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2012  
EDITION

## ENERGY BALANCES OF OECD COUNTRIES



International  
Energy Agency

2012  
EDITION

## ENERGY BALANCES OF OECD COUNTRIES

This volume contains data on the supply and consumption of coal, oil, gas, electricity, heat, renewables and waste presented as comprehensive energy balances expressed in million tonnes of oil equivalent. Complete data are available for 2009 and 2010 and supply estimates are available for the most recent year (*i.e.* 2011). Historical tables summarise production, trade and final consumption data as well as key energy and economic indicators. The book also includes definitions of products and flows, explanatory notes on the individual country data and conversion factors from original units to energy units.

More detailed data in original units are published in the 2012 edition of *Energy Statistics of OECD Countries*, the sister volume of this publication.

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**2012**  
EDITION

**ENERGY BALANCES  
OF OECD COUNTRIES**

# INTERNATIONAL ENERGY AGENCY

The International Energy Agency (IEA), an autonomous agency, was established in November 1974. Its primary mandate was – and is – two-fold: to promote energy security amongst its member countries through collective response to physical disruptions in oil supply, and provide authoritative research and analysis on ways to ensure reliable, affordable and clean energy for its 28 member countries and beyond. The IEA carries out a comprehensive programme of energy co-operation among its member countries, each of which is obliged to hold oil stocks equivalent to 90 days of its net imports. The Agency's aims include the following objectives:

- Secure member countries' access to reliable and ample supplies of all forms of energy; in particular, through maintaining effective emergency response capabilities in case of oil supply disruptions.
- Promote sustainable energy policies that spur economic growth and environmental protection in a global context – particularly in terms of reducing greenhouse-gas emissions that contribute to climate change.
- Improve transparency of international markets through collection and analysis of energy data.
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**International  
Energy Agency**

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The European Commission also participates in the work of the IEA.

# TABLE OF CONTENTS

<b>INTRODUCTION</b> .....	v
---------------------------	---

<b>OECD ENERGY TRENDS</b> .....	vii
---------------------------------	-----

## PART I: METHODOLOGY

1. Explanatory notes .....	I.3	3. Country notes .....	I.15
2. Units and conversions .....	I.11	4. Geographical coverage.....	I.35

## PART II: STATISTICAL DATA

<b>COUNTRY-SPECIFIC NET CALORIFIC VALUES</b> .....	II.3
--	------

### ENERGY BALANCE SHEETS AND ENERGY INDICATORS

OECD Total .....	II.14	Israel .....	II.94
OECD Americas.....	II.18	Italy.....	II.98
OECD Asia Oceania .....	II.22	Japan.....	II.102
OECD Europe .....	II.26	Korea .....	II.106
International Energy Agency .....	II.30	Luxembourg .....	II.110
Australia .....	II.34	Mexico.....	II.114
Austria.....	II.38	Netherlands.....	II.118
Belgium.....	II.42	New Zealand.....	II.122
Canada.....	II.46	Norway .....	II.126
Chile.....	II.50	Poland.....	II.130
Czech Republic .....	II.54	Portugal.....	II.134
Denmark.....	II.58	Slovak Republic.....	II.138
Estonia.....	II.62	Slovenia .....	II.142
Finland .....	II.66	Spain.....	II.146
France.....	II.70	Sweden .....	II.150
Germany.....	II.74	Switzerland .....	II.154
Greece .....	II.78	Turkey.....	II.158
Hungary.....	II.82	United Kingdom .....	II.162
Iceland.....	II.86	United States.....	II.166
Ireland .....	II.90		

### SUMMARY TABLES

Production .....	II.172	GDP .....	II.217
Net imports.....	II.182	Population.....	II.219
Primary energy supply .....	II.187	Energy production/TPES.....	II.220
Electricity generation .....	II.192	TPES/GDP.....	II.221
Final consumption.....	II.200	TPES/population.....	II.223
Industry consumption.....	II.205	Index of industry consumption /	
Consumption in transport.....	II.210	Industrial production.....	II.224
Other consumption .....	II.213		

### RENEWABLE ENERGY AND WASTE

Contribution from renewable energies and energy from waste.....	II.226-264
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# INTRODUCTION

An analysis of energy problems requires a comprehensive presentation of basic statistics in original units such as tonnes of coal and kilowatt hours of electricity. This type of presentation is published in *Energy Statistics of OECD Countries*, the sister volume to this publication. The usefulness of such basic data can be considerably improved by expressing them in a common unit suitable for uses such as estimation of total energy supply, forecasting and the study of substitution and conservation. The energy balance is a presentation of the basic supply and demand data for all fuels in a manner which shows the main fuels together but separately distinguished and expressed in a common energy unit. Both of these characteristics will allow the easy comparison of the contribution each fuel makes to the economy and their interrelationships through the conversion of one fuel into another.<sup>1</sup>

Energy data on OECD countries are collected from member countries by the team in the Energy Data Centre (EDC) of the IEA Secretariat, headed by Jean-Yves Garnier. The IEA would like to thank and acknowledge the dedication and professionalism of the statisticians working on energy data in the

countries. Within the IEA, electricity, coal and renewable data are the responsibility of Robert Schnapp with the help of Yasmina Abdelilah on electricity, Tomasz Truś and Julian Smith on coal, and Wendy Chen and Rachael Hackney on renewables. Oil and natural gas data are the responsibility of Mieke Reece with the help of Tianlai Xu on oil, and Laura Thomson and Ana Luisa São-Marcos on natural gas. Karen Tréanton, with the help of Raphaël Vial, has overall production and editorial responsibility. Desktop publishing was carried out by Sharon Burghgraeve.

Data from 1960 to 2010 and selected estimates for 2011 are available on CD-ROM suitable for use on Windows-based systems.

In addition, a data service is available on the internet. It includes unlimited access through an annual subscription as well as the possibility to obtain data on a pay-per-view basis. Details are available at <http://www.iea.org>.

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1. This document is without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.





# OECD ENERGY TRENDS

One of the highlights of the OECD situation in 2011 was the 9.2% decrease in nuclear energy supply, which led to a 1.9% decrease in total primary energy supply (TPES). Following the tsunami in Japan and the resulting accident at the Fukushima nuclear power plant, nuclear energy decreased by 65% in Japan and by 23% in Germany. The decrease in TPES occurred against a backdrop of economic growth, with GDP increasing by 1.6% in 2011. One of the factors contributing to this delinking was an unusually mild winter in Europe and North America.

## The OECD in the world

In 2010, 18% of the world population lived in the OECD, while 74% of the world GDP was created in its 34 member countries.<sup>2</sup> The TPES of the OECD in 2010 represented about 44% of global energy supply, while the total energy production of the OECD accounted for 30% of the global energy production.

**Table 1. OECD in the world, 2010**

	Population (millions)	GDP*	TPES (Mtoe)	Production (Mtoe)
OECD	1 232	37 494	5 406	3 879
World**	6 825	50 930	12 386	12 785
OECD share**	18%	74%	44%	30%

\* (billion USD, 2005 prices and exchange rates)

\*\* preliminary figures

In terms of TPES/population, with 4.4 toe per capita (compared to a world average of 1.8 toe per capita), the OECD is the most energy-intensive region.

Several factors explain this high consumption: e.g. an electrification rate of almost 100%, a high rate of cars per household, large industry and service sectors, high heating degree-days and a high GDP per capita.

In contrast, in terms of TPES/GDP, with 0.14 toe per thousand USD<sup>3</sup> (compared to a world average of approximately 0.24 toe per thousand USD), the OECD is the least energy-intensive region. Several factors also explain the lower consumption: high GDP compared to other regions, high efficiency in transformation processes (especially power plants), high efficiency in final consumption (efficient cars, insulation of houses) and delocalisation of high energy-consuming industries.

In 2011, the OECD produced 3 866 Mtoe of primary energy while its total primary energy supply was 5 305 Mtoe. As a consequence, 27% of the energy consumed by the OECD in 2011 (the energy dependency) was imported from non-OECD countries. This is the lowest dependency level since the early 2000s.

The following paragraphs highlight the main changes since 1971 as well as giving a snapshot of the situation in 2011 for supply and in 2010 for consumption.

## Production

After peaking in 2010 at 3 879 Mtoe, primary energy production in the OECD fell by 0.3% in 2011 to 3 866 Mtoe. The 2010 peak represented the highest level of energy production since the founding of the International Energy Agency (IEA) in 1974 and was 65% higher than in 1971 (i.e. an annual average growth of 1.3% over the last four decades).

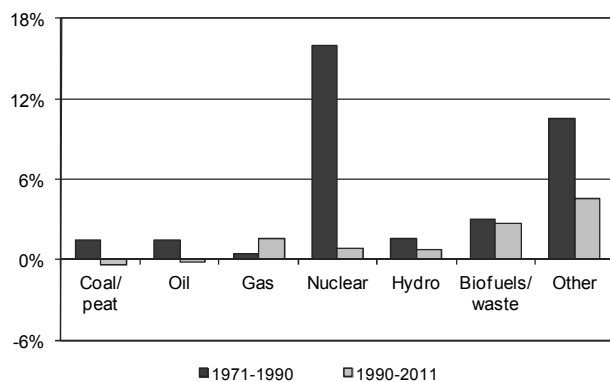
2. OECD Europe includes Estonia and Slovenia starting in 1990. Prior to 1990, data for Estonia are included in Former Soviet Union and data for Slovenia in Former Yugoslavia in the publication *Energy Balances of Non-OECD Countries*.

3. The OECD *National Accounts* has rebased the GDP and GDP PPP series from 2000 USD to 2005 USD. As a result, those series and all associated ratios now refer to 2005 USD.

When analysing changes in the OECD energy situation, it is interesting to break the 40-year period into two parts (1971-1990 and 1990-2011), since 1990 is the reference year for the Kyoto Protocol. The increase in production was not uniform over the timeframe, with a much stronger growth in the first half of the period (2.0% per year) compared to the second half (0.6% per year). The comparative annual growth for each of the fuels shows similar trends, i.e. a much higher growth in the first part of the period (see Figure 1). The exceptions to this are natural gas, which experienced stronger growth in the second part of the period, and biofuels and waste, which saw similar growth rates for both parts of the period.

After the first oil shock in 1973 and the establishment of the IEA, a special effort was made by most of the OECD countries to reduce their dependence on imported oil by various policies, including the development of alternative sources of energy, and for some of them, by exploiting their oil reserves.

**Figure 1. Average annual growth rates in OECD primary energy production**



Within 15 years, the launch of large nuclear programmes in several countries and the exploitation of new open-sky mines in OECD Americas led to a dramatic increase of nuclear and coal/peat production. In 1971, nuclear represented 27 Mtoe whereas in 1990 it accounted for 451 Mtoe. Similarly coal went up from 814 Mtoe in 1971 to 1 073 Mtoe in 1990. These increases, combined with the increase in oil production (especially in the Gulf of Mexico, Norway and the United Kingdom) from 693 to 923 Mtoe, explain the relatively high growth in energy production observed in the first half of the 40-year period.

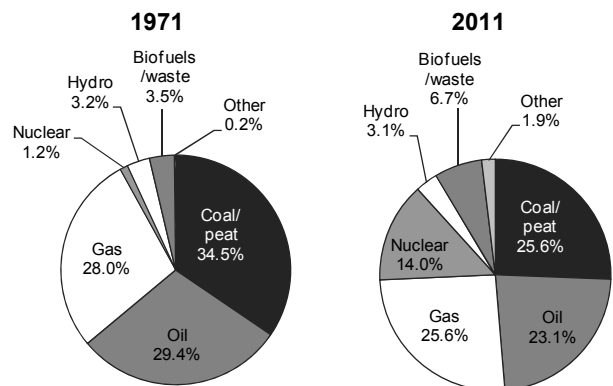
During the second half of the period (from 1990 to 2011), the situation was significantly different. Oil production in the OECD as a whole peaked in 1997, and has been decreasing steadily since then. Oil production in the United Kingdom and Norway reached maximum levels in 1999/2000 whereas Mexico oil

production peaked in 2005 and oil production in Canada is still growing in 2011. Coal production in the OECD also decreased (by 7.9%) during this period due to the closing of high-cost deep mines in OECD Europe and OECD Asia Oceania. On the other hand, the discovery and exploitation of large natural gas fields in OECD Americas led to a major increase in natural gas production in the OECD, from 718 Mtoe in 1990 to 991 Mtoe in 2011. Nuclear energy production also rose at a steady rate through 2010, going from 451 Mtoe in 1990 to 615 Mtoe in 2006 before dropping slightly between 2007 and 2009 and increasing to 596 Mtoe in 2010. However, in 2011, after the tsunami in Japan and the resulting accident at the Fukushima nuclear power plant, nuclear energy decreased by 9.2%.

As a consequence of the contrasting evolution of the various fuels over the period, the shares of the main fuels in total production changed significantly between 1971 and 2011 (see Figure 2).

In 2011, the share of fossil fuels in total OECD production accounted for 74.3%; coal/peat, oil and natural gas represented roughly one quarter of production each. Nuclear accounted for 14.0%, down from 15.3% in 2010.

**Figure 2. Fuel shares in OECD production**



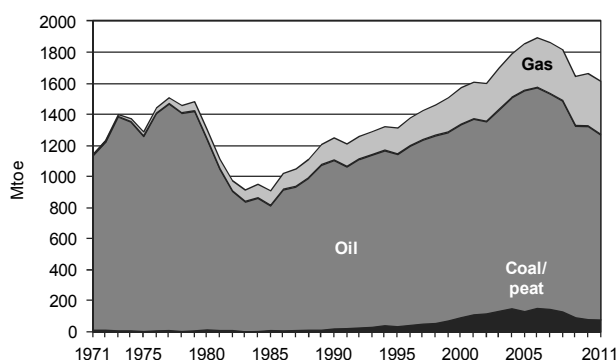
Energy from renewables and waste represented 11.7% in 2011; biofuels and waste contributed for more than one half, hydro for more than one quarter and geothermal and wind energy accounted for most of the rest. Geothermal grew more rapidly than hydro and biofuels, with a growth of 4.1% between 2010 and 2011.

As regards the other forms of renewable energy, their production started to grow rapidly in recent years, although their shares remain limited. For example, solar PV grew 77.2% in 2011 and wind energy grew 24.3%. Solar thermal energy actually fell by 4.5% over the year. However, the combined solar and wind production still only accounted for 1.0% of total primary energy production in 2011.

## Trade

Preliminary data for 2011 show that OECD net imports remained fairly constant in 2011, falling 3.1% after growing 1.2% the previous year.

**Figure 3. Net imports of primary energy by fuel for the OECD**



In 1971, 98.3% of the 1 145 Mtoe of total net imports of energy for the OECD were related to oil; net imports were equivalent to nearly half of the OECD energy production. The policies taken by OECD member countries in order to reduce their dependence on imported oil had twofold consequences for the period 1971-1985:

- a decrease in net imports of oil from 1 461 Mtoe in 1977 to 804 Mtoe in 1985;
- a decrease in the share of oil imports in total net imports (from 98.3% in 1971 to 88.4% in 1985).

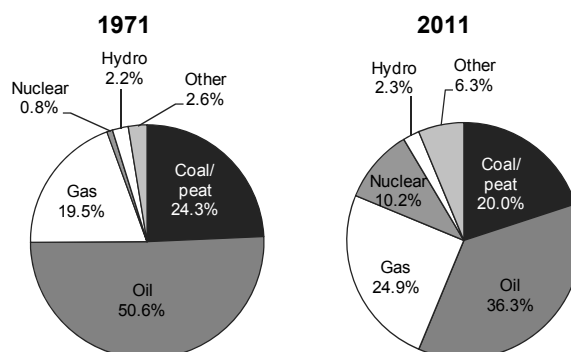
The fall of oil prices in the mid 1980s had an impact on the historical trend of OECD energy trade. Net imports of oil in the OECD started to increase again in 1986, growing on average by 2.4% per year between 1986 and 2005. In 2005, net imports of oil peaked at 1 424 Mtoe before declining steadily. In 2011, net oil imports decreased by 4.2% to 1 193 Mtoe.

On the other hand, volatility of oil prices, increasing performance of natural gas-fired power plants, fuel switching for heating purposes and a growing interest in the use of natural gas for its lower CO<sub>2</sub> emissions led to a steady increase of net imports of natural gas. After decreasing by 3.5% in 2009, net imports of natural gas rose by 6.8% in 2010 and by 1.5% in 2011. This reduced the share of oil in total energy imports to 73.7% in 2011.

## Total primary energy supply

After briefly rising in 2010, TPES resumed a decline that started in 2008, falling 1.9% in 2011. In 2011, the share of fossil fuels in TPES was 81.2%, almost constant from the all-time low of 80.7% in 2010. This compares to a share of 94.4% in 1971. Despite the policies taken after the first oil supply shock to reduce the dependency on oil, oil remains the largest component of TPES in the OECD. However, its share has decreased from 50.6% in 1971 to 36.3% in 2011 (see Figure 4).

**Figure 4. Fuel shares in TPES for the OECD\***



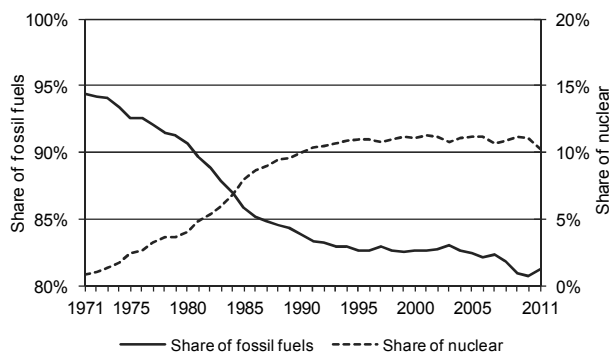
\* Includes electricity trade.

Although efforts have been made to reduce the use of oil in sectors where it can be substituted by other fuels, e.g. electricity production, the growing demand in “captive” sectors such as transport explains why the share of oil remains the highest amongst all energy sources.

The share of coal/peat in total TPES was 24.3% in 1971 and decreased to 20.0% in 2011. In the last decade, coal was partly replaced by natural gas, notably for electricity generation. Natural gas was the only fossil fuel with increasing shares in the last 40 years (from 19.5% in 1971 to 24.9% in 2011) and became the second fuel in the OECD starting in 1999.

The share of nuclear energy in OECD TPES grew from 0.8% in 1971 to 11.3% in 2001, falling to 10.2% in 2011. The development of nuclear energy was particularly intense between 1971 and 1990, with an average growth of 16.0% per year. Since then, the development of nuclear energy has slowed, with a growth of 1.4% per year between 1990 and 2010, with a large decrease of 9.2% in 2011, as mentioned earlier.

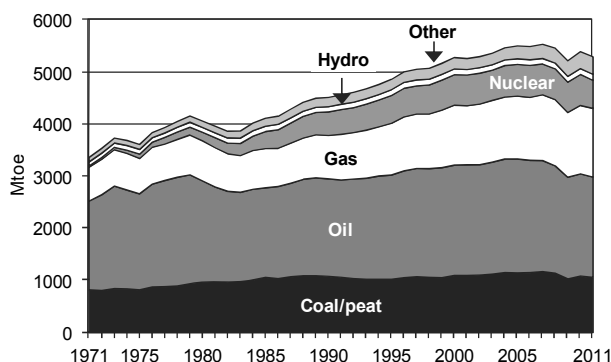
**Figure 5. Share of fossil fuels and nuclear in OECD TPES**



Although hydro energy increased from 76 Mtoe in 1971 to 120 Mtoe in 2011, the share of hydro in TPES remained constant at around 2%.

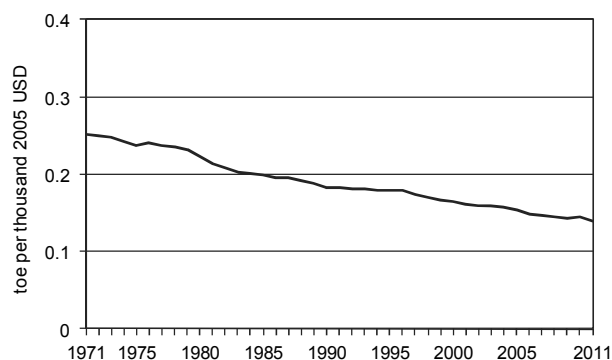
The impact of other alternative energy sources grew from 2.6% in 1971 to 6.3% in 2011. Within this category, solid biofuels (including wood, wood wastes, charcoal and other solid biofuels) was the largest contributor and represented 3.1% of total TPES in 2011. Geothermal energy (including both direct use and energy used for electricity generation) contributed 0.6% to TPES while wind contributed 0.5%. Due to recent efforts in OECD countries to increase the amount of biofuels blended in transport fuels, biogasoline represented 0.5% and biodiesels represented 0.2% of total TPES in 2011. Small amounts also came from other liquid biofuels, biogases, municipal waste, industrial waste, solar and tide/wave/ocean.

**Figure 6. OECD TPES by fuel**



TPES rose from 3 372 Mtoe in 1971 to 5 549 Mtoe in 2007 before falling to 5 305 Mtoe in 2011. With an annual average rate of growth of 1.1% per year since 1971, this growth was less than half that of the growth in GDP observed for the OECD over the same period.

**Figure 7. TPES/GDP in the OECD**

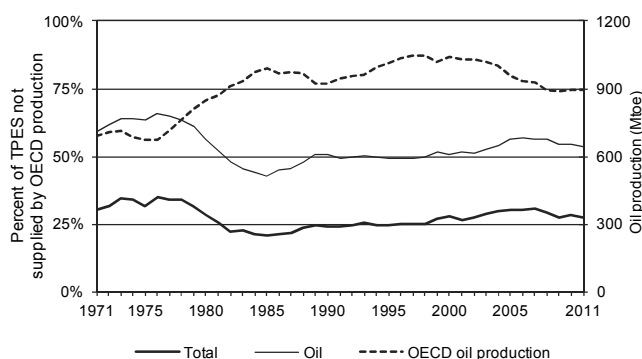


As a consequence, energy intensity (TPES/GDP) fell from 0.25 toe per thousand USD in 1971 to just below 0.14 toe per thousand USD in 2011.

Energy dependency, defined as the fraction of TPES not supplied by OECD production, is strongly influenced by the evolution of OECD oil production and imports. Energy dependency of total OECD was 30.2% in 1971 and peaked in 1976 at 34.9%, when the increase in oil production in Norway and the United Kingdom had not yet started. Energy dependency declined sharply after 1979, when an increasingly large part of the oil imports started to be replaced by domestic production.

In the following years the trend of energy dependency was mainly influenced by the variations of OECD oil production (and imports), but it was smoothed by the increasing weight of other energy sources. As a result, energy dependency grew slowly between 1985 and 2007, when it was back to 1971 levels. In 2008 and 2009 lower demand in the OECD countries caused the energy dependency to fall from 30.6% to 27.5% in two years. After increasing briefly in 2010, energy dependency was 27.1% in 2011.

**Figure 8. Energy dependency in the OECD**

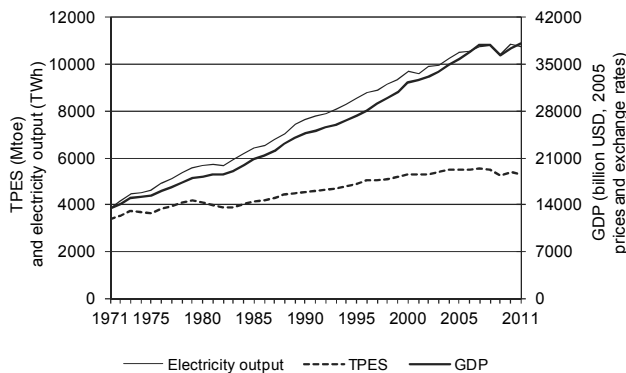


## Electricity generation

Electricity generated in the OECD decreased 0.9% in 2011, just below the all-time high of 2010. Electricity generation on average increased by 2.6% per year since 1971, more than twice as fast as TPES but at a rate comparable to the growth in GDP. Total generation, including the part from CHP, amounted to 10 753 TWh in 2011.

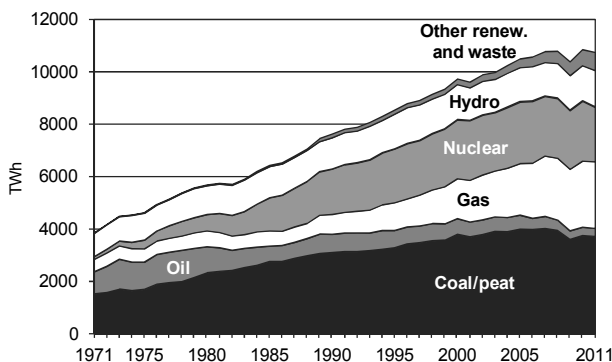
The fuels used for electricity production changed significantly over time and, as for TPES, the trend in the fuel mix was affected by oil prices and the energy policies of OECD member countries.

**Figure 9. GDP, TPES and electricity output in the OECD**



Power generation is the sector where the efforts to reduce dependency on oil found their best ground. Oil accounted for 21.7% of the electricity production in 1971, but its share was reduced to 2.8% in 2011. Most of the decline occurred in the late 1970s and in the early 1980s.

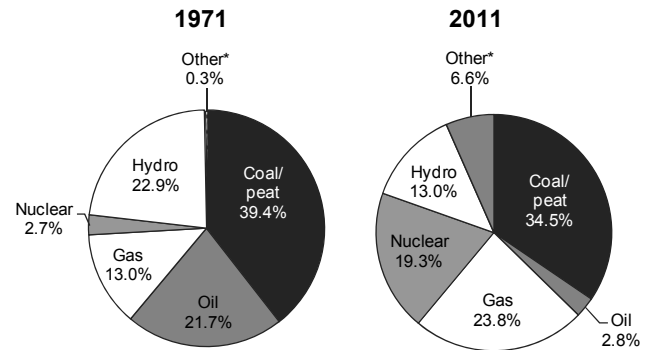
**Figure 10. Electricity generation by fuel in the OECD**



On average, electricity from coal/peat increased by 2.3% per year after 1971, but its growth was weaker after 1990 (0.9% per year, on average), especially because of the increasing use of natural gas in power generation. In 2011 the share of coal/peat was 34.5%, as compared to 39.4% in 1971.

Natural gas accounted for 13.0% of OECD electricity production in 1971. The share of natural gas in electricity decreased until the late 1980s and reached its minimum in 1988, when natural gas-fired power plants contributed only 8.4% of the total electricity output. Technological improvements (highly efficient gas turbines and combined cycle plants), low CO<sub>2</sub> emissions and relatively low prices reversed the trend and allowed natural gas to gain in importance during the 1990s. Outputs from natural gas-fired power plants reached 23.8% in 2011.

**Figure 11. Fuel shares in OECD electricity output**



\* Includes other renewables and waste

The share of hydro decreased dramatically from 22.9% in 1971 to 13.0% in 2011, despite an increase in absolute terms, since most of the possible sites for large hydro production had already been equipped by 1971.

The development of nuclear energy has been extremely important in electricity generation. Nuclear power represented about one-fifth of the total electricity output in 2011, while its share was less than 3% in 1971. However, the problems experienced by Japan in 2011 are causing other countries to re-evaluate their nuclear energy programmes. The share of nuclear in electricity generation fell from 21.1% in 2010 to 19.3% in 2011.

Other energy sources gave a limited contribution to electricity generation, but are gradually increasing their shares. Biofuels and waste represented 2.4% of total output in 2011, up from 1.6% in 1990. Wind electricity grew rapidly by 23.7% per year between 1990 and 2011, reaching 3.1% of the total output generated in OECD countries, compared to 0.1% in 1990. Policies to help develop renewable energies should ensure that electricity output from wind continues to increase.

The overall efficiency of electricity generation improved over time, but less than might have been expected given that new power stations were built. The increase was due to technical improvements, especially in combined cycles. However, the primary energy from nuclear (obtained from traditional cycles with an efficiency close to 33%) and the weight of nuclear in total electricity production offset the gain in the overall efficiency of power plants.

The fraction of TPES consumed for electricity and heat generation increased significantly between 1971 and 2010. The reasons behind such an increase can be found in the transition of OECD economies from industry to services (which are more electricity-intensive than industry), in the growing use of electric-intensive technologies and in the growing share of electricity consumption (with respect to other energies) in industry, commercial/public services and residential.

## Total final consumption

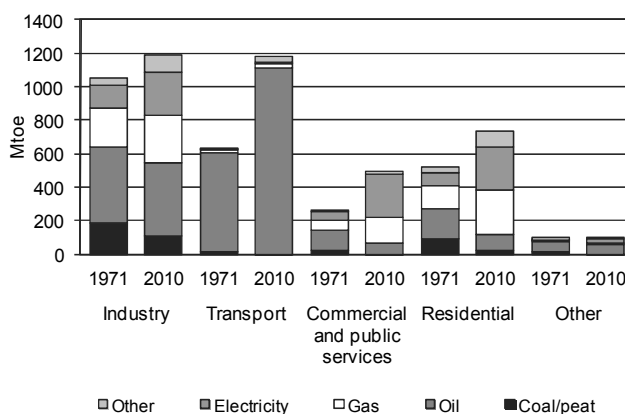
OECD total final consumption (TFC) of energy accounted for 3 691 Mtoe in 2010, an increase of 3.4% over 2009, although still 2.8% lower than the peak in 2007. On average, TFC has increased by 0.9% per year since 1971, one-third that of the GDP growth for the OECD.

Trends were not homogeneous amongst energy sources. End-use of coal tended to decrease in all sectors, while oil consumption was heavily affected by the high oil prices in the mid 1970s and early 1980s and declined in all non-captive sectors. Natural gas increased by 1.3% per year from 1971 to 2010 while electricity grew twice as fast over the same period.

Despite all the efforts made to reduce the oil dependency of OECD countries, transport has always been a captive sector for oil. Oil accounted for 93.9% of transport consumption in 2010 compared to 94.9% in 1971.

Moreover, the weight of transport in TFC increased between 1971 and 2010 due to the rising number of vehicles, the tendency to use larger engines, the high use of road transport in trading goods and the relative decrease of the use of oil in other sectors. In 2010, transport was about one-third of the total final consumption, while it only accounted for a quarter in 1971.

Figure 12. TFC by fuel and by sector in the OECD



Industry, residential and services also increased their consumption, but at lower rates. In addition, natural gas and electricity started to substitute consumption of oil and coal in these sectors.

The share of coal in industry dropped from 17.8% in 1971 to 8.8% in 2010; it went down from 16.9% to 2.5% in residential. The oil share in commercial/public services represented 45.9% of consumption in 1971 and fell to 12.5% in 2010. Similarly, the oil share declined from 35.3% to 13.1% in residential.

Final consumption of electricity rose by 4.8% in 2010 to an all time high, after falling briefly in 2008 and 2009. Driven by the development of electricity-intensive technologies (electronics, robotics, etc.), total final consumption of electricity grew by 2.8% a year between 1971 and 2010. The greatest increases concerned commercial/public services (4.2%) and residential (3.1%).

The growth of natural gas was more moderate, with an increase of 1.3% per year, and mainly concerned residential and commercial/public services. Use of natural gas in agriculture and road increased significantly, but both sectors started from very low bases.

Use of other energy sources (mainly biofuels) was limited to certain industrial activities (paper, pulp, wood and wood products) and to residential, although the share in transport is growing as a result of recent policies in OECD countries to increase the fraction of biogasoline and biodiesels in transport fuels. The share of biofuels and waste in total final consumption was 4.9% in 2010.

# PART I

# METHODOLOGY

## MULTILINGUAL GLOSSARIES

See multilingual glossary at the end of the publication.

Voir le glossaire en plusieurs langues à la fin du présent recueil.

Deutsches GLOSSAR auf der letzten Umschlagseite.

Riferirsi al glossario multilingue alla fine del libro.

巻末の日本語用語集を参照

Véase el glosario plurilingüe al final del libro.

Смотрите многоязычный словарь в конце книги.



## ABBREVIATIONS

Btu:	British thermal unit
GWh:	gigawatt hour
kcal:	kilocalorie
kg:	kilogramme
kJ:	kilojoule
Mt:	million tonnes
m <sup>3</sup> :	cubic metre
t:	metric ton = tonne = 1000 kg
TJ:	terajoule
toe:	tonne of oil equivalent = 10 <sup>7</sup> kcal
CHP:	combined heat and power
GCV:	gross calorific value
GDP:	gross domestic product
HHV:	higher heating value = GCV
LHV:	lower heating value = NCV
NCV:	net calorific value
PPP:	purchasing power parity
TPES:	total primary energy supply
IEA:	International Energy Agency
IPCC:	Intergovernmental Panel on Climate Change
ISIC:	International Standard Industrial Classification
OECD:	Organisation for Economic Co-Operation and Development
OLADE:	Organización Latinoamericana de Energía
UN:	United Nations
UNIPED:	International Union of Producers and Distributors of Electrical Energy
c	confidential
e	estimated
..	not available
-	nil
x	not applicable

# 1. EXPLANATORY NOTES

## Unit

The IEA energy balance methodology is based on the calorific content of the energy commodities and a common unit of account. The unit of account adopted by the IEA is the tonne of oil equivalent (toe) which is defined as  $10^7$  kilocalories (41.868 gigajoules). This quantity of energy is, within a few per cent, equal to the net heat content of 1 tonne of crude oil. Throughout this publication 1 tonne means 1 metric ton or 1000 kg.

## Conversion (from original units to toe)

The change from using the original units to tonnes of oil equivalent implies choosing coefficients of equivalence between different forms and sources of energy. This problem can be approached in many different ways. For example, one could adopt a single equivalence for each major primary energy source in all countries, e.g. 29 307 kJ/kg (7 000 kcal/kg) for hard coal, 41 868 kJ/kg (10 000 kcal/kg) for oil, etc.

The main objection to this method is that it results in distortions since there is a wide spread in calorific values between types of coal and individual coal products, and between calorific values of these fuels in different countries. The Secretariat has, therefore, adopted specific factors supplied by the national administrations for the main categories of each quality of coal and for each flow or use (i.e. production, imports, exports, electricity generation, coke ovens, blast furnaces and industry).

For crude oil, specific factors have been used for production, imports and exports based on consultations

with experts from the national administrations. The IEA applies regional conversion factors (in conjunction with Eurostat for the European countries) for the oil products.

Gas data in *Energy Statistics of OECD Countries* are presented in terajoules on a **gross calorific basis**. Data on biofuels & waste are presented in terajoules on a **net calorific basis** (with the exception of liquid biofuels which are in 1000 tonnes).

The balances are expressed in terms of "net" calorific value. The difference between the "net" and the "gross" calorific value for each fuel is the latent heat of vaporisation of the water produced during combustion of the fuel. For coal and oil, the net calorific value is about 5% less than gross, for most forms of natural and manufactured gas the difference is 9-10%, while for electricity and heat there is no difference as the concept has no meaning in this case. The use of net calorific value is consistent with the practice of the Statistical Offices of the European Communities and the United Nations.

Electricity data are converted from original units of gigawatt hours to million tonnes of oil equivalent using the relationship: 1 terawatt hour = 0.086 Mtoe.

For more detail on converting to heat units, see Section 2, Units and conversions.

## Primary energy conventions

When constructing an energy balance, it is necessary to adopt conventions for primary energy from several sources, such as nuclear, geothermal, solar, hydro, wind, etc. The two types of assumptions that have to be made are described below.

## Choice of the primary energy form

For each of these sources, there is a need to define the form of primary energy to be considered; for instance, in the case of hydro energy, a choice must be made between the kinetic energy of falling water and the electricity produced. For nuclear energy, the choice is between the energy content of the nuclear fuel, the heat generated in the reactors and the electricity produced. For photovoltaic electricity, the choice is between the solar radiation received and the electricity produced.

The principle adopted by the IEA is that the primary energy form should be the first energy form downstream in the production process for which multiple energy uses are practical. The application of this principle leads to the choice of the following primary energy forms:

- **Heat** for nuclear, geothermal and solar thermal;
- **Electricity** for hydro, wind, tide/wave/ocean and solar photovoltaic.

## Calculation of the primary energy equivalent

There are essentially two methods that can be used to calculate the primary energy equivalent of the above energy sources: the partial substitution method and the physical energy content method.

**The partial substitution method:** In this method, the primary energy equivalent of the above sources of electricity generation represents the amount of energy that would be necessary to generate an identical amount of electricity in conventional thermal power plants. The primary energy equivalent is calculated using an average generating efficiency of these plants. This method has several shortcomings, including the difficulty of choosing an appropriate generating efficiency and the fact that the partial substitution method is not relevant for countries with a high share of hydro electricity. For these reasons, the IEA, as most international organisations, has now stopped using this method and adopted the physical energy content method.

**The physical energy content method:** This method uses the physical energy content of the primary energy source as the primary energy equivalent. As a consequence, there is an obvious link between the principles adopted in defining the primary energy forms of energy sources and the primary energy equivalent of these sources.

For instance, in the case of nuclear electricity production, as heat is the primary energy form selected by the IEA, the primary energy equivalent is the quantity of heat generated in the reactors. However, as the amount of heat produced is not always known, the IEA estimates the primary energy equivalent from the electricity generation by assuming an efficiency of 33%, which is the average of nuclear power plants in Europe.

In the case of hydro and solar PV, as electricity is the primary energy form selected, the primary energy equivalent is the physical energy content of the electricity generated in the plant, which amounts to assuming an efficiency of 100%. A more detailed presentation of the assumptions used by the IEA in establishing its energy balances is given in Section 2.

For geothermal, if no country-specific information is reported, the primary energy equivalent is calculated as follows:

- 10% for geothermal electricity;
- 50% for geothermal heat.

Since these two types of energy balances differ significantly in the treatment of electricity from solar, hydro, wind, etc., the share of renewables in total energy supply will appear to be very different depending on the method used. As a result, when looking at the percentages of various energy sources in total supply, it is important to understand the underlying conventions that were used to calculate the primary energy balances.

## Indicators

**Energy production:** total primary energy production, expressed in Mtoe.

**Net imports:** imports minus exports for total energy, expressed in Mtoe.

**Total primary energy supply:** expressed in Mtoe.

**Net oil imports:** imports minus exports of oil, expressed in Mtoe.

**Oil supply:** primary supply of oil, expressed in Mtoe.

**Electricity consumption:** domestic consumption, i.e. gross production + imports - exports - losses, expressed in TWh.

**Population:** the main source of these series for 1970 to 2010 is *National Accounts of OECD Countries, Volume 1*, 2012. Data for 1960 to 1969 have been estimated using the growth rates from the population series published in the *OECD Economic Outlook No 76*. For the **Czech Republic, Hungary and Poland** (1960 to 1969) and **Mexico** (1960 to 1962), the data are estimated using the growth rates from the population series from the World Bank published in the *World Development Indicators CD-ROM*. For the **Slovak Republic**, population data for 1960 to 1989 are from the Demographic Research Centre, Infostat, Slovak Republic.

Population for 2011 has been estimated using the population numbers submitted on the Questionnaire for country submissions for the SLT/CERT annual review of energy policies.

**GDP:** the main source of these series for 1970 to 2011 is *National Accounts of OECD Countries, Volume 1*, 2012. The OECD *National Accounts* has rebased the GDP and GDP PPP series from 2000 USD to 2005 USD. As a result, those series and all associated ratios now refer to 2005 USD.

GDP data for Australia, France, Greece and Sweden for 1960 to 1969 and Denmark for 1966 to 1969 as well as for Netherlands for 1969 come directly from the most recent volume of *National Accounts*. GDP data for 1960 to 1969 for the other countries have been estimated using the growth rates from the series in the *OECD Economic Outlook No 76* and data previously published by the OECD. Data prior to 1986 for **Chile**, prior to 1990 for the **Czech Republic** and **Poland**, prior to 1991 for **Hungary**, and prior to 1992 for the **Slovak Republic** are IEA Secretariat estimates based on GDP growth rates from the World Bank.

The GDP data have been compiled for individual countries at market prices in local currency and annual rates. These data have been scaled up/down to the price levels of 2005 and then converted to US dollars using the yearly average 2005 exchange rates or purchasing power parities (PPPs).

Purchasing power parities are the rates of currency conversion that equalise the purchasing power of different currencies. A given sum of money, when converted into different currencies at the PPP rates, buys the same basket of goods and services in all countries. In other words, PPPs are the rates of currency conversion which eliminate the differences in price levels between different countries. The PPPs selected to convert the GDP from national currencies to US dollars were aggregated using the Geary-Khamis

(GK) method and rebased on the United States. For a more detailed description of the methodology please see *Purchasing Power Parities and Real Expenditures, GK Results, Volume II, 1990*, OECD 1993.

**Industrial Production Index:** the main source of these series is the OECD database *Main Economic Indicators*, April 2012. Industrial production refers to the goods produced by establishments engaged in mining (including oil extraction), manufacturing, and production of electricity, gas and water. These are categories B, C, D and E of ISIC<sup>4</sup> Rev. 4 or NACE Rev. 2 classifications. From 1991, the industrial production index for **Germany** refers to unified Germany and has been linked to the series for Western Germany. For OECD Total, data refer to all OECD countries; prior to 1995 Chile, Czech Republic, Estonia, Hungary, Iceland, Israel, Poland, Slovak Republic and Slovenia are excluded. For OECD Europe, data refer to the 25 OECD countries that are located in Europe starting from 1995; prior to 1995 Czech Republic, Estonia, Hungary, Iceland, Poland, Slovak Republic and Slovenia are excluded.

## Layout

The energy balances are presented in tabular format: columns for the various sources of energy and rows for the different origins and uses.

### Columns

Across the top of the table from left to right, there are eleven columns with the following headings:

**Column 1:** *Coal and peat* includes all coal, both primary (including hard coal and lignite) and derived fuels (including patent fuel, coke oven coke, gas coke, BKB, gas works gas, coke oven gas, blast furnace gas and other recovered gases). Peat is also included in this category. *Note: starting with the 2011 edition, gas works gas is included here with coal. In prior years, gas works gas was included with natural gas.*

**Column 2:** *Crude oil* comprises crude oil, natural gas liquids, refinery feedstocks, and additives as well as other hydrocarbons (including emulsified oils, synthetic crude oil, mineral oils extracted from bituminous minerals such as oil shale, bituminous sand, etc., and oils from coal liquefaction).

4. International Standard Industrial Classification of All Economic Activities, Series M, No. 4 / Rev. 4, United Nations, New York, 2008.

**Column 3:** *Oil products* comprise refinery gas, ethane, LPG, aviation gasoline, motor gasoline, jet fuels, kerosene, gas/diesel oil, fuel oil, naphtha, white spirit, lubricants, bitumen, paraffin waxes, petroleum coke and other oil products.

**Column 4:** *Natural gas* includes natural gas (excluding natural gas liquids). *Note: starting with the 2011 edition, gas works gas is included with coal. In prior years, gas works gas was included with natural gas.*

**Column 5:** *Nuclear* shows the primary heat equivalent of the electricity produced by a nuclear power plant with an average thermal efficiency of 33%.

**Column 6:** *Hydro* shows the energy content of the electricity produced in hydro power plants. Hydro output excludes output from pumped storage plants.

**Column 7:** *Geothermal, solar, etc.* shows production of geothermal, solar, wind and tide/wave/ocean energy and the use of these energy forms for electricity and heat generation. Unless the actual efficiency of the geothermal process is known, the quantity of geothermal energy entering electricity generation is inferred from the electricity production at geothermal plants assuming an average thermal efficiency of 10%. For solar, wind and tide/wave/ocean energy, the quantities entering electricity generation are equal to the electrical energy generated. Other uses shown in this column relate to geothermal and solar thermal heat.

**Column 8:** *Biofuels & waste* comprises solid biofuels, liquid biofuels, biogases, industrial waste and municipal waste. Biofuels are defined as any plant matter used directly as fuel or converted into fuels (e.g. charcoal) or electricity and/or heat. Included here are wood, vegetal waste (including wood waste and crops used for energy production), ethanol, animal materials/wastes and sulphite lyes (also known as "black liquor" which is an alkaline spent liquor from the digesters in the production of sulphate or soda pulp during the manufacture of paper where the energy content is derived from the lignin removed from the wood pulp and which is usually 65-70% solid in its concentrated form).

Municipal waste comprises wastes produced by residential and commercial/public services that are collected by local authorities for disposal in a central location for the production of heat and/or power. Hospital waste is included in this category.

Note that for biofuels, only the amounts of biomass specifically used for energy purposes (a small part of the total) are included in the energy statistics. Therefore,

the non-energy use of biomass is not taken into consideration and the quantities are null by definition.

Data under this heading are often based on incomplete information. Thus the data give only a broad impression of developments, and are not strictly comparable between countries. In some cases complete categories of vegetal fuel are omitted due to lack of information. Please refer to individual country data when consulting regional aggregates.

**Column 9:** *Electricity* shows final consumption and trade in electricity, which is accounted at the same heat value as electricity in final consumption (i.e. 1 GWh = 0.000086 Mtoe).

**Column 10:** *Heat* shows the disposition of heat produced for sale. The large majority of the heat included in this column results from the combustion of fuels although some small amounts are produced from electrically powered heat pumps and boilers. Any heat extracted from ambient air by heat pumps is shown as production.

**Column 11:** *Total* equals the total of Columns 1 to 10.

## Rows

The categories on the left hand side of the table have the following functions:

**Row 1:** *Production* is the production of primary energy, i.e. hard coal, lignite, peat, crude oil, NGL, natural gas, biofuels and waste, nuclear, hydro, geothermal, solar and the heat from heat pumps that is extracted from the ambient environment. Production is calculated after removal of impurities (e.g. sulphur from natural gas). Calculation of production of hydro, geothermal, etc. and nuclear electricity is explained in Section 2, Units and conversions.

**Row 2/3:** *Imports* and *exports* comprise amounts having crossed the national territorial boundaries of the country, whether or not customs clearance has taken place.

*For coal:* Imports and exports comprise the amount of fuels obtained from or supplied to other countries, whether or not there is an economic or customs union between the relevant countries. Coal in transit should not be included.

*For oil and natural gas:* Quantities of crude oil and oil products imported or exported under processing agreements (i.e. refining on account) are included. Quantities of oil in transit are excluded. Crude oil, NGL and natural gas are reported as coming from the

country of origin; refinery feedstocks and oil products are reported as coming from the country of last consignment. Re-exports of oil imported for processing within bonded areas are shown as exports of product from the processing country to the final destination.

*For electricity:* Amounts are considered as imported or exported when they have crossed the national territorial boundaries of the country. If electricity is “wheeled” or transited through a country, the amount is shown as both an import and an export.

**Row 4:** *International marine bunkers* covers those quantities delivered to ships of all flags that are engaged in international navigation. The international navigation may take place at sea, on inland lakes and waterways, and in coastal waters. Consumption by ships engaged in domestic navigation is excluded. The domestic/international split is determined on the basis of port of departure and port of arrival, and not by the flag or nationality of the ship. Consumption by fishing vessels and by military forces is also excluded. See *domestic navigation* (Row 40), *fishing* (Row 46) and *non-specified “other”* (Row 47).

**Row 5:** *International aviation bunkers* includes deliveries of aviation fuels to aircraft for international aviation. Fuels used by airlines for their road vehicles are excluded. The domestic/international split should be determined on the basis of departure and landing locations and not by the nationality of the airline. For many countries this incorrectly excludes fuel used by domestically owned carriers for their international departures.

*Note: In October 2008 the IEA hosted the 3rd meeting of InterEnerStat. This group is made up of 24 international organisations that collect or use energy statistics. One of the objectives of the group is to improve the quality of energy data by harmonising definitions for energy sources and flows. As a result of this meeting, the IEA decided to align its energy statistics and balances with most other international organisations and to treat international aviation bunkers in the same way as international marine bunkers. Starting with the 2009 edition, international aviation bunkers is subtracted out of supply in the same way as international marine bunkers. This differs from the treatment of international aviation bunkers in the annual oil statistics published in Oil Information.*

**Row 6:** *Stock changes* reflects the difference between opening stock levels on the first day of the year and closing levels on the last day of the year of stocks on national territory held by producers, importers, energy

transformation industries and large consumers. A stock build is shown as a negative number, and a stock draw as a positive number.

**Row 7:** *Total primary energy supply (TPES)* is made up of *production* (Row 1) + *imports* (Row 2) - *exports* (Row 3) - *international marine bunkers* (Row 4) - *international aviation bunkers* (Row 5) ± *stock changes* (Row 6). Note, exports, bunkers and stock changes incorporate the algebraic sign directly in the number.

**Row 8:** *Transfers* include interproduct transfers, products transferred and recycled products (e.g. used lubricants which are reprocessed).

**Row 9:** *Statistical differences* includes the sum of the unexplained statistical differences for individual fuels, as they appear in the basic energy statistics. It also includes the statistical differences that arise because of the variety of conversion factors in the coal and oil columns. See introduction to *Energy Statistics of OECD Countries* for further details.

**Row 10:** *Electricity plants* refers to plants which are designed to produce electricity only. If one or more units of the plant is a CHP unit (and the inputs and outputs can not be distinguished on a unit basis) then the whole plant is designated as a CHP plant. Both main activity producer<sup>5</sup> and autoproducer<sup>6</sup> plants are included here. Columns 1 through 8 show the use of primary and secondary fuels for the production of electricity as negative entries. Heat from chemical processes used for electricity generation will appear in Column 10. Gross electricity produced (including power stations' own consumption) appears as a positive quantity in the electricity column. Transformation losses appear in the total column as a negative number.

**Row 11:** *Combined heat and power plants (CHP)*, refers to plants which are designed to produce both heat and electricity, sometimes referred as co-generation power stations. If possible, fuel inputs and electricity/heat outputs are on a unit basis rather than on a plant basis. However, if data are not available on a unit basis, the convention for defining a CHP plant noted above is adopted. Both main activity producer

5. Main activity producers generate electricity and/or heat for sale to third parties, as their primary activity. They may be privately or publicly owned. Note that the sale need not take place through the public grid.

6. Autoproducer undertakings generate electricity and/or heat, wholly or partly for their own use as an activity which supports their primary activity. They may be privately or publicly owned.

and autoproducer plants are included here. *Note that for autoproducer CHP plants, all fuel inputs to electricity production are taken into account, while only the part of fuel inputs to heat sold is shown. Fuel inputs for the production of heat consumed within the autoproducer's establishment are not included here but are included with figures for the final consumption of fuels in the appropriate consuming sector.*

Columns 1 through 8 show the use of primary and secondary fuels for the production of electricity and heat as negative entries. Total gross electricity produced appears as a positive quantity in the electricity column and heat produced appears as a positive number in the heat column. Transformation losses appear in the total column as a negative number.

**Row 12:** *Heat plants* refers to plants (including heat pumps and electric boilers) designed to produce heat only, which is sold to a third party under the provisions of a contract. Both main activity producer and autoproducer plants are included here. Heat pumps that are operated within the residential sector where the heat is not sold are not considered a transformation process and are not included here – the electricity consumption appears as residential use.

Columns 1 through 8 show the use of primary and secondary fuels in a heating system that transmits and distributes heat from one or more energy sources to, among others, residential, industrial, and commercial consumers, for space heating, cooking, hot water and industrial processes.

**Row 13:** *Blast furnaces* contains inputs to and outputs of fuels from blast furnaces. It is often difficult to correctly account for all inputs and outputs in energy transformation industries, and to separate energy that is transformed from energy that is combusted. As a result, in certain cases the data in the total column are positive numbers, indicating a problem in the underlying energy data.

**Row 14:** *Gas works* contains the inputs to and outputs from plants manufacturing gases for distribution to the public, either directly or after blending with natural gas. The coal column will contain the output of gas works gas minus any inputs of coal and coal products into the gas works. Inputs of oil products or natural gas into the gas works will figure as negative numbers with conversion losses appearing in the total column.

**Row 15:** *Coke/patent fuel/BKB plants* contains losses in transformation of coal from primary to secondary fuels and from secondary to tertiary fuels (hard coal to coke and patent fuel, lignite to BKB, etc.).

**Row 16:** *Oil refineries* shows the use of primary energy for the manufacture of finished oil products and the corresponding output. Thus, the total reflects transformation losses. In certain cases the data in the total column are positive numbers. This can be due either to problems in the primary refinery balance, or to the fact that the IEA uses regional net calorific values for oil products.

**Row 17:** *Petrochemical plants* covers backflows returned from the petrochemical industry. Note that backflows from oil products that are used for non-energy purposes (i.e. white spirit and lubricants) are not included here, but in non-energy use.

**Row 18:** *Liquefaction plants* includes diverse liquefaction processes, such as coal liquefaction plants and gas-to-liquid plants.

**Row 19:** *Other transformation* covers non-specified transformation not shown elsewhere, such as the transformation of primary solid biofuels into charcoal.

**Row 20:** *Energy industry own use* contains the primary and secondary energy consumed by transformation industries for heating, pumping, traction and lighting purposes [ISIC<sup>7</sup> 05, 06, 19 and 35, Group 091 and Classes 0892 and 0721]. These quantities are shown as negative figures. Included here are, for example, own use of energy in coal mines, own consumption in power plants (which includes net electricity consumed for pumped storage) and energy used for oil and gas extraction.

**Row 21:** *Losses* includes losses in energy distribution, transmission and transport.

**Row 22:** *Total final consumption* (TFC) is the sum of consumption by the different end-use sectors. Backflows from the petrochemical industry are not included in final consumption (see Row 17, *petrochemical plants* and Row 52, *of which petrochemical feedstocks*).

**Rows 23-36:** *Industry consumption* is specified by sub-sector as listed below: (Note - energy used for transport by industry is not included here but is reported under transport.)

*Iron and steel industry* [ISIC Group 241 and Class 2431];

*Chemical and petrochemical industry* [ISIC Divisions 20 and 21] excluding petrochemical feedstocks;

7. International Standard Industrial Classification of All Economic Activities, Series M, No. 4 / Rev. 4, United Nations, New York, 2008.



*Non-ferrous metals* basic industries [ISIC Group 242 and Class 2432];

*Non-metallic minerals* such as glass, ceramic, cement, etc. [ISIC Division 23];

*Transport equipment* [ISIC Divisions 29 and 30];

*Machinery* comprises fabricated metal products, machinery and equipment other than transport equipment [ISIC Divisions 25 to 28];

*Mining (excluding fuels) and quarrying* [ISIC Divisions 07 and 08 and Group 099];

*Food and tobacco* [ISIC Divisions 10 to 12];

*Paper, pulp and printing* [ISIC Divisions 17 and 18];

*Wood and wood products* (other than pulp and paper) [ISIC Division 16];

*Construction* [ISIC Divisions 41 to 43];

*Textile and leather* [ISIC Divisions 13 to 15];

*Non-specified* (any manufacturing industry not included above) [ISIC Divisions 22, 31 and 32].

Note: Most countries have difficulties supplying an industrial breakdown for all fuels. In these cases, the *non-specified* industry row has been used. Regional aggregates of industrial consumption should therefore be used with caution.

**Rows 37-43:** *Transport* includes all fuels used for transport [ISIC Divisions 49 to 51] except international marine bunkers and international aviation bunkers. It includes transport in industry and covers *domestic aviation, road, rail, pipeline transport, domestic navigation* and *non-specified transport*. Domestic aviation includes deliveries of aviation fuels to aircraft for domestic aviation – commercial, private, agriculture, etc. It includes use for purposes other than flying, e.g. bench testing of engines, but not airline use of fuel for road transport. The domestic/international split should be determined on the basis of departure and landing locations and not by the nationality of the airline. Note that this may include journeys of considerable length between two airports in a country (e.g. San Francisco to Honolulu). For many countries, the split between international aviation and domestic aviation incorrectly allocates fuel use for both domestic and international departures of domestically owned carriers to domestic air. Fuel used for ocean, coastal and inland fishing (included under *fishing*) and military consumption (included in *other non-specified*) are excluded from transport.

**Rows 44-49:** *Other* covers *residential* [ISIC Divisions 97 and 98, although this is only a small part

of residential], *commercial and public services* [ISIC Divisions 33, 36-39, 45-47, 52, 53, 55, 56, 58-66, 68-75, 77-82, 84 (excluding Class 8422), 85-88, 90-96 and 99], *agriculture/forestry* [ISIC Divisions 01 and 02], *fishing* [ISIC Division 03] and *non-specified consumption*. *Non-specified* includes military fuel use for all mobile and stationary consumption (e.g. ships, aircraft, road and energy used in living quarters) regardless of whether the fuel delivered is for the military of that country or for the military of another country. In many cases administrations find it impossible to distinguish energy consumption in *commercial and public services* from *residential* consumption. Some cannot distinguish consumption in *agriculture* from that in *residential*. In these cases, residential will also include consumption in agriculture and/or commercial/public services. The *other* total is, therefore, more accurate than its components.

**Rows 50-54:** *Non-energy use* covers those fuels that are used as raw materials in the different sectors and are not consumed as a fuel or transformed into another fuel. Non-energy use is shown separately in final consumption under the heading *non-energy use*.

Note that for biofuels, only the amounts of biomass specifically used for energy purposes (a small part of the total) are included in the energy statistics. Therefore, the non-energy use of biomass is not taken into consideration and the quantities are null by definition.

*of which: petrochemical feedstocks.* The petrochemical industry includes cracking and reforming processes for the purpose of producing ethylene, propylene, butylene, synthesis gas, aromatics, butadene and other hydrocarbon-based raw materials in processes such as steam cracking, aromatics plants and steam reforming [part of ISIC Group 201].

**Rows 55-57:** *Electricity generated* shows the total number of TWh generated by thermal power plants separated into electricity plants and CHP plants, as well as production by nuclear and hydro (excluding pumped storage production), geothermal, etc. (see, however, the notes on Rows 10 and 11). Electricity produced by heat from chemical processes is shown in the *heat* column.

**Rows 58-60:** *Heat generated* shows the total number of PJ generated by power plants separated into CHP plants and heat plants. Heat produced by electric boilers is shown in the *electricity* column. Heat produced by heat pumps, heat from chemical processes and heat from non-specified combustible fuels is shown in the *heat* column.



## 2. UNITS AND CONVERSIONS

### General conversion factors for energy

To:	TJ	Gcal	Mtoe	MBtu	GWh
From:	multiply by:				
terajoule (TJ)	1	238.8	$2.388 \times 10^{-5}$	947.8	0.2778
gigacalorie (Gcal)	$4.1868 \times 10^{-3}$	1	$10^{-7}$	3.968	$1.163 \times 10^{-3}$
million tonne of oil equivalent (Mtoe)	$4.1868 \times 10^4$	$10^7$	1	$3.968 \times 10^7$	11630
million British thermal unit (MBtu)	$1.0551 \times 10^{-3}$	0.252	$2.52 \times 10^{-8}$	1	$2.931 \times 10^{-4}$
gigawatt hour (GWh)	3.6	860	$8.6 \times 10^{-5}$	3412	1

### Conversion factors for mass

To:	kg	T	lt	st	lb
From:	multiply by:				
kilogramme (kg)	1	0.001	$9.84 \times 10^{-4}$	$1.102 \times 10^{-3}$	2.2046
tonne (t)	1000	1	0.984	1.1023	2204.6
long ton (lt)	1016	1.016	1	1.120	2240.0
short ton (st)	907.2	0.9072	0.893	1	2000.0
pound (lb)	0.454	$4.54 \times 10^{-4}$	$4.46 \times 10^{-4}$	$5.0 \times 10^{-4}$	1

### Conversion factors for volume

To:	gal U.S.	gal U.K.	bbl	ft <sup>3</sup>	l	m <sup>3</sup>
From:	multiply by:					
U.S. gallon (gal)	1	0.8327	0.02381	0.1337	3.785	0.0038
U.K. gallon (gal)	1.201	1	0.02859	0.1605	4.546	0.0045
barrel (bbl)	42.0	34.97	1	5.615	159.0	0.159
cubic foot (ft <sup>3</sup> )	7.48	6.229	0.1781	1	28.3	0.0283
litre (l)	0.2642	0.220	0.0063	0.0353	1	0.001
cubic metre (m <sup>3</sup> )	264.2	220.0	6.289	35.3147	1000.0	1

## Decimal prefixes

10 <sup>1</sup>	deca (da)	10 <sup>-1</sup>	deci (d)
10 <sup>2</sup>	hecto (h)	10 <sup>-2</sup>	centi (c)
10 <sup>3</sup>	kilo (k)	10 <sup>-3</sup>	milli (m)
10 <sup>6</sup>	mega (M)	10 <sup>-6</sup>	micro (μ)
10 <sup>9</sup>	giga (G)	10 <sup>-9</sup>	nano (n)
10 <sup>12</sup>	tera (T)	10 <sup>-12</sup>	pico (p)
10 <sup>15</sup>	peta (P)	10 <sup>-15</sup>	femto (f)
10 <sup>18</sup>	exa (E)	10 <sup>-18</sup>	atto (a)

## Coal

Coal has separate net calorific values for production, imports, exports, inputs to electricity/heat generation and coal used in coke ovens, blast furnaces and industry. For electricity/heat generation, coal inputs to each type of plant (i.e. main activity electricity plant, auto-producer electricity plant, main activity CHP plant, autoproducer CHP plant, main activity heat plant, autoproducer heat plant) are converted to energy units using average factors calculated from the *Annual Electricity Questionnaire*. All other flows are converted using an average net calorific value. Country-specific net calorific values for 2010 are given in Part II.

## Crude oil

Country-specific net calorific values (NCV) for production, imports and exports by country are used to calculate the balances. The average value is used to convert all the other flows to heat values. Country-specific net calorific values for 2010 are given in Part II.

## Gases

*Energy Statistics of OECD Countries* expresses the following gases in terajoules, using their gross calorific value.

1 terajoule = 0.00002388 Mtoe.

To calculate the net heat content of a gas from its gross heat content, multiply the gross heat content by the appropriate following factor.

Gas	Gross to net ratio
Natural gas	0.9
Gas works gas	0.9
Coke oven gas	0.9
Blast furnace gas	1.0
Other recovered gases	1.0

## Biofuels and waste

The heat content of primary solid biofuels, biogases, municipal waste and industrial waste, expressed in terajoules on a net calorific value basis, is presented in *Energy Statistics of OECD Countries*. The Secretariat does not receive information on volumes and other characteristics of these fuels.

1 terajoule = 0.00002388 Mtoe.

Data for charcoal are converted from tonnes using the average net calorific values given in Part II.

Unless country-specific information has been provided, data for biogasoline are converted from tonnes using 26 800 kJ/kg. Biodiesels and other liquid biofuels are assumed to have a net calorific value of 36 800 kJ/kg unless otherwise specified.

## Oil products

The IEA applies regional conversion factors (in conjunction with Eurostat for the European countries) for the oil products.

## Regional net calorific values for oil products

Oil products	Europe	Americas	Asia Oceania
	kJ/kg	kJ/kg	kJ/kg
Refinery gas	49 500	48 100	48 100
Ethane	49 500	49 400	49 400
Liquefied petroleum gases	46 000	47 300	47 700
Motor gasoline	44 000	44 800	44 600
Aviation gasoline	44 000	44 800	44 600
Gasoline type jet fuel	43 000	44 800	44 600
Kerosene type jet fuel	43 000	44 600	44 500
Kerosene	43 000	43 800	42 900
Gas/diesel oil	42 600	42 600	42 600
Fuel oil	40 000	40 200	42 600
Naphtha	44 000	45 000	43 200
White spirit	43 600	43 000	43 000
Lubricants	42 000	42 000	42 900
Bitumen	39 000	40 000	38 800
Paraffin Waxes	40 000		
Petroleum Coke	32 000	32 000	33 800
Non-specified oil products	40 000		

## Electricity

Figures for electricity production, trade, and final consumption are calculated using the energy content of the electricity (i.e. at a rate of 1 TWh = 0.086 Mtoe).

Hydro-electricity production (excluding pumped storage) and electricity produced by other non-thermal means (wind, tide/wave/ocean, photovoltaic, etc.) are accounted for similarly using 1 TWh = 0.086 Mtoe.

The primary energy equivalent of nuclear electricity is calculated from the gross generation by assuming a 33% conversion efficiency, i.e. 1 TWh = (0.086 ÷ 0.33) Mtoe.

In the case of electricity produced from geothermal heat, if the actual geothermal efficiency is not known, then the primary equivalent is calculated assuming an efficiency of 10%, so 1 TWh = (0.086 ÷ 0.1) Mtoe.

## Heat

Information on heat is supplied in terajoules and 1 terajoule = 0.00002388 Mtoe.

In the case of heat produced in a geothermal plant, if the actual geothermal efficiency is not known, then the

primary equivalent is calculated assuming an efficiency of 50%, so 1 TWh = (0.086 ÷ 0.5) Mtoe.

For direct use of geothermal and solar thermal heat, all the heat consumed is accounted for in production and consumption.

## Examples

The following examples indicate how to calculate the net calorific content (in Mtoe) of the quantities expressed in original units in *Energy Statistics of OECD Countries*.

From Original Units	To Mtoe (on a NCV basis)
Coking coal production (Poland) for 2010 in thousand tonnes	divide by 41 868 and then multiply by 29.507
Natural gas in terajoules (gross)	multiply by 0.00002388 and then multiply by 0.9
Motor gasoline (Poland) in thousand tonnes	divide by 41 868 and then multiply by 44.000
Heat in terajoules (net)	multiply by 0.00002388



## 3. COUNTRY NOTES

### General notes

The notes given below refer to data for the years 1960 to 2010 and cover the summary tables at the back of the book, as well as the information on CD-ROM and the on-line data service. In general, more detailed notes are available for data starting in 1990.

Prior to 1974, most fuel inputs and electricity and heat outputs for autoproducers are included in main activity producers. The figures for the quantities of fuels used for the generation of electricity and heat and the corresponding outputs in CHP and heat plants should be used with caution. Despite estimates introduced by the Secretariat, inputs and outputs are not always consistent. Please refer to notes below under *Electricity and Heat*.

In 1996, the IEA Secretariat extensively revised data on coal and coke use in blast furnaces, and in the iron and steel industry (for those countries with blast furnaces), based on data provided to the OECD Steel Committee and other sources. The quantities of fuels transformed into blast furnace gas have been estimated by the IEA Secretariat based on its blast furnace model.

Moreover, in 1996 and 1997, the IEA Secretariat extensively revised data on biofuels and waste (i.e. solid biofuels, biogases, liquid biofuels, industrial waste and municipal waste) based on data from Eurostat (for the EU-15 Member countries) and on other national sources for other OECD Member countries. As consumption data for biofuels and waste from Eurostat are generally available from 1989, there may be breaks in series between 1988 and 1989 for some EU Member countries.

### Australia

In the 2012 edition, data for Australia were revised back to 2006 due to the adoption of the National Greenhouse and Energy Reporting (NGER) data as the main energy consumption data source for the Australian Energy Statistics. As a result, there are breaks in the time series for many data between 2005 and 2006.

All data refer to the fiscal year (e.g. July 2010 to June 2011 for 2011). For the 2002 data, the Australian Administration started to use a new survey methodology which caused shifts in the structure of industry consumption. The Australian Administration is planning to revise the historical series.

**Coal:** Data on blast furnace gas for electricity production by autoproducers begins in 1986. Consumption in wood and wood products is included in paper, pulp and print from 2001 onwards. The drop in BKB production in 2004 was due to a fire in the main production plant. Revisions in the 2012 edition also resulted in reclassification of some coal.

**Oil:** Negative refinery losses are caused by differences in treatment of transfers between refineries. Imports of fuel oil have been estimated by the Australian Administration. The drop in the production of crude oil in 1999 is due to a gas explosion at the Longford plant.

**Natural Gas:** Prior to 1991, natural gas data include ethane. Data for 1999 and 2000 are estimated by the Australian Administration.

**Biofuels and Waste:** For biofuels and waste, a different industry consumption breakdown is available from 1996 and leads to breaks in series. Biogas production at sewage treatment works is unavailable.



**Electricity and Heat:** Inputs and outputs from auto-producer CHP plants are not available prior to 1986. The production of electricity from wind is available from 1994. Electricity production from solar PV starts in 1992 and from solar thermal in 2003. Efficiencies used to calculate the solar thermal inputs to transformation were chosen by the Australian Administration to be consistent with their national statistics. Prior to 1995, electricity production from biogases is included in natural gas. Heat data are not available from 1992 onwards. In 2002, the Australian Administration started to use a new survey methodology and reclassified the types of plants between main activity producers and autoproducers.

Prior to 2006, electricity consumption in mining and quarrying includes consumption in liquefaction/regasification plants. From 1990 to 2008, electricity consumption in wood and wood products is included together with paper, pulp and printing.

## Austria

Historical revisions by the Austrian Administration have resulted in some breaks in series between 1989 and 1990.

**Coal:** In the 2012 edition, the Austrian Administration has revised the data for consumption and transformation processes for other bituminous coal, coke oven coke and coke oven gas from 2001 onwards. Blast furnace gas was revised in selected sectors from 1990. Since 1996, gas works gas is reported with natural gas because it is distributed in the same network. The amount of gas works gas is negligible and it is mostly consumed by households. The last lignite mine closed in the second quarter of 2004 and lignite use for power generation ceased in 2006.

**Natural Gas:** The break in the time series for auto-producer electricity and CHP plants between 1995 and 1996 is due to the availability of more detailed data from 1996 onwards. Differences due to measurement are included with losses prior to 2000. There are inconsistencies in the time series for commercial/public services as this sub-sector is the residual of the consumption data. In the 2011 edition, many consumption sub-sectors have been revised back to 1999 as a result of a new methodology.

**Biofuels and Waste:** Data for 1986 to 1989 for solid biofuels, industrial waste, biogases and liquid biofuels are IEA Secretariat estimates based on information published by OSTAT in *Energieversorgung Österreichs*

*Endgültige Energiebilanz*. Due to a change in the survey methodology, the heat produced in small plants (capacity inferior to 1 MW) is not reported starting in 2002. Prior to 2002, data for biogases only include plants of 1 MW or larger.

**Electricity and Heat:** From 1990 to 2009, small amounts of electricity used in heat pumps have been included in residential. Heat from chemical processes used for electricity production is available from 2004. Electricity plants data may include some CHP plants operating in electricity only mode.

Inputs of other oil products to autoproducer CHP plants were reclassified as refinery gas and natural gas in 2009. Revisions to the historical time series are planned by the Austrian Administration. Electricity consumption in oil refineries includes consumption in gas works prior to 1991. Also prior to 1991, electricity consumption in the iron and steel industry includes consumption in coke ovens and blast furnaces. Consumption in commercial/public services includes electricity used in the field of electricity supply, district heating and water supply prior to 1990. Electricity consumption in non-specified transport represents tramways, electric buses, ski lifts and cable cars. For heat, own use is included in losses.

## Belgium

**Coal:** Production includes the recuperation of coal from coal dumps. Production of other bituminous coal ceased on 31 August 1992. The use of coke oven gas in chemical and petrochemical ceased in 1996. The decrease of bituminous coal and coke oven coke in the iron and steel industry in 2002 is due to the closure of several plants.

**Oil:** The decrease of fuel oil in industry consumption since 1993 is due to the introduction of an excise tax as well as increased use of natural gas. In 2002, patent fuel plants used fuel oil to increase the calorific value of patent fuel.

**Natural Gas:** The large decrease in non-specified industry in 2003 is due to improvements in data collection. New legislation for data collection has led to breaks in series for industry and energy industry own use between 2004 and 2005, and between 2007 and 2008. Starting in 2009, gas trade in Belgium includes imported LNG which is regasified and subsequently exported to other countries.

**Biofuels and Waste:** In 2003, combustion of municipal waste for electricity and heat generation purposes

increased significantly. However, because a large portion of the heat produced is not used (sold), plant efficiencies dropped significantly between 2002 and 2003. Data for biodiesels are available starting in 2007. Data for biogasoline are available starting in 2008.

**Electricity and Heat:** For 1998 and 1999, electricity production at CHP plants with annual heat output below 0.5 TJ is reported with electricity only plants. In 2000, most autoproducer electricity plants using combustible fuels were reclassified as autoproducer CHP plants; the heat production from these plants was used for internal industrial processes and not sold to third parties until 2005. Heat from chemical processes used for electricity production is available from 2005.

Breaks in series exist between 1991 and 1992 for heat consumption in chemical and non-specified industry. Breaks in series may exist between 2007 and 2008 due to revisions of NACE classifications. There is no heat consumption starting in 2007 in the iron and steel industry because the installation concerned became an autoproducer in July 2006 and the heat is no longer sold.

## Canada

Revisions received by the Canadian Administration and incorporated into the 2002 edition have resulted in breaks in series between 1989 and 1990.

**Coal:** Due to a Canadian confidentiality law, it is not possible for the Canadian Administration to submit disaggregated series for all of the coal types. Between 2002 and 2006, the IEA Secretariat has estimated some of the missing series. The data for 2007 onwards are given directly as reported. The Canadian Administration is planning to further refine its reporting.

**Oil:** From 1988 onwards, data for several industrial sub-sectors are no longer available. Transfers for naphtha and *other oil products* include purchases of feedstock and other additives from non-reporting companies. Ethane is mainly used as a petrochemical feedstock. Prior to 1990, hydrogen used for the upgrading of synthetic crude oil production was included in natural gas supply; from 1990, a different methodology was adopted by the Canadian Administration and these amounts are now shown in *other hydrocarbons* (part of crude oil). Canada imported orimulsion from Venezuela from 1994 to 2000.

**Natural Gas:** Starting in 1992, consumption of natural gas in main activity producer CHP plants includes use in three new facilities in the province of Ontario.

In 2000, the increase in main activity producer electricity data is due to new generation plants in Alberta and Ontario, while the increase in autoproducer electricity is due to the addition of independent power production.

**Biofuels and Waste:** The IEA Secretariat has estimated the data for industrial waste from 1990 to 2007, biogasoline (ethanol) from 1998 to 2004, municipal waste from 1990 to 2004, and landfill gas from 1997 to 2006 based on information supplied by Natural Resources Canada. The IEA Secretariat estimated landfill gas production and consumption for 2007 from information supplied by Environment Canada, Waste Management.

**Electricity and Heat:** Heat production includes heat produced by nuclear power stations for distribution to other consumers. The breakdown of electricity and heat generation between natural gas and oil products in main activity producer CHP plants has been estimated by the Canadian Administration starting in 1990. This may cause breaks in the time series between 1989 and 1990. In the 2010 edition, the Canadian Administration revised the heat consumption data, causing statistical differences; revisions to production are pending. Starting in 2009, a new source has been used for electricity production from solar, wind, and tide. This new source covers production from solar and wind only from plants with capacity higher than 500 kW.

## Chile

Data are available starting in 1971.

From 1990, consumption in paper and pulp includes forestry and consumption in agriculture is included in non-specified industry. In general, a new methodology has been applied for data since 1990, leading to other breaks in series between 1989 and 1990.

**Coal:** In the 2012 edition, the Chilean Administration has revised the coal time series back to 2004.

**Oil:** There are breaks in series between 2008 and 2009 due to a change in methodology by the Chilean Administration.

**Natural Gas:** Inputs of natural gas to autoproducer CHP plants in 2009 are estimated by the Chilean Administration based on electricity generation. In previous years these inputs are included in autoproducer electricity. Data for gas inputs to oil refineries are not available for 2008 and 2009.

**Biofuels and Waste:** Production of landfill gas ceased in 2001 as landfill sites stopped producing adequate gas to continue collection. Charcoal production and consumption have been estimated by the IEA Secretariat. For the 2012 edition, the Chilean Administration revised the time series for industrial waste from 2000.

**Electricity and Heat:** The split of electricity generation by main activity and autoproducer and by fuel was estimated by the Chilean Administration for 1990 to 2003.

Electricity production includes production from a conveyor belt transporting crushed rock from high altitude to lower altitude in a mine as well as waste heat. For the 2012 edition, the Chilean Administration revised the time series for hydro from 1996.

## Czech Republic

Data are available starting in 1971.

**Coal:** Final consumption data were submitted by the Czech Administration starting with 1996 data. Due to economic restructuring in consumption in the late 1990s (big state enterprises subdividing and/or privatising and the utilisation of new technologies by businesses), there might be breaks in time series in these sectors. Data for 1990 to 1995 were estimated based on the Czech publication *Energy Economy Year Book*. In 1995, town gas production ceased. Revisions by the Czech Administration have resulted in some breaks in series between 2001 and 2002. Production of other bituminous coal in 2004 includes coal from coal slurries.

**Oil:** Data prior to 1994 are estimated by the IEA Secretariat. The Czech Administration submitted an Oil Questionnaire to the IEA for the first time with 1994 data. Breaks in series between 1998 and 1999 for the final consumption of gas/diesel oil are due to a new data management system implemented by the Czech Administration.

**Natural Gas:** Data from 1993 onwards have been officially submitted by the Czech Statistical Office. The breaks in series between 1993 and 1994 are due to a change in the energy balance methodology between former Czechoslovakia and the Czech Republic. Prior to 1994, data in transport are for former Czechoslovakia. Natural gas inputs into gas

works ceased in 1996. From 2008, hydrogen production is reported in petrochemical feedstocks as non-energy use.

**Biofuels and Waste:** Data for solid biofuels are not available prior to 1990. The restructuring of the Czech electricity market leads to breaks in the time series in all sectors between 1998 and 1999. Data for liquid biofuels are available starting in 1992 and for municipal waste starting in 1999. New survey systems cause breaks in final consumption in 1999 and in 2002. Breaks in both supply and consumption of biofuels and waste occur again in 2003.

**Electricity and Heat:** Electricity statistics from 1971 to 1989 have been estimated by the IEA Secretariat except for final consumption and trade which were submitted by the Czech Administration. Data on heat production, and the corresponding fuel inputs, have been estimated from 1980 to 1989 based on consumption in residential and commercial/public services. Prior to that, inputs are included in industry. Data from 1990 onwards have been officially submitted by the Czech Administration. This may lead to breaks in series between 1989 and 1990. Prior to 1990, electricity production in main activity producer CHP and autoproducer CHP plants is included in main activity producer electricity plants. Heat production prior to 1990 excludes heat sold by industry. In addition, heat production prior to 1990 is reported under main activity heat plants because the breakdown by producer and plant type is not available before then. The amount of heat reported under *other sources* is waste heat from the glass industry. In 1999 and 2000, various big enterprises have been divided, sold and merged. This causes breaks in the time series of all types of plants. The new reporting methodology used by the Czech Administration for biofuels and wastes causes some breaks in time series between 2002 and 2003.

## Denmark

In the 2004 edition, major revisions were made by the Danish Administration for the 1990 to 2001 data, which may cause breaks in time series between 1989 and 1990.

**Oil:** Information on waste oil recycling and final consumption begins in 1989 and is reported in *other oil products*. Prior to 1990, Greenland and the Danish

Faroese are included in the oil data. Also prior to 1990, gas/diesel oil consumption and fuel oil consumption for fishing are included in domestic navigation. Consumption data are based on a detailed survey sent to companies in Denmark every other year. For non-survey years, the consumption figures are estimated by the Danish Energy Agency. Due to better survey methods, inputs to electricity and heat generation have been reclassified, causing a break in series between 1993 and 1994. The marked increase in inputs of fuel oil to CHP production in 1994 is due to increased electricity exports to Norway. Industry detail for 1994 and 1995 is based on a new survey. Between 1995 and 2004, other hydrocarbon imports and inputs to main activity producer CHP plants represent orimulsion. The oil inputs used in industrial sub-sectors for producing surplus heat, which is delivered to district heating networks, are allocated to these industrial sub-sectors.

**Biofuels and Waste:** The number of heating companies burning wood chips that are equipped with boilers with flue-gas condensation is increasing. This implies a very high efficiency of heat plants.

**Electricity and Heat:** From 1984 onwards, small amounts of heat have been imported from Germany. Heat produced for sale by heat pumps starts in 1994. Prior to 1994 the electricity and heat production are estimated based on fuel inputs. The amount of heat reported under *other sources* is heat recovered from industrial processes and sold for district heating.

## Estonia

Data for Estonia are available starting in 1990. Prior to that, they are included in Former Soviet Union in *Energy Balances of Non-OECD Countries*.

**Coal:** Data reported under lignite are for oil shale.

**Oil:** For the years 1990 to 2007, oil data are based on direct communication with Statistics Estonia and UN ECE.

**Natural Gas:** In 2009, Estonia's main producer of fertilisers ceased activity, resulting in a sharp decrease in the non-energy use of natural gas.

**Electricity and Heat:** Electricity and heat output reported under lignite refer to oil shale. Inputs of residual fuel oil and gas works gas to transformation processes include shale oil.

## Finland

A new survey system and a reclassification of the data lead to breaks in the time series between 1999 and 2000 for most products and sectors. The new survey system is more detailed and has better product coverage, especially in electricity, CHP and heat production, as well as in industry.

**Coal:** The first coking plant started operation in 1987, hence imports of coking coal and production of coke oven coke and coke oven gas started in that year. Coal tars used for non-energy purposes are not reported in production or consumption. The increase of other bituminous coal inputs into main activity producer electricity plants from 1993 to 1994 was due to coal replacing imported electricity and hydro power. Production of gas works gas ceased in April 1994.

**Oil:** In 1995, there is a break in series for oil products trade due to the aligning of the National Board of Customs trade data collection system with the European Union's Intrastat system. Due to a new calculation model, there is a break in fuel oil *other* consumption between 1998 and 1999.

**Natural Gas:** Prior to 1989, natural gas consumption in residential and agriculture/forestry has been estimated by the Finnish Administration. Due to a new system of data collection, the breakdown between residential and commercial/public services is available since 1995.

**Biofuels and Waste:** Data for biogases and industrial waste are available from 1996. Prior to 2004, industrial waste also included other energy forms such as hydrogen, heat from chemical processes, natural gas and blast furnace gas. For the 2012 edition, data for solid biofuels and biogases were revised from 2000.

**Electricity and Heat:** Electricity and heat production from biogases are available from 1996. Heat output from autoproducer CHP plants is available starting in 1996 and from autoproducer heat plants starting in 2000. Heat from chemical processes and associated electricity generation are available from 2004. The decrease in electricity production in 2005 is mainly due to lower generation from coal and peat, which was offset by increased electricity imports from Sweden. The increasing heat production from heat pumps in 2007 and 2008 is from the new Katri Vala heating and cooling plant. *Other sources* includes hydrogen and purchased steam.

Consumption of electricity in non-specified transport corresponds to use for urban transport systems. Consumption of heat in residential includes consumption in agriculture/forestry and commercial/public services.

## France

**Coal:** For 1989 to 1998, the IEA Secretariat has estimated industry consumption based on *Consommations d'Énergie dans l'Industrie*, SESSI.

**Oil:** Additives and oxygenates data are available from 1991. From 1998, imported oil products needing further refinery processing are no longer reported as refinery feedstock imports but as oil product imports and products transferred. The consumption of kerosene type jet fuel includes military use as of 1998. Prior to 2000, data for non-ferrous metals are included in non-specified industry for petroleum coke.

**Natural Gas:** From 1990 to 1998, the statistical difference includes gas consumption that is not broken down by sector. From 1999 onwards, a new methodology was used for preparing the natural gas balances which leads to breaks in series between 1999 and 2000. Gas for pipelines is included in losses. There is a break in series in the industry sub-sectors between 2005 and 2006. Improvements in data collection lead to some breaks in series between 2008 and 2009.

**Biofuels and Waste:** Plants using municipal waste were reclassified as autoproducer CHP plants from 1995, which leads to a break in series. The breakdown of the final energy consumption of biogases was estimated by the French Administration from 1970 to 2003. In the 2012 edition, data for solid biofuels and biogases were revised from 2006.

**Electricity and Heat:** Electricity production from wind is available from 1993. From 1995, due to a change in the economic activity classification, data have been reported in *other non-specified*. A new method of survey and a reclassification between main activity producer electricity plants and autoproducer electricity plants may cause breaks in the series for other bituminous coal between 1998 and 1999. From 2000 to 2008, there are further classification problems for inputs and output of electricity and heat from oil. The French Administration is working to reconcile their data collection methods for the inputs and the outputs for electricity generation. Due to a new survey, in the 2007 edition the French Administration revised the data back to 2000 and included heat produced

from fossil fuels in CHP plants. Data for heat produced from fossil fuels in heat only plants are not available. Unfortunately it is not possible to separate out the amount of heat not sold in autoproducer plants so these amounts have been included. However, no double counting occurs since the corresponding inputs have not been included in final consumption. In 2005, autoproducer CHP efficiencies for other biogases drop due to the opening of a larger, less efficient plant.

Consumption of electricity for oil and gas extraction includes that used in oil refineries from 1988 to 2000. *Other non-specified* consumption includes exports to Monaco prior to 1992. In the 2012 edition, data for direct use of solar thermal and geothermal were revised from 2006 and 2007.

## Germany

German data include the new federal states of Germany from 1970 onwards.

The German Administration has changed the methodology for reporting heat. Between 2003 and 2006, autoproducer heat output was provided, but no inputs. Starting in 2007, more information is available on main activity heat plants and additional inputs started to be reported for this category. This causes breaks in series between 2006 and 2007.

**Coal:** Due to reclassification of several sectors by the German Administration, breaks in series may occur between 1990 and 1992; this particularly affects BKB, lignite and coke oven coke. BKB inputs to gas works plants stopped in 1997. Breaks in series may occur between 1998 and 1999 for coke oven gas and blast furnace gas. Breaks in the series for coke oven gas from 2007 are due to a change in statistical source. Consumption of non-renewable municipal waste and other solid biofuels as a reductant occurs in German blast furnaces, but is not currently quantified. Likewise, coal tar is a by-product of coke ovens, but not currently reported.

**Oil:** Beginning in 1994, final consumption by individual sector has been improved due to new survey methods instituted by the *Minerölwirtschaftsverband*. In 1995, a break in gas/diesel oil consumption occurs as a result of an alignment with the Classification of the Economic Activities in the European Community (NACE). Breaks in series in consumption data between 2002 and 2004 are due to structural changes in energy statistics following the newly introduced Energy Statistics Act.

**Natural Gas:** Prior to 1995, inputs of natural gas for main activity producer heat are included with main activity producer CHP. Also prior to 1995, final consumption data are based on *Arbeitsgemeinschaft Energiebilanzen*. From 1995 onwards, the industry sub-sector breakdown is based on the new 1995 NACE classification. This leads to a number of breaks in series between 1994 and 1995. In 2003, there is a break in series for electricity and CHP plants (both autoproducers and main activity producers). From 2003 onwards, own use of gas in coke ovens was negligible. There are no official data for construction from 2004 onwards. There is a break in series between 2009 and 2010 due to a new, more comprehensive legal framework that resulted in methodological changes for production and new calorific values for natural gas. Consumption in coke ovens, agriculture and *other non-specified*, which was previously estimated, is no longer shown starting in 2010 and losses have been included in statistical differences. Revisions back to 2005 are pending.

**Biofuels and Waste:** A new survey for renewables causes breaks in the time series between 1998 and 1999. The German Administration submitted an incomplete annual questionnaire on renewables and waste for the years 2001 and 2002. As a consequence, the IEA Secretariat estimated the missing data based on statistics published by the Federal Environment Ministry and data submitted in the Electricity and Heat Questionnaire. Where estimation was impossible due to lack of information, the data from the previous year were used. A new reporting system leads to break in series between 2002 and 2003. The German Administration is undertaking the reconciliation of historical data. Data on biogasoline and biodiesels are available starting in 2004.

**Electricity and Heat:** Data should be used with caution since numerous breaks in series occur from 1998 onwards. The German Administration started reporting near the surface geothermal energy in 1995, which leads to a break in series with 1994, where only deep geothermal energy is reported. From 1999 onwards, small amounts of electricity generation that are not accounted for in the data submission have been attributed to various combustible fuels. In some instances, electricity generation from nuclear, hydro, solar and wind in autoproducer electricity plants is confidential or not available and therefore is included in main activity producer electricity plants. For 2002 and 2003, the German Administration did not submit the breakdown of electricity and heat production from

combustible fuels. The data were estimated as follows: renewables and waste were taken from the Renewables and Waste Questionnaire and the other combustible fuels were estimated pro rata based on 2001 estimates. Electricity production in electricity plants includes production from CHP plants prior to 2003. Due to the implementation of the Energy Statistics Act, collection concerning heat produced in heat plants and district heating plants became more efficient and more complete. This leads to breaks in series between 2002 and 2003 and between 2003 and 2004. Prior to 1993, all heat production from BKB/peat briquettes is included in main activity producer CHP plants. Detailed data by fuel are not available for total heat production. The non-allocated part is reported as heat production from non-specified combustible fuels. In 2007, many main activity CHP plants that burn biofuels and waste were reclassified as electricity only which results in breaks in the time series between 2006 and 2007. Electricity production from *other sources* is available starting in 2009. This refers to the production of electricity from turbines which are located at pressure drops in fluid transport and from purchased waste heat.

The German Federal Statistics Office reclassified some industrial branches which may cause a break in series in industry sub-sectors between 1994 and 1995. Revisions from the German Administration to the electricity consumption data may cause breaks in the time series between 1999 and 2000. The breakdown of heat consumption is not available from 2003 to 2006. The data for that period were estimated as follows: the transformation processes and losses were estimated based on previous years, the heat produced by autoproducers was included in non-specified industry, and the remaining consumption included in *other non-specified*.

## Greece

**Coal:** Production of gas works gas ceased in 1997. Lignite is used in main activity producer CHP plants since 1997. Production of BKB/peat briquettes ceased in 2009.

**Oil:** Data on feedstocks for cracking in refineries are available from 1986. Crude oil production stopped on 30 November 1998 and started again in December 1999.

**Natural Gas:** Natural gas produced in Greece has a higher than average gross calorific value due to a high

content of C<sub>2</sub>/C<sub>4</sub> hydrocarbons. In 1997, a new pipeline between Russia and Greece became operational. In 1998, consumption in residential is included with commercial/public services. Production of natural gas stopped on 30 November 1998 and started again in December 1999.

**Biofuels and Waste:** Solid biofuel consumption in commercial/public services is included in residential. Data for biogases are available from 1990 and data for industrial waste from 1992. New information on solid biofuels is available from 1996 and leads to breaks between 1995 and 1996. Inputs of solid biofuels to charcoal production are estimated by the IEA Secretariat assuming an efficiency of 40%.

**Electricity and Heat:** A break in series exists between 1991 and 1992 for electricity consumption in transport. Data on biofuels and waste are available from 1992. Production and consumption of distributed heat (heat sold) that is produced from lignite is available from 1997.

Direct use of geothermal heat in residential is available starting in 2004.

## Hungary

Data are available starting in 1965.

**Coal:** Autoproducer heat and power plants using coke oven gas and blast furnace gas were reclassified in 1998 as main activity power plants.

**Oil:** The Hungarian Administration submitted questionnaires to the IEA Secretariat for the first time with 1993 data. Data for additives and aviation gasoline are available starting from 1998.

**Natural Gas:** Due to a new methodology, some breaks in series exist between 1996 and 1997. From 1997, two autoproducer heat plants have been reclassified to main activity producer heat plants. Prior to 2004, iron and steel consumption includes transformation of natural gas in blast furnaces.

**Biofuels and Waste:** Data for biogases are available from 2000.

**Electricity and Heat:** The revision of heat production data to conform to IEA reporting methodologies may result in a mismatch of fuel inputs with electricity and heat outputs by plant type, which could cause high efficiencies. Electricity and heat production from solid biofuels in autoproducer CHP plants is available from

1995. Geothermal heat production from main activity producer heat plants is also available from 1995. The Hungarian Administration reclassified some of their plants between 1996 and 2000, which may lead to breaks in the time series.

Direct use of geothermal heat is available from 1990. Direct use of solar thermal heat is available from 2001.

## Iceland

**Coal:** Final consumption increased in 2000 as a new iron and steel plant came on-line.

**Oil:** Oil supply and consumption data for 2008 and 2009 are estimated by the IEA Secretariat.

**Biofuels and Waste:** The use of municipal waste to produce heat is available from 1993.

**Electricity and Heat:** Electricity production from geothermal sources in main activity producer CHP plants is available from 1992. Heat production from municipal waste is available from 1993. In 1998, 60 MW of generating capacity was installed in the geothermal CHP plant at Nesjavellir. Since the plant was inoperable for four months, production of geothermal heat decreased compared to 1997. The extra electricity capacity caused electricity production from geothermal to almost double over the same period. In 2002, the increase of heat produced by geothermal was due to the installation of a third unit at the Nesjavellir CHP power plant. The increase in hydro and geothermal electricity production from 2007 is due to the expansion of the aluminium industry.

Energy industry own use of electricity refers mainly to the use of electricity by the geothermal industry to pump geothermal water from underground sources. The consumption of electricity reported in *other non-specified* corresponds to a NATO base at Keflavik airport which closed in 2005. The increase of electricity consumption in construction from 2004 to 2007 is due to the drilling of tunnels for the Kárahnjúkar power plant. Starting in 2007, the Icelandic Administration decided not to estimate the allocation of geothermal consumption amongst the sub-sectors of industry as they had done from 1999 to 2006 and instead reported all industry consumption under non-specified industry. Prior to 2008, all heat for space heating was reported in residential. From 2008 a portion is estimated to be consumed in commercial and public services.



## Ireland

**Coal:** The production of gas works gas ceased in 1987 due to fuel switching to natural gas. Other bituminous coal inputs to main activity producer electricity plants increased from 1986 due to three new generating units at Moneypoint coming on-line. A reclassification causes a break in the series for peat consumption in the energy industry own use in BKB plants from 1989 to 1990. Patent fuel data from 1990 are confidential.

**Oil:** Consumption in commercial/public services includes quantities used by state-owned agricultural companies. Consumption data collected for 1993 are based on a detailed survey. Data for historical years back to 1990 were revised by the National Administration based on the results of this survey. Owing to these revisions, breaks in series exist between 1989 and 1990 in the detailed consumption data for LPG, kerosene, gas/diesel oil and fuel oil. There is a break in series between 2006 and 2007 for white spirit, lubricants and bitumen and between 2008 and 2009 for gas/diesel oil and petroleum coke due to a new methodology being applied to sectoral demand by Sustainable Energy Ireland (SEI).

**Natural Gas:** The large increase in imports since 1996 is due to the depletion of the Kinsale gas field and the availability of a new pipeline system to the United Kingdom. The decrease in natural gas consumption in the iron and steel industry from 2001 onwards is due to the shutdown of Ireland's main steel plant. Feedstock use in the petrochemical industry stopped in 2003, due to the shutdown of a fertiliser plant.

**Biofuels and Waste:** Data for solid biofuels and biogases are available from 1990. Data for municipal waste are available from 2009. Production and trade of biogasoline and biodiesels cannot be distinguished due to confidentiality issues.

**Electricity and Heat:** Electricity production from wind begins in 1992.

Direct use of solar thermal heat is available from 1990.

The decrease of electricity consumption in the iron and steel industry from 2001 onwards is due to the fact that the main steel plant in Ireland ceased production. In accordance with ISIC definitions, electricity used for urban transport has been included in non-specified transport. The increase in 2004 is due to the new light rail transit system in Dublin.

## Israel

Data are available starting in 1971.

**Coal:** Data for oil shale are included with lignite.

**Oil:** From 2007 to 2009, oil data are estimated by the IEA Secretariat based on information from the Ministry of National Infrastructures.

**Natural Gas:** Imports of natural gas began in 2008.

**Biofuels and Waste:** Inputs to transformation are estimated by the IEA Secretariat for other liquid biofuels for 2009 and 2010 and for municipal waste for 2009.

**Electricity and Heat:** Electricity production from wind begins in 2001. Data on the breakdown of hydroelectric plants are available from 2008. For 2009, solar photovoltaic electricity generation is estimated.

## Italy

In the 2011 edition, industry and transformation data were revised for 2004 to 2007 according to the same methodology as used in 2008 and 2009. This leads to breaks in series between 2003 and 2004.

**Coal:** From 1986 onwards, figures from lignite are given using the same methodology as in the *Bilancio Energetico Nazionale*. In 1991, all industrial activities were reclassified on the basis of ISTAT/NACE 91. This has implied some transfers of activities which may result in some anomalies between 1991 and earlier years. Due to a change in the survey system, breaks in series may occur between 1997 and 1998 for final consumption.

**Oil:** Inputs to electricity and heat generation have been estimated by the IEA Secretariat for the years 1984 to 1997 based on submissions of the Electricity and Heat Questionnaire. All other data for the years 1992 to 1997 and the detailed consumption breakdown for other years have been estimated by the IEA Secretariat based on *Bilancio Energetico Nazionale*. Due to new surveys, breaks appear in the consumption series between 1998 and 1999. For gas/diesel oil, non-specified use is included in commercial/public services. In the 2010 edition, the split between international marine bunkers and domestic navigation was revised from 1996 for fuel oil and from 1999 for gas/diesel due to a new survey, causing a break in series in these years. For LPG, a new disaggregation

between residential and commercial/public services has been applied starting in 2005. From 2009 onwards, transfers of lubricants could not be disaggregated from refinery output data, which results in increased production of non-specified oil products.

**Natural Gas:** The production of gas works gas from natural gas ceased in 1996. Prior to 2008, inputs of natural gas for useful heat production in industry are reported in final consumption. Except for liquefaction plants, data in energy industry own use are estimated and include statistical differences and *other non-specified* consumption.

**Biofuels and Waste:** Data for biofuels and waste were reclassified in 2008, which results in several breaks in the time series for transformation. Data collection for wood and other solid biofuels consumption by sector was improved in 2008.

**Electricity and Heat:** From 2000 onwards, the Italian Administration defines electricity and heat production from autoproducers as generation from producers that consume more than 70% of their own electricity production. However, for the 2000 to 2002 period, all electricity production from autoproducers is reported with main activity producers. The production of electricity reported in the category *other fuel sources* refers to electricity produced from turbines which are located at pressure drops in fluid transport. Heat production is reported starting in 2004 and includes self-generation in industry.

The breakdown of heat consumption by sector has been estimated by the Italian Administration.

The methodology of data collection for photovoltaic electricity production changed in 2009 and the distinction between main activity and autoproducer plants could not be determined, causing a break in the time series. The Italian Administration plans to revise the photovoltaic electricity time series for the next cycle.

## Japan

Between 2004 and 2007, the IEA received a series of revisions from the Japanese Administration. The first set of revisions received in 2004 increased the 1990 supply by 5% for coal, 2% for natural gas and 0.7% for oil compared to the previous data. This led to an increase of 2.5% in 1990 CO<sub>2</sub> emissions calculated using the Reference Approach while the Sectoral Approach remained fairly constant. For the 2006 edition, the IEA received revisions to the coal and oil data which had a significant impact on both the

energy data and the CO<sub>2</sub> emissions. The most significant revisions occurred for coke oven coke, naphtha, blast furnace gas and petroleum coke. These revisions affected consumption rather than supply in the years concerned. As a result, the Sectoral Approach CO<sub>2</sub> emissions increased for all the years, however at different rates. For example, the Sectoral Approach CO<sub>2</sub> emissions for 1990 were 4.6% higher than those calculated for the 2005 edition while the 2003 emissions were 1.1% higher than those of the previous edition. Due to the impact these successive revisions have had on the final energy balance as well as on CO<sub>2</sub> emissions, the IEA was in close contact with the Japanese Administration to better understand the reasons behind these changes. These changes were mainly due to the Government of Japan's efforts to improve the input-output balances in the production of oil products and coal products in response to inquiries from the UNFCCC Secretariat. To cope with this issue, the Japanese Administration established a working group in March 2004. The working group completed its work in April 2006. Many of its conclusions were incorporated in the 2006 edition but some further revisions to the time series (especially in industry and *other*) were submitted for the 2007 edition.

Starting in 1990, data are reported on a fiscal year basis (e.g. April 2010 to March 2011 for 2010).

**Coal:** The inputs of coke oven coke to blast furnaces as well as the final consumption of coke oven coke in iron and steel have been estimated by the IEA Secretariat starting in 1990. From 1998, inputs of coke oven gas, blast furnace gas and oxygen steel furnace gas into autoproducer electricity plants include the amount used to produce electricity with TRT technology (Top pressure Recovery Turbines) which was previously included in industry. Statistical differences in hard coal since 2004 are primarily due to a stock build by final consumers. Since the 2010 edition, the net calorific values for coal have been recalculated by the IEA Secretariat based upon gross values submitted by Japan.

**Oil:** Orimulsion imports for electricity generation begin in 1991.

**Biofuels and Waste:** Inputs of solid biofuels to charcoal production are estimated by the IEA Secretariat assuming an efficiency of 40%. Stock changes in industrial waste represent stocked tires on the consumer side reserved for energy production.

**Electricity and Heat:** Data for the entire time series refer to fiscal year. Electricity and heat produced in CHP plants are not included in the data series. Data

on heat produced for sale by autoproducer heat plants are not available. Heat production from geothermal and solar thermal sources in Japan is not reported by the Japanese Administration. Production of electricity from wind began in 1993. Production of electricity from solar photovoltaic and wind in autoproducer plants is understated as it covers only plants with capacity higher than 1 000 kW. The IEA Secretariat estimated the photovoltaic (PV) electricity generation from autoproducers starting in 1992 based on an average capacity factor of 12% and capacity data for autoproducers. Autoproducer PV capacity is derived from data from the Japanese Administration as well as the IEA Photovoltaic Power Systems Programme (IEA-PVPS) report, "Trends in Photovoltaic Applications" published in 2011. The capacity factor was based on the report "National survey report of PV Power Applications in Japan 2010", published in 2011 by IEA-PVPS. The corresponding electricity consumption has been included with *other non-specified* consumption. Prior to 1998, the electricity produced using TRT technology (Top pressure Recovery Turbines) was included with electricity generated from solid biofuels. Starting in 1998, it is included with electricity generated from coal gases. Electricity consumption in urban transport systems is included with rail.

## Korea

Data are available starting in 1971. Data for 2002 onwards have been reported on a different basis, causing breaks in series between 2001 and 2002, especially for inputs and outputs to electricity generation and consumption in the iron and steel industry. The Korean Administration is planning to revise the historical series as time and resources permit.

**Coal:** Data for coal and coal products from 1971 to 2001 are based on information provided by the Korean Administration, as well as information from the *Yearbook of Energy Statistics 2002*, the *Yearbook of Coal Statistics 2001* (both from the Ministry of Commerce, Industry and Energy), and *Statistics of Electric Power in Korea 2001* (from the Korea Electric Power Corporation). Data on sub-bituminous coal were estimated by the IEA Secretariat based on statistics of the exporting countries. Consumption of imported coke oven coke starting in 2002 is reported under non-specified industry. Consumption of manufactured gases in the iron and steel industry starting in 2002 includes the consumption in blast furnaces, oxygen steel furnaces and other iron and steel processing

plants. Blast furnace gas used for energy purposes in blast furnaces prior to 2007 are reported in the iron and steel industry. Coal tar production prior to 2007 is not available at this time.

**Oil:** *Except for naphtha*, inputs of oil products to autoproducer electricity and autoproducer CHP are included with final consumption.

**Natural Gas:** Prior to 2007, consumption of natural gas in machinery was included with transport equipment. There are breaks in series in industry subsectors in 2008 due to a new classification. Energy industry own use in liquefaction plants includes losses and measuring errors.

**Biofuels and Waste:** In 2007, some main activity heat plants and autoproducers in the commercial/public services sector were reclassified as main activity CHP plants, which causes a break in the time series between 2006 and 2007 for biogases.

**Electricity and Heat:** Electricity statistics from 1971 to 1993 have been estimated by the IEA Secretariat based on the Korean National Statistics. Data from 1994 have been submitted by the Korean Administration. This leads to breaks in series between 1993 and 1994. Before 1994, electricity production from main activity producer CHP plants is included with main activity producer electricity only plants. Heat data are available starting in 1993. For 1993 to 1999, the breakdown of heat output by type of fuel has been estimated by the IEA Secretariat. In 2000, the Korean Administration started to report heat statistics for some heat plants which were not reported before. Electricity and heat production by autoproducers using natural gas and liquid fuels are available from 2000. Electricity production using heat from chemical processes in copper and zinc plants is available from 2005. The corresponding heat inputs are estimated. Heat from chemical processes that is sold is available from 2008. Electricity generation reported under *other sources* is from fuel cells. Prior to 2009, autoproducer heat production includes amounts of unsold heat.

Prior to 2007, production and consumption of electricity and heat in oil refineries and LNG liquefaction/regasification plants are included in industry. Prior to 2008, sales of electricity by Korea's main electricity distributor, KEPCO, to the non-ferrous metals sector are included in iron and steel consumption. Data for electricity consumption in the transport equipment sector are included in machinery from 1994 to 1999. Heat consumption by subsector was reclassified in 2010 due to new information available on heat sales from autoproducers to end-users by sector.

Direct use of geothermal heat is available from 2002. Geothermal direct use is overstated as it refers to heat production by geothermal heat pumps, which include inputs of electricity and/or gas in the transformation process.

## Luxembourg

**Coal:** Steel production from blast furnaces ceased at the end of 1997.

**Natural Gas:** Prior to 2000, residential consumption includes consumption in commercial/public services and agriculture/forestry. The large increase of gas consumption in transformation from 2002 onwards is due to a new 350-MW combined cycle power plant. In the 2011 edition, data from 2000 to 2008 were revised according to a new methodology, leading to a more detailed breakdown in final consumption sub-sectors. From 2000, consumption in the non-ferrous metals sub-sector is included in iron and steel for reasons of confidentiality. For 2010, all the inputs to transformation were reported in non-specified transformation by the Luxembourg Administration for confidentiality reasons. Based on data for previous years, for a large part, this number should encompass inputs of natural gas for electricity and heat generation. As a consequence, to avoid breaks in time series in this publication, the IEA Secretariat has chosen to show this number under main activity electricity generation, despite the fact that it also includes inputs to CHP and autoproducer heat plants.

**Biofuels and Waste:** Data on solid biofuels are available from 1992. For the 2012 edition, the Luxembourgian Administration revised the time series for consumption of industrial waste from 2000 and solid biofuels from 2002.

**Electricity and Heat:** Most of the hydro production shown for Luxembourg is from the Vianden pumped storage plant and is exported directly to Germany. Electricity from natural gas for autoproducer CHP plants are available starting in 1995 and for main activity CHP plants starting in 1996. The iron and steel industry stopped production of electricity at the end of 1997. Electricity production from biogases is available from 1999. Data for solar thermal are available starting in 2001 and for solar PV starting in 2003. The increase in electricity production in 2002 is due to a new natural gas combined cycle power plant. Heat production from biogases is available from 2010. In the 2012 edition, heat production from biogases in

autoproducer CHP plants from 2000 to 2009 was removed because it was discovered the heat was not sold.

The breakdown of electricity consumption in industry is not available from 1990 to 1999. Starting in 2005, data for electricity transmission and distribution losses were obtained from the network operator. Prior to 2005, they were estimated by the National Administration.

## Mexico

Data are available starting in 1971 and are partly estimated based on the publication *Balance Nacional - Energía*. The Mexican Administration submitted data directly by questionnaire for the first time with 1992 data. As a result, some breaks in series may occur between 1991 and 1992. In the 2011 edition, the Mexican Administration revised selected historical data.

**Coal:** The time series for blast furnace gas and inputs of coke oven coke to blast furnaces start in 1991.

**Oil:** Prior to 1987, the split of LPG consumption between residential and commercial/public services has been estimated by the IEA Secretariat. Consumption of lubricants, bitumen and paraffin waxes are available from 1990 and petroleum coke from 1993. Because of a change in the processing of the data, breaks in series occur between 1998 and 1999.

**Natural Gas:** Natural gas reported in the IEA publications may be different from what is reported in the Mexican energy publications, as IEA includes only dry gas and excludes natural gas liquids. Losses and pipeline transport have been included in energy industry own use. Beginning with 1993, data have been submitted by the "Secretaria de Energia".

**Biofuels and Waste:** Data on biogases are available from 1997. Data for solid biofuels used in autoproducer electricity plants from 1991 to 2005 have been estimated by the Mexican Administration.

**Electricity and Heat:** Electricity production from wind and solar photovoltaic is available from 1990. Electricity production from biofuels and waste is available from 1998. New autoproducer electricity plants fuelled with coal gases were put on-line in 1999. Prior to 1996, gas/diesel oil inputs to autoproducer electricity plants is comprised only of diesel.

Direct use of solar thermal heat is available from 1990.

Some electricity consumption in energy industry own use is included in the industry sub-sector where it was generated (e.g. the chemical industry, as well as in non-specified industry).

## Netherlands

In the national statistical system of the Netherlands, use of fuel in manufacturing industries for CHP production is considered to be consumption in transformation. However, in IEA statistics, this own use for heat production (autoproduced heat) is reported under the relevant industry sub-sector, based on estimates provided by the Central Bureau of Statistics.

**Oil:** Some breaks in series occur in 2007 when the Dutch Administration has started to report the petrochemical industry according to IEA methodology.

**Natural Gas:** Consumption in commercial/public services includes *other non-specified* consumption starting in 1988. In 2008, a new autoproducer CHP plant came on-stream, accounting for the large consumption increases in that year. In 2009, the increase in main activity electricity is due to the opening of a new plant in the second half of 2008.

**Biofuels and Waste:** In 2006, for municipal waste some plants changed ownership and were reclassified from electricity only to CHP plants as they started heat projects. Production and trade of biogasoline in 2010 is confidential.

**Electricity and Heat:** Electricity from *other sources* represents generation from the expansion of gases. Heat in non-specified transformation represents waste heat bought from other industries that is generated from combustible fuels. The corresponding electricity output is included with that of natural gas. Electricity production from solar photovoltaic is available from 1992. The decrease of electricity produced from nuclear in 1997 is due to the closure for five months of one nuclear power plant. Heat produced from biofuels and waste is available from 1990. A new main activity producer CHP plant fuelled by refinery gas started up in 1999 and there was a fuel reclassification in 2000. In the 2007 edition, the Dutch Administration implemented a reporting methodology which causes some breaks between 2004 and 2005. Prior to 1990, all electricity and heat produced from coal is included in CHP plants. For natural gas, all electricity production prior to 1998 and all heat production prior to 1995 is included in CHP plants. For biofuels and waste, all

electricity and heat produced prior to 1995 is included in CHP plants.

Commercial/public services electricity consumption includes small users. Increasing electricity consumption in agriculture/forestry is due to expansion of greenhouse farming. The large increase in electricity trade in 1999 is due to the liberalisation of the Dutch electricity market. A new reporting methodology starting in 2005 causes breaks in the heat consumption series. Direct use of geothermal heat in agriculture/forestry starting in 2008 is due to a new project extracting deep geothermal heat.

## New Zealand

Where data refer to the fiscal year, April 2010 to March 2011 is shown as 2010. In the 2011 edition, the New Zealand Administration has revised some of the coal, natural gas, oil, renewable and electricity time series back to 1990.

**Coal:** Peat, although produced in New Zealand, is not used as a fuel. It is used for agricultural purposes only. In final consumption, some industry data are reported in non-specified industry for confidentiality reasons. Prior to 2009, mining and quarrying is included in agriculture. Prior to 2010, construction is included with commercial/public services. Sub-bituminous coal inputs into autoproducer CHP refers to coal that is merged with iron sands and limestone to form the inputs for the multi-hearth-furnaces, kilns and melters to produce direct reduced iron (Glenbrook Steel Site), with off-gases and supplemental and natural gas driving the CHP plants. This method, while not the typical iron and steel process, produces similar by-products. The sub-bituminous coal inputs are reported under coke ovens and the resulting off-gases are reported as production of coke oven gas and blast furnace gas. Some transformation efficiencies will appear higher than normal due to non-reporting of certain inputs including some confidential data.

**Oil:** For reasons of confidentiality, beginning in 1994, the New Zealand Administration no longer reports data on the production of methanol. Liquefaction of other hydrocarbons shown as crude oil represents synthetic gasoline production from natural gas. In February 1997, production of synthetic gasoline ceased. Between 2009 and 2010, the NZ Administration changed its reporting methodology for the demand of gas/diesel oil in commercial/public services.

**Natural Gas:** In February 1997, production of synthetic gasoline from natural gas ceased. In 1998, two new autoproducer CHP plants came on-stream, accounting for the very large consumption increases in that year. A steep decline in consumption in chemical industry in 2005 was caused by closure of the Motunui methanol production plant. The Motunui plant was then reopened in late 2008 resulting in an increase in consumption in the chemical industry in 2009.

**Biofuels and Waste:** Data prior to 1993 are for the fiscal year. For the 2012 edition, the New Zealand Administration revised the time series for solid biofuels from 1990.

**Electricity and Heat:** The classifications used by the Administration of New Zealand were changed in 1991. Prior to 1994, data refer to fiscal year. From 1994, data refer to calendar year. Electricity production by autoproducers for geothermal is available from 1990. The New Zealand Administration has updated efficiencies for electricity production from geothermal heat from 10% to 15% from 1990 onwards; this causes a break in the time series between 1989 and 1990. Heat from chemical processes used for electricity production is available from 1990 and corresponds to acid plants in the fertiliser industry where sulphur is the main input.

Direct use of geothermal heat is available from 1990 and direct use of solar thermal heat from 2002.

Electricity consumption in paper, pulp and printing is included in wood and wood products prior to 1990. There are breaks in series between 1996 and 1997 for electricity consumption due to a new NZ Standard Industrial Classification (NZSIC). For the 2012 edition, the New Zealand Administration revised the time series for hydro from 1996.

## Norway

**Coal:** The decrease of bituminous coal production in 2005 is due to a fire in one of the coal mines; this entailed a break in the production for a large part of the year.

**Oil:** The IEA Secretariat calculates the net calorific value for Norwegian crude oil based on the oil product outputs of the oil refineries. Due to revisions from the Norwegian Administration, there are breaks in series in 1990, 1993 and 2003. Gas/diesel oil used in fishing is included in agriculture/forestry prior to

2000. Consumption of petroleum coke in industry has been reclassified from 2005.

**Natural Gas:** The large increase in energy industry own use in 1992 results from the start up of new fields. Before 2000, in energy industry own use, the oil and gas extraction data included data normally included under total final consumption. Consumption for pipeline transport is included in oil and gas extraction. For Norway, supply of natural gas is the residual of two very large and opposite terms, production and exports. As a result, large statistical differences in some years may lead to discrepancies in the growth rates of supply and demand of natural gas.

**Biofuels and Waste:** Data for industrial waste and biogases are available from 1991. Distribution losses for biogases are included in commercial/public services prior to 2003. Liquid biofuels imports are available starting in 2006.

**Electricity and Heat:** Heat production from heat pumps and electric boilers (including the electricity used for this production) is available from 1989. No data on electricity production from solar energy are submitted separately to the IEA by the Norwegian Administration. Electricity production from wind is available from 1992. Heat production from biogases is available from 1995. Breaks in series between 1996 and 1997 are due to a reclassification of main activity producers and of autoproducers. The electricity generated from *other sources* represents electricity from waste heat. Heat produced by autoproducer heat plants from chemical processes and from *other sources* and used for electricity production was estimated by the IEA Secretariat for the period 1990 to 2006.

Consumption of electricity for pipeline transport is included in energy industry own use. The breakdown of heat consumption by industry sub-sector was expanded in 1992, reclassified in 1994 and collected by a new reporting system in 1997. For the 2012 edition, the Norwegian Administration revised the time series for hydro from 1992.

## Poland

**Oil:** Petroleum coke data are available from 2003 onwards.

**Natural Gas:** The inputs of natural gas in transformation have been inferred by the Polish Administration and for some years may be out of line with historical

data. Non-specified transformation represents natural gas used for hydrogen manufacture in catalytic reforming processes. Natural gas used in pipeline transport is partly included in energy industry own use. Distribution losses may include some statistical differences.

**Biofuels and Waste:** Data for biogases refer only to the gas from fermentation of biomass. Due to data availability, there is a large increase in solid biofuels between 1992 and 1993 for residential, commercial/public services and agriculture/forestry. Before 2000, industrial wastes were used interchangeably with light fuel oil in some plants, which might result in breaks in the time series. Data on liquid biofuels are available starting in 2003. In 2008, a new questionnaire was administered which increased the coverage of renewable and waste data.

**Electricity and Heat:** Heat production from autoproducer CHP plants includes the unsold heat for own use between 1988 and 1995. In order to alleviate this, the Polish Administration adopted new methods to estimate the production of heat sold in autoproducer heat plants (1993) and in autoproducer CHP plants (1995). This causes breaks between 1992 and 1993, and between 1994 and 1995 for heat production and fuel inputs in these plants and for heat consumption in industry sub-sectors. In 2008, a number of CHP plants were reclassified from autoproducer to main activity producer due to an industry re-organisation.

Direct use of geothermal heat is available from 2000 and direct use of solar thermal heat from 2002.

Heat consumption in energy industry own use includes process heat not sold before 1995.

## Portugal

**Coal:** Between 1997 and 2001 gas works gas was gradually replaced by natural gas in the commercial/public service and residential sectors. The production of pig iron ceased in the first quarter of 2001, leading to decreases in supply and consumption of coking coal, coke oven coke, coke oven gas and blast furnace gas in 2001.

**Oil:** Consumption of gas/diesel oil in industry and commercial/public services represents diesel use in mobile fleets.

**Natural Gas:** Portugal started to import natural gas in February 1997. The decrease in natural gas used for

gas works in 2001 is due to the closing of the Lisbon gas works plant in May 2001.

**Biofuels and Waste:** Data are available from 1994 for biogases, from 1999 for municipal waste and from 2003 for industrial waste. Data for solid biofuels were revised by the National Administration from 1990 to 2001, which may result in breaks in series between 1989 and 1990.

**Electricity and Heat:** To conform to IEA methodology, heat produced from biofuels and waste (mainly black liquor) and from coal gases in autoproducer CHP plants is not accounted for since it is not sold, while the electricity produced in these plants is included. New plants fuelled by solid biofuels and by municipal waste started in 1999. In 2007, some power plants that were previously reported as main activity CHP have been reclassified as autoproducer CHP. The power station that burns industrial waste started to work as a CHP plant in 2007, whereas previously it was only producing electricity.

Direct use of solar thermal heat is available from 1989 and direct use of geothermal heat from 1994.

## Slovak Republic

Data are available starting in 1971. There are some breaks in series between 1992 and 1993. A new survey system in 2001 leads to major breaks in series for most products.

**Coal:** Commercial/public services includes statistical differences for other bituminous coal, lignite, patent fuel and coke oven coke from 1980 onwards and BKB from 1989 onwards.

**Oil:** For gas/diesel oil, road data include rail use. Energy use of white spirit is not available.

**Natural Gas:** The break in series for oil and gas extraction in 2001 is due to application of the IEA's definition starting in that year. Consumption in *other transformation* is mainly natural gas used for production of hydrogen and in hydrocracking for gasoline. From 2009, data for losses are no longer available. There are inconsistencies in the time series for commercial/public services as this sub-sector is the residual of the consumption data.

**Electricity and Heat:** Electricity and heat production from combustible fuels from 1990 to 2000 have been estimated based on the data on fuel used for electricity and heat plants reported in the annual fuel

questionnaires. The IEA Secretariat estimated the photovoltaic (PV) electricity generation in 2010 by the reported PV capacity by a capacity factor of 9.7%. The capacity factor was based on an annual yield published in a national report in 2009 by the IEA Photovoltaic Power Systems Programme. The corresponding electricity consumption was allocated to residential and commercial/public services.

The low electricity consumption in oil refineries in 2003 and 2004 is due to a change in ownership and work carried out on a refinery.

Direct use of geothermal heat is available from 2001 and direct use of solar thermal heat from 2005.

## Slovenia

Data for Slovenia are available starting in 1990. Prior to that, they are included in *Energy Balances of Non-OECD Countries* in Former Yugoslavia. A new energy data collection system was implemented in January 2001, causing some breaks in time series between 1999 and 2000.

**Biofuels and Waste:** The Slovenian Administration plans to revise the total final consumption for solid biofuels with the results from a new household survey next cycle. Breaks in total final consumption for industrial waste are a result of a sectoral reclassification.

**Electricity and Heat:** Surveys for data on heat consumption are available from 2003 onwards for the residential, industry and energy sectors. Prior to 2003 the data were estimated by the Slovenian Administration. Direct use of solar thermal and geothermal heat is available from 2009.

## Spain

**Coal:** Lignite mining was halted indefinitely in 2008.

**Oil:** A change in the reporting system in mid-1996 has resulted in some breaks in series.

**Natural Gas:** There is a break in series between 1993 and 1994 in autoproducer CHP consumption, since a new survey revealed a larger number of CHP autoproducers that had previously been included in industry consumption. The large increase in main activity producer electricity consumption in 1997 is due to two main activity producer electricity plants running on natural gas. From 2001 onwards, the final consumption breakdown is estimated by the National

Administration. The consumption data for 2006 onwards have been estimated on a different basis, thus causing breaks in the energy industry own use and in final consumption.

**Biofuels and Waste:** A new reporting system leads to breaks in final consumption sectors between 1999 and 2000 and again between 2005 and 2006. In 2000 and 2006, many plants are reclassified from main activity producer to autoproducer or vice versa. Prior to 2006, inputs of biogases used to generate process heat were erroneously included as inputs to transformation when they should have been reported in the appropriate industry in final consumption. In the 2010 edition, the National Energy Commission reclassified plants that consume biogases, leading to breaks in series between 2007 and 2008.

**Electricity and Heat:** The large increase in electricity output from main activity producer electricity plants fuelled by natural gas in 1997 is due to the opening of a new plant. Electricity from solar thermal plants is available from 2007. A reclassification of plants from main activity to autoproducer in 2008 has led to breaks in electricity production between 2008 and 2009.

Direct use of geothermal heat is available from 1990. Direct use of solar thermal heat is available from 1994.

Transmission and distribution losses are estimated by the Spanish Administration. Starting in 2006, a new method was used to estimate the losses from final consumption data resulting in a break in time series between 2005 and 2006.

## Sweden

**Coal:** Other bituminous coal production is coal recovered during the quarrying of clay. Autoproducer inputs to waste heat production that is sold are reported in the respective final consumption sectors and not in transformation.

**Oil:** Beginning in 1995, Sweden has changed its standard classification of industry sub-sectors. Data are available from 2000 for additives and ethane, and from 2003 for refinery gas.

**Natural Gas:** Prior to 1993, road transport is included in commercial/public services. Total final consumption and its breakdown in 2008 was estimated by the IEA Secretariat based on other Statistics Sweden publications.



**Biofuels and Waste:** Data for biogases begin in 1992. Heat production from solid biofuels in autoproducer CHP includes waste heat and chemical heat.

**Electricity and Heat:** In Sweden, heat produced in heat pumps is sold to third parties (as district heat) and is therefore included in transformation. Inputs to heat pumps include heat recovered from industry and from ambient sources (including sewage and sea-water). Ambient heat is shown as the indigenous production of heat. The electricity used to drive heat pumps is considered to be transformed and appears as output in transformation rather than as electricity used in energy industry own use. Fuel inputs to the heat that is recovered by the heat pump are reported in the appropriate industry sub-sector (i.e. chemical and paper, pulp and printing). Information on heat for sale produced in heat pumps and electric boilers is available starting in 1992. Heat produced for sale by autoproducer CHP plants is reported starting in 1992. Heat production from liquid fuels in main activity producer CHP plants includes heat recovered from flue-gas condensing for 1997 and 1998.

Industry consumption of the heat produced by heat pumps has been estimated by the IEA Secretariat based on fuel inputs submitted by the Swedish Administration (2/3 in paper, pulp and printing and 1/3 in chemical). Consumption of electricity for distribution of district heat is included with *energy industry own use*.

## Switzerland

From 1999, data on consumption result from a new survey and are not comparable with data of previous years.

**Coal:** From 1985, industrial consumption of gas works gas is reported in non-specified industry to prevent the disclosure of commercially confidential data. Allocation of consumption data between certain coal types is estimated by the Swiss Administration, as are calorific values.

**Oil:** Petroleum coke production started in 2004 due to the installation of a cracking unit in a refinery. In 2010, the large statistical difference for gas/diesel oil is partly due to a reduction of consumer stocks.

**Natural Gas:** The breaks in series in 2007 and 2008 for CHP plants are due to the closing of a plant in 2007 and the opening of another plant in 2008.

**Biofuels and Waste:** The autoproducer heat plant that produced heat for sale using municipal waste was

closed in 2006. For the 2012 edition, the Swiss Administration revised the time series for municipal waste from 1999, leading to a break in the time series in 1999.

**Electricity and Heat:** Heat production includes heat produced by nuclear power stations and distributed to other consumers. Solar electricity production by autoproducers is available from 1990. For the 2012 edition, the Swiss Administration revised the time series for hydro from 1990.

Direct use of geothermal heat and solar thermal heat is available from 1990. Geothermal direct use is overstated as it refers to heat production by geothermal heat pumps, which include inputs from electricity and/or gas in the transformation process.

Electricity consumption in the transport equipment industry is included with machinery.

## Turkey

**Coal:** Production of gas works gas declined in 1989 due to plant closures; the last plant closed in 1994. Use of gas coke and gas works gas ceased in 1994. Due to government regulations in industry and residential, in particular, there has been a shift from the use of domestically produced coal to imported coal and natural gas. Privatisation of state owned coke ovens in recent years results in incomplete information on coke oven gas distribution. Data for 2008 are provided from the results of an improved questionnaire. Significant changes occur in consumption patterns within the iron and steel industry, coal mining as well as across industry, residential and commercial/public services for other bituminous coal. Some coal used in cement kilns is reported under construction instead of non-metallic minerals since 2008. Historical data may be revised in future issues.

**Natural Gas:** Data for commercial/public services were included in residential prior to 2000. The decrease in natural gas consumption in petrochemical feedstocks between 1999 and 2001 is related to the fertiliser industry. Classification improvements resulted in a break in series for non-energy use in the chemical industry in 2006. Storage capacity has been reviewed which resulted in a break in series for stock change in 2008. Starting with 2009 figures, consumption data are collected by Turkey's Energy Market Regulatory Authority. This leads to breaks in series across all sectors.

**Biofuels and Waste:** The Turkish Administration only surveys renewables and waste used for power and heat intermittently. Due to this fact, some breaks may appear in the biofuels and waste series.

**Electricity and Heat:** In 1995, the Turkish Administration reclassified autoproducer plants by type and source to be consistent with IEA definitions. This causes breaks between 1994 and 1995 for electricity production in these plants. Electricity production from wind is available starting in 1998. In the 2006 edition, the Turkish Statistical Office started providing electricity and heat output on the basis of a new survey that revised time series back to 2000. This causes breaks in the time series between 1999 and 2000. Not all of the input series have been revised.

Consumption in the machinery sector includes transport equipment. Prior to 1998, consumption in the wood and wood products includes that of the paper, pulp and printing industry.

## United Kingdom

**Coal:** Consumption shown for the commercial/public services includes consumption of some of *other non-specified*.

**Oil:** Prior to 1995, the product breakdown for transfers is estimated by the UK Administration. Beginning with 1995, the UK Administration revised their product breakdown for transfers and petrochemical reporting methodology. Breaks in series for LPG occur between 2000 and 2001 due to a re-allocation of data. Fuel oil inputs to heat production are available starting in 2000. Beginning with 2009, the UK Administration revised their product consumption data based on a new reporting methodology. Consumption data prior to 2009 are pending.

**Natural Gas:** From 1992 onwards, losses include metering differences and losses due to pipeline leakage. The consumption of natural gas in commercial is included with *other non-specified* while public services is shown separately. Natural gas consumption includes substitute natural gas made at gas works and piped into the natural gas distribution system. Data in non-specified industry refer to sales by independent gas suppliers unallocated by category. The natural gas used to form synthetic coke oven gas is reported under non-specified transformation.

**Biofuels and Waste:** Prior to 2001, some of the industrial waste was reported with *other oil products*.

**Electricity and Heat:** The reorganisation and subsequent privatisation of the electricity supply industry in 1990 has resulted in some breaks in series. Inputs and output from natural gas for main activity producer electricity production are included in autoproducer electricity for 1990 (for reasons of confidentiality). For the United Kingdom, it is necessary to combine figures for main activity producers and autoproducers in order to prevent the disclosure of information relating to less than three electricity generating companies, since this information is considered confidential. For this reason, data for main activity producer CHP plants have been included with autoproducer CHP plants from 1988. Prior to 1988, electricity output from CHP plants was included with autoproducer electricity plants. In 1996, the break in electricity production from nuclear is due to a reclassification of plants from autoproducer to main activity producer plants. Electricity production from solar PV is available from 1999. Heat output is available starting in 1999.

Consumption in the non-metallic mineral products sector includes mining and quarrying. Starting in 1990, small amounts of electricity used in heat pumps have been included in residential. In the 2012 edition, the data for electricity consumption in transport sector was reclassified by sub-sector resulting in a break in time series between 2003 and 2004. Prior to 2004, non-specified transport includes consumption for traction by urban rails and road vehicles, and consumption for non-traction by railways and bus stations and airports. From 2004 onwards, non-specified transport includes consumption by road vehicles only. Prior to 2004, electricity consumption in rail refers to industrial rail only and from 2004 onwards it includes both industrial and urban rail.

## United States

Due to problems in reporting, there are numerous breaks in series for the US data, particularly in 1992, 1999, 2001 and 2002. Care should be taken when evaluating consumption by sector since inputs of fuel to autoproducers are included in final consumption for some years. No data are available for most energy products in the construction and mining and quarrying industries.

**Coal:** Coal tar as a by-product of coke ovens is not currently reported.

**Oil:** International marine bunkers of fuel oil show a large increase in 1990 due to a change in the data

collection and reporting methodology of the US Administration. From 1992 onwards, the individual components of NGL and LPG have been converted using their respective gravities rather than an average gravity, resulting in a break in series. In 1993, the US Administration made several adjustments to its collection system for oil statistics in order to accommodate the revisions to the Clean Air Act of 1990. As a result, data for oxygenates (i.e. fuel ethanol, MTBE, etc.) were collected in 1993 and reported in the additives category, or in the case of ethanol, in biogasoline. Beginning in 1994, motor gasoline consumption in commercial/public services is based on a new model from the US Department of Transportation. High statistical differences for crude oil represent “unaccounted for crude oil”, the difference between the supply and disposition of crude oil. From 1995, LPG inputs to gas works are included in industry. As a result of a new Manufacturing Energy Consumption Survey (MECS), there are breaks in series between 1999 and 2000 for industry, and again between 2000 and 2001 as the MECS percentages were revised due to revisions in CHP electricity. There were significant revisions to fuel oil and unfinished oils for 2001 data. Primarily, the changes are a result of importers misclassifying unfinished oils as fuel oil. From 2002 onwards, the IEA Secretariat has estimated the amounts of refinery gas used for autoproducer electricity production.

**Natural Gas:** The amounts of gas works gas that are blended with natural gas have been estimated from 1990 to 2002 on the basis of the output efficiency of the process. With the exception of petrochemical feedstocks, *other non-energy use* of natural gas is included in industry prior to 2003. A detailed breakdown of industry consumption is not available for natural gas prior to 1995. From 1995 on, this breakdown is estimated by the Energy Information Administration (EIA), using the MECS, which is conducted quadrennially. Consumption in agriculture, forestry and fisheries is included in non-specified industry.

**Biofuels and Waste:** The EIA collects generation and consumption data from all plants 1 MW or more in capacity.

**Electricity and Heat:** There are breaks in series concerning the total production of electricity and heat in the United States. Comprehensive data on electricity and heat production and consumption in main activity producer electricity, CHP and heat plants and autoproducer electricity and CHP plants are not available

for all years. The selling of main activity producer plants to autoproducers may cause breaks in the series between 1998 and 2000. For the United States, prior to 2000, autoproducers include small and independent power producers, which under IEA definitions are considered main activity producers. In the 2003 edition, the US Administration changed what it was reporting under autoproducers. This reclassification causes more breaks between 1999 and 2000. For the 2009 edition, the EIA changed their methodology for calculating heat production in CHP plants, and revised data back to 2006. This leads to breaks in series between 2005 and 2006. Electricity generation reported under *other sources* is from purchased steam. Starting in 2002, autoproducer electricity output for oil includes generation from refinery gases with a low average calorific value. Prior to 2002, this output was not accounted for. From 2007, the industrial waste category includes recovered heat from industrial processes. Accurate accounting of coke oven gas and refinery gas inputs is not always possible, which can lead to efficiencies over 100% in main activity producer CHP plants. Prior to 2008, heat produced by heat pumps was incorrectly reported as geothermal use in residential and commercial/public services.

Data for electricity absorbed by pumping and electricity production from pumped storage plants became available starting in 1987. The consumption of heat sold in industry is available from 1991 and in energy industry own use from 1992. Prior to 1991, total consumption of heat sold referred to consumption in commercial/public services. No data are available for heat sold that is consumed in residential and agriculture/forestry.

Direct use of solar thermal heat in residential is available from 1999. Prior to 1999, solar thermal electricity production includes generation from natural gas because some natural gas units are attached to solar thermal plants and their production cannot be separated. The IEA Secretariat estimated US photovoltaic (PV) electricity generation from autoproducers starting in 1999 by multiplying the dispersed and distributed PV capacity estimated by the EIA by an average capacity factor of 12%. The capacity factor was based on a report published in 2007 by the IEA Photovoltaic Power Systems Programme, *Cost and Performance Trends in Grid-Connected Photovoltaic Systems and Case Studies*. The corresponding consumption of electricity has been included under *other non-specified*.



## 4. GEOGRAPHICAL COVERAGE

**Australia** excludes the overseas territories.

**Denmark** excludes Greenland and the Danish Faroes, except prior to 1990, where data on oil for Greenland were included with the Danish statistics. The Administration is planning to revise the series back to 1974 to exclude these amounts.

**France** includes Monaco, and excludes the following overseas departments and territories: Guadeloupe, Guyana, Martinique, New Caledonia, French Polynesia, Reunion, and St.-Pierre and Miquelon.

**Germany** includes the new federal states of Germany from 1970 onwards.

The statistical data for **Israel** are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

**Italy** includes San Marino and the Vatican.

**Japan** includes Okinawa.

The **Netherlands** excludes Suriname and the Netherlands Antilles.

**Portugal** includes the Azores and Madeira.

**Spain** includes the Canary Islands.

**Switzerland** includes Liechtenstein for the oil data. Data for other fuels do not include Liechtenstein.

Shipments of coal and oil to the Channel Islands and the Isle of Man from the **United Kingdom** are not classed as exports. Supplies of coal and oil to these islands are, therefore, included as part of UK supply. Exports of natural gas to the Isle of Man are included with the exports to Ireland.

**United States** includes the 50 states and the District of Columbia. Oil statistics as well as coal trade statistics

also include Puerto Rico, Guam, the Virgin Islands, American Samoa, Johnston Atoll, Midway Islands, Wake Island and the Northern Mariana Islands.

The **International Energy Agency (IEA)** includes Australia, Austria, Belgium, Canada, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Japan, Korea, Luxembourg, the Netherlands, New Zealand, Norway, Poland, Portugal, the Slovak Republic, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States.

The **Organisation for Economic Co-Operation and Development (OECD)** includes Australia, Austria, Belgium, Canada, Chile, the Czech Republic, Denmark, Estonia<sup>8</sup>, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, the Slovak Republic, Slovenia<sup>8</sup>, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States.

**OECD Americas** includes Canada, Chile, Mexico and the United States.

**OECD Asia Oceania** includes Australia, Israel, Japan, Korea and New Zealand.

**OECD Europe** includes Austria, Belgium, the Czech Republic, Denmark, Estonia<sup>8</sup>, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Poland, Portugal, the Slovak Republic, Slovenia<sup>8</sup>, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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8. Estonia and Slovenia are included starting in 1990. Prior to 1990, data for Estonia are included in Former Soviet Union and data for Slovenia in Former Yugoslavia in the publication *Energy Balances of Non-OECD Countries*.



# **PART II**

# **STATISTICAL DATA**





# **COUNTRY-SPECIFIC NET CALORIFIC VALUES**

## **2010**

## Country specific net calorific values (kilojoule per kilogramme)

2010

	Australia	Austria	Belgium	Canada	Chile	Czech Republic	Denmark	Estonia	Finland
<b>Crude oil</b>									
Production	43985	42500	-	42790	43692	42400	43000	-	-
Imports	42655	42500	42750	42790	43166	42400	43000	-	42390
Exports	43985	-	-	42790	-	42400	43000	-	-
Average	43282	42500	42750	42790	43371	42400	43000	-	42390
<b>NGL</b>	45410	42500	45200	45220	48095	-	-	-	45217
<b>Refinery feedstocks</b>	43282	42587	42500	42500	44799	38470	42700	-	42496
<b>Additives</b>	-	-	25100	-	22651	39500	-	-	25121
<b>Other hydrocarbons</b>	-	-	-	41868	-	-	-	39642	41868
<b>Biogasoline</b>	26800	26700	26860	26800	-	27000	26700	-	27500
<b>Biodiesels</b>	36800	36600	38052	36800	-	37100	37600	-	36800
<b>Other liquid biofuels</b>	-	33207	37000	-	-	-	36800	-	36800
<b>Anthracite</b>									
Production	26700	-	-	-	-	-	-	-	-
Imports	-	28033	25184	26381	-	30000	-	-	-
Exports	26700	-	25184	-	-	30000	-	-	-
Main activity elec. generation	-	-	-	-	-	-	-	-	-
Industry	-	28033	25184	26381	-	30000	-	-	-
Other uses	26700	28033	25184	26381	-	30000	-	-	-
<b>Coking coal</b>									
Production	28500	-	-	24719	-	28582	-	-	-
Imports	-	29073	29308	28329	28638	29557	-	-	29300
Exports	28500	-	29308	24719	-	28698	-	-	-
Coke ovens	28500	29073	29308	28329	28638	29385	-	-	29300
Main activity elec. generation	-	-	-	-	-	-	-	-	-
Industry	-	-	-	-	-	-	-	-	-
Other uses	28000	29073	29308	24719	28638	29385	-	-	29300
<b>Other bituminous coal</b>									
Production	25700	-	-	24219	17147	25499	-	-	-
Imports	-	27902	25781	24219	22605	24412	24442	27156	25098
Exports	25700	27872	25781	24219	-	26410	24574	-	-
Coke ovens	-	28099	-	-	-	-	-	-	-
Main activity elec. generation	22515	26970	26225	29396	21748	21143	24305	27160	25096
Industry	25700	29850	27581	24219	27650	23189	26500	27160	25098
Other uses	25700	27539	25781	24219	27650	28445	24438	27160	25098
<b>Sub-bituminous coal</b>									
Production	18478	-	-	18238	-	-	-	-	-
Imports	-	22200	-	18238	-	-	-	-	-
Exports	-	-	-	18238	-	-	-	-	-
Main activity elec. generation	18817	-	-	19150	-	-	-	-	-
Industry	19195	22200	-	-	-	-	-	-	-
Other uses	18478	22200	-	18238	-	-	-	-	-
<b>Lignite</b>									
Production	9800	-	-	14286	-	12742	-	9000	-
Imports	-	9015	8370	14286	-	14621	-	-	-
Exports	-	9158	-	14286	-	16303	-	-	-
Main activity elec. generation	9800	-	-	15000	-	11783	-	9304	-
Industry	9800	10004	8370	-	-	12670	-	11000	-
Other uses	9800	9158	8370	14286	-	13838	-	11000	-
<b>Patent fuel</b>	-	31000	29308	-	-	-	-	-	-
<b>Coke oven coke</b>	25650	29000	27696	28830	28645	28056	29300	29308	29300
<b>Coal tar</b>	35714	41800	-	-	41366	36936	-	-	37000
<b>BKB</b>	20995	19303	20000	-	-	20737	18300	16000	-
<b>Peat</b>	-	8800	-	-	-	-	-	9946	10190
<b>Charcoal</b>	-	31000	29300	-	30800	-	-	-	-

## Country specific net calorific values (kilojoule per kilogramme)

2010

	France	Germany	Greece	Hungary	Iceland	Ireland	Israel	Italy	Japan
<b>Crude oil</b>									
Production	41855	42757	38158	41800	-	-	42538	41860	42395
Imports	41855	42757	41540	41800	-	42830	42538	41860	42395
Exports	-	42757	41860	-	-	42830	-	41860	-
Average	41855	42757	41228	41800	-	42830	42538	41860	42395
<b>NGL</b>	42000	-	-	43000	-	-	-	-	46198
<b>Refinery feedstocks</b>	41855	42496	41318	41800	-	-	44799	41860	42500
<b>Additives</b>	25120	25121	41318	41800	-	-	-	25121	-
<b>Other hydrocarbons</b>	-	-	-	-	-	-	-	-	-
<b>Biogasoline</b>	26805	26660	-	26600	-	24091	-	26800	-
<b>Biodiesels</b>	37400	37100	37980	37500	-	37273	-	37400	-
<b>Other liquid biofuels</b>	-	28000	-	-	-	36364	36800	36700	-
<b>Anthracite</b>									
Production	-	29030	-	-	-	28052	-	-	-
Imports	-	29030	-	-	-	27891	-	-	26362
Exports	-	30100	-	-	-	28052	-	-	-
Main activity elec. generation	-	29710	-	-	-	-	-	-	-
Industry	-	29710	-	-	-	-	-	-	-
Other uses	-	29710	-	-	-	27989	-	-	26362
<b>Coking coal</b>									
Production	-	29000	-	-	-	-	-	-	-
Imports	30500	29000	-	31430	28050	-	-	30984	28130
Exports	30500	29000	-	-	-	-	-	-	-
Coke ovens	30500	29000	-	31430	-	-	-	30984	28227
Main activity elec. generation	-	29000	-	-	-	-	-	-	-
Industry	-	29000	-	-	28050	-	-	-	-
Other uses	30500	29000	-	31430	28050	-	-	30984	27354
<b>Other bituminous coal</b>									
Production	26000	23850	-	-	-	-	-	26587	-
Imports	26000	26556	26901	24770	28050	27838	25087	26587	24801
Exports	26000	31130	-	23860	-	-	-	26587	24801
Coke ovens	-	-	-	-	-	-	-	-	24801
Main activity elec. generation	29681	25664	27448	24534	-	24725	25146	25303	25057
Industry	26000	24753	26901	26100	28050	27842	-	26587	24801
Other uses	26000	25000	25805	24550	28050	27842	25146	26587	24801
<b>Sub-bituminous coal</b>									
Production	-	-	-	-	-	-	-	-	-
Imports	-	-	-	17280	-	-	-	18832	-
Exports	-	-	-	17000	-	-	-	-	-
Main activity elec. generation	-	-	-	16025	-	-	-	18830	-
Industry	-	-	-	22850	-	-	-	-	-
Other uses	-	-	-	17230	-	-	-	18832	-
<b>Lignite</b>									
Production	-	9059	5419	7320	-	-	2931	-	-
Imports	17000	-	4379	-	-	19820	-	10468	-
Exports	-	-	-	15500	-	19820	-	-	-
Main activity elec. generation	-	8938	5419	7100	-	-	-	-	-
Industry	17000	10196	8479	9000	-	-	2931	10468	-
Other uses	17000	10196	5419	10880	-	19820	2931	10468	-
<b>Patent fuel</b>	32000	31400	-	22000	-	-	-	-	-
<b>Coke oven coke</b>	28000	28650	30230	29980	26670	-	-	29000	29400
<b>Coal tar</b>	38000	-	-	38000	-	-	-	-	35393
<b>BKB</b>	-	19600	-	20000	-	18548	-	-	-
<b>Peat</b>	-	-	-	-	-	8824	-	-	-
<b>Charcoal</b>	-	-	31000	-	-	-	30800	30800	29300

## Country specific net calorific values (kilojoule per kilogramme)

2010

	Korea	Luxembourg	Mexico	Netherlands	New Zealand	Norway	Poland	Portugal
<b>Crude oil</b>								
Production	42700	-	46773	42700	43765	41368	42507	-
Imports	42700	-	-	42700	42996	41368	42496	43040
Exports	-	-	46773	42700	43773	41368	42507	-
Average	42700	-	46773	42700	43379	41368	42500	43040
<b>NGL</b>	-	-	42661	44000	45795	43795	-	45220
<b>Refinery feedstocks</b>	44800	-	-	42496	44070	42300	42500	43996
<b>Additives</b>	41868	-	46015	25121	-	36800	37360	37000
<b>Other hydrocarbons</b>	-	-	-	-	-	-	42500	-
<b>Biogasoline</b>	-	26803	-	27000	28865	26800	29700	-
<b>Biodiesels</b>	38210	38133	-	37000	39860	36800	38400	37000
<b>Other liquid biofuels</b>	-	-	-	35600	-	36800	38400	36800
<b>Anthracite</b>								
Production	19259	-	-	-	-	-	-	-
Imports	26796	26700	-	29300	-	-	-	30952
Exports	-	-	-	29300	-	-	-	29291
Main activity elec. generation	21890	-	-	-	-	-	-	-
Industry	26796	26700	-	29300	-	-	-	29985
Other uses	19259	29300	-	29300	-	-	-	29985
<b>Coking coal</b>								
Production	-	-	23483	-	29647	-	29507	-
Imports	28261	-	-	28671	29647	-	29580	-
Exports	-	-	-	-	29647	-	29637	-
Coke ovens	28261	-	23483	28671	-	-	29491	-
Main activity elec. generation	-	-	-	-	-	-	-	-
Industry	28261	-	-	-	29647	-	29802	-
Other uses	28261	-	23483	28671	29647	-	29310	-
<b>Other bituminous coal</b>								
Production	-	-	-	-	27782	28100	22910	-
Imports	24911	29300	23483	24824	27782	28100	23780	25616
Exports	-	-	23483	24824	28230	28100	26104	25896
Coke ovens	-	-	23483	-	-	-	27303	-
Main activity elec. generation	24911	-	-	24822	-	28100	21604	25623
Industry	24911	29300	-	-	27782	28100	22822	25670
Other uses	24911	29300	23483	24824	27782	28100	28753	25616
<b>Sub-bituminous coal</b>								
Production	-	-	19405	-	20630	-	-	-
Imports	20934	-	19405	-	20630	-	-	-
Exports	-	-	-	-	-	-	-	-
Main activity elec. generation	20935	-	21548	-	20364	-	-	-
Industry	19259	-	19405	-	20630	-	-	-
Other uses	20933	-	19405	-	20630	-	-	-
<b>Lignite</b>								
Production	-	-	-	-	14531	-	8564	-
Imports	-	-	14100	20000	-	-	8670	-
Exports	-	-	-	20000	-	-	8564	-
Main activity elec. generation	-	-	-	-	-	-	8567	-
Industry	-	-	-	20000	14531	-	11181	-
Other uses	-	-	14100	20000	14531	-	8336	-
<b>Patent fuel</b>	19259	-	-	-	-	-	24155	-
<b>Coke oven coke</b>	29308	28500	26521	28500	29500	28500	27952	29398
<b>Coal tar</b>	37000	-	-	41900	-	-	37667	-
<b>BKB</b>	-	20100	-	-	-	-	17486	-
<b>Peat</b>	-	-	-	-	-	-	-	-
<b>Charcoal</b>	-	-	-	30000	-	-	-	-

## Country specific net calorific values (kilojoule per kilogramme)

2010

	Slovak Republic	Slovenia	Spain	Sweden	Switzerland	Turkey	United Kingdom	United States
<b>Crude oil</b>								
Production	41200	-	42665	-	-	41370	43371	43261
Imports	42000	-	42665	42161	43225	41570	43371	43143
Exports	41889	-	-	-	-	-	43371	43261
Average	41996	-	42665	42161	43225	41520	43371	43092
<b>NGL</b>	37000	-	-	-	-	-	36090	46040
<b>Refinery feedstocks</b>	43860	-	42500	44244	43700	42500	42496	43878
<b>Additives</b>	43813	-	25100	25121	41325	-	-	25121
<b>Other hydrocarbons</b>	41500	-	-	-	-	-	-	51004
<b>Biogasoline</b>	21232	26670	26753	26886	26524	-	26800	26747
<b>Biodiesels</b>	41228	36900	37555	37512	32040	37046	36800	40933
<b>Other liquid biofuels</b>	-	-	-	42095	-	-	-	21583
<b>Anthracite</b>								
Production	-	-	18220	-	-	-	-	28796
Imports	26990	-	26400	-	28100	-	-	28960
Exports	-	-	25300	-	-	-	-	28796
Main activity elec. generation	25499	-	20046	-	-	-	-	12907
Industry	26990	-	-	-	28100	-	-	20787
Other uses	26986	-	20051	-	28100	-	-	21433
<b>Coking coal</b>								
Production	-	-	-	-	-	25275	30400	28139
Imports	29500	-	29000	30000	-	27731	28900	28203
Exports	-	-	-	-	-	-	30400	27567
Coke ovens	29500	-	29200	30000	-	29120	31000	29664
Main activity elec. generation	-	-	-	-	-	-	-	-
Industry	-	-	-	-	-	26914	30400	-
Other uses	29500	-	29200	30000	-	25336	30400	28532
<b>Other bituminous coal</b>								
Production	-	-	17100	-	-	24909	25000	26872
Imports	25810	25290	23915	27400	28100	26708	25200	25810
Exports	-	-	24011	27400	-	-	30600	27535
Coke ovens	-	-	-	-	-	-	30600	-
Main activity elec. generation	24308	23128	23556	27900	-	21792	24855	25863
Industry	25810	25290	24250	26860	28100	22480	26133	27288
Other uses	25802	25473	25249	27400	28100	24423	24488	27170
<b>Sub-bituminous coal</b>								
Production	-	-	8621	-	-	18064	-	19011
Imports	-	19103	-	-	-	-	-	20049
Exports	-	-	-	-	-	-	-	18892
Main activity elec. generation	-	17914	12675	-	-	23019	-	19278
Industry	-	16325	-	-	-	16327	-	20074
Other uses	-	18476	8621	-	-	16012	-	18825
<b>Lignite</b>								
Production	10800	10964	-	-	-	9314	-	13893
Imports	14918	16453	-	-	20100	-	-	13834
Exports	-	-	-	-	-	-	-	13749
Main activity elec. generation	11321	13323	-	-	-	6996	-	14378
Industry	11148	11134	-	-	20100	17110	-	15173
Other uses	11148	11046	-	-	20100	16194	-	14418
<b>Patent fuel</b>	28000	-	-	-	-	-	30970	-
<b>Coke oven coke</b>	28261	29767	28500	28080	28100	28512	28310	28842
<b>Coal tar</b>	33491	-	38519	-	-	-	38519	-
<b>BKB</b>	17000	-	-	-	-	-	-	-
<b>Peat</b>	-	-	-	12500	-	-	-	-
<b>Charcoal</b>	-	-	-	-	-	-	-	-

## Country specific net calorific values (tonne of oil equivalent per tonne)

2010

	Australia	Austria	Belgium	Canada	Chile	Czech Republic	Denmark	Estonia	Finland
<b>Crude oil</b>									
Production	1.0506	1.0151	-	1.0220	1.0436	1.0127	1.0270	-	-
Imports	1.0188	1.0151	1.0211	1.0220	1.0310	1.0127	1.0270	-	1.0125
Exports	1.0506	-	-	1.0220	-	1.0127	1.0270	-	-
Average	1.0338	1.0151	1.0211	1.0220	1.0359	1.0127	1.0270	-	1.0125
<b>NGL</b>	1.0846	1.0151	1.0796	1.0801	1.1487	-	-	-	1.0800
<b>Refinery feedstocks</b>	1.0338	1.0172	1.0151	1.0151	1.0700	0.9188	1.0199	-	1.0150
<b>Additives</b>	-	-	0.5995	-	0.5410	0.9434	-	-	0.6000
<b>Other hydrocarbons</b>	-	-	-	1.0000	-	-	-	0.9468	1.0000
<b>Biogasoline</b>	0.6401	0.6377	0.6415	0.6401	-	0.6449	0.6377	-	0.6568
<b>Biodiesels</b>	0.8790	0.8742	0.9089	0.8790	-	0.8861	0.8981	-	0.8790
<b>Other liquid biofuels</b>	-	0.7931	0.8837	-	-	-	0.8790	-	0.8790
<b>Anthracite</b>									
Production	0.6377	-	-	-	-	-	-	-	-
Imports	-	0.6696	0.6015	0.6301	-	0.7165	-	-	-
Exports	0.6377	-	0.6015	-	-	0.7165	-	-	-
Main activity elec. generation	-	-	-	-	-	-	-	-	-
Industry	-	0.6696	0.6015	0.6301	-	0.7165	-	-	-
Other uses	0.6377	0.6696	0.6015	0.6301	-	0.7165	-	-	-
<b>Coking coal</b>									
Production	0.6807	-	-	0.5904	-	0.6827	-	-	-
Imports	-	0.6944	0.7000	0.6766	0.6840	0.7060	-	-	0.6998
Exports	0.6807	-	0.7000	0.5904	-	0.6854	-	-	-
Coke ovens	0.6807	0.6944	0.7000	0.6766	0.6840	0.7018	-	-	0.6998
Main activity elec. generation	-	-	-	-	-	-	-	-	-
Industry	-	-	-	-	-	-	-	-	-
Other uses	0.6688	0.6944	0.7000	0.5904	0.6840	0.7018	-	-	0.6998
<b>Other bituminous coal</b>									
Production	0.6138	-	-	0.5785	0.4095	0.6090	-	-	-
Imports	-	0.6664	0.6158	0.5785	0.5399	0.5831	0.5838	0.6486	0.5995
Exports	0.6138	0.6657	0.6158	0.5785	-	0.6308	0.5869	-	-
Coke ovens	-	0.6711	-	-	-	-	-	-	-
Main activity elec. generation	0.5378	0.6442	0.6264	0.7021	0.5194	0.5050	0.5805	0.6487	0.5994
Industry	0.6138	0.7130	0.6588	0.5785	0.6604	0.5539	0.6329	0.6487	0.5995
Other uses	0.6138	0.6578	0.6158	0.5785	0.6604	0.6794	0.5837	0.6487	0.5995
<b>Sub-bituminous coal</b>									
Production	0.4413	-	-	0.4356	-	-	-	-	-
Imports	-	0.5302	-	0.4356	-	-	-	-	-
Exports	-	-	-	0.4356	-	-	-	-	-
Main activity elec. generation	0.4494	-	-	0.4574	-	-	-	-	-
Industry	0.4585	0.5302	-	-	-	-	-	-	-
Other uses	0.4413	0.5302	-	0.4356	-	-	-	-	-
<b>Lignite</b>									
Production	0.2341	-	-	0.3412	-	0.3043	-	0.2150	-
Imports	-	0.2153	0.1999	0.3412	-	0.3492	-	-	-
Exports	-	0.2187	-	0.3412	-	0.3894	-	-	-
Main activity elec. generation	0.2341	-	-	0.3583	-	0.2814	-	0.2222	-
Industry	0.2341	0.2389	0.1999	-	-	0.3026	-	0.2627	-
Other uses	0.2341	0.2187	0.1999	0.3412	-	0.3305	-	0.2627	-
<b>Patent fuel</b>	-	0.7404	0.7000	-	-	-	-	-	-
<b>Coke oven coke</b>	0.6126	0.6927	0.6615	0.6886	0.6842	0.6701	0.6998	0.7000	0.6998
<b>Coal tar</b>	0.8530	0.9984	-	-	0.9880	0.8822	-	-	0.8837
<b>BKB</b>	0.5015	0.4610	0.4777	-	-	0.4953	0.4371	0.3822	-
<b>Peat</b>	-	0.2102	-	-	-	-	-	0.2376	0.2434
<b>Charcoal</b>	-	0.7404	0.6998	-	0.7356	-	-	-	-

## Country specific net calorific values (tonne of oil equivalent per tonne)

2010

	France	Germany	Greece	Hungary	Iceland	Ireland	Israel	Italy	Japan
<b>Crude oil</b>									
Production	0.9997	1.0212	0.9114	0.9984	-	-	1.0160	0.9998	1.0126
Imports	0.9997	1.0212	0.9922	0.9984	-	1.0230	1.0160	0.9998	1.0126
Exports	-	1.0212	0.9998	-	-	1.0230	-	0.9998	-
Average	0.9997	1.0212	0.9847	0.9984	-	1.0230	1.0160	0.9998	1.0126
<b>NGL</b>	1.0032	-	-	1.0270	-	-	-	-	1.1034
<b>Refinery feedstocks</b>	0.9997	1.0150	0.9869	0.9984	-	-	1.0700	0.9998	1.0151
<b>Additives</b>	0.6000	0.6000	0.9869	0.9984	-	-	-	0.6000	-
<b>Other hydrocarbons</b>	-	-	-	-	-	-	-	-	-
<b>Biogasoline</b>	0.6402	0.6368	-	0.6353	-	0.5754	-	0.6401	-
<b>Biodiesels</b>	0.8933	0.8861	0.9071	0.8957	-	0.8903	-	0.8933	-
<b>Other liquid biofuels</b>	-	0.6688	-	-	-	0.8685	0.8790	0.8766	-
<b>Anthracite</b>									
Production	-	0.6934	-	-	-	0.6700	-	-	-
Imports	-	0.6934	-	-	-	0.6662	-	-	0.6296
Exports	-	0.7189	-	-	-	0.6700	-	-	-
Main activity elec. generation	-	0.7096	-	-	-	-	-	-	-
Industry	-	0.7096	-	-	-	-	-	-	-
Other uses	-	0.7096	-	-	-	0.6685	-	-	0.6296
<b>Coking coal</b>									
Production	-	0.6927	-	-	-	-	-	-	-
Imports	0.7285	0.6927	-	0.7507	0.6700	-	-	0.7400	0.6719
Exports	0.7285	0.6927	-	-	-	-	-	-	-
Coke ovens	0.7285	0.6927	-	0.7507	-	-	-	0.7400	0.6742
Main activity elec. generation	-	0.6927	-	-	-	-	-	-	-
Industry	-	0.6927	-	-	0.6700	-	-	-	-
Other uses	0.7285	0.6927	-	0.7507	0.6700	-	-	0.7400	0.6533
<b>Other bituminous coal</b>									
Production	0.6210	0.5696	-	-	-	-	-	0.6350	-
Imports	0.6210	0.6343	0.6425	0.5916	0.6700	0.6649	0.5992	0.6350	0.5924
Exports	0.6210	0.7435	-	0.5699	-	-	-	0.6350	0.5924
Coke ovens	-	-	-	-	-	-	-	-	0.5924
Main activity elec. generation	0.7089	0.6130	0.6556	0.5860	-	0.5905	0.6006	0.6044	0.5985
Industry	0.6210	0.5912	0.6425	0.6234	0.6700	0.6650	-	0.6350	0.5924
Other uses	0.6210	0.5971	0.6163	0.5864	0.6700	0.6650	0.6006	0.6350	0.5924
<b>Sub-bituminous coal</b>									
Production	-	-	-	-	-	-	-	-	-
Imports	-	-	-	0.4127	-	-	-	0.4498	-
Exports	-	-	-	0.4060	-	-	-	-	-
Main activity elec. generation	-	-	-	0.3828	-	-	-	0.4497	-
Industry	-	-	-	0.5458	-	-	-	-	-
Other uses	-	-	-	0.4115	-	-	-	0.4498	-
<b>Lignite</b>									
Production	-	0.2164	0.1294	0.1748	-	-	0.0700	-	-
Imports	0.4060	-	0.1046	-	-	0.4734	-	0.2500	-
Exports	-	-	-	0.3702	-	0.4734	-	-	-
Main activity elec. generation	-	0.2135	0.1294	0.1696	-	-	-	-	-
Industry	0.4060	0.2435	0.2025	0.2150	-	-	0.0700	0.2500	-
Other uses	0.4060	0.2435	0.1294	0.2599	-	0.4734	0.0700	0.2500	-
<b>Patent fuel</b>	0.7643	0.7500	-	0.5255	-	-	-	-	-
<b>Coke oven coke</b>	0.6688	0.6843	0.7220	0.7161	0.6370	-	-	0.6927	0.7022
<b>Coal tar</b>	0.9076	-	-	0.9076	-	-	-	-	0.8453
<b>BKB</b>	-	0.4681	-	0.4777	-	0.4430	-	-	-
<b>Peat</b>	-	-	-	-	-	0.2108	-	-	-
<b>Charcoal</b>	-	-	0.7404	-	-	-	0.7356	0.7356	0.6998

## Country specific net calorific values (tonne of oil equivalent per tonne)

2010

	Korea	Luxembourg	Mexico	Netherlands	New Zealand	Norway	Poland	Portugal
<b>Crude oil</b>								
Production	1.0199	-	1.1172	1.0199	1.0453	0.9881	1.0153	-
Imports	1.0199	-	-	1.0199	1.0269	0.9881	1.0150	1.0280
Exports	-	-	1.1172	1.0199	1.0455	0.9881	1.0153	-
Average	1.0199	-	1.1172	1.0199	1.0361	0.9881	1.0151	1.0280
<b>NGL</b>	-	-	1.0189	1.0509	1.0938	1.0460	-	1.0801
<b>Refinery feedstocks</b>	1.0700	-	-	1.0150	1.0526	1.0103	1.0151	1.0508
<b>Additives</b>	1.0000	-	1.0990	0.6000	-	0.8790	0.8923	0.8837
<b>Other hydrocarbons</b>	-	-	-	-	-	-	1.0151	-
<b>Biogasoline</b>	-	0.6402	-	0.6449	0.6894	0.6401	0.7094	-
<b>Biodiesels</b>	0.9126	0.9108	-	0.8837	0.9520	0.8790	0.9172	0.8837
<b>Other liquid biofuels</b>	-	-	-	0.8503	-	0.8790	0.9172	0.8790
<b>Anthracite</b>								
Production	0.4600	-	-	-	-	-	-	-
Imports	0.6400	0.6377	-	0.6998	-	-	-	0.7393
Exports	-	-	-	0.6998	-	-	-	0.6996
Main activity elec. generation	0.5228	-	-	-	-	-	-	-
Industry	0.6400	0.6377	-	0.6998	-	-	-	0.7162
Other uses	0.4600	0.6998	-	0.6998	-	-	-	0.7162
<b>Coking coal</b>								
Production	-	-	0.5609	-	0.7081	-	0.7048	-
Imports	0.6750	-	-	0.6848	0.7081	-	0.7065	-
Exports	-	-	-	-	0.7081	-	0.7079	-
Coke ovens	0.6750	-	0.5609	0.6848	-	-	0.7044	-
Main activity elec. generation	-	-	-	-	-	-	-	-
Industry	0.6750	-	-	-	0.7081	-	0.7118	-
Other uses	0.6750	-	0.5609	0.6848	0.7081	-	0.7001	-
<b>Other bituminous coal</b>								
Production	-	-	-	-	0.6636	0.6712	0.5472	-
Imports	0.5950	0.6998	0.5609	0.5929	0.6636	0.6712	0.5680	0.6118
Exports	-	-	0.5609	0.5929	0.6743	0.6712	0.6235	0.6185
Coke ovens	-	-	0.5609	-	-	-	0.6521	-
Main activity elec. generation	0.5950	-	-	0.5929	-	0.6712	0.5160	0.6120
Industry	0.5950	0.6998	-	-	0.6636	0.6712	0.5451	0.6131
Other uses	0.5950	0.6998	0.5609	0.5929	0.6636	0.6712	0.6868	0.6118
<b>Sub-bituminous coal</b>								
Production	-	-	0.4635	-	0.4927	-	-	-
Imports	0.5000	-	0.4635	-	0.4927	-	-	-
Exports	-	-	-	-	-	-	-	-
Main activity elec. generation	0.5000	-	0.5147	-	0.4864	-	-	-
Industry	0.4600	-	0.4635	-	0.4927	-	-	-
Other uses	0.5000	-	0.4635	-	0.4927	-	-	-
<b>Lignite</b>								
Production	-	-	-	-	0.3471	-	0.2045	-
Imports	-	-	0.3368	0.4777	-	-	0.2071	-
Exports	-	-	-	0.4777	-	-	0.2045	-
Main activity elec. generation	-	-	-	-	-	-	0.2046	-
Industry	-	-	-	0.4777	0.3471	-	0.2671	-
Other uses	-	-	0.3368	0.4777	0.3471	-	0.1991	-
<b>Patent fuel</b>	0.4600	-	-	-	-	-	0.5769	-
<b>Coke oven coke</b>	0.7000	0.6807	0.6334	0.6807	0.7046	0.6807	0.6676	0.7022
<b>Coal tar</b>	0.8837	-	-	1.0008	-	-	0.8997	-
<b>BKB</b>	-	0.4801	-	-	-	-	0.4176	-
<b>Peat</b>	-	-	-	-	-	-	-	-
<b>Charcoal</b>	-	-	-	0.7165	-	-	-	-



## Country specific net calorific values (tonne of oil equivalent per tonne)

2010

	Slovak Republic	Slovenia	Spain	Sweden	Switzerland	Turkey	United Kingdom	United States
<b>Crude oil</b>								
Production	0.9840	-	1.0190	-	-	0.9881	1.0359	1.0333
Imports	1.0032	-	1.0190	1.0070	1.0324	0.9929	1.0359	1.0305
Exports	1.0005	-	-	-	-	-	1.0359	1.0333
Average	1.0031	-	1.0190	1.0070	1.0324	0.9917	1.0359	1.0292
<b>NGL</b>	0.8837	-	-	-	-	-	0.8620	1.0996
<b>Refinery feedstocks</b>	1.0476	-	1.0151	1.0567	1.0438	1.0151	1.0150	1.0480
<b>Additives</b>	1.0465	-	0.5995	0.6000	0.9870	-	-	0.6000
<b>Other hydrocarbons</b>	0.9912	-	-	-	-	-	-	1.2182
<b>Biogasoline</b>	0.5071	0.6370	0.6390	0.6422	0.6335	-	0.6401	0.6388
<b>Biodiesels</b>	0.9847	0.8813	0.8970	0.8960	0.7653	0.8848	0.8790	0.9777
<b>Other liquid biofuels</b>	-	-	-	1.0054	-	-	-	0.5155
<b>Anthracite</b>								
Production	-	-	0.4352	-	-	-	-	0.6878
Imports	0.6446	-	0.6306	-	0.6712	-	-	0.6917
Exports	-	-	0.6043	-	-	-	-	0.6878
Main activity elec. generation	0.6090	-	0.4788	-	-	-	-	0.3083
Industry	0.6446	-	-	-	0.6712	-	-	0.4965
Other uses	0.6445	-	0.4789	-	0.6712	-	-	0.5119
<b>Coking coal</b>								
Production	-	-	-	-	-	0.6037	0.7261	0.6721
Imports	0.7046	-	0.6927	0.7165	-	0.6623	0.6903	0.6736
Exports	-	-	-	-	-	-	0.7261	0.6584
Coke ovens	0.7046	-	0.6974	0.7165	-	0.6955	0.7404	0.7085
Main activity elec. generation	-	-	-	-	-	-	-	-
Industry	-	-	-	-	-	0.6428	0.7261	-
Other uses	0.7046	-	0.6974	0.7165	-	0.6051	0.7261	0.6815
<b>Other bituminous coal</b>								
Production	-	-	0.4084	-	-	0.5949	0.5971	0.6418
Imports	0.6165	0.6040	0.5712	0.6544	0.6712	0.6379	0.6019	0.6165
Exports	-	-	0.5735	0.6544	-	-	0.7309	0.6577
Coke ovens	-	-	-	-	-	-	0.7309	-
Main activity elec. generation	0.5806	0.5524	0.5626	0.6664	-	0.5205	0.5937	0.6177
Industry	0.6165	0.6040	0.5792	0.6415	0.6712	0.5369	0.6242	0.6518
Other uses	0.6163	0.6084	0.6031	0.6544	0.6712	0.5833	0.5849	0.6489
<b>Sub-bituminous coal</b>								
Production	-	-	0.2059	-	-	0.4315	-	0.4541
Imports	-	0.4563	-	-	-	-	-	0.4789
Exports	-	-	-	-	-	-	-	0.4512
Main activity elec. generation	-	0.4279	0.3027	-	-	0.5498	-	0.4604
Industry	-	0.3899	-	-	-	0.3900	-	0.4795
Other uses	-	0.4413	0.2059	-	-	0.3824	-	0.4496
<b>Lignite</b>								
Production	0.2580	0.2619	-	-	-	0.2225	-	0.3318
Imports	0.3563	0.3930	-	-	0.4801	-	-	0.3304
Exports	-	-	-	-	-	-	-	0.3284
Main activity elec. generation	0.2704	0.3182	-	-	-	0.1671	-	0.3434
Industry	0.2663	0.2659	-	-	0.4801	0.4087	-	0.3624
Other uses	0.2663	0.2638	-	-	0.4801	0.3868	-	0.3444
<b>Patent fuel</b>	0.6688	-	-	-	-	-	0.7397	-
<b>Coke oven coke</b>	0.6750	0.7110	0.6807	0.6707	0.6712	0.6810	0.6762	0.6889
<b>Coal tar</b>	0.7999	-	0.9200	-	-	-	0.9200	-
<b>BKB</b>	0.4060	-	-	-	-	-	-	-
<b>Peat</b>	-	-	-	0.2986	-	-	-	-
<b>Charcoal</b>	-	-	-	-	-	-	-	-



# ENERGY BALANCE SHEETS AND ENERGY INDICATORS

## OECD Total : 2009

Million tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	970.15	890.56	-	939.10	584.44	114.01	56.87	238.23	-	0.55	3793.93
Imports	341.58	1524.99	540.34	596.70	-	-	-	8.18	32.93	0.00	3044.72
Exports	-246.70	-353.17	-476.63	-280.78	-	-	-	-3.83	-32.15	-0.01	-1393.26
Intl. marine bunkers	-	-	-87.99	-	-	-	-	-	-	-	-87.99
Intl. aviation bunkers	-	-	-84.75	-	-	-	-	-	-	-	-84.75
Stock changes	-35.86	1.21	-1.56	-6.38	-	-	-	-0.34	-	-	-42.94
<b>TPES</b>	<b>1029.17</b>	<b>2063.59</b>	<b>-110.59</b>	<b>1248.64</b>	<b>584.44</b>	<b>114.01</b>	<b>56.87</b>	<b>242.25</b>	<b>0.77</b>	<b>0.55</b>	<b>5229.70</b>
Transfers	-	-47.40	59.70	-	-	-	-	-	-	-	12.30
Statistical differences	-7.94	-4.15	-12.62	-3.22	-	-	0.00	0.08	0.55	-0.01	-27.33
Electricity plants	-758.72	-3.18	-55.66	-324.37	-581.76	-114.01	-47.20	-40.21	807.53	-0.15	-1117.73
CHP plants	-80.78	-	-14.74	-102.71	-2.68	-	-1.06	-29.70	86.25	56.81	-88.60
Heat plants	-4.47	-	-1.30	-7.12	-	-	-0.14	-5.09	-0.33	14.84	-3.62
Blast furnaces	-39.60	-	-0.64	-0.07	-	-	-	-	-	-	-40.31
Gas works	-2.03	-	-2.83	3.28	-	-	-	-0.02	-	-	-1.60
Coke/pat. fuel/BKB plants	-7.33	-	-1.07	-0.04	-	-	-	-	-	-	-8.45
Oil refineries	-	-2027.93	2022.21	-0.59	-	-	-	-	-	-	-6.30
Petrochemical plants	-	25.70	-26.15	-	-	-	-	-	-	-	-0.45
Liquefaction plants	-0.71	1.05	-	-1.96	-	-	-	-	-	-	-1.63
Other transformation	0.03	0.14	-0.10	-0.43	-	-	-	-0.40	-	-0.34	-1.10
Energy industry own use	-12.31	-0.08	-118.39	-102.78	-	-	-0.13	-0.21	-65.82	-8.10	-307.82
Losses	-0.76	-	-0.01	-3.31	-	-	-0.14	-0.03	-59.02	-5.08	-68.35
<b>TFC</b>	<b>114.54</b>	<b>7.74</b>	<b>1737.80</b>	<b>705.32</b>	<b>-</b>	<b>-</b>	<b>8.20</b>	<b>166.66</b>	<b>769.93</b>	<b>58.51</b>	<b>3568.70</b>
<b>INDUSTRY</b>	<b>89.76</b>	<b>2.04</b>	<b>112.14</b>	<b>232.92</b>	<b>-</b>	<b>-</b>	<b>0.30</b>	<b>67.50</b>	<b>238.54</b>	<b>24.12</b>	<b>767.32</b>
Iron and steel	32.91	0.00	4.33	21.25	-	-	-	0.15	26.63	0.74	86.02
Chemical and petrochem.	10.30	1.98	24.18	57.21	-	-	0.00	1.41	44.72	11.43	151.24
Non-ferrous metals	1.75	0.00	2.58	11.73	-	-	0.00	0.11	24.49	0.41	41.07
Non-metallic minerals	16.41	0.01	19.45	27.33	-	-	0.00	4.29	13.85	0.18	81.50
Transport equipment	0.18	0.01	1.20	8.55	-	-	0.00	0.01	9.15	0.75	19.85
Machinery	0.33	0.01	3.87	17.84	-	-	0.00	0.09	27.92	0.65	50.72
Mining and quarrying	0.55	-	7.25	10.49	-	-	-	0.04	8.26	0.16	26.74
Food and tobacco	5.52	0.01	8.70	29.72	-	-	0.00	3.68	19.48	1.68	68.80
Paper, pulp and printing	6.59	0.01	6.70	22.56	-	-	0.15	42.98	28.76	2.86	110.61
Wood and wood products	0.42	0.00	3.77	2.64	-	-	-	9.89	4.49	0.73	21.94
Construction	2.25	-	9.95	2.25	-	-	0.00	0.13	1.91	0.06	16.56
Textile and leather	0.40	0.01	1.19	5.78	-	-	0.00	0.08	6.24	0.99	14.69
Non-specified	12.15	0.01	18.96	15.57	-	-	0.14	4.64	22.65	3.47	77.59
<b>TRANSPORT</b>	<b>0.14</b>	<b>0.03</b>	<b>1101.90</b>	<b>20.83</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>35.22</b>	<b>9.26</b>	<b>-</b>	<b>1167.37</b>
Domestic aviation	-	-	66.37	-	-	-	-	-	-	-	66.37
Road	-	0.03	1000.40	2.66	-	-	-	35.20	0.00	-	1038.29
Rail	0.01	-	14.06	-	-	-	-	0.01	7.59	-	21.67
Pipeline transport	-	-	0.02	18.02	-	-	-	-	0.40	-	18.44
Domestic navigation	0.13	-	19.90	0.05	-	-	-	0.00	-	-	20.08
Non-specified	0.00	-	1.16	0.10	-	-	-	0.00	1.27	-	2.52
<b>OTHER</b>	<b>22.16</b>	<b>0.60</b>	<b>209.81</b>	<b>423.47</b>	<b>-</b>	<b>-</b>	<b>7.91</b>	<b>63.95</b>	<b>522.13</b>	<b>34.40</b>	<b>1284.42</b>
Residential	16.10	0.45	96.34	265.26	-	-	6.70	57.06	248.35	19.70	709.98
Comm. and public services	4.66	0.08	63.09	147.13	-	-	0.73	4.71	250.80	10.38	481.59
Agriculture/forestry	1.16	0.07	41.79	4.04	-	-	0.16	2.14	7.73	0.28	57.36
Fishing	0.01	-	4.39	0.01	-	-	0.03	-	0.24	0.02	4.70
Non-specified	0.23	-	4.19	7.03	-	-	0.28	0.04	15.01	4.01	30.79
<b>NON-ENERGY USE</b>	<b>2.47</b>	<b>5.07</b>	<b>313.95</b>	<b>28.10</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>349.60</b>
in industry/transf./energy	2.31	5.07	306.33	28.10	-	-	-	-	-	-	341.81
of which: feedstocks	0.85	5.07	221.01	27.06	-	-	-	-	-	-	253.98
in transport	-	-	4.05	-	-	-	-	-	-	-	4.05
in other	0.16	-	3.58	-	-	-	-	-	-	-	3.74
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>3593.60</b>	<b>15.32</b>	<b>309.24</b>	<b>2370.96</b>	<b>2242.14</b>	<b>1325.72</b>	<b>294.14</b>	<b>241.13</b>	<b>-</b>	<b>0.55</b>	<b>10392.79</b>
Electricity plants	3290.42	15.32	252.03	1849.09	2232.32	1325.72	290.57	133.84	-	0.19	9389.51
CHP plants	303.18	-	57.21	521.87	9.82	-	3.56	107.29	-	0.35	1003.28
<b>Heat generated - PJ</b>	<b>852.54</b>	<b>-</b>	<b>269.97</b>	<b>1329.15</b>	<b>5.06</b>	<b>-</b>	<b>16.15</b>	<b>496.97</b>	<b>7.49</b>	<b>46.12</b>	<b>3023.44</b>
CHP plants	713.66	-	234.11	1079.60	5.06	-	10.28	334.41	0.32	14.59	2392.03
Heat plants	138.88	-	35.86	249.55	-	-	5.87	162.56	7.17	31.53	631.42

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## OECD Total : 2010

Million tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	984.22	894.85	-	965.11	596.49	116.21	63.17	258.50	-	0.66	3879.21
Imports	369.05	1536.81	563.98	636.80	-	-	-	10.12	33.18	0.00	3149.95
Exports	-285.96	-354.29	-501.46	-299.24	-	-	-	-5.18	-32.25	-0.01	-1478.38
Intl. marine bunkers	-	-	-90.21	-	-	-	-	-	-	-	-90.21
Intl. aviation bunkers	-	-	-85.88	-	-	-	-	-	-	-	-85.88
Stock changes	19.06	-3.63	1.29	14.30	-	-	-	0.16	-	-	31.17
<b>TPES</b>	<b>1086.37</b>	<b>2073.74</b>	<b>-112.28</b>	<b>1316.96</b>	<b>596.49</b>	<b>116.21</b>	<b>63.17</b>	<b>263.60</b>	<b>0.94</b>	<b>0.65</b>	<b>5405.87</b>
Transfers	-	-49.66	63.27	-	-	-	-	-	-	-	13.61
Statistical differences	-8.20	-5.59	-6.55	1.43	-	-	0.00	-0.03	-0.09	-0.10	-19.14
Electricity plants	-785.14	-4.13	-50.42	-349.41	-593.73	-116.21	-52.99	-43.97	840.75	-0.22	-1155.47
CHP plants	-85.22	-	-15.40	-112.85	-2.76	-	-1.06	-32.56	92.73	60.42	-96.70
Heat plants	-5.14	-	-1.46	-8.35	-	-	-0.17	-5.79	-0.34	16.86	-4.40
Blast furnaces	-49.07	-	-0.79	-0.11	-	-	-	-	-	-	-49.97
Gas works	-2.04	-	-2.99	3.47	-	-	-	-0.02	-	-	-1.59
Coke/pat. fuel/BKB plants	-7.76	-	-1.19	-0.00	-	-	-	-0.00	-	-	-8.95
Oil refineries	-	-2033.89	2030.82	-0.80	-	-	-	-	-	-	-3.87
Petrochemical plants	-	26.84	-27.33	-	-	-	-	-	-	-	-0.49
Liquefaction plants	-0.79	1.30	-	-1.93	-	-	-	-	-	-	-1.43
Other transformation	0.02	0.13	-0.08	-0.49	-	-	-	-0.30	-	-0.39	-1.12
Energy industry own use	-14.09	-0.10	-117.47	-107.12	-	-	-0.13	-0.26	-68.05	-8.71	-315.93
Losses	-0.94	-	-0.01	-3.84	-	-	-0.14	-0.03	-59.07	-5.27	-69.31
<b>TFC</b>	<b>128.00</b>	<b>8.65</b>	<b>1758.12</b>	<b>736.95</b>	<b>-</b>	<b>-</b>	<b>8.69</b>	<b>180.62</b>	<b>806.87</b>	<b>63.22</b>	<b>3691.11</b>
<b>INDUSTRY</b>	<b>102.11</b>	<b>2.21</b>	<b>113.47</b>	<b>255.25</b>	<b>-</b>	<b>-</b>	<b>0.30</b>	<b>72.09</b>	<b>259.35</b>	<b>24.01</b>	<b>828.80</b>
Iron and steel	40.29	0.00	4.68	23.59	-	-	0.01	0.05	29.58	0.59	98.79
Chemical and petrochem.	11.28	2.14	24.22	63.03	-	-	0.00	1.90	49.05	11.08	162.69
Non-ferrous metals	1.72	0.00	2.88	12.11	-	-	0.00	0.10	25.93	0.35	43.09
Non-metallic minerals	17.11	0.01	19.00	28.89	-	-	0.00	4.51	14.72	0.20	84.43
Transport equipment	0.17	0.01	1.29	9.30	-	-	0.00	0.01	10.07	0.89	21.74
Machinery	0.35	0.01	4.01	19.18	-	-	0.00	0.15	32.66	0.93	57.29
Mining and quarrying	0.59	-	7.95	12.76	-	-	-	0.04	9.08	0.20	30.61
Food and tobacco	6.23	0.01	8.41	32.00	-	-	0.00	3.91	20.43	1.53	72.52
Paper, pulp and printing	6.70	0.01	6.36	24.21	-	-	0.15	45.58	30.39	2.96	116.36
Wood and wood products	0.42	0.01	4.17	2.79	-	-	-	10.89	4.79	0.75	23.81
Construction	2.33	-	10.09	2.63	-	-	0.00	0.14	2.02	0.05	17.25
Textile and leather	0.42	0.01	1.09	6.13	-	-	0.00	0.10	6.74	0.80	15.29
Non-specified	14.51	0.01	19.31	18.63	-	-	0.15	4.72	23.91	3.68	84.91
<b>TRANSPORT</b>	<b>0.14</b>	<b>0.03</b>	<b>1107.23</b>	<b>22.67</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>40.28</b>	<b>9.33</b>	<b>-</b>	<b>1179.69</b>
Domestic aviation	-	-	67.10	-	-	-	-	-	-	-	67.10
Road	-	0.03	1005.31	3.25	-	-	-	40.26	0.00	-	1048.85
Rail	0.01	-	14.98	-	-	-	-	0.02	7.65	-	22.66
Pipeline transport	-	-	0.01	19.28	-	-	-	-	0.38	-	19.67
Domestic navigation	0.12	-	18.65	0.05	-	-	-	0.00	-	-	18.82
Non-specified	0.00	-	1.19	0.10	-	-	-	0.00	1.31	-	2.59
<b>OTHER</b>	<b>23.57</b>	<b>0.73</b>	<b>210.10</b>	<b>429.06</b>	<b>-</b>	<b>-</b>	<b>8.39</b>	<b>68.25</b>	<b>538.18</b>	<b>39.20</b>	<b>1317.48</b>
Residential	18.11	0.55	96.00	269.23	-	-	7.16	61.00	259.75	22.18	733.98
Comm. and public services	3.87	0.10	61.61	151.55	-	-	0.88	4.84	256.21	11.92	490.97
Agriculture/forestry	1.38	0.08	43.67	4.32	-	-	0.19	2.38	7.74	0.26	60.03
Fishing	0.00	-	4.56	0.01	-	-	0.06	-	0.25	0.02	4.90
Non-specified	0.19	-	4.26	3.96	-	-	0.09	0.04	14.24	4.83	27.61
<b>NON-ENERGY USE</b>	<b>2.19</b>	<b>5.67</b>	<b>327.31</b>	<b>29.97</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>365.14</b>
in industry/transf./energy	2.00	5.67	319.14	29.97	-	-	-	-	-	-	356.78
of which: feedstocks	0.91	5.67	231.46	28.87	-	-	-	-	-	-	266.92
in transport	-	-	4.20	-	-	-	-	-	-	-	4.20
in other	0.19	-	3.97	-	-	-	-	-	-	-	4.16
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>3746.50</b>	<b>20.18</b>	<b>288.79</b>	<b>2544.10</b>	<b>2288.37</b>	<b>1351.28</b>	<b>350.74</b>	<b>263.54</b>	<b>-</b>	<b>0.88</b>	<b>10854.37</b>
Electricity plants	3425.93	20.18	233.05	1971.89	2278.27	1351.28	347.15	147.52	-	0.40	9775.65
CHP plants	320.57	-	55.74	572.21	10.10	-	3.59	116.03	-	0.48	1078.72
<b>Heat generated - PJ</b>	<b>924.41</b>	<b>-</b>	<b>266.54</b>	<b>1430.64</b>	<b>5.37</b>	<b>-</b>	<b>17.04</b>	<b>568.17</b>	<b>7.48</b>	<b>43.79</b>	<b>3263.45</b>
CHP plants	753.90	-	225.07	1145.31	5.37	-	10.39	386.94	0.21	17.33	2544.51
Heat plants	170.51	-	41.48	285.33	-	-	6.65	181.23	7.27	26.47	718.94

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

**OECD Total**
**Estimated energy supply balance for 2011**

Million tonnes of oil equivalent											
SUPPLY	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	988.00	893.51	-	991.11	541.74	119.83	71.89	259.07	-	0.70	3865.84
Imports	372.40	1507.76	558.25	648.81	-	-	-	11.95	35.92	0.00	3135.10
Exports	-292.24	-349.40	-523.31	-306.14	-	-	-	-8.90	-35.86	-0.01	-1515.85
Intl. marine bunkers	-	-	-91.01	-	-	-	-	-	-	-	-91.01
Intl. aviation bunkers	-	-	-85.47	-	-	-	-	-	-	-	-85.47
Stock changes	-7.06	9.76	4.89	-11.08	-	-	-	-0.16	-	-	-3.66
<b>TPES</b>	<b>1061.10</b>	<b>2061.63</b>	<b>-136.65</b>	<b>1322.71</b>	<b>541.74</b>	<b>119.83</b>	<b>71.89</b>	<b>261.97</b>	<b>0.06</b>	<b>0.70</b>	<b>5304.95</b>
Electricity and Heat Output											
Elec. generated - TWh	3709.61	24.19	277.49	2564.16	2078.27	1393.38	441.79	263.07	-	0.79	10752.75
Heat generated - PJ	857.03	-	241.91	1347.66	5.33	-	17.79	546.07	7.81	38.55	3062.15

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

**Key indicators**

	1960	1971	1980	1990	2000	2009	2010	2011e
Energy production (Mtoe)	..	2355.0	2913.3	3441.5	3830.3	3793.9	3879.2	3865.8
Net imports (Mtoe)	..	1144.7	1304.8	1251.1	1575.0	1651.5	1671.6	1619.3
Total primary energy supply (Mtoe)	..	3372.3	4068.3	4522.5	5292.5	5229.7	5405.9	5305.0
Net oil imports (Mtoe)	..	1124.8	1228.6	1084.7	1246.3	1235.5	1245.0	1193.3
Oil supply (Mtoe)	..	1707.5	1945.5	1869.7	2114.2	1953.0	1961.5	1925.0
Electricity consumption (TWh)*	..	3551.6	5259.9	7104.3	9173.6	9780.5	10245.9	10131.1
GDP (billion 2005 USD)	..	13431.9	18205.9	24706.5	32225.9	36401.3	37494.1	38099.0
GDP PPP (billion 2005 USD)	..	13003.2	17723.4	24022.7	31596.8	35987.9	37113.4	37778.5
Population (millions)	..	894.70	979.95	1064.06	1151.87	1225.13	1232.22	1238.02
Industrial production index (2005=100)	..	..	57.50	72.90	94.70	92.20	99.60	102.70
Total self-sufficiency**	..	0.6983	0.7161	0.7610	0.7237	0.7255	0.7176	0.7287
Coal and peat self-sufficiency**	..	0.9937	1.0031	0.9929	0.8780	0.9427	0.9060	0.9311
Oil self-sufficiency**	..	0.4061	0.4358	0.4938	0.4918	0.4560	0.4562	0.4642
Natural gas self-sufficiency**	..	1.0038	0.9243	0.8515	0.7811	0.7521	0.7328	0.7493
TPES/GDP (toe per thousand 2005 USD)	..	0.2511	0.2235	0.1830	0.1642	0.1437	0.1442	0.1392
TPES/GDP PPP (toe per thousand 2005 USD)	..	0.2593	0.2295	0.1883	0.1675	0.1453	0.1457	0.1404
TPES/population (toe per capita)	..	3.7692	4.1515	4.2502	4.5948	4.2687	4.3871	4.2850
Net oil imports/GDP (toe per thousand 2005 USD)	..	0.0837	0.0675	0.0439	0.0387	0.0339	0.0332	0.0313
Oil supply/GDP (toe per thousand 2005 USD)	..	0.1271	0.1069	0.0757	0.0656	0.0537	0.0523	0.0505
Oil supply/population (toe per capita)	..	1.9085	1.9853	1.7571	1.8354	1.5941	1.5918	1.5549
Elect. cons./GDP (kWh per 2005 USD)	..	0.2644	0.2889	0.2875	0.2847	0.2687	0.2733	0.2659
Elect. cons./population (kWh per capita)	..	3970	5368	6677	7964	7983	8315	8183
Industry cons.***/industrial production (2005=100)	..	..	163.74	121.69	107.50	96.17	95.16	..
Industry oil cons.***/industrial production (2005=100)	..	..	176.76	115.80	99.80	94.71	90.75	..

\* Electricity consumption equals domestic supply less losses.

\*\* Production divided by TPES.

\*\*\* Includes non-energy use.

Note: OECD Total excludes Estonia and Slovenia prior to 1990.

OECD Total

Figure 1. Energy production

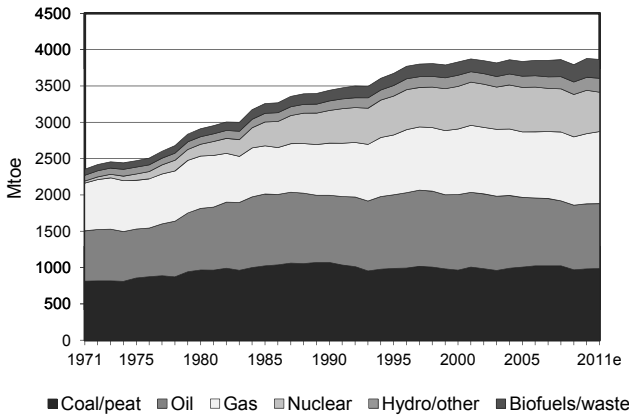


Figure 2. Total primary energy supply\*

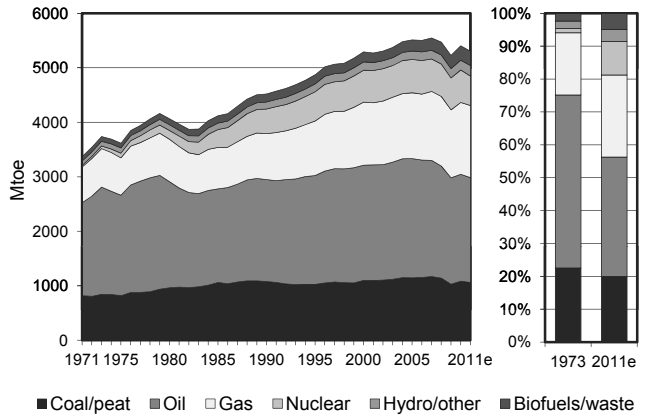


Figure 3. Energy self-sufficiency

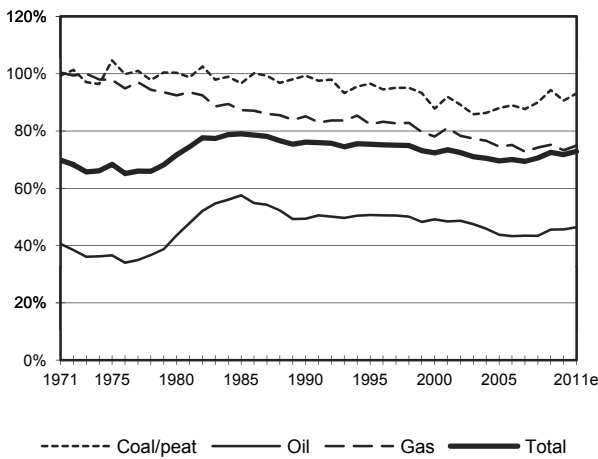


Figure 4. Breakdown of sectorial final consumption by source in 1973 and 2010\*\*

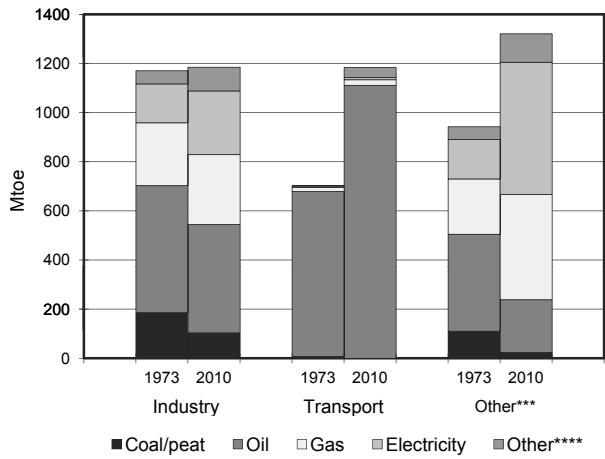


Figure 5. Electricity generation by fuel

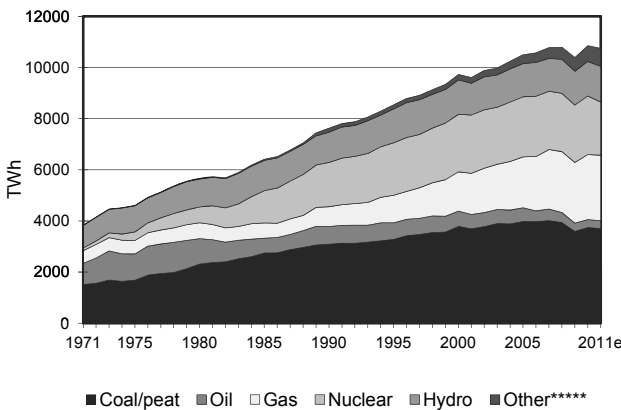
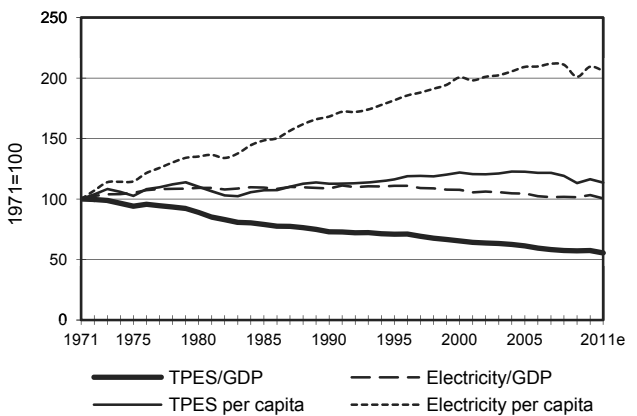


Figure 6. Selected indicators



\* Excluding electricity trade.  
 \*\* Includes non-energy use.  
 \*\*\* Includes residential, commercial and public services, agriculture/forestry, fishing and non-specified.  
 \*\*\*\* Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.  
 \*\*\*\*\* Includes geothermal, solar, wind, biofuels and waste, etc.

## OECD Americas : 2009

Million tonnes of oil equivalent											
<b>SUPPLY AND CONSUMPTION</b>	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	566.12	649.67	-	654.87	242.57	59.88	22.84	110.28	-	-	2306.23
Imports	26.35	587.79	124.98	116.07	-	-	-	0.90	6.20	-	862.29
Exports	-51.79	-180.92	-123.72	-103.87	-	-	-	-1.30	-6.12	-	-467.73
Intl. marine bunkers	-	-	-26.33	-	-	-	-	-	-	-	-26.33
Intl. aviation bunkers	-	-	-25.22	-	-	-	-	-	-	-	-25.22
Stock changes	-22.22	-1.80	-2.92	-2.18	-	-	-	-0.29	-	-	-29.40
<b>TPES</b>	<b>518.46</b>	<b>1054.74</b>	<b>-53.21</b>	<b>664.89</b>	<b>242.57</b>	<b>59.88</b>	<b>22.84</b>	<b>109.59</b>	<b>0.08</b>	<b>-</b>	<b>2619.84</b>
Transfers	-	-51.65	58.03	-	-	-	-	-	-	-	6.38
Statistical differences	-10.26	-10.47	-2.39	-5.84	-	-	-	0.09	0.23	-0.05	-28.70
Electricity plants	-457.90	-	-23.65	-165.70	-242.57	-59.88	-21.08	-14.67	410.95	-	-574.51
CHP plants	-12.47	-	-3.15	-41.03	-	-	-	-8.14	27.74	13.33	-23.71
Heat plants	-	-	-	-	-	-	-	-0.06	-	0.03	-0.03
Blast furnaces	-4.08	-	-0.00	-	-	-	-	-	-	-	-4.09
Gas works	-1.93	-	-0.94	1.84	-	-	-	-0.01	-	-	-1.02
Coke/pat. fuel/BKB plants	-2.10	-	-	-	-	-	-	-	-	-	-2.10
Oil refineries	-	-990.27	991.23	-0.59	-	-	-	-	-	-	0.37
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	0.59	-	-1.96	-	-	-	-	-	-	-1.37
Other transformation	-	-	-	-	-	-	-	-0.27	-	-	-0.27
Energy industry own use	-1.41	-	-63.17	-74.48	-	-	-	-0.00	-31.13	-4.15	-174.34
Losses	-0.02	-	-	-	-	-	-	-	-32.68	-1.49	-34.20
<b>TFC</b>	<b>28.28</b>	<b>2.93</b>	<b>902.74</b>	<b>377.15</b>	<b>-</b>	<b>-</b>	<b>1.76</b>	<b>86.53</b>	<b>375.18</b>	<b>7.67</b>	<b>1782.24</b>
<b>INDUSTRY</b>	<b>25.91</b>	<b>0.05</b>	<b>43.19</b>	<b>134.66</b>	<b>-</b>	<b>-</b>	<b>0.11</b>	<b>39.12</b>	<b>95.09</b>	<b>6.25</b>	<b>344.38</b>
Iron and steel	5.58	0.00	1.11	10.83	-	-	-	0.00	7.36	0.20	25.09
Chemical and petrochem.	4.19	-	7.70	37.14	-	-	-	0.17	21.26	3.59	74.05
Non-ferrous metals	-	0.00	0.44	5.70	-	-	-	-	10.64	0.11	16.89
Non-metallic minerals	4.85	0.01	7.11	12.32	-	-	-	0.55	3.72	0.00	28.55
Transport equipment	0.08	0.01	0.57	5.61	-	-	-	0.00	3.63	0.13	10.03
Machinery	0.09	0.01	0.97	9.17	-	-	-	-	8.59	0.10	18.93
Mining and quarrying	0.39	-	4.97	9.85	-	-	-	-	5.77	-	20.98
Food and tobacco	3.40	0.00	3.04	15.35	-	-	-	1.51	6.62	0.59	30.51
Paper, pulp and printing	3.89	0.01	3.85	13.81	-	-	-	28.92	13.41	0.61	64.50
Wood and wood products	0.03	0.00	3.47	1.94	-	-	-	4.80	2.18	0.27	12.69
Construction	-	-	2.68	0.31	-	-	-	-	0.04	-	3.03
Textile and leather	0.10	0.00	0.20	2.68	-	-	-	-	2.14	0.16	5.28
Non-specified	3.31	0.01	7.08	9.95	-	-	0.11	3.17	9.73	0.49	33.85
<b>TRANSPORT</b>	<b>-</b>	<b>0.03</b>	<b>648.47</b>	<b>17.33</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>22.96</b>	<b>1.14</b>	<b>-</b>	<b>689.93</b>
Domestic aviation	-	-	52.72	-	-	-	-	-	-	-	52.72
Road	-	0.03	577.13	0.75	-	-	-	22.95	-	-	600.86
Rail	-	-	10.17	-	-	-	-	0.01	0.80	-	10.98
Pipeline transport	-	-	0.02	16.58	-	-	-	-	0.27	-	16.87
Domestic navigation	-	-	7.66	-	-	-	-	-	-	-	7.66
Non-specified	-	-	0.78	-	-	-	-	0.00	0.06	-	0.83
<b>OTHER</b>	<b>1.62</b>	<b>0.60</b>	<b>71.69</b>	<b>209.78</b>	<b>-</b>	<b>-</b>	<b>1.64</b>	<b>24.45</b>	<b>278.95</b>	<b>1.43</b>	<b>590.16</b>
Residential	0.01	0.45	32.27	126.31	-	-	1.50	21.84	134.91	0.00	317.28
Comm. and public services	1.60	0.08	20.06	82.96	-	-	0.14	2.27	128.51	1.43	237.05
Agriculture/forestry	-	0.07	19.21	0.51	-	-	-	0.34	1.62	0.00	21.75
Fishing	0.01	-	0.15	0.01	-	-	-	-	0.01	-	0.17
Non-specified	-	-	-	-	-	-	-	-	13.91	-	13.91
<b>NON-ENERGY USE</b>	<b>0.75</b>	<b>2.26</b>	<b>139.39</b>	<b>15.37</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>157.77</b>
in industry/transf./energy	0.75	2.26	136.26	15.37	-	-	-	-	-	-	154.64
of which: feedstocks	-	2.26	88.56	14.33	-	-	-	-	-	-	105.15
in transport	-	-	0.21	-	-	-	-	-	-	-	0.21
in other	-	-	2.92	-	-	-	-	-	-	-	2.92
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>2023.28</b>	<b>-</b>	<b>118.72</b>	<b>1136.29</b>	<b>930.80</b>	<b>696.25</b>	<b>108.72</b>	<b>87.02</b>	<b>-</b>	<b>-</b>	<b>5101.07</b>
Electricity plants	1972.78	-	102.49	922.95	930.80	696.25	108.35	44.87	-	-	4778.49
CHP plants	50.50	-	16.22	213.34	-	-	0.37	42.16	-	-	322.58
<b>Heat generated - PJ</b>	<b>104.04</b>	<b>-</b>	<b>41.03</b>	<b>365.01</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>49.55</b>	<b>-</b>	<b>-</b>	<b>559.63</b>
CHP plants	104.04	-	41.03	365.01	-	-	-	48.14	-	-	558.22
Heat plants	-	-	-	-	-	-	-	1.41	-	-	1.41

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.



## OECD Americas : 2010

Million tonnes of oil equivalent											
<b>SUPPLY AND CONSUMPTION</b>	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	570.70	672.73	-	670.80	243.79	57.84	25.22	116.84	-	-	2357.91
Imports	26.80	588.35	131.62	121.06	-	-	-	0.64	5.60	-	874.08
Exports	-67.92	-194.10	-136.38	-106.01	-	-	-	-1.66	-5.58	-	-511.65
Intl. marine bunkers	-	-	-27.90	-	-	-	-	-	-	-	-27.90
Intl. aviation bunkers	-	-	-26.12	-	-	-	-	-	-	-	-26.12
Stock changes	8.55	-3.13	-1.39	6.96	-	-	-	-0.10	-	-	10.88
<b>TPES</b>	<b>538.13</b>	<b>1063.85</b>	<b>-60.18</b>	<b>692.81</b>	<b>243.79</b>	<b>57.84</b>	<b>25.22</b>	<b>115.72</b>	<b>0.02</b>	<b>-</b>	<b>2677.20</b>
Transfers	-	-53.48	60.67	-	-	-	-	-	-	-	7.18
Statistical differences	0.47	-6.65	3.56	-4.81	-	-	-	0.00	0.12	-0.05	-7.35
Electricity plants	-481.35	-	-22.10	-179.72	-243.79	-57.84	-23.49	-15.66	425.95	-	-598.00
CHP plants	-13.43	-	-2.40	-43.88	-	-	-	-8.08	29.30	12.56	-25.94
Heat plants	-	-	-	-	-	-	-	-0.06	-	0.03	-0.03
Blast furnaces	-5.25	-	-	-	-	-	-	-	-	-	-5.25
Gas works	-1.90	-	-0.82	1.84	-	-	-	-0.01	-	-	-0.90
Coke/pat. fuel/BKB plants	-2.88	-	-	-	-	-	-	-	-	-	-2.88
Oil refineries	-	-1000.95	1004.67	-0.80	-	-	-	-	-	-	2.91
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	0.80	-	-1.93	-	-	-	-	-	-	-1.13
Other transformation	-	-	-	-	-	-	-	-0.27	-	-	-0.27
Energy industry own use	-1.78	-	-61.97	-77.41	-	-	-	-0.00	-33.11	-4.04	-178.32
Losses	-0.02	-	-	-	-	-	-	-	-32.33	-1.46	-33.80
<b>TFC</b>	<b>31.99</b>	<b>3.56</b>	<b>921.43</b>	<b>386.08</b>	<b>-</b>	<b>-</b>	<b>1.73</b>	<b>91.64</b>	<b>389.96</b>	<b>7.04</b>	<b>1833.43</b>
<b>INDUSTRY</b>	<b>30.32</b>	<b>0.06</b>	<b>46.16</b>	<b>143.82</b>	<b>-</b>	<b>-</b>	<b>0.11</b>	<b>40.71</b>	<b>102.90</b>	<b>5.64</b>	<b>369.73</b>
Iron and steel	7.98	0.00	1.12	11.05	-	-	-	0.00	7.96	0.19	28.30
Chemical and petrochem.	4.28	-	8.41	39.94	-	-	-	0.20	23.24	3.45	79.51
Non-ferrous metals	-	0.00	0.49	5.94	-	-	-	-	11.35	0.10	17.89
Non-metallic minerals	5.27	0.01	7.27	12.85	-	-	-	0.65	4.25	0.00	30.30
Transport equipment	0.07	0.01	0.63	5.90	-	-	-	0.00	3.99	0.13	10.72
Machinery	0.08	0.01	1.06	9.66	-	-	-	-	9.46	0.10	20.37
Mining and quarrying	0.42	-	5.67	11.86	-	-	-	-	6.32	-	24.26
Food and tobacco	3.99	0.01	3.30	16.20	-	-	-	1.59	7.26	0.58	32.92
Paper, pulp and printing	4.05	0.01	3.87	14.48	-	-	-	29.65	14.28	0.50	66.84
Wood and wood products	0.03	0.01	3.86	2.04	-	-	-	5.35	2.39	0.27	13.95
Construction	-	-	2.70	0.40	-	-	-	-	0.05	-	3.14
Textile and leather	0.10	0.00	0.22	2.83	-	-	-	-	2.36	0.15	5.66
Non-specified	4.04	0.01	7.58	10.69	-	-	0.11	3.27	9.99	0.17	35.86
<b>TRANSPORT</b>	<b>-</b>	<b>0.03</b>	<b>655.59</b>	<b>18.72</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>26.46</b>	<b>1.13</b>	<b>-</b>	<b>701.92</b>
Domestic aviation	-	-	53.77	-	-	-	-	-	-	-	53.77
Road	-	0.03	583.35	0.78	-	-	-	26.44	-	-	610.60
Rail	-	-	11.05	-	-	-	-	0.02	0.80	-	11.87
Pipeline transport	-	-	0.01	17.94	-	-	-	-	0.26	-	18.21
Domestic navigation	-	-	6.59	-	-	-	-	-	-	-	6.59
Non-specified	-	-	0.82	-	-	-	-	0.00	0.06	-	0.88
<b>OTHER</b>	<b>1.53</b>	<b>0.73</b>	<b>72.22</b>	<b>207.63</b>	<b>-</b>	<b>-</b>	<b>1.62</b>	<b>24.47</b>	<b>285.94</b>	<b>1.39</b>	<b>595.52</b>
Residential	0.01	0.55	31.04	125.39	-	-	1.49	21.88	142.04	-	322.39
Comm. and public services	1.52	0.10	19.75	81.65	-	-	0.13	2.21	129.30	1.39	236.04
Agriculture/forestry	-	0.08	21.16	0.59	-	-	-	0.37	1.55	-	23.75
Fishing	0.00	-	0.27	0.00	-	-	-	-	0.01	-	0.29
Non-specified	-	-	-	-	-	-	-	-	13.05	-	13.05
<b>NON-ENERGY USE</b>	<b>0.14</b>	<b>2.74</b>	<b>147.46</b>	<b>15.91</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>166.26</b>
in industry/transf./energy	0.14	2.74	143.81	15.91	-	-	-	-	-	-	162.61
of which: feedstocks	-	2.74	94.30	14.82	-	-	-	-	-	-	111.86
in transport	-	-	0.23	-	-	-	-	-	-	-	0.23
in other	-	-	3.42	-	-	-	-	-	-	-	3.42
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>2131.53</b>	<b>-</b>	<b>107.83</b>	<b>1221.46</b>	<b>935.47</b>	<b>672.58</b>	<b>135.66</b>	<b>89.07</b>	<b>-</b>	<b>-</b>	<b>5293.60</b>
Electricity plants	2076.57	-	94.35	991.44	935.47	672.58	135.06	47.46	-	-	4952.93
CHP plants	54.96	-	13.48	230.02	-	-	0.60	41.61	-	-	340.67
<b>Heat generated - PJ</b>	<b>102.69</b>	<b>-</b>	<b>37.46</b>	<b>340.93</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>46.16</b>	<b>-</b>	<b>-</b>	<b>527.24</b>
CHP plants	102.69	-	37.46	340.93	-	-	-	44.75	-	-	525.83
Heat plants	-	-	-	-	-	-	-	1.41	-	-	1.41

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## OECD Americas

## Estimated energy supply balance for 2011

Million tonnes of oil equivalent											
SUPPLY	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	579.58	694.09	-	710.78	240.39	65.44	28.81	118.72	-	-	2437.79
Imports	22.93	568.40	127.75	123.56	-	-	-	1.50	5.86	-	850.01
Exports	-83.44	-208.08	-150.53	-111.61	-	-	-	-5.62	-5.87	-	-565.15
Intl. marine bunkers	-	-	-28.88	-	-	-	-	-	-	-	-28.88
Intl. aviation bunkers	-	-	-26.06	-	-	-	-	-	-	-	-26.06
Stock changes	3.19	6.38	2.85	-1.77	-	-	-	-0.19	-	-	10.45
<b>TPES</b>	<b>522.27</b>	<b>1060.79</b>	<b>-74.87</b>	<b>720.96</b>	<b>240.39</b>	<b>65.44</b>	<b>28.81</b>	<b>114.40</b>	<b>-0.01</b>	<b>-</b>	<b>2678.17</b>
Electricity and Heat Output											
Elec. generated - TWh	2008.96	-	100.92	1248.92	922.41	760.91	171.70	80.29	-	-	5294.12
Heat generated - PJ	103.37	-	39.89	364.46	-	-	-	42.14	-	-	549.86

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1960	1971	1980	1990	2000	2009	2010	2011e
Energy production (Mtoe)	..	1641.0	1913.5	2128.8	2270.9	2306.2	2357.9	2437.8
Net imports (Mtoe)	..	168.5	249.8	219.7	424.8	394.6	362.4	284.9
Total primary energy supply (Mtoe)	..	1780.5	2101.9	2260.0	2695.1	2619.8	2677.2	2678.2
Net oil imports (Mtoe)	..	195.8	304.3	295.1	446.0	408.1	389.5	337.6
Oil supply (Mtoe)	..	824.3	955.0	920.1	1059.0	1001.5	1003.7	985.9
Electricity consumption (TWh)*	..	1796.9	2625.3	3487.5	4595.2	4744.8	4942.2	4941.1
GDP (billion 2005 USD)	..	5038.0	6858.4	9312.1	13025.0	14805.0	15279.6	15579.8
GDP PPP (billion 2005 USD)	..	5190.5	7124.1	9635.8	13496.5	15353.7	15858.5	16183.4
Population (millions)	..	289.31	329.13	372.30	426.80	465.58	469.60	474.00
Industrial production index (2005=100)	..	..	..	..	..	..	..	..
Total self-sufficiency**	..	0.9216	0.9104	0.9419	0.8426	0.8803	0.8807	0.9102
Coal and peat self-sufficiency**	..	1.0912	1.1743	1.1930	1.0030	1.0919	1.0605	1.1097
Oil self-sufficiency**	..	0.7876	0.7314	0.7397	0.6285	0.6487	0.6703	0.7040
Natural gas self-sufficiency**	..	1.0150	0.9968	1.0263	0.9505	0.9849	0.9682	0.9859
TPES/GDP (toe per thousand 2005 USD)	..	0.3534	0.3065	0.2427	0.2069	0.1770	0.1752	0.1719
TPES/GDP PPP (toe per thousand 2005 USD)	..	0.3430	0.2950	0.2345	0.1997	0.1706	0.1688	0.1655
TPES/population (toe per capita)	..	6.1544	6.3861	6.0705	6.3146	5.6271	5.7010	5.6501
Net oil imports/GDP (toe per thousand 2005 USD)	..	0.0389	0.0444	0.0317	0.0342	0.0276	0.0255	0.0217
Oil supply/GDP (toe per thousand 2005 USD)	..	0.1636	0.1392	0.0988	0.0813	0.0676	0.0657	0.0633
Oil supply/population (toe per capita)	..	2.8493	2.9015	2.4714	2.4812	2.1512	2.1373	2.0800
Elect. cons./GDP (kWh per 2005 USD)	..	0.3567	0.3828	0.3745	0.3528	0.3205	0.3234	0.3171
Elect. cons./population (kWh per capita)	..	6211	7976	9368	10767	10191	10524	10424
Industry cons.***/industrial production (2005=100)	..	..	..	..	..	..	..	..
Industry oil cons.***/industrial production (2005=100)	..	..	..	..	..	..	..	..

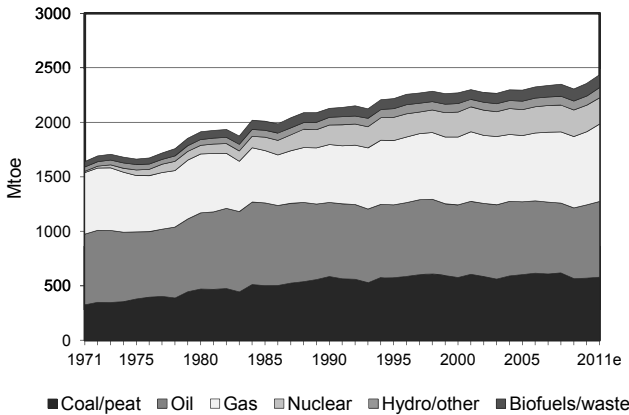
\* Electricity consumption equals domestic supply less losses.

\*\* Production divided by TPES.

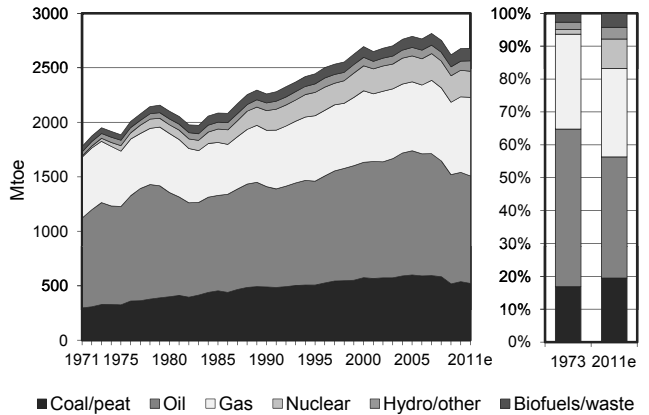
\*\*\* Includes non-energy use.

### OECD Americas

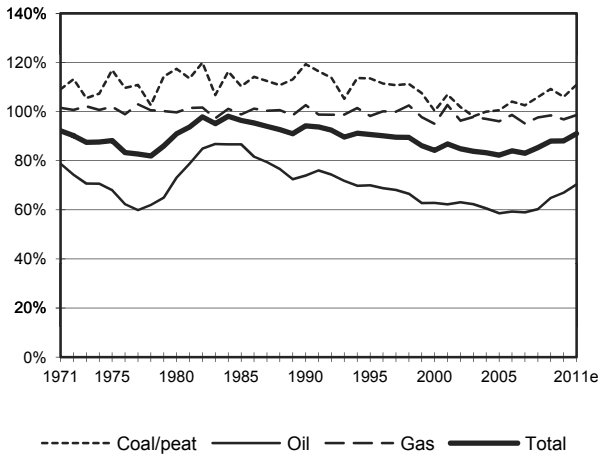
**Figure 1. Energy production**



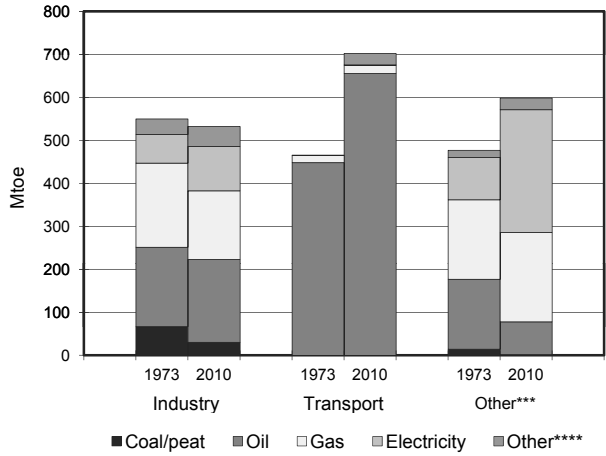
**Figure 2. Total primary energy supply\***



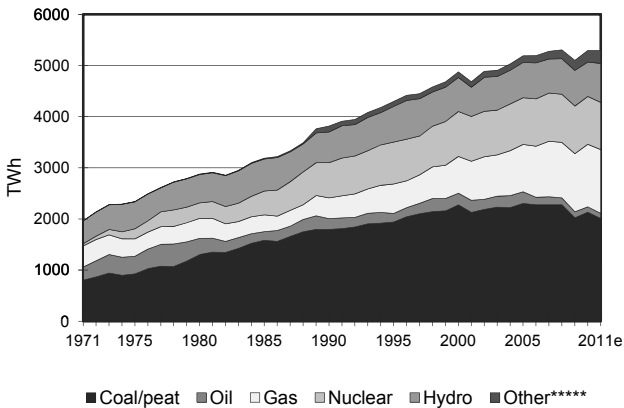
**Figure 3. Energy self-sufficiency**



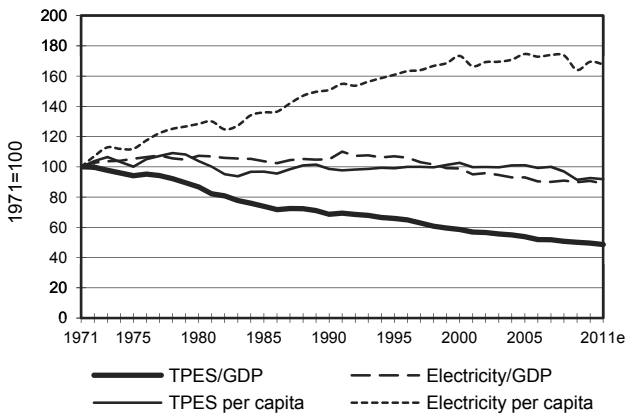
**Figure 4. Breakdown of sectorial final consumption by source in 1973 and 2010\*\***



**Figure 5. Electricity generation by fuel**



**Figure 6. Selected indicators**



\* Excluding electricity trade.

\*\* Includes non-energy use.

\*\*\* Includes residential, commercial and public services, agriculture/forestry, fishing and non-specified.

\*\*\*\* Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.

\*\*\*\*\* Includes geothermal, solar, wind, biofuels and waste, etc.

## OECD Asia Oceania : 2009

Million tonnes of oil equivalent											
<b>SUPPLY AND CONSUMPTION</b>	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	229.54	29.23	-	48.95	111.41	9.88	8.52	16.27	-	0.10	453.92
Imports	172.01	337.24	92.25	114.77	-	-	-	0.03	-	-	716.31
Exports	-171.27	-16.61	-67.32	-18.02	-	-	-	-	-0.33	-	-273.54
Intl. marine bunkers	-	-	-14.68	-	-	-	-	-	-	-	-14.68
Intl. aviation bunkers	-	-	-13.55	-	-	-	-	-	-	-	-13.55
Stock changes	-3.35	-0.67	1.37	0.44	-	-	-	-0.01	-	-	-2.22
<b>TPES</b>	<b>226.94</b>	<b>349.19</b>	<b>-1.92</b>	<b>146.14</b>	<b>111.41</b>	<b>9.88</b>	<b>8.52</b>	<b>16.29</b>	<b>-0.33</b>	<b>0.10</b>	<b>866.24</b>
Transfers	-	-3.04	6.60	-	-	-	-	-	-	-	3.56
Statistical differences	2.48	3.13	-5.32	5.34	-	-	-	0.01	0.01	0.04	5.68
Electricity plants	-156.28	-3.18	-18.41	-72.12	-111.41	-9.88	-6.31	-4.71	153.66	-0.05	-228.71
CHP plants	-6.26	-	-1.39	-4.79	-	-	-0.03	-2.05	4.40	4.05	-6.07
Heat plants	-	-	-0.38	-0.43	-	-	-	-0.41	-0.09	0.99	-0.33
Blast furnaces	-21.18	-	-	-0.06	-	-	-	-	-	-	-21.23
Gas works	0.06	-	-1.69	1.34	-	-	-	-	-	-	-0.29
Coke/pat. fuel/BKB plants	-2.51	-	-0.43	-0.00	-	-	-	-	-	-	-2.93
Oil refineries	-	-357.66	356.09	-	-	-	-	-	-	-	-1.57
Petrochemical plants	-	12.09	-12.06	-	-	-	-	-	-	-	0.03
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-0.01	-	-	-	-	-0.02	-	-	-0.02
Energy industry own use	-5.32	-0.08	-17.36	-10.56	-	-	-	-	-10.15	-0.02	-43.48
Losses	-0.01	-	-	-0.02	-	-	-	-	-7.48	-0.12	-7.62
<b>TFC</b>	<b>37.94</b>	<b>0.46</b>	<b>303.72</b>	<b>64.85</b>	<b>-</b>	<b>-</b>	<b>2.18</b>	<b>9.10</b>	<b>140.02</b>	<b>4.98</b>	<b>563.24</b>
<b>INDUSTRY</b>	<b>35.58</b>	<b>0.03</b>	<b>33.91</b>	<b>21.41</b>	<b>-</b>	<b>-</b>	<b>0.15</b>	<b>6.56</b>	<b>50.67</b>	<b>2.70</b>	<b>151.02</b>
Iron and steel	15.50	-	1.76	3.61	-	-	-	0.11	9.09	0.01	30.08
Chemical and petrochem.	3.08	0.02	10.61	3.88	-	-	-	0.27	7.84	1.49	27.20
Non-ferrous metals	1.32	-	1.24	3.09	-	-	-	0.07	5.78	0.08	11.57
Non-metallic minerals	6.86	-	3.02	2.12	-	-	-	0.69	3.30	-	16.01
Transport equipment	-	-	0.20	0.49	-	-	-	-	1.51	-	2.20
Machinery	0.11	-	1.08	2.07	-	-	-	0.02	10.79	0.04	14.09
Mining and quarrying	0.02	-	1.53	0.14	-	-	-	0.00	1.21	-	2.90
Food and tobacco	0.60	0.00	2.36	2.51	-	-	-	0.90	2.89	0.20	9.45
Paper, pulp and printing	1.55	-	1.39	1.15	-	-	0.15	2.88	4.01	0.16	11.28
Wood and wood products	0.03	-	0.04	0.14	-	-	-	1.12	0.36	0.02	1.70
Construction	0.00	-	4.42	0.76	-	-	-	-	0.17	-	5.35
Textile and leather	0.13	0.01	0.42	0.52	-	-	-	0.01	1.15	0.70	2.94
Non-specified	6.38	-	5.84	0.94	-	-	0.00	0.50	2.59	-	16.26
<b>TRANSPORT</b>	<b>0.13</b>	<b>-</b>	<b>138.41</b>	<b>1.32</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.46</b>	<b>2.21</b>	<b>-</b>	<b>142.53</b>
Domestic aviation	-	-	6.06	-	-	-	-	-	-	-	6.06
Road	-	-	126.15	0.94	-	-	-	0.46	-	-	127.55
Rail	-	-	1.21	-	-	-	-	-	2.08	-	3.28
Pipeline transport	-	-	0.00	0.35	-	-	-	-	0.00	-	0.35
Domestic navigation	0.13	-	4.74	-	-	-	-	-	-	-	4.87
Non-specified	0.00	-	0.26	0.02	-	-	-	-	0.14	-	0.42
<b>OTHER</b>	<b>1.53</b>	<b>-</b>	<b>50.08</b>	<b>40.55</b>	<b>-</b>	<b>-</b>	<b>2.03</b>	<b>2.08</b>	<b>87.14</b>	<b>2.28</b>	<b>185.67</b>
Residential	0.92	-	17.08	20.47	-	-	1.69	1.58	37.12	1.57	80.45
Comm. and public services	0.59	-	22.29	20.02	-	-	0.23	0.49	48.14	0.71	92.47
Agriculture/forestry	0.02	-	4.89	0.05	-	-	0.10	-	1.19	-	6.25
Fishing	-	-	2.73	-	-	-	-	-	0.17	-	2.90
Non-specified	-	-	3.09	-	-	-	-	0.01	0.51	-	3.60
<b>NON-ENERGY USE</b>	<b>0.71</b>	<b>0.42</b>	<b>81.32</b>	<b>1.57</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>84.02</b>
in industry/transf./energy	0.71	0.42	79.88	1.57	-	-	-	-	-	-	82.59
of which: feedstocks	0.71	0.42	70.08	1.57	-	-	-	-	-	-	72.78
in transport	-	-	1.40	-	-	-	-	-	-	-	1.40
in other	-	-	0.03	-	-	-	-	-	-	-	0.03
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>712.99</b>	<b>15.32</b>	<b>98.40</b>	<b>420.59</b>	<b>427.52</b>	<b>114.94</b>	<b>21.21</b>	<b>26.78</b>	<b>-</b>	<b>0.14</b>	<b>1837.88</b>
Electricity plants	690.83	15.32	93.66	399.78	427.52	114.94	21.15	23.39	-	-	1786.57
CHP plants	22.16	-	4.75	20.81	-	-	0.05	3.39	-	0.14	51.30
<b>Heat generated - PJ</b>	<b>51.18</b>	<b>-</b>	<b>67.58</b>	<b>68.38</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>20.35</b>	<b>3.56</b>	<b>4.33</b>	<b>215.38</b>
CHP plants	51.18	-	63.46	51.12	-	-	-	3.85	-	4.33	173.94
Heat plants	-	-	4.12	17.27	-	-	-	16.50	3.56	-	41.44

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## OECD Asia Oceania : 2010

Million tonnes of oil equivalent											
<b>SUPPLY AND CONSUMPTION</b>	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	241.46	27.89	-	52.74	113.84	10.59	9.36	17.04	-	0.12	473.04
Imports	195.80	346.54	97.75	128.65	-	-	-	0.02	-	-	768.77
Exports	-192.33	-18.37	-69.17	-20.89	-	-	-	-	-0.34	-	-301.09
Intl. marine bunkers	-	-	-15.01	-	-	-	-	-	-	-	-15.01
Intl. aviation bunkers	-	-	-14.51	-	-	-	-	-	-	-	-14.51
Stock changes	3.53	-0.52	-0.30	-1.20	-	-	-	-0.02	-	-	1.50
<b>TPES</b>	<b>248.46</b>	<b>355.55</b>	<b>-1.23</b>	<b>159.30</b>	<b>113.84</b>	<b>10.59</b>	<b>9.36</b>	<b>17.05</b>	<b>-0.34</b>	<b>0.12</b>	<b>912.70</b>
Transfers	-	-3.58	6.91	-	-	-	-	-	-	-	3.33
Statistical differences	-6.53	0.40	-4.83	6.66	-	-	0.00	0.00	-0.15	-0.05	-4.50
Electricity plants	-159.71	-4.13	-18.32	-80.14	-113.84	-10.59	-7.05	-4.96	162.69	-0.07	-236.12
CHP plants	-7.15	-	-1.71	-5.98	-	-	-0.03	-1.69	5.21	3.92	-7.43
Heat plants	-	-	-0.38	-0.50	-	-	-	-0.52	-0.10	1.15	-0.35
Blast furnaces	-26.07	-	-	-0.08	-	-	-	-	-	-	-26.15
Gas works	0.01	-	-1.99	1.54	-	-	-	-	-	-	-0.44
Coke/pat. fuel/BKB plants	-1.01	-	-0.38	-0.00	-	-	-	-0.00	-	-	-1.39
Oil refineries	-	-359.25	357.82	-	-	-	-	-	-	-	-1.43
Petrochemical plants	-	11.65	-11.63	-	-	-	-	-	-	-	0.02
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-0.02	-	-	-0.02
Energy industry own use	-6.13	-0.10	-18.18	-11.12	-	-	-	-0.01	-10.13	-0.11	-45.77
Losses	-0.01	-	-	-0.01	-	-	-	-	-7.52	-0.05	-7.59
<b>TFC</b>	<b>41.86</b>	<b>0.55</b>	<b>306.07</b>	<b>69.68</b>	<b>-</b>	<b>-</b>	<b>2.27</b>	<b>9.86</b>	<b>149.68</b>	<b>4.91</b>	<b>584.87</b>
<b>INDUSTRY</b>	<b>39.50</b>	<b>0.04</b>	<b>33.67</b>	<b>23.26</b>	<b>-</b>	<b>-</b>	<b>0.15</b>	<b>7.12</b>	<b>57.05</b>	<b>2.34</b>	<b>163.12</b>
Iron and steel	17.67	-	2.00	4.13	-	-	-	0.02	10.26	0.00	34.07
Chemical and petrochem.	3.31	0.03	10.31	4.68	-	-	-	0.31	8.55	1.46	28.64
Non-ferrous metals	1.22	-	1.50	2.89	-	-	-	0.05	5.97	0.00	11.64
Non-metallic minerals	6.97	-	2.77	2.22	-	-	-	0.87	3.46	0.00	16.29
Transport equipment	0.00	-	0.21	0.60	-	-	-	-	1.77	-	2.59
Machinery	0.11	-	1.05	2.22	-	-	-	0.02	11.91	0.07	15.38
Mining and quarrying	0.01	-	1.56	0.15	-	-	-	0.00	1.21	-	2.93
Food and tobacco	0.66	0.00	2.09	2.64	-	-	-	0.87	3.00	0.08	9.35
Paper, pulp and printing	1.52	-	1.21	1.26	-	-	0.15	3.24	4.06	0.23	11.67
Wood and wood products	0.02	-	0.04	0.13	-	-	-	1.22	0.36	0.01	1.78
Construction	0.00	-	4.51	0.78	-	-	-	-	0.16	-	5.45
Textile and leather	0.15	0.01	0.38	0.59	-	-	-	0.02	1.22	0.45	2.82
Non-specified	7.86	-	6.05	0.96	-	-	0.00	0.49	5.12	0.04	20.51
<b>TRANSPORT</b>	<b>0.12</b>	<b>-</b>	<b>139.79</b>	<b>1.45</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.58</b>	<b>2.18</b>	<b>-</b>	<b>144.14</b>
Domestic aviation	-	-	6.01	-	-	-	-	-	-	-	6.01
Road	-	-	127.47	1.07	-	-	-	0.58	-	-	129.12
Rail	-	-	1.26	-	-	-	-	-	2.05	-	3.31
Pipeline transport	-	-	0.00	0.36	-	-	-	-	0.00	-	0.36
Domestic navigation	0.12	-	4.79	-	-	-	-	-	-	-	4.91
Non-specified	0.00	-	0.26	0.02	-	-	-	-	0.14	-	0.42
<b>OTHER</b>	<b>1.49</b>	<b>-</b>	<b>50.00</b>	<b>43.21</b>	<b>-</b>	<b>-</b>	<b>2.13</b>	<b>2.16</b>	<b>90.44</b>	<b>2.58</b>	<b>192.01</b>
Residential	0.87	-	18.11	21.33	-	-	1.79	1.57	39.16	1.79	84.61
Comm. and public services	0.58	-	20.89	21.84	-	-	0.24	0.58	49.26	0.79	94.17
Agriculture/forestry	0.04	-	5.03	0.04	-	-	0.10	-	1.25	-	6.47
Fishing	-	-	2.83	-	-	-	-	-	0.19	-	3.01
Non-specified	-	-	3.14	-	-	-	-	0.01	0.59	-	3.74
<b>NON-ENERGY USE</b>	<b>0.75</b>	<b>0.51</b>	<b>82.60</b>	<b>1.75</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>85.60</b>
in industry/transf./energy	0.75	0.51	81.13	1.75	-	-	-	-	-	-	84.13
of which: feedstocks	0.75	0.51	71.46	1.75	-	-	-	-	-	-	74.46
in transport	-	-	1.45	-	-	-	-	-	-	-	1.45
in other	-	-	0.03	-	-	-	-	-	-	-	0.03
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>740.83</b>	<b>20.18</b>	<b>101.52</b>	<b>475.73</b>	<b>436.83</b>	<b>123.11</b>	<b>24.88</b>	<b>29.12</b>	<b>-</b>	<b>0.21</b>	<b>1952.39</b>
Electricity plants	715.08	20.18	96.61	449.25	436.83	123.11	24.83	25.71	-	0.07	1891.66
CHP plants	25.75	-	4.91	26.47	-	-	0.05	3.41	-	0.14	60.73
<b>Heat generated - PJ</b>	<b>53.34</b>	<b>-</b>	<b>53.44</b>	<b>76.70</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>25.18</b>	<b>3.83</b>	<b>5.14</b>	<b>217.64</b>
CHP plants	53.34	-	49.80	57.31	-	-	-	3.90	-	4.36	168.70
Heat plants	-	-	3.64	19.39	-	-	-	21.29	3.83	0.79	48.94

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## OECD Asia Oceania

## Estimated energy supply balance for 2011

Million tonnes of oil equivalent											
SUPPLY	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	234.76	24.14	-	60.10	65.65	11.01	9.62	16.50	-	0.18	421.97
Imports	195.95	353.21	102.01	145.77	-	-	-	0.00	-	-	796.95
Exports	-186.27	-19.88	-74.06	-23.33	-	-	-	-	-0.36	-	-303.90
Intl. marine bunkers	-	-	-14.21	-	-	-	-	-	-	-	-14.21
Intl. aviation bunkers	-	-	-14.57	-	-	-	-	-	-	-	-14.57
Stock changes	-5.85	-1.02	0.19	-1.69	-	-	-	-0.01	-	-	-8.38
<b>TPES</b>	<b>238.60</b>	<b>356.46</b>	<b>-0.64</b>	<b>180.85</b>	<b>65.65</b>	<b>11.01</b>	<b>9.62</b>	<b>16.49</b>	<b>-0.36</b>	<b>0.18</b>	<b>877.86</b>
Electricity and Heat Output											
Elec. generated - TWh	792.80	24.19	107.95	546.08	251.92	127.98	27.89	28.58	-	0.22	1907.62
Heat generated - PJ	62.71	-	50.68	75.94	-	-	-	19.69	4.12	7.50	220.63

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1960	1971	1980	1990	2000	2009	2010	2011e
Energy production (Mtoe)	..	105.4	143.6	267.3	388.8	453.9	473.0	422.0
Net imports (Mtoe)	..	266.4	345.7	396.9	489.1	442.8	467.7	493.1
Total primary energy supply (Mtoe)	..	348.8	472.1	643.0	850.5	866.2	912.7	877.9
Net oil imports (Mtoe)	..	246.3	303.0	331.5	399.8	345.6	356.8	361.3
Oil supply (Mtoe)	..	242.7	302.1	343.7	405.4	347.3	354.3	355.8
Electricity consumption (TWh)*	..	439.7	704.2	1097.9	1560.5	1756.9	1872.3	1827.5
GDP (billion 2005 USD)	..	2039.3	2992.3	4743.7	5804.6	6490.8	6756.0	6787.1
GDP PPP (billion 2005 USD)	..	1803.7	2661.4	4268.1	5351.5	6094.4	6351.4	6399.0
Population (millions)	..	157.02	177.03	191.70	203.37	210.24	210.82	210.88
Industrial production index (2005=100)	..	..	..	..	..	..	..	..
Total self-sufficiency**	..	0.3021	0.3041	0.4157	0.4571	0.5240	0.5183	0.4807
Coal and peat self-sufficiency**	..	0.7514	0.7116	0.8504	0.8833	1.0115	0.9718	0.9839
Oil self-sufficiency**	..	0.0886	0.0737	0.0922	0.0920	0.0842	0.0787	0.0679
Natural gas self-sufficiency**	..	0.7802	0.3467	0.3500	0.3354	0.3350	0.3311	0.3323
TPES/GDP (toe per thousand 2005 USD)	..	0.1710	0.1578	0.1355	0.1465	0.1335	0.1351	0.1293
TPES/GDP PPP (toe per thousand 2005 USD)	..	0.1934	0.1774	0.1506	0.1589	0.1421	0.1437	0.1372
TPES/population (toe per capita)	..	2.2211	2.6670	3.3541	4.1822	4.1203	4.3293	4.1629
Net oil imports/GDP (toe per thousand 2005 USD)	..	0.1208	0.1012	0.0699	0.0689	0.0532	0.0528	0.0532
Oil supply/GDP (toe per thousand 2005 USD)	..	0.1190	0.1010	0.0725	0.0698	0.0535	0.0524	0.0524
Oil supply/population (toe per capita)	..	1.5458	1.7066	1.7931	1.9932	1.6518	1.6807	1.6873
Elect. cons./GDP (kWh per 2005 USD)	..	0.2156	0.2353	0.2314	0.2688	0.2707	0.2771	0.2693
Elect. cons./population (kWh per capita)	..	2800	3978	5727	7673	8357	8881	8666
Industry cons.***/industrial production (2005=100)	..	..	..	..	..	..	..	..
Industry oil cons.***/industrial production (2005=100)	..	..	..	..	..	..	..	..

\* Electricity consumption equals domestic supply less losses.

\*\* Production divided by TPES.

\*\*\* Includes non-energy use.

OECD Asia Oceania

Figure 1. Energy production

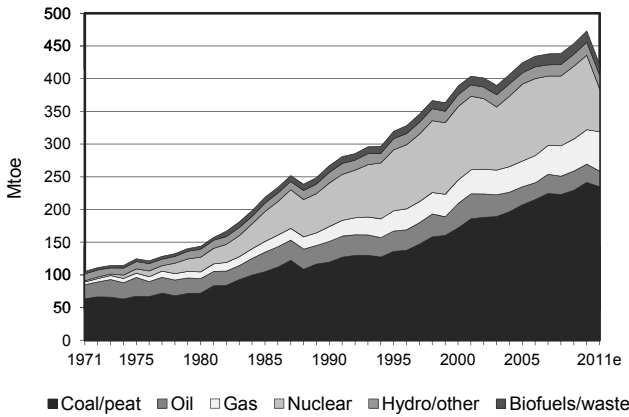


Figure 2. Total primary energy supply\*

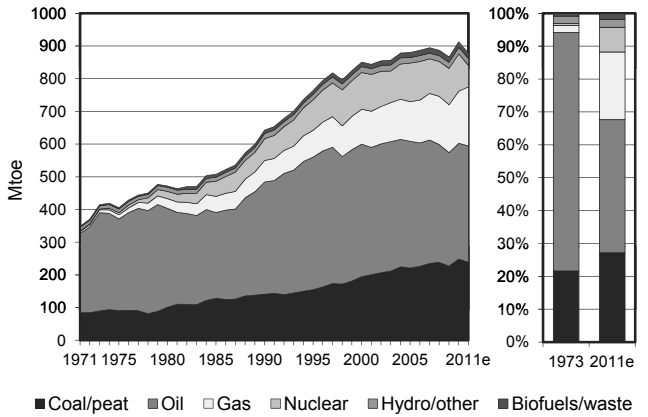


Figure 3. Energy self-sufficiency

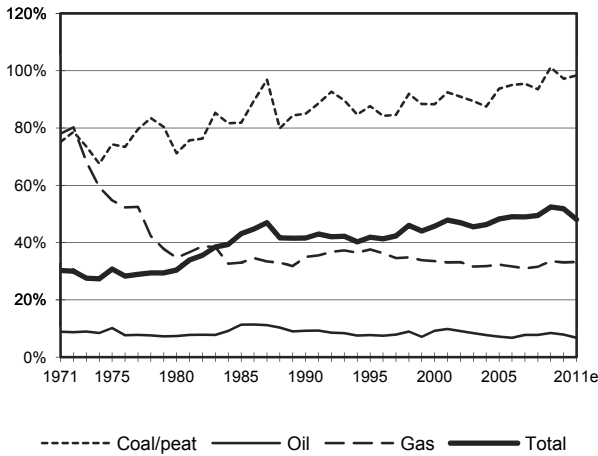


Figure 4. Breakdown of sectorial final consumption by source in 1973 and 2010\*\*

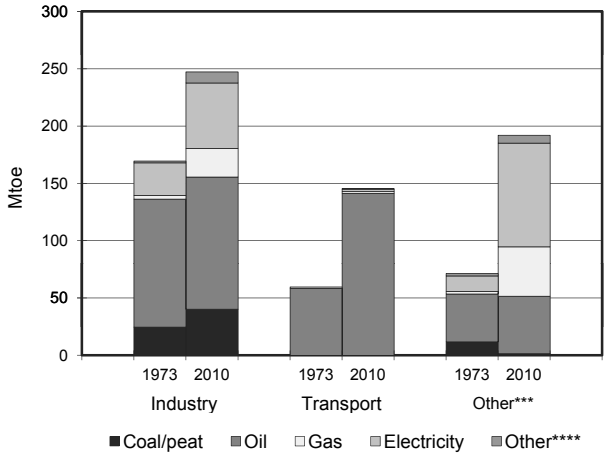


Figure 5. Electricity generation by fuel

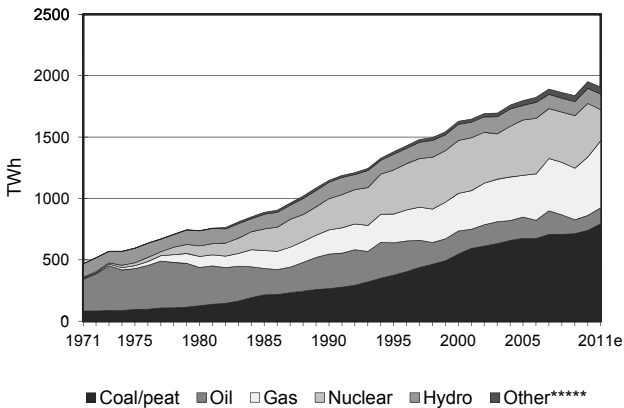
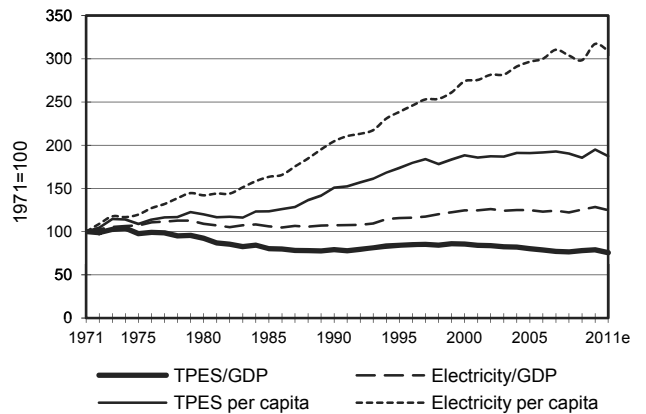


Figure 6. Selected indicators



\* Excluding electricity trade.  
 \*\* Includes non-energy use.  
 \*\*\* Includes residential, commercial and public services, agriculture/forestry, fishing and non-specified.  
 \*\*\*\* Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.  
 \*\*\*\*\* Includes geothermal, solar, wind, biofuels and waste, etc.

## OECD Europe : 2009

Million tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	174.49	211.66	-	235.28	230.45	44.25	25.51	111.69	-	0.45	1033.78
Imports	143.21	599.96	323.11	365.86	-	-	-	7.25	26.73	0.00	1466.13
Exports	-23.63	-155.64	-285.59	-158.90	-	-	-	-2.53	-25.71	-0.01	-652.00
Intl. marine bunkers	-	-	-46.99	-	-	-	-	-	-	-	-46.99
Intl. aviation bunkers	-	-	-45.98	-	-	-	-	-	-	-	-45.98
Stock changes	-10.30	3.68	-0.02	-4.64	-	-	-	-0.04	-	-	-11.32
<b>TPES</b>	<b>283.77</b>	<b>659.66</b>	<b>-55.46</b>	<b>437.60</b>	<b>230.45</b>	<b>44.25</b>	<b>25.51</b>	<b>116.37</b>	<b>1.02</b>	<b>0.45</b>	<b>1743.62</b>
Transfers	-	7.30	-4.93	-	-	-	-	-	-	-	2.36
Statistical differences	-0.16	3.19	-4.91	-2.72	-	-	0.00	-0.02	0.31	0.00	-4.32
Electricity plants	-144.54	-	-13.59	-86.55	-227.77	-44.25	-19.80	-20.83	242.92	-0.10	-314.51
CHP plants	-62.05	-	-10.20	-56.89	-2.68	-	-1.03	-19.50	54.11	39.43	-58.81
Heat plants	-4.47	-	-0.92	-6.68	-	-	-0.14	-4.62	-0.24	13.81	-3.26
Blast furnaces	-14.34	-	-0.63	-0.01	-	-	-	-	-	-	-14.98
Gas works	-0.17	-	-0.20	0.10	-	-	-	-0.01	-	-	-0.28
Coke/pat. fuel/BKB plants	-2.72	-	-0.64	-0.04	-	-	-	-	-	-	-3.41
Oil refineries	-	-680.00	674.89	-	-	-	-	-	-	-	-5.11
Petrochemical plants	-	13.61	-14.09	-	-	-	-	-	-	-	-0.48
Liquefaction plants	-0.71	0.46	-	-	-	-	-	-	-	-	-0.26
Other transformation	0.03	0.14	-0.09	-0.43	-	-	-	-0.11	-	-0.34	-0.81
Energy industry own use	-5.59	-	-37.86	-17.74	-	-	-0.13	-0.21	-24.54	-3.93	-90.00
Losses	-0.73	-	-0.01	-3.30	-	-	-0.14	-0.03	-18.85	-3.47	-26.53
<b>TFC</b>	<b>48.31</b>	<b>4.35</b>	<b>531.34</b>	<b>263.32</b>	<b>-</b>	<b>-</b>	<b>4.27</b>	<b>71.04</b>	<b>254.73</b>	<b>45.85</b>	<b>1223.22</b>
<b>INDUSTRY</b>	<b>28.28</b>	<b>1.96</b>	<b>35.03</b>	<b>76.86</b>	<b>-</b>	<b>-</b>	<b>0.03</b>	<b>21.81</b>	<b>92.78</b>	<b>15.17</b>	<b>271.92</b>
Iron and steel	11.83	-	1.46	6.81	-	-	-	0.04	10.18	0.53	30.85
Chemical and petrochem.	3.03	1.96	5.87	16.19	-	-	0.00	0.97	15.62	6.35	49.99
Non-ferrous metals	0.43	-	0.90	2.95	-	-	0.00	0.05	8.07	0.22	12.61
Non-metallic minerals	4.70	-	9.31	12.88	-	-	0.00	3.05	6.82	0.17	36.94
Transport equipment	0.10	-	0.43	2.45	-	-	0.00	0.00	4.02	0.62	7.62
Machinery	0.14	-	1.83	6.60	-	-	0.00	0.08	8.54	0.52	17.70
Mining and quarrying	0.14	-	0.75	0.49	-	-	-	0.04	1.28	0.16	2.87
Food and tobacco	1.52	-	3.30	11.87	-	-	0.00	1.28	9.98	0.89	28.84
Paper, pulp and printing	1.15	-	1.46	7.60	-	-	0.00	11.18	11.34	2.09	34.82
Wood and wood products	0.36	-	0.26	0.56	-	-	-	3.97	1.96	0.44	7.55
Construction	2.25	-	2.86	1.18	-	-	0.00	0.13	1.70	0.06	8.18
Textile and leather	0.17	-	0.57	2.57	-	-	0.00	0.07	2.94	0.14	6.46
Non-specified	2.46	-	6.04	4.69	-	-	0.03	0.96	10.33	2.98	27.48
<b>TRANSPORT</b>	<b>0.01</b>	<b>-</b>	<b>315.02</b>	<b>2.17</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>11.80</b>	<b>5.91</b>	<b>-</b>	<b>334.91</b>
Domestic aviation	-	-	7.59	-	-	-	-	-	-	-	7.59
Road	-	-	297.13	0.96	-	-	-	11.79	0.00	-	309.88
Rail	0.01	-	2.68	-	-	-	-	0.00	4.71	-	7.41
Pipeline transport	-	-	0.00	1.08	-	-	-	-	0.12	-	1.21
Domestic navigation	-	-	7.50	0.05	-	-	-	0.00	-	-	7.55
Non-specified	-	-	0.12	0.07	-	-	-	0.00	1.08	-	1.27
<b>OTHER</b>	<b>19.01</b>	<b>-</b>	<b>88.05</b>	<b>173.14</b>	<b>-</b>	<b>-</b>	<b>4.24</b>	<b>37.43</b>	<b>156.04</b>	<b>30.69</b>	<b>508.59</b>
Residential	15.17	-	47.00	118.48	-	-	3.51	33.64	76.32	18.13	312.25
Comm. and public services	2.47	-	20.74	44.15	-	-	0.36	1.96	74.15	8.25	152.07
Agriculture/forestry	1.14	-	17.69	3.47	-	-	0.06	1.80	4.92	0.28	29.36
Fishing	-	-	1.52	0.00	-	-	0.03	-	0.06	0.02	1.62
Non-specified	0.23	-	1.11	7.03	-	-	0.28	0.03	0.60	4.01	13.28
<b>NON-ENERGY USE</b>	<b>1.01</b>	<b>2.39</b>	<b>93.25</b>	<b>11.16</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>107.81</b>
in industry/transf./energy	0.85	2.39	90.19	11.16	-	-	-	-	-	-	104.58
of which: feedstocks	0.15	2.39	62.37	11.16	-	-	-	-	-	-	76.06
in transport	-	-	2.43	-	-	-	-	-	-	-	2.43
in other	0.16	-	0.63	-	-	-	-	-	-	-	0.79
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>857.34</b>	<b>-</b>	<b>92.12</b>	<b>814.09</b>	<b>883.82</b>	<b>514.54</b>	<b>164.21</b>	<b>127.33</b>	<b>-</b>	<b>0.41</b>	<b>3453.85</b>
Electricity plants	626.82	-	55.88	526.37	874.00	514.54	161.07	65.59	-	0.19	2824.45
CHP plants	230.52	-	36.24	287.72	9.82	-	3.14	61.74	-	0.21	629.39
<b>Heat generated - PJ</b>	<b>697.32</b>	<b>-</b>	<b>161.36</b>	<b>895.75</b>	<b>5.06</b>	<b>-</b>	<b>16.15</b>	<b>427.07</b>	<b>3.93</b>	<b>41.79</b>	<b>2248.43</b>
CHP plants	558.44	-	129.62	663.47	5.06	-	10.28	282.41	0.32	10.26	1659.87
Heat plants	138.88	-	31.74	232.28	-	-	5.87	144.66	3.61	31.53	588.57

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.



## OECD Europe : 2010

Million tonnes of oil equivalent											
<b>SUPPLY AND CONSUMPTION</b>	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	172.06	194.23	-	241.57	238.86	47.78	28.60	124.62	-	0.53	1048.26
Imports	146.46	601.91	334.61	387.09	-	-	-	9.46	27.58	0.00	1507.11
Exports	-25.71	-141.82	-295.91	-172.35	-	-	-	-3.52	-26.33	-0.01	-665.64
Intl. marine bunkers	-	-	-47.30	-	-	-	-	-	-	-	-47.30
Intl. aviation bunkers	-	-	-45.24	-	-	-	-	-	-	-	-45.24
Stock changes	6.98	0.01	2.99	8.54	-	-	-	0.28	-	-	18.79
<b>TPES</b>	<b>299.79</b>	<b>654.34</b>	<b>-50.86</b>	<b>464.85</b>	<b>238.86</b>	<b>47.78</b>	<b>28.60</b>	<b>130.83</b>	<b>1.26</b>	<b>0.53</b>	<b>1815.98</b>
Transfers	-	7.41	-4.31	-	-	-	-	-	-	-	3.10
Statistical differences	-2.13	0.66	-5.29	-0.42	-	-	-	-0.04	-0.07	0.00	-7.29
Electricity plants	-144.08	-	-10.00	-89.54	-236.10	-47.78	-22.44	-23.36	252.10	-0.15	-321.36
CHP plants	-64.64	-	-11.29	-62.99	-2.76	-	-1.03	-22.79	58.22	43.94	-63.34
Heat plants	-5.14	-	-1.07	-7.85	-	-	-0.17	-5.21	-0.25	15.67	-4.02
Blast furnaces	-17.75	-	-0.79	-0.04	-	-	-	-	-	-	-18.57
Gas works	-0.15	-	-0.19	0.09	-	-	-	-0.01	-	-	-0.26
Coke/pat. fuel/BKB plants	-3.87	-	-0.81	-0.00	-	-	-	-	-	-	-4.69
Oil refineries	-	-673.69	668.34	-	-	-	-	-	-	-	-5.35
Petrochemical plants	-	15.19	-15.70	-	-	-	-	-	-	-	-0.51
Liquefaction plants	-0.79	0.50	-	-	-	-	-	-	-	-	-0.29
Other transformation	0.02	0.13	-0.08	-0.49	-	-	-	-0.01	-	-0.39	-0.83
Energy industry own use	-6.18	-	-37.32	-18.59	-	-	-0.13	-0.25	-24.81	-4.56	-91.84
Losses	-0.92	-	-0.01	-3.82	-	-	-0.14	-0.03	-19.22	-3.77	-27.91
<b>TFC</b>	<b>54.15</b>	<b>4.54</b>	<b>530.62</b>	<b>281.19</b>	<b>-</b>	<b>-</b>	<b>4.69</b>	<b>79.13</b>	<b>267.22</b>	<b>51.27</b>	<b>1272.81</b>
<b>INDUSTRY</b>	<b>32.30</b>	<b>2.11</b>	<b>33.63</b>	<b>88.16</b>	<b>-</b>	<b>-</b>	<b>0.05</b>	<b>24.27</b>	<b>99.40</b>	<b>16.03</b>	<b>295.95</b>
Iron and steel	14.64	-	1.56	8.41	-	-	0.01	0.03	11.37	0.40	36.41
Chemical and petrochem.	3.69	2.11	5.51	18.41	-	-	0.00	1.39	17.25	6.17	54.54
Non-ferrous metals	0.50	-	0.89	3.27	-	-	0.00	0.05	8.61	0.24	13.56
Non-metallic minerals	4.86	-	8.97	13.82	-	-	0.00	2.99	7.01	0.20	37.84
Transport equipment	0.10	-	0.45	2.81	-	-	0.00	0.01	4.30	0.77	8.44
Machinery	0.16	-	1.90	7.30	-	-	0.00	0.13	11.29	0.77	21.55
Mining and quarrying	0.16	-	0.73	0.75	-	-	-	0.04	1.55	0.20	3.43
Food and tobacco	1.59	-	3.03	13.17	-	-	0.00	1.44	10.17	0.88	30.26
Paper, pulp and printing	1.13	-	1.28	8.47	-	-	0.00	12.68	12.05	2.23	37.84
Wood and wood products	0.37	-	0.27	0.62	-	-	-	4.31	2.03	0.47	8.08
Construction	2.33	-	2.89	1.45	-	-	0.00	0.14	1.81	0.05	8.66
Textile and leather	0.17	-	0.49	2.71	-	-	0.00	0.08	3.16	0.20	6.81
Non-specified	2.61	-	5.68	6.98	-	-	0.04	0.96	8.80	3.47	28.53
<b>TRANSPORT</b>	<b>0.01</b>	<b>-</b>	<b>311.85</b>	<b>2.50</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>13.24</b>	<b>6.02</b>	<b>-</b>	<b>333.63</b>
Domestic aviation	-	-	7.31	-	-	-	-	-	-	-	7.31
Road	-	-	294.50	1.39	-	-	-	13.23	0.00	-	309.13
Rail	0.01	-	2.67	-	-	-	-	0.00	4.80	-	7.48
Pipeline transport	-	-	0.00	0.98	-	-	-	-	0.11	-	1.09
Domestic navigation	-	-	7.27	0.05	-	-	-	0.00	-	-	7.32
Non-specified	-	-	0.10	0.08	-	-	-	0.00	1.11	-	1.29
<b>OTHER</b>	<b>20.54</b>	<b>-</b>	<b>87.88</b>	<b>178.22</b>	<b>-</b>	<b>-</b>	<b>4.64</b>	<b>41.63</b>	<b>161.80</b>	<b>35.24</b>	<b>529.95</b>
Residential	17.23	-	46.86	122.51	-	-	3.89	37.54	78.55	20.39	326.97
Comm. and public services	1.78	-	20.97	48.06	-	-	0.51	2.05	77.65	9.74	160.76
Agriculture/forestry	1.34	-	17.48	3.69	-	-	0.09	2.01	4.94	0.26	29.80
Fishing	-	-	1.46	0.00	-	-	0.06	-	0.06	0.02	1.60
Non-specified	0.19	-	1.11	3.96	-	-	0.09	0.03	0.60	4.83	10.82
<b>NON-ENERGY USE</b>	<b>1.30</b>	<b>2.42</b>	<b>97.25</b>	<b>12.31</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>113.28</b>
in industry/transf./energy	1.11	2.42	94.20	12.31	-	-	-	-	-	-	110.04
of which: feedstocks	0.16	2.42	65.70	12.31	-	-	-	-	-	-	80.59
in transport	-	-	2.52	-	-	-	-	-	-	-	2.52
in other	0.19	-	0.52	-	-	-	-	-	-	-	0.72
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>874.14</b>	<b>-</b>	<b>79.44</b>	<b>846.92</b>	<b>916.08</b>	<b>555.59</b>	<b>190.20</b>	<b>145.35</b>	<b>-</b>	<b>0.67</b>	<b>3608.39</b>
Electricity plants	634.28	-	42.08	531.20	905.98	555.59	187.27	74.35	-	0.32	2931.06
CHP plants	239.87	-	37.36	315.72	10.10	-	2.93	71.00	-	0.35	677.33
<b>Heat generated - PJ</b>	<b>768.38</b>	<b>-</b>	<b>175.64</b>	<b>1013.01</b>	<b>5.37</b>	<b>-</b>	<b>17.04</b>	<b>496.83</b>	<b>3.65</b>	<b>38.65</b>	<b>2518.57</b>
CHP plants	597.87	-	137.80	747.08	5.37	-	10.39	338.30	0.21	12.97	1849.98
Heat plants	170.51	-	37.83	265.93	-	-	6.65	158.53	3.44	25.68	668.59

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## OECD Europe

### Estimated energy supply balance for 2011

Million tonnes of oil equivalent											
SUPPLY	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	173.66	175.28	-	220.23	235.70	43.39	33.45	123.85	-	0.52	1006.08
Imports	153.51	586.15	328.49	379.48	-	-	-	10.45	30.06	0.00	1488.14
Exports	-22.53	-121.45	-298.72	-171.19	-	-	-	-3.27	-29.62	-0.01	-646.80
Intl. marine bunkers	-	-	-47.92	-	-	-	-	-	-	-	-47.92
Intl. aviation bunkers	-	-	-44.85	-	-	-	-	-	-	-	-44.85
Stock changes	-4.41	4.40	1.85	-7.62	-	-	-	0.04	-	-	-5.73
<b>TPES</b>	<b>300.23</b>	<b>644.38</b>	<b>-61.15</b>	<b>420.90</b>	<b>235.70</b>	<b>43.39</b>	<b>33.45</b>	<b>131.07</b>	<b>0.44</b>	<b>0.52</b>	<b>1748.92</b>
Electricity and Heat Output											
Elec. generated - TWh	907.85	-	68.62	769.16	903.93	504.48	242.19	154.20	-	0.58	3551.01
Heat generated - PJ	690.95	-	151.34	907.27	5.33	-	17.79	484.24	3.69	31.05	2291.66

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

### Key indicators

	1960	1971	1980	1990	2000	2009	2010	2011e
Energy production (Mtoe)	..	608.7	856.2	1045.4	1170.6	1033.8	1048.3	1006.1
Net imports (Mtoe)	..	709.8	709.3	634.5	661.1	814.1	841.5	841.3
Total primary energy supply (Mtoe)	..	1243.0	1494.2	1619.5	1746.9	1743.6	1816.0	1748.9
Net oil imports (Mtoe)	..	682.8	621.3	458.2	400.5	481.8	498.8	494.5
Oil supply (Mtoe)	..	640.4	688.4	605.9	649.9	604.2	603.5	583.2
Electricity consumption (TWh)*	..	1315.0	1930.4	2518.9	3017.9	3278.8	3431.4	3362.6
GDP (billion 2005 USD)	..	6354.6	8355.1	10650.8	13396.4	15105.5	15458.5	15732.2
GDP PPP (billion 2005 USD)	..	6009.0	7937.9	10118.7	12748.8	14539.8	14903.5	15196.1
Population (millions)	..	448.37	473.78	500.06	521.70	549.32	551.80	553.14
Industrial production index (2005=100)	..	50.20	64.40	78.00	94.00	93.40	99.90	103.60
Total self-sufficiency**	..	0.4897	0.5730	0.6455	0.6701	0.5929	0.5772	0.5753
Coal and peat self-sufficiency**	..	0.9741	0.9189	0.8191	0.6577	0.6149	0.5739	0.5784
Oil self-sufficiency**	..	0.0353	0.1847	0.3481	0.5185	0.3503	0.3219	0.3005
Natural gas self-sufficiency**	..	0.9496	0.8169	0.6302	0.6198	0.5377	0.5197	0.5232
TPES/GDP (toe per thousand 2005 USD)	..	0.1956	0.1788	0.1521	0.1304	0.1154	0.1175	0.1112
TPES/GDP PPP (toe per thousand 2005 USD)	..	0.2069	0.1882	0.1600	0.1370	0.1199	0.1218	0.1151
TPES/population (toe per capita)	..	2.7723	3.1538	3.2386	3.3486	3.1742	3.2910	3.1618
Net oil imports/GDP (toe per thousand 2005 USD)	..	0.1075	0.0744	0.0430	0.0299	0.0319	0.0323	0.0314
Oil supply/GDP (toe per thousand 2005 USD)	..	0.1008	0.0824	0.0569	0.0485	0.0400	0.0390	0.0371
Oil supply/population (toe per capita)	..	1.4284	1.4530	1.2116	1.2457	1.0999	1.0936	1.0544
Elect. cons./GDP (kWh per 2005 USD)	..	0.2069	0.2310	0.2365	0.2253	0.2171	0.2220	0.2137
Elect. cons./population (kWh per capita)	..	2933	4075	5037	5785	5969	6219	6079
Industry cons.***/industrial production (2005=100)	..	185.00	156.77	121.99	104.53	91.64	92.39	..
Industry oil cons.***/industrial production (2005=100)	..	273.19	201.26	121.04	106.37	94.62	90.38	..

\* Electricity consumption equals domestic supply less losses.

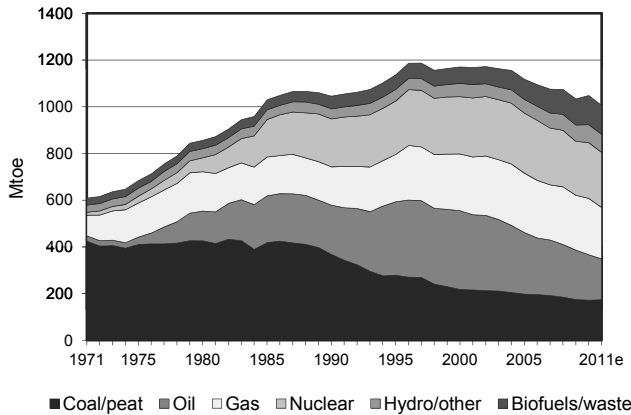
\*\* Production divided by TPES.

\*\*\* Includes non-energy use.

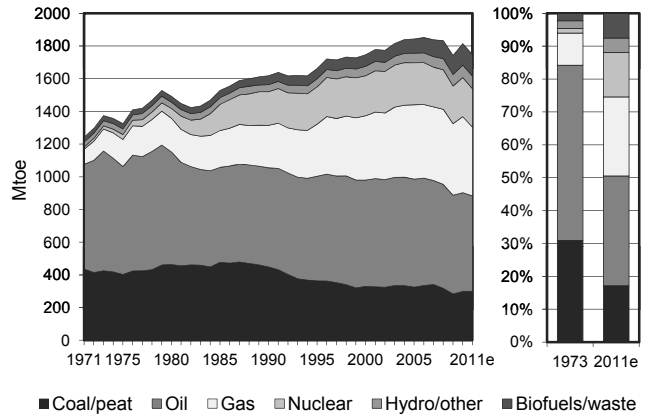
Note: OECD Europe excludes Estonia and Slovenia prior to 1990.

### OECD Europe

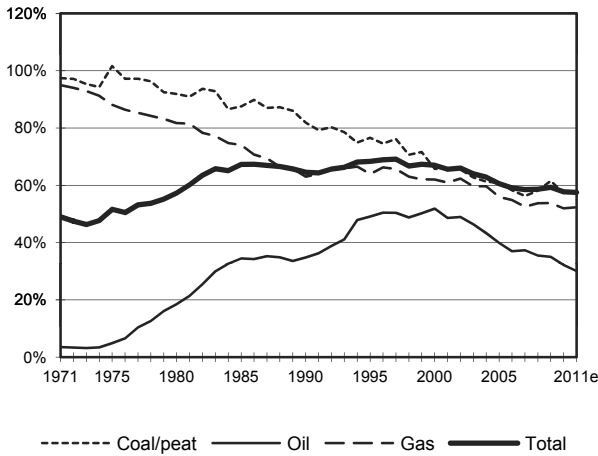
**Figure 1. Energy production**



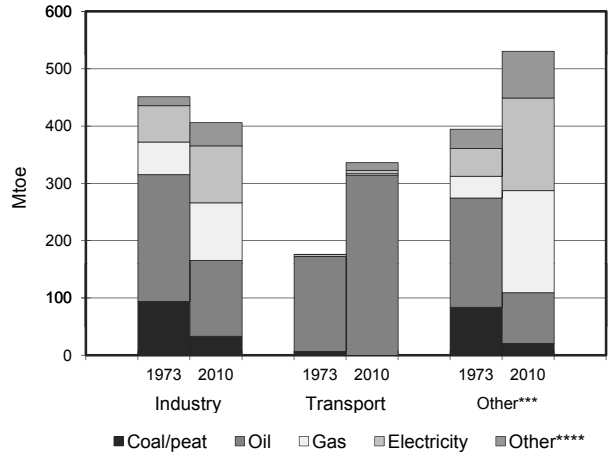
**Figure 2. Total primary energy supply\***



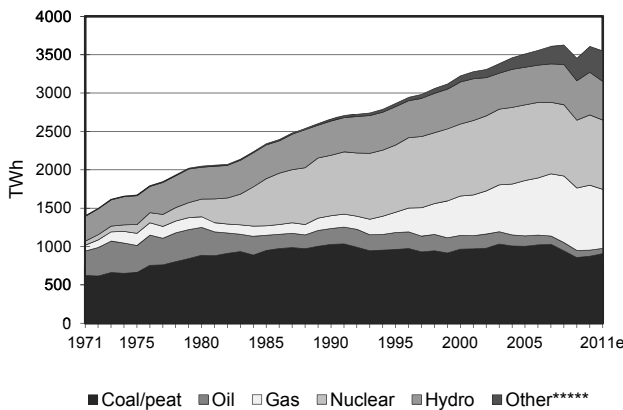
**Figure 3. Energy self-sufficiency**



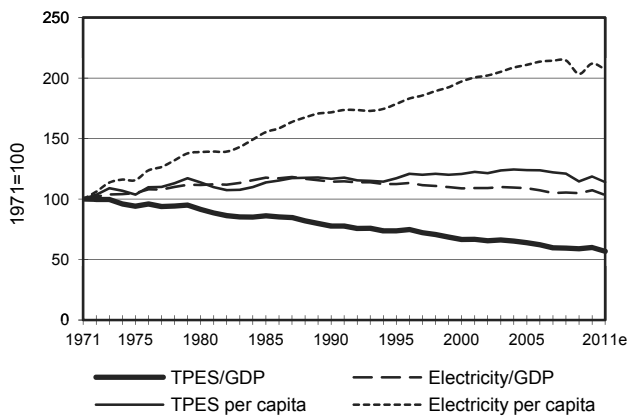
**Figure 4. Breakdown of sectorial final consumption by source in 1973 and 2010\*\***



**Figure 5. Electricity generation by fuel**



**Figure 6. Selected indicators**



\* Excluding electricity trade.  
 \*\* Includes non-energy use.  
 \*\*\* Includes residential, commercial and public services, agriculture/forestry, fishing and non-specified.  
 \*\*\*\* Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.  
 \*\*\*\*\* Includes geothermal, solar, wind, biofuels and waste, etc.

## IEA : 2009

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	960.37	732.69	-	896.99	580.20	108.07	46.44	222.88	-	0.55	3548.21
Imports	327.79	1501.56	501.76	582.10	-	-	-	8.15	31.99	0.00	2953.35
Exports	-246.66	-282.59	-461.65	-280.20	-	-	-	-3.69	-30.68	-0.01	-1305.47
Intl. marine bunkers	-	-	-85.75	-	-	-	-	-	-	-	-85.75
Intl. aviation bunkers	-	-	-80.66	-	-	-	-	-	-	-	-80.66
Stock changes	-35.25	0.85	-1.78	-6.33	-	-	-	-0.33	-	-	-42.85
<b>TPES</b>	<b>1006.24</b>	<b>1952.50</b>	<b>-128.08</b>	<b>1192.57</b>	<b>580.20</b>	<b>108.07</b>	<b>46.44</b>	<b>227.02</b>	<b>1.32</b>	<b>0.55</b>	<b>4986.83</b>
Transfers	-	-37.49	48.60	-	-	-	-	-	-	-	11.11
Statistical differences	-9.77	-3.27	-10.14	-2.82	-	-	0.00	0.08	0.28	-0.01	-25.65
Electricity plants	-738.57	-3.18	-42.11	-296.56	-577.52	-108.07	-39.60	-39.04	772.59	-0.15	-1072.23
CHP plants	-79.39	-	-14.62	-102.49	-2.68	-	-0.03	-28.84	85.18	56.18	-86.70
Heat plants	-4.43	-	-1.25	-6.84	-	-	-0.11	-4.99	-0.32	14.40	-3.54
Blast furnaces	-39.32	-	-0.63	-0.07	-	-	-	-	-	-	-40.01
Gas works	-1.95	-	-1.89	2.62	-	-	-	-0.01	-	-	-1.24
Coke/pat. fuel/BKB plants	-7.09	-	-1.07	-0.04	-	-	-	-	-	-	-8.20
Oil refineries	-	-1927.17	1928.19	-0.59	-	-	-	-	-	-	0.44
Petrochemical plants	-	25.70	-26.15	-	-	-	-	-	-	-	-0.45
Liquefaction plants	-	0.59	-	-1.96	-	-	-	-	-	-	-1.37
Other transformation	0.03	0.14	-0.09	-0.43	-	-	-	-0.12	-	-0.34	-0.82
Energy industry own use	-12.11	-0.08	-110.24	-89.01	-	-	-0.13	-0.21	-63.39	-8.08	-283.25
Losses	-0.73	-	-0.01	-3.31	-	-	-0.00	-0.03	-54.47	-4.94	-63.50
<b>TFC</b>	<b>112.92</b>	<b>7.74</b>	<b>1640.49</b>	<b>691.05</b>	<b>-</b>	<b>-</b>	<b>6.58</b>	<b>153.84</b>	<b>741.19</b>	<b>57.60</b>	<b>3411.41</b>
<b>INDUSTRY</b>	<b>88.20</b>	<b>2.04</b>	<b>102.01</b>	<b>223.81</b>	<b>-</b>	<b>-</b>	<b>0.28</b>	<b>64.81</b>	<b>223.44</b>	<b>24.02</b>	<b>728.61</b>
Iron and steel	31.78	0.00	4.02	19.01	-	-	-	0.15	25.71	0.73	81.40
Chemical and petrochem.	10.30	1.98	23.77	55.59	-	-	0.00	1.40	43.68	11.39	148.12
Non-ferrous metals	1.75	0.00	2.57	11.67	-	-	0.00	0.11	23.33	0.40	39.84
Non-metallic minerals	16.15	0.01	16.40	26.14	-	-	0.00	4.26	13.34	0.18	76.48
Transport equipment	0.18	0.01	1.19	8.49	-	-	0.00	0.01	8.94	0.75	19.56
Machinery	0.33	0.01	3.84	17.80	-	-	0.00	0.09	27.76	0.64	50.48
Mining and quarrying	0.48	-	5.31	9.77	-	-	-	0.04	5.87	0.16	21.63
Food and tobacco	5.52	0.01	8.29	29.43	-	-	0.00	2.74	19.01	1.68	66.67
Paper, pulp and printing	6.57	0.01	6.14	21.77	-	-	0.15	41.81	27.88	2.86	107.19
Wood and wood products	0.42	0.00	3.76	2.62	-	-	-	9.80	4.45	0.73	21.79
Construction	2.25	-	9.59	2.24	-	-	0.00	0.13	1.77	0.06	16.05
Textile and leather	0.40	0.01	1.19	5.76	-	-	0.00	0.08	6.18	0.98	14.60
Non-specified	12.08	0.01	15.93	13.49	-	-	0.12	4.19	15.53	3.46	64.81
<b>TRANSPORT</b>	<b>0.14</b>	<b>0.03</b>	<b>1038.20</b>	<b>20.79</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>35.18</b>	<b>9.11</b>	<b>-</b>	<b>1103.46</b>
Domestic aviation	-	-	66.02	-	-	-	-	-	-	-	66.02
Road	-	0.03	938.83	2.63	-	-	-	35.17	0.00	-	976.66
Rail	0.01	-	13.41	-	-	-	-	0.01	7.45	-	20.88
Pipeline transport	-	-	0.02	18.02	-	-	-	-	0.40	-	18.44
Domestic navigation	0.13	-	18.76	0.05	-	-	-	0.00	-	-	18.94
Non-specified	0.00	-	1.16	0.10	-	-	-	0.00	1.26	-	2.52
<b>OTHER</b>	<b>22.12</b>	<b>0.60</b>	<b>193.65</b>	<b>421.86</b>	<b>-</b>	<b>-</b>	<b>6.30</b>	<b>53.85</b>	<b>508.64</b>	<b>33.59</b>	<b>1240.60</b>
Residential	16.09	0.45	87.65	264.05	-	-	5.28	46.99	241.54	19.12	681.16
Comm. and public services	4.65	0.08	61.09	146.75	-	-	0.59	4.69	246.36	10.20	474.41
Agriculture/forestry	1.16	0.07	38.84	4.03	-	-	0.15	2.14	6.75	0.27	53.41
Fishing	-	-	4.04	0.00	-	-	0.00	-	0.23	0.00	4.27
Non-specified	0.23	-	2.02	7.03	-	-	0.28	0.03	13.76	4.00	27.36
<b>NON-ENERGY USE</b>	<b>2.46</b>	<b>5.07</b>	<b>306.64</b>	<b>24.58</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>338.75</b>
in industry/transf./energy	2.29	5.07	299.04	24.58	-	-	-	-	-	-	330.99
of which: feedstocks	0.85	5.07	216.81	23.54	-	-	-	-	-	-	246.27
in transport	-	-	4.05	-	-	-	-	-	-	-	4.05
in other	0.16	-	3.55	-	-	-	-	-	-	-	3.71
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>3501.57</b>	<b>15.32</b>	<b>249.04</b>	<b>2209.84</b>	<b>2225.90</b>	<b>1256.66</b>	<b>281.56</b>	<b>233.59</b>	<b>-</b>	<b>0.55</b>	<b>9974.03</b>
Electricity plants	3203.28	15.32	192.47	1688.70	2216.08	1256.66	279.54	130.96	-	0.19	8983.20
CHP plants	298.29	-	56.58	521.14	9.82	-	2.02	102.63	-	0.35	990.83
<b>Heat generated - PJ</b>	<b>840.49</b>	<b>-</b>	<b>268.04</b>	<b>1315.39</b>	<b>5.06</b>	<b>-</b>	<b>5.95</b>	<b>490.84</b>	<b>6.85</b>	<b>46.12</b>	<b>2978.73</b>
CHP plants	703.06	-	234.05	1075.80	5.06	-	0.78	331.95	0.32	14.59	2365.61
Heat plants	137.44	-	33.99	239.58	-	-	5.17	158.89	6.53	31.53	613.12

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## IEA : 2010

Million tonnes of oil equivalent											
<b>SUPPLY AND CONSUMPTION</b>	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	973.99	733.62	-	918.99	593.49	109.67	52.70	243.61	-	0.66	3626.72
Imports	353.49	1514.95	518.65	618.20	-	-	-	10.08	32.28	0.00	3047.65
Exports	-285.89	-273.64	-486.76	-298.51	-	-	-	-5.01	-30.54	-0.01	-1380.35
Intl. marine bunkers	-	-	-88.38	-	-	-	-	-	-	-	-88.38
Intl. aviation bunkers	-	-	-81.65	-	-	-	-	-	-	-	-81.65
Stock changes	18.75	-3.48	1.65	14.72	-	-	-	0.14	-	-	31.78
<b>TPES</b>	<b>1060.34</b>	<b>1971.45</b>	<b>-136.48</b>	<b>1253.40</b>	<b>593.49</b>	<b>109.67</b>	<b>52.70</b>	<b>248.82</b>	<b>1.74</b>	<b>0.65</b>	<b>5155.78</b>
Transfers	-	-39.43	51.84	-	-	-	-	-	-	-	12.40
Statistical differences	-9.51	-9.85	-2.36	1.52	-	-	0.00	-0.03	-0.14	-0.10	-20.46
Electricity plants	-763.11	-4.13	-38.10	-318.21	-590.72	-109.67	-45.40	-42.79	804.21	-0.22	-1108.15
CHP plants	-83.73	-	-15.30	-112.63	-2.76	-	-0.03	-31.99	91.75	59.76	-94.94
Heat plants	-5.10	-	-1.40	-8.05	-	-	-0.13	-5.69	-0.33	16.41	-4.29
Blast furnaces	-48.78	-	-0.79	-0.11	-	-	-	-	-	-	-49.68
Gas works	-1.94	-	-2.17	2.84	-	-	-	-0.01	-	-	-1.29
Coke/pat. fuel/BKB plants	-7.64	-	-1.19	-0.00	-	-	-	-0.00	-	-	-8.84
Oil refineries	-	-1937.07	1941.76	-0.80	-	-	-	-	-	-	3.89
Petrochemical plants	-	26.84	-27.33	-	-	-	-	-	-	-	-0.49
Liquefaction plants	-	0.80	-	-1.93	-	-	-	-	-	-	-1.13
Other transformation	0.02	0.13	-0.08	-0.49	-	-	-	-0.03	-	-0.39	-0.84
Energy industry own use	-13.91	-0.10	-109.94	-90.80	-	-	-0.13	-0.26	-65.72	-8.70	-289.54
Losses	-0.92	-	-0.01	-3.84	-	-	-0.00	-0.03	-54.40	-5.15	-64.36
<b>TFC</b>	<b>125.71</b>	<b>8.65</b>	<b>1658.44</b>	<b>720.89</b>	<b>-</b>	<b>-</b>	<b>7.01</b>	<b>167.98</b>	<b>777.12</b>	<b>62.26</b>	<b>3528.05</b>
<b>INDUSTRY</b>	<b>99.87</b>	<b>2.21</b>	<b>103.48</b>	<b>244.48</b>	<b>-</b>	<b>-</b>	<b>0.29</b>	<b>69.78</b>	<b>243.46</b>	<b>23.92</b>	<b>787.48</b>
Iron and steel	38.66	0.00	4.45	21.58	-	-	0.01	0.05	28.68	0.59	94.02
Chemical and petrochem.	11.28	2.14	23.33	60.76	-	-	0.00	1.88	47.93	11.04	158.36
Non-ferrous metals	1.72	0.00	2.87	12.05	-	-	0.00	0.10	24.77	0.35	41.86
Non-metallic minerals	16.87	0.01	16.24	27.74	-	-	0.00	4.49	13.98	0.20	79.52
Transport equipment	0.17	0.01	1.28	9.24	-	-	0.00	0.01	9.84	0.89	21.44
Machinery	0.33	0.01	3.98	19.14	-	-	0.00	0.15	32.46	0.92	56.99
Mining and quarrying	0.49	-	5.83	11.28	-	-	-	0.04	6.59	0.20	24.43
Food and tobacco	6.23	0.01	8.03	31.67	-	-	0.00	2.96	19.95	1.52	70.37
Paper, pulp and printing	6.68	0.01	6.01	23.31	-	-	0.15	44.84	29.46	2.96	113.41
Wood and wood products	0.42	0.01	4.16	2.78	-	-	-	10.78	4.74	0.75	23.63
Construction	2.33	-	9.76	2.62	-	-	0.00	0.14	1.89	0.05	16.78
Textile and leather	0.42	0.01	1.09	6.11	-	-	0.00	0.10	6.68	0.79	15.21
Non-specified	14.27	0.01	16.46	16.19	-	-	0.13	4.25	16.48	3.66	71.46
<b>TRANSPORT</b>	<b>0.14</b>	<b>0.03</b>	<b>1041.63</b>	<b>22.64</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>40.23</b>	<b>9.17</b>	<b>-</b>	<b>1113.85</b>
Domestic aviation	-	-	66.70	-	-	-	-	-	-	-	66.70
Road	-	0.03	941.95	3.22	-	-	-	40.21	0.00	-	985.41
Rail	0.01	-	14.29	-	-	-	-	0.02	7.49	-	21.82
Pipeline transport	-	-	0.01	19.28	-	-	-	-	0.38	-	19.67
Domestic navigation	0.12	-	17.50	0.05	-	-	-	0.00	-	-	17.67
Non-specified	0.00	-	1.19	0.10	-	-	-	0.00	1.30	-	2.59
<b>OTHER</b>	<b>23.53</b>	<b>0.73</b>	<b>193.60</b>	<b>427.35</b>	<b>-</b>	<b>-</b>	<b>6.72</b>	<b>57.96</b>	<b>524.49</b>	<b>38.34</b>	<b>1272.72</b>
Residential	18.10	0.55	87.21	267.93	-	-	5.67	50.74	252.87	21.56	704.63
Comm. and public services	3.86	0.10	59.44	151.14	-	-	0.75	4.82	251.61	11.71	483.42
Agriculture/forestry	1.38	0.08	40.74	4.32	-	-	0.17	2.38	6.82	0.25	56.14
Fishing	-	-	4.10	0.00	-	-	0.03	-	0.24	-	4.38
Non-specified	0.19	-	2.10	3.96	-	-	0.09	0.03	12.95	4.83	24.15
<b>NON-ENERGY USE</b>	<b>2.17</b>	<b>5.67</b>	<b>319.73</b>	<b>26.42</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>353.99</b>
in industry/transf./energy	1.98	5.67	311.58	26.42	-	-	-	-	-	-	345.64
of which: feedstocks	0.91	5.67	227.12	25.32	-	-	-	-	-	-	259.02
in transport	-	-	4.20	-	-	-	-	-	-	-	4.20
in other	0.19	-	3.95	-	-	-	-	-	-	-	4.14
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>3645.94</b>	<b>20.18</b>	<b>234.24</b>	<b>2369.63</b>	<b>2275.84</b>	<b>1275.29</b>	<b>337.54</b>	<b>257.61</b>	<b>-</b>	<b>0.88</b>	<b>10418.13</b>
Electricity plants	3330.61	20.18	179.36	1798.33	2266.74	1275.29	335.42	144.53	-	0.40	9350.84
CHP plants	315.34	-	54.88	571.30	10.10	-	2.12	113.08	-	0.48	1067.29
<b>Heat generated - PJ</b>	<b>911.44</b>	<b>-</b>	<b>264.59</b>	<b>1417.14</b>	<b>5.37</b>	<b>-</b>	<b>6.80</b>	<b>561.25</b>	<b>6.83</b>	<b>43.79</b>	<b>3217.21</b>
CHP plants	742.40	-	225.02	1142.70	5.37	-	0.89	382.97	0.21	17.33	2516.87
Heat plants	169.04	-	39.57	274.45	-	-	5.91	178.28	6.62	26.47	700.34

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## IEA

## Estimated energy supply balance for 2011

Million tonnes of oil equivalent											
SUPPLY	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	976.43	733.39	-	944.15	537.49	113.56	61.05	244.04	-	0.70	3610.80
Imports	355.79	1483.93	511.12	628.65	-	-	-	11.92	35.06	0.00	3026.47
Exports	-292.17	-270.12	-509.36	-305.93	-	-	-	-8.75	-34.22	-0.01	-1420.56
Intl. marine bunkers	-	-	-88.88	-	-	-	-	-	-	-	-88.88
Intl. aviation bunkers	-	-	-81.23	-	-	-	-	-	-	-	-81.23
Stock changes	-6.88	9.02	4.99	-10.85	-	-	-	-0.17	-	-	-3.88
<b>TPES</b>	<b>1033.18</b>	<b>1956.21</b>	<b>-163.36</b>	<b>1256.03</b>	<b>537.49</b>	<b>113.56</b>	<b>61.05</b>	<b>247.04</b>	<b>0.84</b>	<b>0.70</b>	<b>5042.72</b>
Electricity and Heat Output											
Elec. generated - TWh	3603.30	24.19	218.70	2394.91	2061.96	1320.45	427.81	257.62	-	0.79	10309.73
Heat generated - PJ	845.20	-	240.18	1335.05	5.33	-	7.54	539.61	7.15	38.55	3018.62

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1960	1971	1980	1990	2000	2009	2010	2011e
Energy production (Mtoe)	..	2299.9	2759.5	3228.6	3590.2	3548.2	3626.7	3610.8
Net imports (Mtoe)	..	1139.4	1341.0	1294.5	1604.6	1647.9	1667.3	1605.9
Total primary energy supply (Mtoe)	..	3314.0	3954.4	4356.8	5089.8	4986.8	5155.8	5042.7
Net oil imports (Mtoe)	..	1119.5	1263.7	1134.4	1294.4	1259.1	1273.2	1215.6
Oil supply (Mtoe)	..	1671.0	1867.7	1768.8	1998.5	1824.4	1835.0	1792.9
Electricity consumption (TWh)*	..	3508.6	5174.8	6944.9	8893.7	9421.0	9873.0	9751.2
GDP (billion 2005 USD)	..	13114.7	17657.2	23993.5	31185.1	35172.2	36201.9	36753.0
GDP PPP (billion 2005 USD)	..	12528.0	16901.2	22960.5	30047.3	34161.7	35191.7	35776.1
Population (millions)	..	831.75	898.93	961.11	1028.23	1089.57	1095.51	1100.13
Industrial production index (2005=100)	..	..	..	..	..	..	..	..
Total self-sufficiency**	..	0.6940	0.6978	0.7411	0.7054	0.7115	0.7034	0.7160
Coal and peat self-sufficiency**	..	0.9943	1.0043	0.9971	0.8862	0.9544	0.9186	0.9451
Oil self-sufficiency**	..	0.3951	0.3916	0.4349	0.4345	0.4016	0.3998	0.4091
Natural gas self-sufficiency**	..	1.0031	0.9191	0.8492	0.7807	0.7522	0.7332	0.7517
TPES/GDP (toe per thousand 2005 USD)	..	0.2527	0.2240	0.1816	0.1632	0.1418	0.1424	0.1372
TPES/GDP PPP (toe per thousand 2005 USD)	..	0.2645	0.2340	0.1898	0.1694	0.1460	0.1465	0.1410
TPES/population (toe per capita)	..	3.9844	4.3989	4.5331	4.9500	4.5769	4.7063	4.5838
Net oil imports/GDP (toe per thousand 2005 USD)	..	0.0854	0.0716	0.0473	0.0415	0.0358	0.0352	0.0331
Oil supply/GDP (toe per thousand 2005 USD)	..	0.1274	0.1058	0.0737	0.0641	0.0519	0.0507	0.0488
Oil supply/population (toe per capita)	..	2.0090	2.0777	1.8404	1.9436	1.6744	1.6750	1.6297
Elect. cons./GDP (kWh per 2005 USD)	..	0.2675	0.2931	0.2894	0.2852	0.2679	0.2727	0.2653
Elect. cons./population (kWh per capita)	..	4218	5757	7226	8650	8647	9012	8864
Industry cons.***/industrial production (2005=100)	..	..	..	..	..	..	..	..
Industry oil cons.***/industrial production (2005=100)	..	..	..	..	..	..	..	..

\* Electricity consumption equals domestic supply less losses.

\*\* Production divided by TPES.

\*\*\* Includes non-energy use.

IEA Total

Figure 1. Energy production

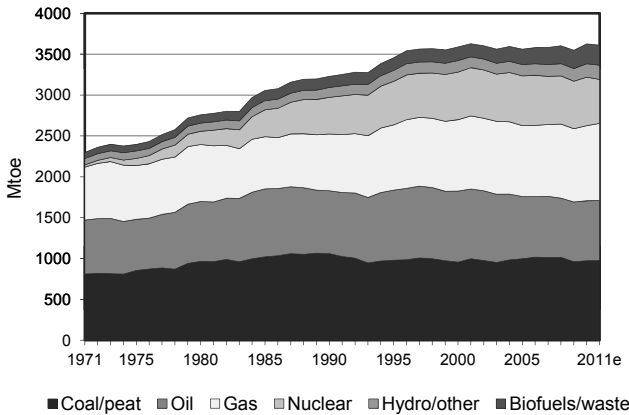


Figure 2. Total primary energy supply\*

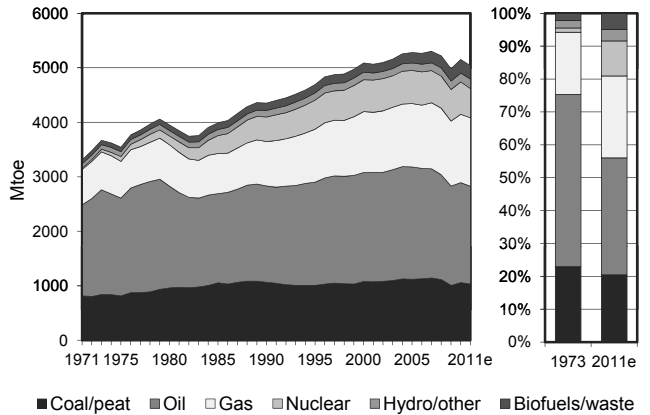


Figure 3. Energy self-sufficiency

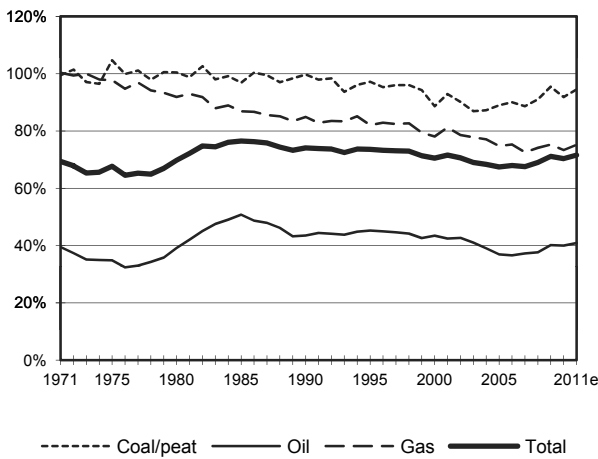


Figure 4. Breakdown of sectorial final consumption by source in 1973 and 2010\*\*

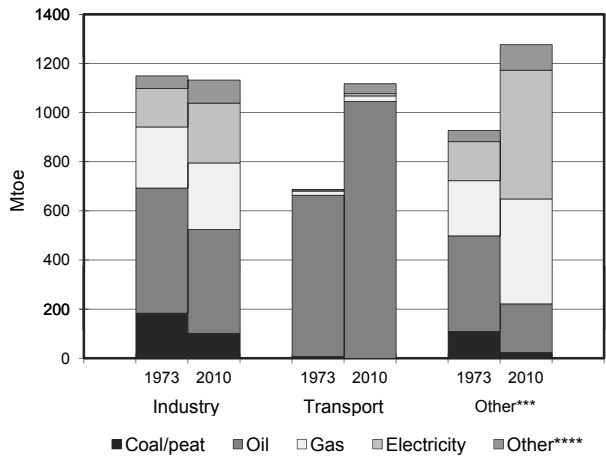


Figure 5. Electricity generation by fuel

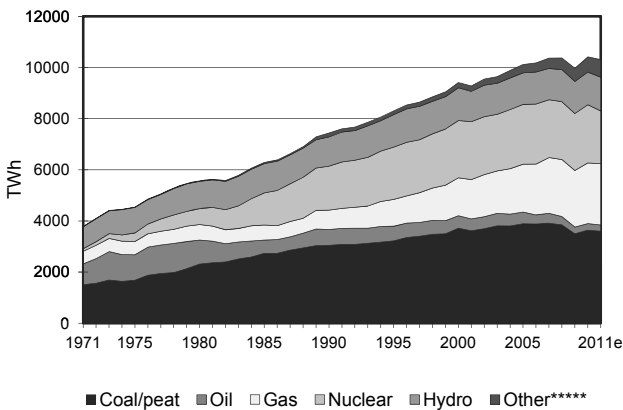
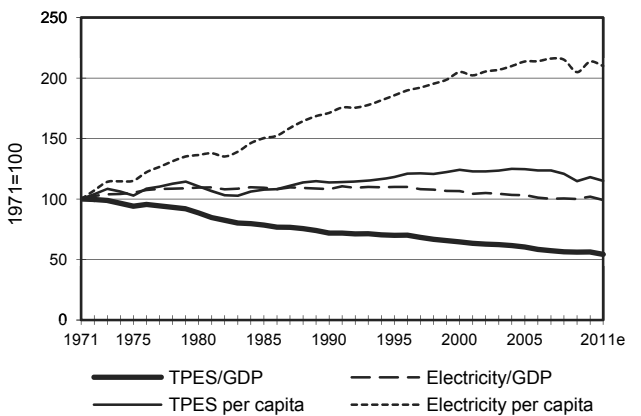


Figure 6. Selected indicators



\* Excluding electricity trade.  
 \*\* Includes non-energy use.  
 \*\*\* Includes residential, commercial and public services, agriculture/forestry, fishing and non-specified.  
 \*\*\*\* Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.  
 \*\*\*\*\* Includes geothermal, solar, wind, biofuels and waste, etc.

## Australia : 2009

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	225.71	25.02	-	39.32	-	0.94	0.54	5.56	-	-	297.08
Imports	0.00	19.88	15.56	5.56	-	-	-	-	-	-	41.00
Exports	-169.05	-13.91	-2.54	-18.02	-	-	-	-	-	-	-203.52
Intl. marine bunkers	-	-	-0.88	-	-	-	-	-	-	-	-0.88
Intl. aviation bunkers	-	-	-3.12	-	-	-	-	-	-	-	-3.12
Stock changes	-4.34	0.04	-0.30	-	-	-	-	-	-	-	-4.59
<b>TPES</b>	<b>52.33</b>	<b>31.03</b>	<b>8.73</b>	<b>26.86</b>	-	<b>0.94</b>	<b>0.54</b>	<b>5.56</b>	-	-	<b>125.98</b>
Transfers	-	-0.39	3.88	-	-	-	-	-	-	-	3.49
Statistical differences	-0.88	2.28	-4.12	0.94	-	-	-	-	-	-	-1.77
Electricity plants	-44.67	-	-0.97	-6.85	-	-0.94	-0.34	-0.46	19.84	-	-34.38
CHP plants	-1.83	-	-	-1.11	-	-	-	-1.71	1.17	-	-3.48
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-0.84 e	-	-	-0.06 e	-	-	-	-	-	-	-0.90
Gas works	0.06	-	-0.01	-0.26	-	-	-	-	-	-	-0.22
Coke/pat. fuel/BKB plants	-0.30	-	-0.02	-	-	-	-	-	-	-	-0.32
Oil refineries	-	-32.85	32.76	-	-	-	-	-	-	-	-0.09
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-0.51	-0.05	-2.71	-6.84	-	-	-	-	-2.27	-	-12.38
Losses	-	-	-	-	-	-	-	-	-1.29	-	-1.29
<b>TFC</b>	<b>3.37</b>	<b>0.02</b>	<b>37.55</b>	<b>12.68</b>	-	-	<b>0.20</b>	<b>3.39</b>	<b>17.46</b>	-	<b>74.66</b>
<b>INDUSTRY</b>	<b>3.20</b>	<b>0.02</b>	<b>3.23</b>	<b>7.48</b>	-	-	-	<b>1.74</b>	<b>6.55</b>	-	<b>22.22</b>
Iron and steel	0.86 e	-	0.02	0.40 e	-	-	-	-	0.29	-	1.57
Chemical and petrochem.	0.24	-	0.20	1.44	-	-	-	0.13	0.41	-	2.41
Non-ferrous metals	1.09	-	0.86	2.85	-	-	-	0.05	3.38	-	8.23
Non-metallic minerals	0.58	-	0.26	1.26	-	-	-	0.03	0.38	-	2.51
Transport equipment	-	-	-	..	-	-	-	-	..	-	-
Machinery	-	-	0.03	0.12	-	-	-	-	0.23	-	0.38
Mining and quarrying	0.01	-	1.26	0.06	-	-	-	0.00	0.89	-	2.22
Food and tobacco	0.32	0.00	0.07	0.67	-	-	-	0.89	0.45	-	2.41
Paper, pulp and printing	0.07	-	0.00	0.45	-	-	-	0.32	0.33	-	1.18
Wood and wood products	0.01	-	0.01	0.05	-	-	-	0.32	0.09	-	0.47
Construction	-	-	0.50	0.07	-	-	-	-	0.01	-	0.57
Textile and leather	0.01	0.01	0.01	0.12	-	-	-	-	0.07	-	0.22
Non-specified	0.02	-	0.00	0.01	-	-	-	-	0.02	-	0.05
<b>TRANSPORT</b>	<b>0.13</b>	-	<b>27.40</b>	<b>0.43</b>	-	-	-	<b>0.23</b>	<b>0.35</b>	-	<b>28.54</b>
Domestic aviation	-	-	2.16	-	-	-	-	-	-	-	2.16
Road	-	-	23.74	0.05	-	-	-	0.23	-	-	24.02
Rail	-	-	0.77	-	-	-	-	-	0.23	-	0.99
Pipeline transport	-	-	-	0.35	-	-	-	-	0.00	-	0.35
Domestic navigation	0.13	-	0.58	-	-	-	-	-	-	-	0.70
Non-specified	-	-	0.16	0.02	-	-	-	-	0.13	-	0.32
<b>OTHER</b>	<b>0.04</b>	-	<b>2.81</b>	<b>4.05</b>	-	-	<b>0.20</b>	<b>1.42</b>	<b>10.55</b>	-	<b>19.06</b>
Residential	0.01	-	0.28	3.03	-	-	0.19	1.39	5.13	-	10.04
Comm. and public services	0.04	-	0.61	1.01	-	-	0.01	0.02	5.22	-	6.91
Agriculture/forestry	-	-	1.91	0.00	-	-	-	-	0.20	-	2.11
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	-	-	<b>4.11</b>	<b>0.72</b>	-	-	-	-	-	-	<b>4.83</b>
in industry/transf./energy	-	-	4.11	0.72	-	-	-	-	-	-	4.83
of which: feedstocks	-	-	2.05	0.72	-	-	-	-	-	-	2.77
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>185.98</b>	-	<b>3.58</b>	<b>35.87</b>	-	<b>10.99</b>	<b>3.97</b>	<b>3.97</b>	-	-	<b>244.35</b>
Electricity plants	179.65	-	3.58	31.32	-	10.99	3.97	1.24	-	-	230.74
CHP plants	6.33	-	-	4.55	-	-	-	2.74	-	-	13.62
<b>Heat generated - PJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.



## Australia : 2010

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	237.34	23.75	-	42.52	-	1.07	0.68	5.25	-	-	310.62
Imports	0.01	22.32	15.81	4.85	-	-	-	-	-	-	42.99
Exports	-190.14	-15.15	-2.44	-20.89	-	-	-	-	-	-	-228.62
Intl. marine bunkers	-	-	-0.71	-	-	-	-	-	-	-	-0.71
Intl. aviation bunkers	-	-	-3.41	-	-	-	-	-	-	-	-3.41
Stock changes	4.17	-0.43	0.12	-	-	-	-	-	-	-	3.85
<b>TPES</b>	<b>51.37</b>	<b>30.49</b>	<b>9.38</b>	<b>26.48</b>	-	<b>1.07</b>	<b>0.68</b>	<b>5.25</b>	-	-	<b>124.73</b>
Transfers	-	-0.82	4.07	-	-	-	-	-	-	-	3.25
Statistical differences	-0.94	2.39	-3.10	2.60	-	-	-	0.00	0.00	-	0.95
Electricity plants	-43.23	-	-0.85	-7.26	-	-1.07	-0.44	-0.46	19.62	-	-33.69
CHP plants	-1.80	-	-	-1.14	-	-	-	-1.34	1.15	-	-3.12
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-1.14	-	-	-0.08	-	-	-	-	-	-	-1.21
Gas works	0.01	-	-0.01	-0.26	-	-	-	-	-	-	-0.26
Coke/pat. fuel/BKB plants	-0.54	-	-0.02	-	-	-	-	-	-	-	-0.56
Oil refineries	-	-31.98	31.43	-	-	-	-	-	-	-	-0.54
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-0.68	-0.08	-2.84	-7.21	-	-	-	-	-2.21	-	-13.01
Losses	-	-	-	-	-	-	-	-	-1.26	-	-1.26
<b>TFC</b>	<b>3.05</b>	<b>0.01</b>	<b>38.06</b>	<b>13.14</b>	-	-	<b>0.24</b>	<b>3.46</b>	<b>17.31</b>	-	<b>75.28</b>
<b>INDUSTRY</b>	<b>2.89</b>	<b>0.01</b>	<b>3.55</b>	<b>7.72</b>	-	-	-	<b>1.79</b>	<b>6.44</b>	-	<b>22.41</b>
Iron and steel	0.71	-	0.02	0.50	-	-	-	-	0.32	-	1.55
Chemical and petrochem.	0.18	-	0.20	1.69	-	-	-	0.18	0.41	-	2.66
Non-ferrous metals	0.99	-	1.15	2.67	-	-	-	0.03	3.31	-	8.16
Non-metallic minerals	0.59	-	0.29	1.33	-	-	-	0.02	0.39	-	2.62
Transport equipment	-	-	-	..	-	-	-	-	..	-	-
Machinery	-	-	0.04	0.12	-	-	-	-	0.22	-	0.37
Mining and quarrying	0.00	-	1.29	0.04	-	-	-	0.00	0.83	-	2.16
Food and tobacco	0.31	0.00	0.06	0.67	-	-	-	0.86	0.46	-	2.36
Paper, pulp and printing	0.07	-	0.01	0.48	-	-	-	0.38	0.34	-	1.27
Wood and wood products	0.01	-	0.01	0.05	-	-	-	0.31	0.08	-	0.46
Construction	-	-	0.49	0.06	-	-	-	-	0.01	-	0.56
Textile and leather	0.01	0.01	0.01	0.11	-	-	-	-	0.06	-	0.20
Non-specified	0.02	-	0.00	0.01	-	-	-	-	0.00	-	0.03
<b>TRANSPORT</b>	<b>0.12</b>	-	<b>27.46</b>	<b>0.43</b>	-	-	-	<b>0.28</b>	<b>0.33</b>	-	<b>28.62</b>
Domestic aviation	-	-	2.22	-	-	-	-	-	-	-	2.22
Road	-	-	23.55	0.05	-	-	-	0.28	-	-	23.88
Rail	-	-	0.83	-	-	-	-	-	0.20	-	1.03
Pipeline transport	-	-	-	0.36	-	-	-	-	0.00	-	0.36
Domestic navigation	0.12	-	0.68	-	-	-	-	-	-	-	0.81
Non-specified	-	-	0.17	0.02	-	-	-	-	0.13	-	0.32
<b>OTHER</b>	<b>0.04</b>	-	<b>2.85</b>	<b>4.14</b>	-	-	<b>0.24</b>	<b>1.39</b>	<b>10.53</b>	-	<b>19.21</b>
Residential	0.00	-	0.28	3.10	-	-	0.23	1.37	5.17	-	10.16
Comm. and public services	0.03	-	0.62	1.04	-	-	0.01	0.02	5.16	-	6.89
Agriculture/forestry	-	-	1.96	0.00	-	-	-	-	0.20	-	2.16
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	-	-	<b>4.20</b>	<b>0.84</b>	-	-	-	-	-	-	<b>5.05</b>
in industry/transf./energy	-	-	4.20	0.84	-	-	-	-	-	-	5.05
of which: feedstocks	-	-	2.05	0.84	-	-	-	-	-	-	2.89
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>180.70</b>	-	<b>3.16</b>	<b>36.22</b>	-	<b>12.47</b>	<b>5.08</b>	<b>3.91</b>	-	-	<b>241.53</b>
Electricity plants	174.41	-	3.16	31.75	-	12.47	5.08	1.27	-	-	228.14
CHP plants	6.29	-	-	4.47	-	-	-	2.64	-	-	13.39
<b>Heat generated - PJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Australia

## Estimated energy supply balance for 2011

Million tonnes of oil equivalent											
SUPPLY	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	230.89	20.46	-	49.50	-	1.27	0.83	5.38	-	-	308.33
Imports	0.03	25.97	14.72	5.61	-	-	-	-	-	-	46.33
Exports	-184.05	-16.47	-2.10	-23.33	-	-	-	-	-	-	-225.95
Intl. marine bunkers	-	-	-0.63	-	-	-	-	-	-	-	-0.63
Intl. aviation bunkers	-	-	-3.39	-	-	-	-	-	-	-	-3.39
Stock changes	-5.31	0.35	0.06	-	-	-	-	-	-	-	-4.90
<b>TPES</b>	<b>41.56</b>	<b>30.31</b>	<b>8.67</b>	<b>31.77</b>	<b>-</b>	<b>1.27</b>	<b>0.83</b>	<b>5.38</b>	<b>-</b>	<b>-</b>	<b>119.80</b>
Electricity and Heat Output											
Elec. generated - TWh	165.34	-	2.09	46.02	-	14.82	6.66	3.53	-	-	238.45
Heat generated - PJ	-	-	-	-	-	-	-	-	-	-	-

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1960	1971	1980	1990	2000	2009	2010	2011e
Energy production (Mtoe)	21.3	53.9	85.4	157.5	233.6	297.1	310.6	308.3
Net imports (Mtoe)	12.0	-1.7	-16.6	-64.5	-127.1	-162.5	-185.6	-179.6
Total primary energy supply (Mtoe)	31.5	51.6	69.6	86.2	108.1	126.0	124.7	119.8
Net oil imports (Mtoe)	12.7	11.3	11.3	5.1	3.6	19.0	20.5	22.1
Oil supply (Mtoe)	11.2	24.2	30.1	31.2	34.2	39.8	39.9	39.0
Electricity consumption (TWh)*	18.8	48.5	86.9	145.5	195.2	229.5	227.0	223.9
GDP (billion 2005 USD)	149.9 e	259.8	333.9	451.4	644.7	853.3	874.5	893.4
GDP PPP (billion 2005 USD)	141.4 e	245.0	315.0	425.8	608.1	804.8	824.8	842.6
Population (millions)	10.39 e	13.20	14.81	17.17	19.27	22.16	22.55	22.86
Industrial production index (2005=100)	..	..	55.30	74.30	94.00	105.80	110.60	110.30
Total self-sufficiency**	0.6767	1.0434	1.2271	1.8269	2.1603	2.3582	2.4903	2.5738
Coal and peat self-sufficiency**	1.0615	1.5473	1.8997	3.0333	3.4176 e	4.3132	4.6200	5.5561
Oil self-sufficiency**	..	0.6140	0.7084	0.9303	0.9929	0.6294	0.5958	0.5250
Natural gas self-sufficiency**	..	1.0000	1.0000	1.1589	1.4807	1.4640	1.6055	1.5577
TPES/GDP (toe per thousand 2005 USD)	0.2100 e	0.1987	0.2084	0.1910	0.1677	0.1476	0.1426	0.1341
TPES/GDP PPP (toe per thousand 2005 USD)	0.2226 e	0.2107	0.2210	0.2025	0.1778	0.1565	0.1512	0.1422
TPES/population (toe per capita)	3.0295 e	3.9107	4.7007	5.0219	5.6103	5.6841	5.5302	5.2400
Net oil imports/GDP (toe per thousand 2005 USD)	0.0849 e	0.0433	0.0337	0.0113	0.0055	0.0223	0.0235	0.0248
Oil supply/GDP (toe per thousand 2005 USD)	0.0744 e	0.0930	0.0901	0.0691	0.0530	0.0466	0.0456	0.0436
Oil supply/population (toe per capita)	1.0733 e	1.8296	2.0311	1.8172	1.7723	1.7937	1.7676	1.7050
Elect. cons./GDP (kWh per 2005 USD)	0.1251 e	0.1868	0.2602	0.3223	0.3028	0.2689	0.2595	0.2506
Elect. cons./population (kWh per capita)	1805 e	3678	5869	8475	10132	10354	10063	9793
Industry cons.***/industrial production (2005=100)	..	..	135.20	113.93	109.68	93.48	90.75	..
Industry oil cons.***/industrial production (2005=100)	..	..	195.94	117.36	110.92	94.98	95.92	..

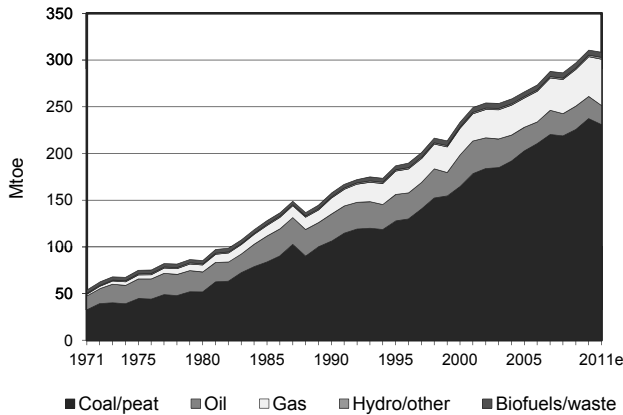
\* Electricity consumption equals domestic supply less losses.

\*\* Production divided by TPES.

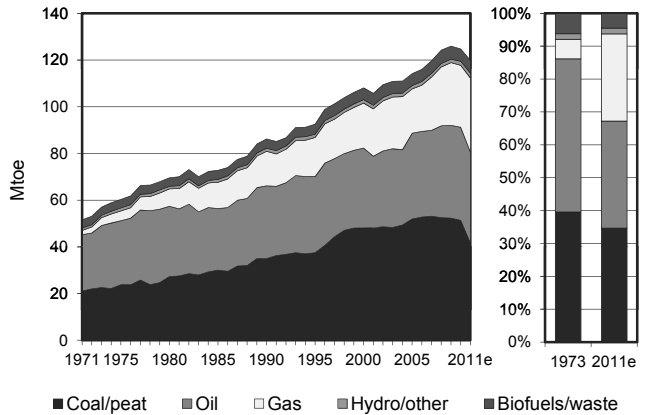
\*\*\* Includes non-energy use.

## Australia

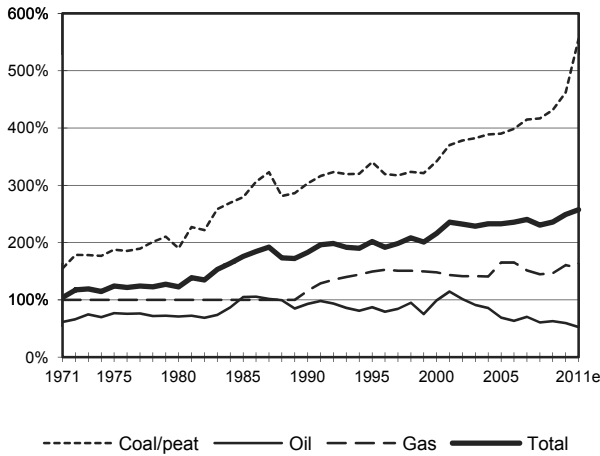
**Figure 1. Energy production**



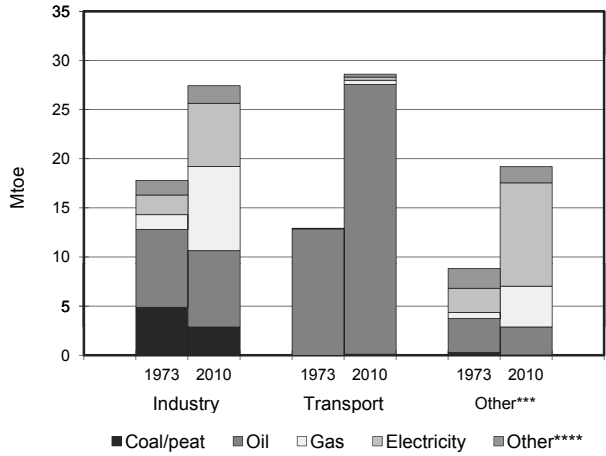
**Figure 2. Total primary energy supply\***



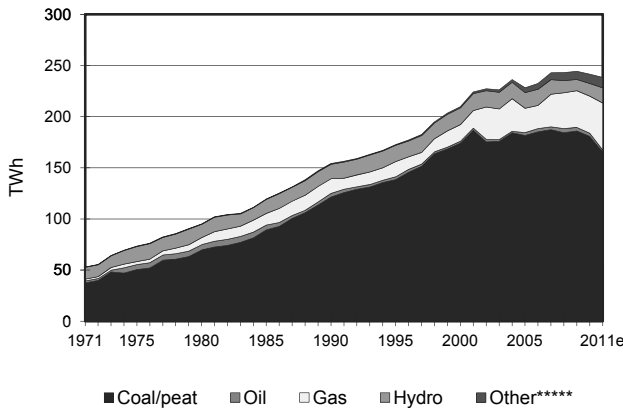
**Figure 3. Energy self-sufficiency**



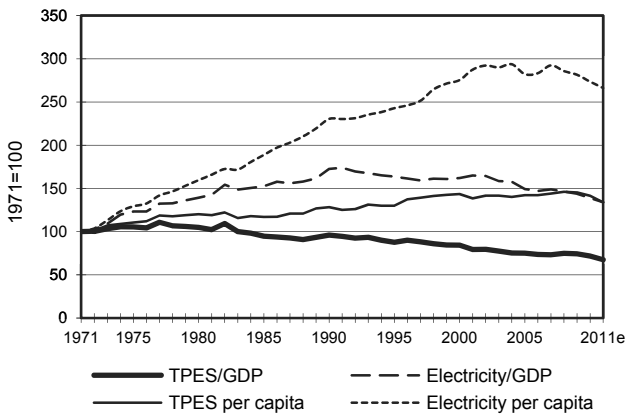
**Figure 4. Breakdown of sectorial final consumption by source in 1973 and 2010\*\***



**Figure 5. Electricity generation by fuel**



**Figure 6. Selected indicators**



\* Excluding electricity trade.  
 \*\* Includes non-energy use.  
 \*\*\* Includes residential, commercial and public services, agriculture/forestry, fishing and non-specified.  
 \*\*\*\* Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.  
 \*\*\*\*\* Includes geothermal, solar, wind, biofuels and waste, etc.

## Austria : 2009

Million tonnes of oil equivalent

<b>SUPPLY AND CONSUMPTION</b>	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	0.00	1.06	-	1.43	-	3.52	0.33	5.11	-	0.00	11.45
Imports	2.77	7.71	6.01	9.50	-	-	-	0.82	1.68	-	28.49
Exports	-0.01	-0.00	-2.20	-3.10	-	-	-	-0.36	-1.61	-	-7.28
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-0.62	-	-	-	-	-	-	-	-0.62
Stock changes	0.12	0.02	-0.05	-0.37	-	-	-	-0.00	-	-	-0.28
<b>TPES</b>	<b>2.87</b>	<b>8.79</b>	<b>3.14</b>	<b>7.47</b>	<b>-</b>	<b>3.52</b>	<b>0.33</b>	<b>5.56</b>	<b>0.07</b>	<b>0.00</b>	<b>31.76</b>
Transfers	-	-0.02	0.04	-	-	-	-	-	-	-	0.02
Statistical differences	0.00	-0.00	-	-0.00	-	-	-	0.00	-	-0.00	0.00
Electricity plants	-0.96	-	-0.12	-1.05	-	-3.52	-0.17	-0.63	4.94	-0.00	-1.51
CHP plants	-0.15	-	-0.23	-1.16	-	-	-	-0.85	0.76	1.07	-0.57
Heat plants	-	-	-0.06	-0.31	-	-	-0.03	-0.41	-	0.59	-0.21
Blast furnaces	-0.66	-	-0.13	-	-	-	-	-	-	-	-0.79
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB plants	-0.05	-	-	-	-	-	-	-	-	-	-0.05
Oil refineries	-	-8.77	8.74	-	-	-	-	-	-	-	-0.03
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-0.00	-	-	-0.00
Energy industry own use	-0.53	-	-0.58	-0.45	-	-	-	-	-0.41	-	-1.97
Losses	-0.01	-	-	..	-	-	-	-	-0.29	-0.13	-0.43
<b>TFC</b>	<b>0.52</b>	<b>-</b>	<b>10.81</b>	<b>4.50</b>	<b>-</b>	<b>-</b>	<b>0.13</b>	<b>3.68</b>	<b>5.07</b>	<b>1.52</b>	<b>26.23</b>
<b>INDUSTRY</b>	<b>0.45</b>	<b>-</b>	<b>0.74</b>	<b>2.37</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.41</b>	<b>2.29</b>	<b>0.25</b>	<b>7.52</b>
Iron and steel	0.21	-	0.06	0.38	-	-	-	0.01	0.32	0.00	0.99
Chemical and petrochem.	0.01	-	0.03	0.34	-	-	-	0.15	0.32	0.06	0.91
Non-ferrous metals	0.00	-	0.01	0.10	-	-	-	0.00	0.07	0.00	0.19
Non-metallic minerals	0.16	-	0.09	0.31	-	-	-	0.25	0.18	0.00	0.99
Transport equipment	-	-	0.00	0.04	-	-	-	0.00	0.07	0.03	0.15
Machinery	-	-	0.04	0.19	-	-	-	0.02	0.29	0.03	0.58
Mining and quarrying	-	-	0.01	0.04	-	-	-	0.00	0.08	0.00	0.13
Food and tobacco	0.00	-	0.07	0.28	-	-	-	0.01	0.18	0.03	0.57
Paper, pulp and printing	0.06	-	0.02	0.48	-	-	-	0.51	0.39	0.02	1.48
Wood and wood products	-	-	0.01	0.07	-	-	-	0.36	0.15	0.05	0.63
Construction	-	-	0.38	0.04	-	-	-	0.05	0.06	0.01	0.54
Textile and leather	-	-	0.01	0.05	-	-	-	0.00	0.05	0.00	0.10
Non-specified	-	-	0.01	0.05	-	-	-	0.04	0.15	0.01	0.25
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>6.87</b>	<b>0.18</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.49</b>	<b>0.29</b>	<b>-</b>	<b>7.83</b>
Domestic aviation	-	-	0.04	-	-	-	-	-	-	-	0.04
Road	-	-	6.77	0.00	-	-	-	0.48	-	-	7.26
Rail	-	-	0.05	-	-	-	-	0.00	0.15	-	0.20
Pipeline transport	-	-	-	0.18	-	-	-	-	0.01	-	0.19
Domestic navigation	-	-	0.01	-	-	-	-	0.00	-	-	0.01
Non-specified	-	-	-	-	-	-	-	0.00	0.13	-	0.13
<b>OTHER</b>	<b>0.06</b>	<b>-</b>	<b>1.82</b>	<b>1.60</b>	<b>-</b>	<b>-</b>	<b>0.13</b>	<b>1.78</b>	<b>2.49</b>	<b>1.28</b>	<b>9.16</b>
Residential	0.05	-	1.24	1.22	-	-	0.08	1.51	1.52	0.64	6.27
Comm. and public services	0.00	-	0.34	0.37	-	-	0.05	0.07	0.90	0.63	2.36
Agriculture/forestry	0.00	-	0.24	0.01	-	-	0.00	0.21	0.07	0.01	0.54
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	<b>0.01</b>	<b>-</b>	<b>1.37</b>	<b>0.34</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.72</b>
in industry/transf./energy	0.01	-	1.34	0.34	-	-	-	-	-	-	1.70
<i>of which: feedstocks</i>	<i>0.01</i>	<i>-</i>	<i>0.83</i>	<i>0.34</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>1.18</i>
in transport	-	-	0.02	-	-	-	-	-	-	-	0.02
in other	-	-	0.00	-	-	-	-	-	-	-	0.00
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>5.04</b>	<b>-</b>	<b>1.14</b>	<b>12.34</b>	<b>-</b>	<b>40.91</b>	<b>2.02</b>	<b>4.86</b>	<b>-</b>	<b>0.02</b>	<b>66.32</b>
Electricity plants	4.65	-	0.56	6.90	-	40.91	2.02	2.41	-	0.02	57.46
CHP plants	0.39	-	0.58	5.44	-	-	-	2.45	-	-	8.86
<b>Heat generated - PJ</b>	<b>3.14</b>	<b>-</b>	<b>6.89</b>	<b>30.14</b>	<b>-</b>	<b>-</b>	<b>0.54</b>	<b>28.66</b>	<b>-</b>	<b>0.15</b>	<b>69.51</b>
CHP plants	3.14	-	5.06	19.76	-	-	-	16.72	-	-	44.67
Heat plants	-	-	1.83	10.38	-	-	0.54	11.95	-	0.15	24.84

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Austria : 2010

Million tonnes of oil equivalent											
<b>SUPPLY AND CONSUMPTION</b>	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	0.00	1.03	-	1.49	-	3.30	0.38	5.56	-	0.00	11.76
Imports	3.01	7.12	6.69	10.19	-	-	-	0.91	1.71	-	29.63
Exports	-0.01	-0.04	-2.17	-4.08	-	-	-	-0.44	-1.51	-	-8.26
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-0.67	-	-	-	-	-	-	-	-0.67
Stock changes	0.41	0.10	0.25	0.61	-	-	-	0.01	-	-	1.38
<b>TPES</b>	<b>3.41</b>	<b>8.20</b>	<b>4.10</b>	<b>8.21</b>	<b>-</b>	<b>3.30</b>	<b>0.38</b>	<b>6.03</b>	<b>0.20</b>	<b>0.00</b>	<b>33.84</b>
Transfers	-	-0.01	0.02	-	-	-	-	-	-	-	0.01
Statistical differences	-0.03	-0.00	-	-0.00	-	-	-	0.00	-	-	-0.03
Electricity plants	-1.27	-	-0.10	-1.06	-	-3.30	-0.19	-0.67	4.90	-0.00	-1.70
CHP plants	-0.14	-	-0.28	-1.40	-	-	-	-0.91	0.94	1.23	-0.56
Heat plants	-	-	-0.05	-0.38	-	-	-0.03	-0.48	-	0.67	-0.26
Blast furnaces	-0.74	-	-0.19	-	-	-	-	-	-	-	-0.93
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB plants	-0.06	-	-	-	-	-	-	-	-	-	-0.06
Oil refineries	-	-8.19	8.13	-	-	-	-	-	-	-	-0.06
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-0.00	-	-	-0.00
Energy industry own use	-0.66	-	-0.56	-0.45	-	-	-	-	-0.48	-	-2.14
Losses	-0.02	-	-	-	-	-	-	-	-0.29	-0.15	-0.46
<b>TFC</b>	<b>0.50</b>	<b>-</b>	<b>11.08</b>	<b>4.91</b>	<b>-</b>	<b>-</b>	<b>0.17</b>	<b>3.97</b>	<b>5.27</b>	<b>1.74</b>	<b>27.65</b>
<b>INDUSTRY</b>	<b>0.43</b>	<b>-</b>	<b>0.65</b>	<b>2.41</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.51</b>	<b>2.30</b>	<b>0.25</b>	<b>7.54</b>
Iron and steel	0.25	-	0.01	0.34	-	-	-	0.01	0.31	0.01	0.93
Chemical and petrochem.	0.01	-	0.03	0.34	-	-	-	0.18	0.34	0.06	0.96
Non-ferrous metals	0.00	-	0.01	0.09	-	-	-	-	0.07	0.00	0.17
Non-metallic minerals	0.09	-	0.09	0.31	-	-	-	0.30	0.16	0.00	0.94
Transport equipment	-	-	0.00	0.05	-	-	-	0.00	0.06	0.03	0.14
Machinery	-	-	0.04	0.20	-	-	-	0.03	0.29	0.03	0.60
Mining and quarrying	-	-	0.01	0.05	-	-	-	0.00	0.10	0.00	0.16
Food and tobacco	0.00	-	0.06	0.29	-	-	-	0.01	0.17	0.03	0.57
Paper, pulp and printing	0.07	-	0.03	0.55	-	-	-	0.62	0.41	0.02	1.70
Wood and wood products	-	-	0.01	0.07	-	-	-	0.29	0.15	0.04	0.56
Construction	-	-	0.33	0.04	-	-	-	0.04	0.05	0.01	0.48
Textile and leather	-	-	0.01	0.04	-	-	-	0.00	0.04	0.00	0.09
Non-specified	-	-	0.01	0.05	-	-	-	0.03	0.14	0.01	0.25
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>7.12</b>	<b>0.14</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.47</b>	<b>0.30</b>	<b>-</b>	<b>8.03</b>
Domestic aviation	-	-	0.03	-	-	-	-	-	-	-	0.03
Road	-	-	7.02	0.00	-	-	-	0.47	-	-	7.50
Rail	-	-	0.05	-	-	-	-	0.00	0.15	-	0.21
Pipeline transport	-	-	-	0.14	-	-	-	-	0.01	-	0.15
Domestic navigation	-	-	0.01	-	-	-	-	0.00	-	-	0.01
Non-specified	-	-	-	-	-	-	-	0.00	0.13	-	0.13
<b>OTHER</b>	<b>0.06</b>	<b>-</b>	<b>1.92</b>	<b>1.98</b>	<b>-</b>	<b>-</b>	<b>0.17</b>	<b>1.99</b>	<b>2.68</b>	<b>1.49</b>	<b>10.29</b>
Residential	0.05	-	1.38	1.34	-	-	0.10	1.69	1.55	0.78	6.90
Comm. and public services	0.00	-	0.29	0.62	-	-	0.07	0.08	1.06	0.70	2.82
Agriculture/forestry	0.00	-	0.25	0.02	-	-	0.00	0.23	0.07	0.01	0.57
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	<b>0.02</b>	<b>-</b>	<b>1.40</b>	<b>0.38</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.79</b>
in industry/transf./energy	0.02	-	1.37	0.38	-	-	-	-	-	-	1.76
of which: feedstocks	0.01	-	0.89	0.38	-	-	-	-	-	-	1.28
in transport	-	-	0.03	-	-	-	-	-	-	-	0.03
in other	-	-	0.00	-	-	-	-	-	-	-	0.00
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>6.70</b>	<b>-</b>	<b>1.28</b>	<b>14.35</b>	<b>-</b>	<b>38.41</b>	<b>2.15</b>	<b>5.03</b>	<b>-</b>	<b>0.02</b>	<b>67.94</b>
Electricity plants	6.31	-	0.51	7.13	-	38.41	2.15	2.44	-	0.02	56.97
CHP plants	0.39	-	0.77	7.22	-	-	-	2.59	-	-	10.97
<b>Heat generated - PJ</b>	<b>3.07</b>	<b>-</b>	<b>7.46</b>	<b>35.05</b>	<b>-</b>	<b>-</b>	<b>0.54</b>	<b>33.38</b>	<b>-</b>	<b>0.16</b>	<b>79.64</b>
CHP plants	3.07	-	6.02	22.59	-	-	-	19.65	-	-	51.32
Heat plants	-	-	1.44	12.46	-	-	0.54	13.72	-	0.16	28.32

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Austria

## Estimated energy supply balance for 2011

Million tonnes of oil equivalent											
SUPPLY	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	0.00	0.97	-	1.46	-	2.90	0.41	5.01	-	0.00	10.75
Imports	3.21	7.79	6.00	12.01	-	-	-	0.84	2.15	-	32.00
Exports	-0.01	-0.04	-2.28	-3.98	-	-	-	-0.40	-1.44	-	-8.15
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-0.70	-	-	-	-	-	-	-	-0.70
Stock changes	0.35	0.21	-0.11	-1.71	-	-	-	-0.01	-	-	-1.27
<b>TPES</b>	<b>3.55</b>	<b>8.93</b>	<b>2.91</b>	<b>7.77</b>	<b>-</b>	<b>2.90</b>	<b>0.41</b>	<b>5.44</b>	<b>0.71</b>	<b>0.00</b>	<b>32.62</b>
Electricity and Heat Output											
Elec. generated - TWh	7.31	-	1.00	11.68	-	33.72	2.19	6.32	-	0.02	62.24
Heat generated - PJ	2.94	-	5.11	24.99	-	-	0.58	35.99	-	0.16	69.77

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1960	1971	1980	1990	2000	2009	2010	2011e
Energy production (Mtoe)	7.4	7.4	7.6	8.1	9.8	11.5	11.8	10.8
Net imports (Mtoe)	3.8	11.6	16.1	17.3	19.1	21.2	21.4	23.9
Total primary energy supply (Mtoe)	10.9	18.8	23.2	24.8	28.6	31.8	33.8	32.6
Net oil imports (Mtoe)	0.6	7.8	11.0	9.7	11.0	11.5	11.6	11.5
Oil supply (Mtoe)	3.0	10.0	12.1	10.4	11.7	11.9	12.3	11.8
Electricity consumption (TWh)*	12.8	24.1	35.4	46.9	56.7	66.6	70.1	70.7
GDP (billion 2005 USD)	76.4 e	127.3	172.8	215.3	280.6	319.8	327.2	337.4
GDP PPP (billion 2005 USD)	69.3 e	115.5	156.8	195.3	254.6	290.1	296.8	306.1
Population (millions)	7.05 e	7.50	7.55	7.68	8.01	8.36	8.39	8.38
Industrial production index (2005=100)	17.90	32.70	45.50	59.70	85.40	103.10	110.20	118.30
Total self-sufficiency**	0.6752	0.3915	0.3296	0.3271	0.3425	0.3605	0.3475	0.3294
Coal and peat self-sufficiency**	0.3642	0.2543	0.2306	0.1556	0.0814	0.0001	0.0001	0.0001
Oil self-sufficiency**	0.8370	0.2617	0.1260	0.1165	0.0930	0.0885	0.0834	0.0822
Natural gas self-sufficiency**	1.0000	0.5768	0.4019	0.2115	0.2351	0.1917	0.1809	0.1874
TPES/GDP (toe per thousand 2005 USD)	0.1426 e	0.1478	0.1340	0.1154	0.1018	0.0993	0.1034	0.0967
TPES/GDP PPP (toe per thousand 2005 USD)	0.1572 e	0.1630	0.1477	0.1272	0.1122	0.1095	0.1140	0.1066
TPES/population (toe per capita)	1.5464 e	2.5083	3.0672	3.2355	3.5644	3.7979	4.0344	3.8944
Net oil imports/GDP (toe per thousand 2005 USD)	0.0073 e	0.0613	0.0636	0.0450	0.0391	0.0360	0.0354	0.0340
Oil supply/GDP (toe per thousand 2005 USD)	0.0391 e	0.0789	0.0699	0.0482	0.0418	0.0373	0.0376	0.0351
Oil supply/population (toe per capita)	0.4236 e	1.3390	1.6004	1.3509	1.4646	1.4269	1.4664	1.4137
Elect. cons./GDP (kWh per 2005 USD)	0.1673 e	0.1893	0.2046	0.2180	0.2020	0.2081	0.2143	0.2094
Elect. cons./population (kWh per capita)	1815 e	3213	4685	6111	7076	7958	8358	8434
Industry cons.***/industrial production (2005=100)	242.07	189.41	155.75	124.72	99.67	99.90	94.39	..
Industry oil cons.***/industrial production (2005=100)	324.83	399.02	199.34	144.05	103.27	97.04	87.59	..

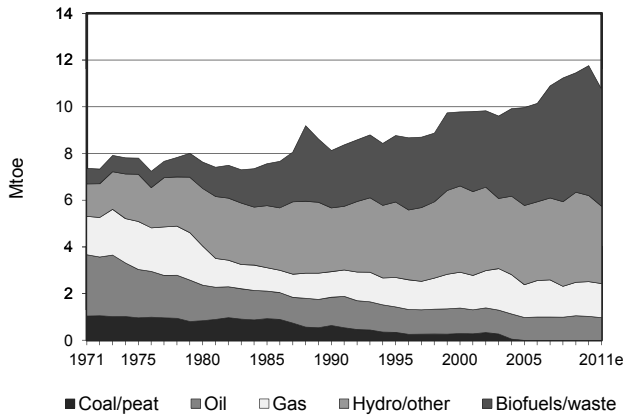
\* Electricity consumption equals domestic supply less losses.

\*\* Production divided by TPES.

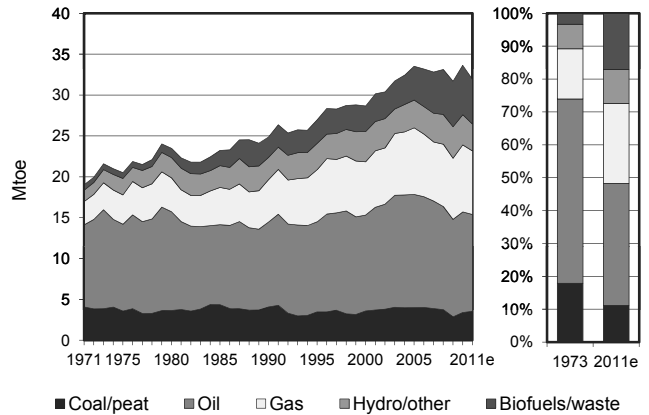
\*\*\* Includes non-energy use.

**Austria**

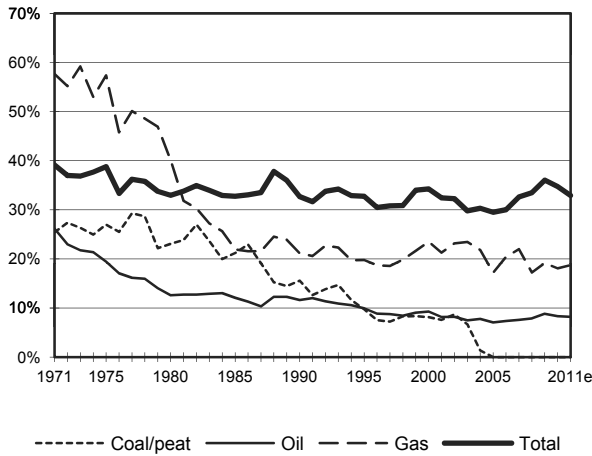
**Figure 1. Energy production**



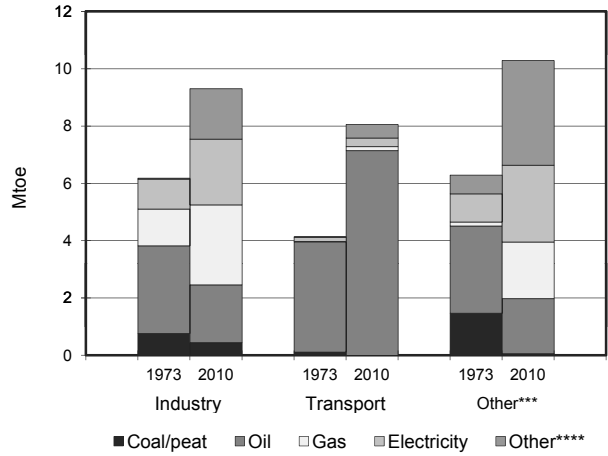
**Figure 2. Total primary energy supply\***



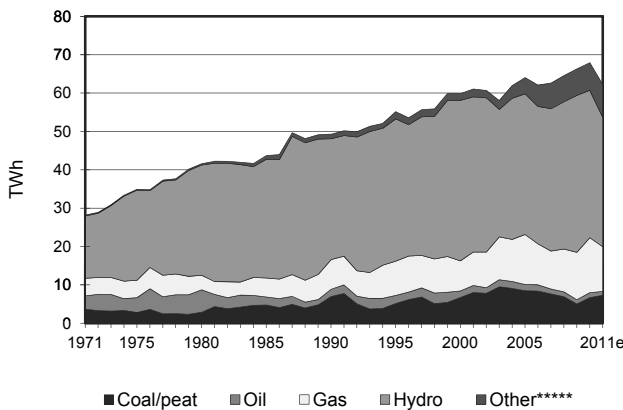
**Figure 3. Energy self-sufficiency**



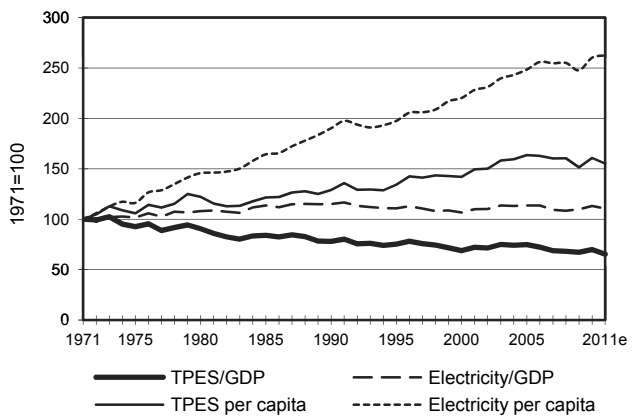
**Figure 4. Breakdown of sectorial final consumption by source in 1973 and 2010\*\***



**Figure 5. Electricity generation by fuel**



**Figure 6. Selected indicators**



\* Excluding electricity trade.  
 \*\* Includes non-energy use.  
 \*\*\* Includes residential, commercial and public services, agriculture/forestry, fishing and non-specified.  
 \*\*\*\* Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.  
 \*\*\*\*\* Includes geothermal, solar, wind, biofuels and waste, etc.

## Belgium : 2009

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	-	0.62	-	-	12.31	0.03	0.12	2.23	-	0.02	15.32
Imports	3.25	34.18	20.37	17.99	-	-	-	0.54	0.82	-	77.14
Exports	-0.81	-4.41	-18.31	-3.03	-	-	-	-0.01	-0.97	-	-27.55
Intl. marine bunkers	-	-	-6.99	-	-	-	-	-	-	-	-6.99
Intl. aviation bunkers	-	-	-1.93	-	-	-	-	-	-	-	-1.93
Stock changes	0.54	0.09	0.34	0.15	-	-	-	-0.01	-	-	1.11
<b>TPES</b>	<b>2.98</b>	<b>30.47</b>	<b>-6.52</b>	<b>15.11</b>	<b>12.31</b>	<b>0.03</b>	<b>0.12</b>	<b>2.76</b>	<b>-0.16</b>	<b>0.02</b>	<b>57.10</b>
Transfers	-	5.12	-4.90	-	-	-	-	-	-	-	0.22
Statistical differences	-0.01	0.17	-0.48	-0.00	-	-	0.00	0.01	-0.01	-	-0.32
Electricity plants	-1.37	-	-0.04	-3.20	-12.31	-0.03	-0.10	-1.06	6.59	-0.02	-11.52
CHP plants	-0.08	-	-0.02	-1.78	-	-	-	-0.50	1.13	0.74	-0.51
Heat plants	-	-	-	-0.00	-	-	-0.00	-	-	0.00	-0.00
Blast furnaces	-0.51 e	-	-	-	-	-	-	-	-	-	-0.51
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB plants	-0.17	-	-	-	-	-	-	-	-	-	-0.17
Oil refineries	-	-35.76	33.40	-	-	-	-	-	-	-	-2.36
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-0.09	-	-1.51	-0.01	-	-	-	-	-0.56	-0.16	-2.35
Losses	-	-	-	-	-	-	-0.00	-	-0.35	-0.01	-0.36
<b>TFC</b>	<b>0.75</b>	<b>-</b>	<b>19.93</b>	<b>10.11</b>	<b>-</b>	<b>-</b>	<b>0.01</b>	<b>1.21</b>	<b>6.64</b>	<b>0.57</b>	<b>39.22</b>
<b>INDUSTRY</b>	<b>0.50</b>	<b>-</b>	<b>0.65</b>	<b>3.99</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.65</b>	<b>2.81</b>	<b>0.47</b>	<b>9.08</b>
Iron and steel	0.24 e	-	0.01	0.45	-	-	-	-	0.45	-	1.15
Chemical and petrochem.	0.00	-	0.01	1.97	-	-	-	0.02	0.75	0.37	3.12
Non-ferrous metals	0.02	-	-	0.10	-	-	-	-	0.11	-	0.23
Non-metallic minerals	0.15	-	0.27	0.29	-	-	-	0.21	0.17	-	1.08
Transport equipment	-	-	0.00	0.09	-	-	-	-	0.09	-	0.18
Machinery	0.00	-	0.02	0.07	-	-	-	0.00	0.15	-	0.24
Mining and quarrying	-	-	-	0.01	-	-	-	-	0.05	-	0.06
Food and tobacco	0.05	-	0.05	0.53	-	-	-	0.02	0.40	0.03	1.08
Paper, pulp and printing	0.03	-	0.01	0.15	-	-	-	0.31	0.20	0.05	0.75
Wood and wood products	-	-	-	0.01	-	-	-	0.10	0.07	-	0.18
Construction	-	-	0.06	0.20	-	-	-	-	0.11	-	0.37
Textile and leather	0.00	-	0.00	0.10	-	-	-	-	0.11	0.00	0.21
Non-specified	0.01	-	0.22	0.04	-	-	-	-	0.15	0.01	0.43
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>8.71</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.29</b>	<b>0.15</b>	<b>-</b>	<b>9.14</b>
Domestic aviation	-	-	0.00	-	-	-	-	-	-	-	0.00
Road	-	-	8.50	-	-	-	-	0.29	-	-	8.78
Rail	-	-	0.03	-	-	-	-	-	0.14	-	0.18
Pipeline transport	-	-	-	-	-	-	-	-	0.01	-	0.01
Domestic navigation	-	-	0.17	-	-	-	-	-	-	-	0.17
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>0.24</b>	<b>-</b>	<b>4.18</b>	<b>5.27</b>	<b>-</b>	<b>-</b>	<b>0.01</b>	<b>0.27</b>	<b>3.68</b>	<b>0.11</b>	<b>13.75</b>
Residential	0.23	-	2.75	3.31	-	-	0.01	0.23	1.74	0.01	8.28
Comm. and public services	-	-	0.95	1.72	-	-	0.00	0.01	1.85	0.07	4.60
Agriculture/forestry	-	-	0.43	0.23	-	-	0.00	0.03	0.09	0.02	0.81
Fishing	-	-	-	-	-	-	-	-	0.00	-	0.00
Non-specified	0.01	-	0.05	-	-	-	-	-	0.01	-	0.06
<b>NON-ENERGY USE</b>	<b>0.01</b>	<b>-</b>	<b>6.39</b>	<b>0.85</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>7.25</b>
in industry/transf./energy	0.01	-	6.33	0.85	-	-	-	-	-	-	7.19
of which: feedstocks	0.01	-	5.50	0.85	-	-	-	-	-	-	6.36
in transport	-	-	0.01	-	-	-	-	-	-	-	0.01
in other	-	-	0.05	-	-	-	-	-	-	-	0.05
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>6.15</b>	<b>-</b>	<b>0.28</b>	<b>29.31</b>	<b>47.22</b>	<b>0.33</b>	<b>1.16</b>	<b>5.26</b>	<b>-</b>	<b>0.08</b>	<b>89.80</b>
Electricity plants	5.95	-	0.16	18.24	47.22	0.33	1.16	3.49	-	0.06	76.61
CHP plants	0.20	-	0.12	11.07	-	-	-	1.77	-	0.03	13.19
<b>Heat generated - PJ</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>27.61</b>	<b>-</b>	<b>-</b>	<b>0.09</b>	<b>3.40</b>	<b>-</b>	<b>0.89</b>	<b>31.98</b>
CHP plants	-	-	-	27.54	-	-	-	3.40	-	0.89	31.83
Heat plants	-	-	-	0.07	-	-	0.09	-	-	-	0.16

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.



## Belgium : 2010

Million tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	-	0.73	-	-	12.49	0.03	0.18	2.54	-	0.07	16.04
Imports	3.82	35.87	20.93	19.54	-	-	-	0.61	1.07	-	81.84
Exports	-0.68	-4.83	-18.23	-2.75	-	-	-	-0.04	-1.02	-	-27.56
Intl. marine bunkers	-	-	-7.60	-	-	-	-	-	-	-	-7.60
Intl. aviation bunkers	-	-	-1.54	-	-	-	-	-	-	-	-1.54
Stock changes	0.05	-0.06	-0.47	0.17	-	-	-	-0.01	-	-	-0.32
<b>TPES</b>	<b>3.19</b>	<b>31.71</b>	<b>-6.91</b>	<b>16.96</b>	<b>12.49</b>	<b>0.03</b>	<b>0.18</b>	<b>3.11</b>	<b>0.05</b>	<b>0.07</b>	<b>60.86</b>
Transfers	-	4.31	-4.09	-	-	-	-	-	-	-	0.21
Statistical differences	-0.03	0.20	-1.06	-0.06	-	-	-	0.01	-	-	-0.93
Electricity plants	-1.25	-	-0.03	-3.32	-12.49	-0.03	-0.16	-1.22	6.83	-0.07	-11.74
CHP plants	-0.08	-	-0.05	-1.97	-	-	-	-0.51	1.24	0.85	-0.53
Heat plants	-	-	-	-0.00	-	-	-0.00	-	-	0.00	-0.00
Blast furnaces	-0.69	-	-	-	-	-	-	-	-	-	-0.69
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB plants	-0.20	-	-	-	-	-	-	-	-	-	-0.20
Oil refineries	-	-36.21	33.94	-	-	-	-	-	-	-	-2.27
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-0.15	-	-1.74	-0.01	-	-	-	-	-0.58	-0.17	-2.65
Losses	-	-	-	-	-	-	-0.00	-	-0.37	-0.01	-0.38
<b>TFC</b>	<b>0.79</b>	<b>-</b>	<b>20.06</b>	<b>11.60</b>	<b>-</b>	<b>-</b>	<b>0.01</b>	<b>1.40</b>	<b>7.16</b>	<b>0.67</b>	<b>41.68</b>
<b>INDUSTRY</b>	<b>0.66</b>	<b>-</b>	<b>0.61</b>	<b>4.62</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.74</b>	<b>3.28</b>	<b>0.55</b>	<b>10.46</b>
Iron and steel	0.33	-	0.01	0.56	-	-	-	-	0.51	-	1.42
Chemical and petrochem.	-	-	0.01	2.43	-	-	-	0.02	1.16	0.47	4.08
Non-ferrous metals	0.00	-	0.00	0.11	-	-	-	-	0.15	-	0.27
Non-metallic minerals	0.25	-	0.16	0.20	-	-	-	0.21	0.09	-	0.91
Transport equipment	-	-	0.01	0.11	-	-	-	-	0.09	-	0.21
Machinery	-	-	0.02	0.08	-	-	-	0.00	0.16	-	0.27
Mining and quarrying	-	-	-	0.11	-	-	-	-	0.10	-	0.21
Food and tobacco	0.03	-	0.08	0.55	-	-	-	0.01	0.41	0.03	1.10
Paper, pulp and printing	0.02	-	0.02	0.12	-	-	-	0.39	0.22	0.05	0.83
Wood and wood products	-	-	-	0.02	-	-	-	0.10	0.06	-	0.18
Construction	-	-	0.06	0.19	-	-	-	-	0.12	-	0.38
Textile and leather	-	-	0.00	0.11	-	-	-	-	0.11	0.00	0.22
Non-specified	0.02	-	0.24	0.04	-	-	-	-	0.09	0.00	0.40
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>8.18</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.36</b>	<b>0.15</b>	<b>-</b>	<b>8.69</b>
Domestic aviation	-	-	0.00	-	-	-	-	-	-	-	0.00
Road	-	-	7.98	-	-	-	-	0.36	-	-	8.35
Rail	-	-	0.03	-	-	-	-	-	0.14	-	0.18
Pipeline transport	-	-	-	-	-	-	-	-	0.01	-	0.01
Domestic navigation	-	-	0.16	-	-	-	-	-	-	-	0.16
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>0.13</b>	<b>-</b>	<b>4.53</b>	<b>6.11</b>	<b>-</b>	<b>-</b>	<b>0.01</b>	<b>0.29</b>	<b>3.74</b>	<b>0.12</b>	<b>14.94</b>
Residential	0.12	-	3.01	3.82	-	-	0.01	0.26	1.74	0.01	8.97
Comm. and public services	-	-	1.09	1.95	-	-	0.00	0.01	1.91	0.08	5.03
Agriculture/forestry	-	-	0.44	0.29	-	-	-	0.03	0.07	0.01	0.84
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	0.01	-	-	0.04	-	-	0.01	-	0.01	0.03	0.10
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>6.73</b>	<b>0.86</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>7.59</b>
in industry/transf./energy	-	-	6.69	0.86	-	-	-	-	-	-	7.56
of which: feedstocks	-	-	5.77	0.86	-	-	-	-	-	-	6.64
in transport	-	-	0.02	-	-	-	-	-	-	-	0.02
in other	-	-	0.02	-	-	-	-	-	-	-	0.02
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>5.95</b>	<b>-</b>	<b>0.41</b>	<b>31.42</b>	<b>47.94</b>	<b>0.31</b>	<b>1.85</b>	<b>5.63</b>	<b>-</b>	<b>0.26</b>	<b>93.76</b>
Electricity plants	5.69	-	0.14	19.40	47.94	0.31	1.85	3.80	-	0.13	79.26
CHP plants	0.26	-	0.26	12.02	-	-	-	1.83	-	0.13	14.51
<b>Heat generated - PJ</b>	<b>-</b>	<b>-</b>	<b>0.52</b>	<b>31.44</b>	<b>-</b>	<b>-</b>	<b>0.09</b>	<b>3.53</b>	<b>-</b>	<b>2.73</b>	<b>38.31</b>
CHP plants	-	-	0.52	31.37	-	-	-	3.53	-	2.73	38.15
Heat plants	-	-	-	0.07	-	-	0.09	-	-	-	0.16

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Belgium

## Estimated energy supply balance for 2011

Million tonnes of oil equivalent											
SUPPLY	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	-	0.24	-	-	12.57	0.02	0.35	2.54	-	0.06	15.78
Imports	3.26	32.73	20.47	16.36	-	-	-	0.55	1.13	-	74.51
Exports	-0.52	-3.62	-18.62	-2.14	-	-	-	..	-0.92	-	-25.82
Intl. marine bunkers	-	-	-7.22	-	-	-	-	-	-	-	-7.22
Intl. aviation bunkers	-	-	-1.29	-	-	-	-	-	-	-	-1.29
Stock changes	-0.07	-0.11	0.11	0.06	-	-	-	..	-	-	-0.01
<b>TPES</b>	<b>2.68</b>	<b>29.24</b>	<b>-6.56</b>	<b>14.28</b>	<b>12.57</b>	<b>0.02</b>	<b>0.35</b>	<b>3.10</b>	<b>0.22</b>	<b>0.06</b>	<b>55.95</b>
Electricity and Heat Output											
Elec. generated - TWh	5.46	-	0.43	23.80	48.23	0.20	3.84	5.97	-	0.22	88.15
Heat generated - PJ	-	-	0.55	23.82	-	-	0.09	3.72	-	2.38	30.56

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1960	1971	1980	1990	2000	2009	2010	2011e
Energy production (Mtoe)	14.0	6.8	8.1	13.1	13.7	15.3	16.0	15.8
Net imports (Mtoe)	8.2	37.0	42.3	40.1	51.1	49.6	54.3	48.7
Total primary energy supply (Mtoe)	23.1	39.7	46.8	48.3	58.5	57.1	60.9	56.0
Net oil imports (Mtoe)	7.7	28.8	26.4	22.6	30.1	31.8	33.7	31.0
Oil supply (Mtoe)	7.0	24.8	23.3	18.0	23.3	24.0	24.8	22.7
Electricity consumption (TWh)*	14.4	31.1	48.3	63.6	84.6	85.3	91.4	87.6
GDP (billion 2005 USD)	103.2 e	170.8	229.3	279.8	348.6	391.1	399.9	407.5
GDP PPP (billion 2005 USD)	92.2 e	152.7	205.0	250.1	311.6	349.6	357.5	364.2
Population (millions)	9.13 e	9.66	9.86	9.97	10.25	10.79	10.88	10.95
Industrial production index (2005=100)	28.80	47.70	58.50	70.60	76.80	103.80	115.90	122.40
Total self-sufficiency**	0.6070	0.1726	0.1730	0.2714	0.2347	0.2682	0.2636	0.2820
Coal and peat self-sufficiency**	0.8737	0.6692	0.4131	0.1117	0.0261	-	-	-
Oil self-sufficiency**	..	..	-	-	-	0.0258	0.0296	0.0106
Natural gas self-sufficiency**	1.0000	0.0080	0.0037	0.0012	0.0002	-	-	-
TPES/GDP (toe per thousand 2005 USD)	0.2235 e	0.2322	0.2039	0.1725	0.1678	0.1460	0.1522	0.1373
TPES/GDP PPP (toe per thousand 2005 USD)	0.2501 e	0.2597	0.2281	0.1930	0.1878	0.1634	0.1702	0.1536
TPES/population (toe per capita)	2.5270 e	4.1055	4.7437	4.8439	5.7104	5.2921	5.5921	5.1108
Net oil imports/GDP (toe per thousand 2005 USD)	0.0750 e	0.1686	0.1151	0.0808	0.0864	0.0814	0.0843	0.0760
Oil supply/GDP (toe per thousand 2005 USD)	0.0683 e	0.1453	0.1018	0.0642	0.0667	0.0612	0.0620	0.0557
Oil supply/population (toe per capita)	0.7720 e	2.5698	2.3673	1.8013	2.2705	2.2194	2.2784	2.0718
Elect. cons./GDP (kWh per 2005 USD)	0.1399 e	0.1822	0.2104	0.2273	0.2425	0.2182	0.2285	0.2151
Elect. cons./population (kWh per capita)	1581 e	3221	4894	6380	8252	7908	8397	8005
Industry cons.***/industrial production (2005=100)	141.00	166.69	130.78	106.77	141.90	87.56	86.83	..
Industry oil cons.***/industrial production (2005=100)	111.86	203.93	99.68	77.56	129.20	88.25	82.64	..

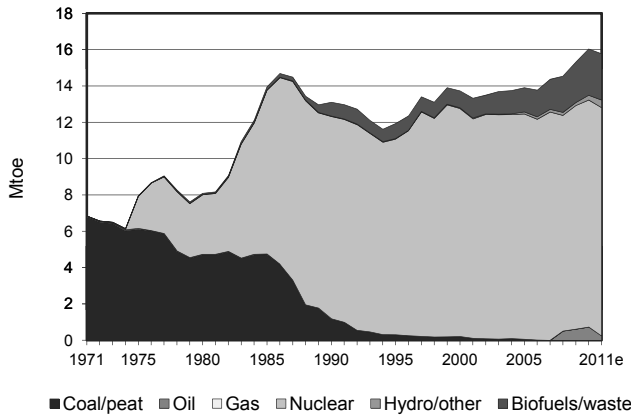
\* Electricity consumption equals domestic supply less losses.

\*\* Production divided by TPES.

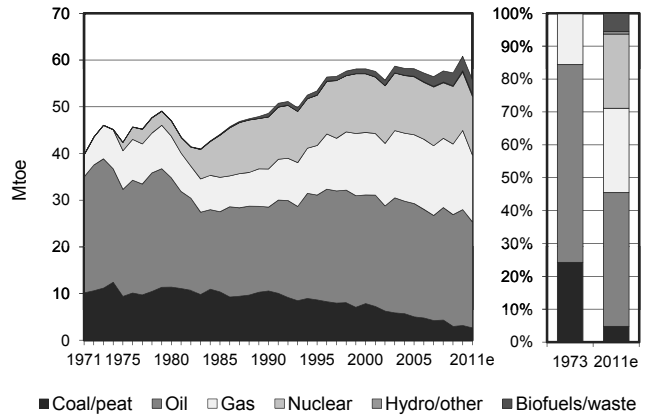
\*\*\* Includes non-energy use.

## Belgium

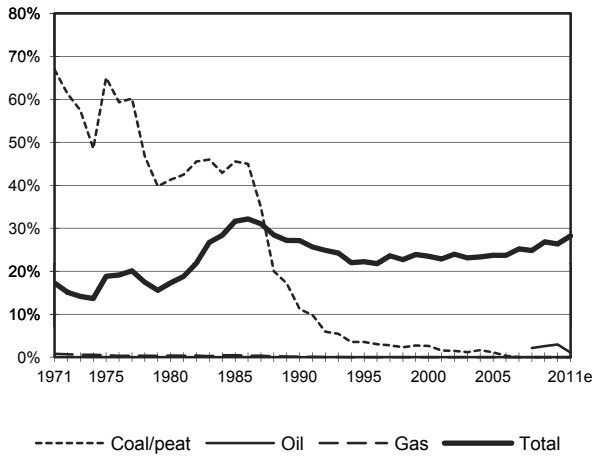
**Figure 1. Energy production**



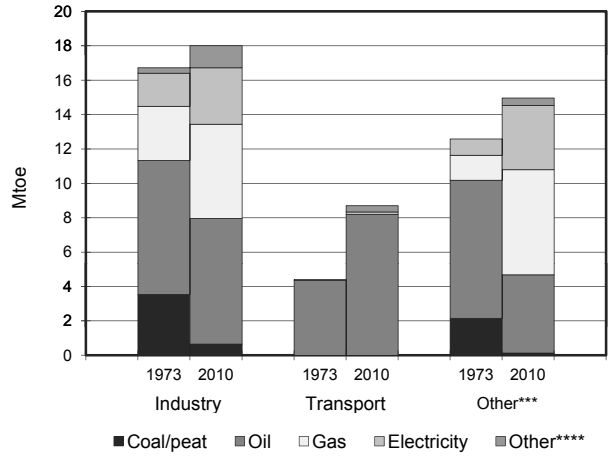
**Figure 2. Total primary energy supply\***



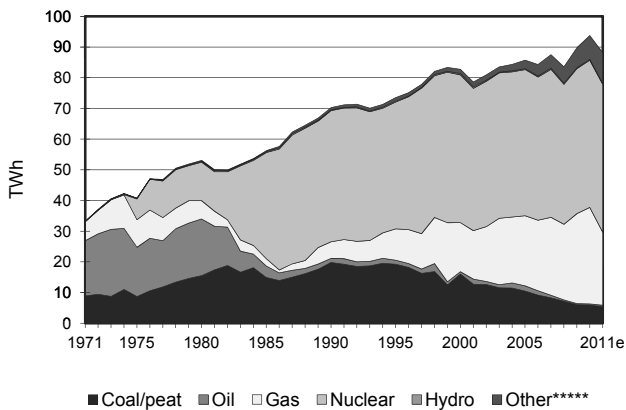
**Figure 3. Energy self-sufficiency**



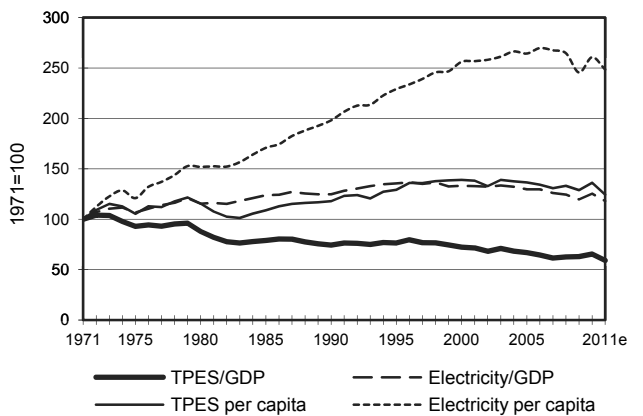
**Figure 4. Breakdown of sectorial final consumption by source in 1973 and 2010\*\***



**Figure 5. Electricity generation by fuel**



**Figure 6. Selected indicators**



\* Excluding electricity trade.

\*\* Includes non-energy use.

\*\*\* Includes residential, commercial and public services, agriculture/forestry, fishing and non-specified.

\*\*\*\* Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.

\*\*\*\*\* Includes geothermal, solar, wind, biofuels and waste, etc.

## Canada : 2009

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	30.69	156.30	-	135.34	23.48	31.70	0.58	12.06 e	-	-	390.15
Imports	7.29	40.80	12.02	17.06	-	-	-	0.27	1.56	-	79.01
Exports	-16.93	-102.30	-20.80	-78.66	-	-	-	-0.43	-4.45	-	-223.56
Intl. marine bunkers	-	-	-0.66	-	-	-	-	-	-	-	-0.66
Intl. aviation bunkers	-	-	-0.79	-	-	-	-	-	-	-	-0.79
Stock changes	1.16	0.19	0.63	4.62	-	-	-	-	-	-	6.60
<b>TPES</b>	<b>22.22</b>	<b>94.99</b>	<b>-9.60</b>	<b>78.37</b>	<b>23.48</b>	<b>31.70</b>	<b>0.58</b>	<b>11.90</b>	<b>-2.89</b>	<b>-</b>	<b>250.75</b>
Transfers	-	-2.32	5.83	-	-	-	-	-	-	-	3.51
Statistical differences	2.18	1.99	0.36	0.30	-	-	-	-	-	-0.05	4.78
Electricity plants	-20.15	-	-2.34	-7.14	-23.48	-31.70	-0.58	-1.73 e	51.84	-	-35.29
CHP plants	-	-	-0.06	-2.47	-	-	-	-0.04 e	0.96 e	0.90 e	-0.71
Heat plants	-	-	-	-	-	-	-	-0.06	-	0.03 e	-0.03
Blast furnaces	-0.69 e	-	-	-	-	-	-	-	-	-	-0.69
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB plants	-0.12	-	-	-	-	-	-	-	-	-	-0.12
Oil refineries	-	-95.24	100.38	-0.59	-	-	-	-	-	-	4.55
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	0.59	-	-1.96	-	-	-	-	-	-	-1.37
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-0.05	-	-9.87	-14.61	-	-	-	-0.00 e	-3.84	-	-28.37
Losses	-	-	-	-	-	-	-	-	-6.06	-0.00	-6.06
<b>TFC</b>	<b>3.38</b>	<b>-</b>	<b>84.72</b>	<b>51.91</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>10.05</b>	<b>40.01</b>	<b>0.88</b>	<b>190.95</b>
<b>INDUSTRY</b>	<b>2.63</b>	<b>-</b>	<b>6.21</b>	<b>20.57</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>6.94</b>	<b>13.93</b>	<b>0.88</b>	<b>51.16</b>
Iron and steel	1.39 e	-	0.00	1.29	-	-	-	0.00 e	0.65	-	3.34
Chemical and petrochem.	-	-	0.00	3.29	-	-	-	-	1.56	0.30	5.15
Non-ferrous metals	-	-	0.03	0.50	-	-	-	-	4.45	-	4.98
Non-metallic minerals	-	-	0.01	0.04	-	-	-	0.11 e	0.16	-	0.32
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	0.32	-	3.04	9.14	-	-	-	-	1.57	-	14.07
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper, pulp and printing	-	-	0.36	1.69	-	-	-	6.83	3.51	0.11	12.50
Wood and wood products	-	-	0.58	-	-	-	-	-	-	-	0.58
Construction	-	-	1.10	0.31	-	-	-	-	-	-	1.41
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	0.92	-	1.09	4.31	-	-	-	-	2.03	0.46	8.81
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>53.65</b>	<b>2.72</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.79</b>	<b>0.33</b>	<b>-</b>	<b>57.49</b>
Domestic aviation	-	-	4.34	-	-	-	-	-	-	-	4.34
Road	-	-	45.90	0.04	-	-	-	0.79	-	-	46.73
Rail	-	-	1.47	-	-	-	-	-	-	-	1.47
Pipeline transport	-	-	0.02	2.68	-	-	-	-	0.27	-	2.97
Domestic navigation	-	-	1.93	-	-	-	-	-	-	-	1.93
Non-specified	-	-	-	-	-	-	-	-	0.06	-	0.06
<b>OTHER</b>	<b>0.00</b>	<b>-</b>	<b>7.79</b>	<b>25.64</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2.33</b>	<b>25.74</b>	<b>0.00</b>	<b>61.50</b>
Residential	0.00	-	2.87	14.19	-	-	-	2.32	12.75	0.00	32.14
Comm. and public services	-	-	2.53	10.93	-	-	-	0.00 e	12.17	0.00	25.64
Agriculture/forestry	-	-	2.39	0.51	-	-	-	0.00 e	0.82	0.00	3.72
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	<b>0.75</b>	<b>-</b>	<b>17.07</b>	<b>2.98</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>20.80</b>
in industry/transf./energy	0.75	-	14.10	2.98	-	-	-	-	-	-	17.83
<i>of which: feedstocks</i>	-	-	10.20	2.98	-	-	-	-	-	-	13.18
in transport	-	-	0.05	-	-	-	-	-	-	-	0.05
in other	-	-	2.92	-	-	-	-	-	-	-	2.92
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>86.20</b>	<b>-</b>	<b>10.38</b>	<b>44.11</b>	<b>90.09</b>	<b>368.65</b>	<b>6.77</b>	<b>7.74</b>	<b>-</b>	<b>-</b>	<b>613.94</b>
Electricity plants	86.20	-	10.37	33.09	90.09	368.65	6.77	7.58 e	-	-	602.75
CHP plants	-	-	0.01	11.02	-	-	-	0.16 e	-	-	11.19
<b>Heat generated - PJ</b>	<b>-</b>	<b>-</b>	<b>1.70</b>	<b>35.25</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2.16</b>	<b>-</b>	<b>-</b>	<b>39.11</b>
CHP plants	-	-	1.70	35.25	-	-	-	0.75 e	-	-	37.70
Heat plants	-	-	-	-	-	-	-	1.41	-	-	1.41

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Canada : 2010

Million tonnes of oil equivalent											
<b>SUPPLY AND CONSUMPTION</b>	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	33.76	165.02	-	132.31	23.63	30.23	0.84	12.06	-	-	397.83
Imports	7.59	39.32	10.94	18.73	-	-	-	0.54	1.61	-	78.72
Exports	-19.68	-104.79	-20.46	-79.13	-	-	-	-0.55	-3.82	-	-228.44
Intl. marine bunkers	-	-	-0.68	-	-	-	-	-	-	-	-0.68
Intl. aviation bunkers	-	-	-1.07	-	-	-	-	-	-	-	-1.07
Stock changes	0.62	-1.53	-0.31	6.69	-	-	-	-	-	-	5.48
<b>TPES</b>	<b>22.29</b>	<b>98.01</b>	<b>-11.58</b>	<b>78.59</b>	<b>23.63</b>	<b>30.23</b>	<b>0.84</b>	<b>12.04</b>	<b>-2.21</b>	<b>-</b>	<b>251.84</b>
Transfers	-	-3.23	7.30	-	-	-	-	-	-	-	4.07
Statistical differences	2.31	1.25	3.76	1.52	-	-	-	-	-	-0.05	8.78
Electricity plants	-20.46	-	-1.79	-7.69	-23.63	-30.23	-0.84	-1.95	50.74	-	-35.84
CHP plants	-	-	-0.03	-3.82	-	-	-	-0.04	1.53	0.42	-1.95
Heat plants	-	-	-	-	-	-	-	-0.06	-	0.03	-0.03
Blast furnaces	-0.76 e	-	-	-	-	-	-	-	-	-	-0.76
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB plants	-0.27	-	-	-	-	-	-	-	-	-	-0.27
Oil refineries	-	-96.83	102.07	-0.80	-	-	-	-	-	-	4.44
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	0.80	-	-1.93	-	-	-	-	-	-	-1.13
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-0.03	-	-9.54	-13.95	-	-	-	-0.00	-4.00	-	-27.52
Losses	-	-	-	-	-	-	-	-	-5.65	-	-5.65
<b>TFC</b>	<b>3.09</b>	<b>-</b>	<b>90.17</b>	<b>51.92</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>9.98</b>	<b>40.42</b>	<b>0.40</b>	<b>195.98</b>
<b>INDUSTRY</b>	<b>2.94</b>	<b>-</b>	<b>7.22</b>	<b>22.40</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>6.43</b>	<b>14.29</b>	<b>0.40</b>	<b>53.67</b>
Iron and steel	1.53 e	-	0.00	1.36	-	-	-	0.00	0.71	-	3.60
Chemical and petrochem.	-	-	0.00	3.72	-	-	-	-	1.59	0.24	5.56
Non-ferrous metals	-	-	0.03	0.46	-	-	-	-	4.56	-	5.05
Non-metallic minerals	-	-	0.01	0.04	-	-	-	0.13	0.15	-	0.33
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	0.32	-	3.55	10.38	-	-	-	-	1.85	-	16.11
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper, pulp and printing	-	-	0.26	1.65	-	-	-	6.30	3.42	0.02	11.64
Wood and wood products	-	-	0.66	-	-	-	-	-	-	-	0.66
Construction	-	-	1.16	0.40	-	-	-	-	-	-	1.55
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	1.09	-	1.54	4.38	-	-	-	-	2.01	0.15	9.17
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>55.62</b>	<b>2.46</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.08</b>	<b>0.32</b>	<b>-</b>	<b>59.49</b>
Domestic aviation	-	-	4.19	-	-	-	-	-	-	-	4.19
Road	-	-	47.60	0.04	-	-	-	1.08	-	-	48.72
Rail	-	-	1.89	-	-	-	-	-	-	-	1.89
Pipeline transport	-	-	0.01	2.42	-	-	-	-	0.26	-	2.69
Domestic navigation	-	-	1.93	-	-	-	-	-	-	-	1.93
Non-specified	-	-	-	-	-	-	-	-	0.06	-	0.06
<b>OTHER</b>	<b>0.00</b>	<b>-</b>	<b>8.02</b>	<b>24.08</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2.48</b>	<b>25.81</b>	<b>0.00</b>	<b>60.39</b>
Residential	0.00	-	2.64	13.22	-	-	-	2.46	12.65	-	30.98
Comm. and public services	-	-	2.55	10.27	-	-	-	0.02	12.35	0.00	25.18
Agriculture/forestry	-	-	2.83	0.59	-	-	-	0.00	0.81	-	4.23
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	<b>0.14</b>	<b>-</b>	<b>19.31</b>	<b>2.98</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>22.44</b>
in industry/transf./energy	0.14	-	15.84	2.98	-	-	-	-	-	-	18.97
<i>of which: feedstocks</i>	-	-	11.10	2.98	-	-	-	-	-	-	14.08
in transport	-	-	0.05	-	-	-	-	-	-	-	0.05
in other	-	-	3.42	-	-	-	-	-	-	-	3.42
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>87.94</b>	<b>-</b>	<b>7.40</b>	<b>51.92</b>	<b>90.66</b>	<b>351.48</b>	<b>9.74</b>	<b>8.71</b>	<b>-</b>	<b>-</b>	<b>607.84</b>
Electricity plants	87.94	-	7.39	34.29	90.66	351.48	9.74	8.54	-	-	590.03
CHP plants	-	-	0.01	17.63	-	-	-	0.17	-	-	17.81
<b>Heat generated - PJ</b>	<b>-</b>	<b>-</b>	<b>1.09</b>	<b>15.71</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2.15</b>	<b>-</b>	<b>-</b>	<b>18.95</b>
CHP plants	-	-	1.09	15.71	-	-	-	0.74	-	-	17.54
Heat plants	-	-	-	-	-	-	-	1.41	-	-	1.41

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Canada

## Estimated energy supply balance for 2011

Million tonnes of oil equivalent											
SUPPLY	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	33.61	172.74	-	132.80	23.70	32.37	1.73	11.92	-	-	408.87
Imports	5.89	34.98	12.86	24.98	-	-	-	0.76	1.25	-	80.71
Exports	-20.05	-118.63	-18.94	-76.76	-	-	-	-0.57	-4.47	-	-239.41
Intl. marine bunkers	-	-	-0.60	-	-	-	-	-	-	-	-0.60
Intl. aviation bunkers	-	-	-1.02	-	-	-	-	-	-	-	-1.02
Stock changes	-0.03	1.05	-0.20	6.69	-	-	-	-	-	-	7.51
<b>TPES</b>	<b>19.43</b>	<b>90.14</b>	<b>-7.89</b>	<b>87.71</b>	<b>23.70</b>	<b>32.37</b>	<b>1.73</b>	<b>12.11</b>	<b>-3.22</b>	<b>-</b>	<b>256.08</b>
Electricity and Heat Output											
Elec. generated - TWh	80.81	-	7.72	53.48	90.94	376.40	20.12	6.38	-	-	635.83
Heat generated - PJ	-	-	1.09	15.71	-	-	-	2.15	-	-	18.95

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1960	1971	1980	1990	2000	2009	2010	2011e
Energy production (Mtoe)	57.1	155.8	207.4	273.7	372.7	390.2	397.8	408.9
Net imports (Mtoe)	20.4	-12.3	-11.9	-59.3	-127.7	-144.6	-149.7	-158.7
Total primary energy supply (Mtoe)	76.1	141.4	192.6	208.5	251.4	250.8	251.8	256.1
Net oil imports (Mtoe)	16.2	1.8	8.4	-14.9	-39.0	-70.3	-75.0	-89.7
Oil supply (Mtoe)	42.0	71.9	88.5	76.5	87.1	85.4	86.4	82.3
Electricity consumption (TWh)*	100.8	201.3	313.9	447.7	522.8	509.9	516.6	532.8
GDP (billion 2005 USD)	233.0 e	397.7	568.3	749.9	999.9	1166.4	1203.9	1233.5
GDP PPP (billion 2005 USD)	232.6 e	397.1	567.4	748.7	998.4	1164.6	1202.0	1231.6
Population (millions)	18.19 e	21.96	24.52	27.69	30.69	33.72	34.11	34.44
Industrial production index (2005=100)	..	41.80	55.60	68.30	98.90	83.30	88.40	91.60
Total self-sufficiency**	0.7498	1.1025	1.0769	1.3125	1.4823	1.5560	1.5797	1.5967
Coal and peat self-sufficiency**	0.4563	0.5959	0.9659	1.5638	1.0871	1.3815	1.5145	1.7302
Oil self-sufficiency**	0.6334	1.0069	0.9449	1.2305	1.4745	1.8303	1.9092	2.1002
Natural gas self-sufficiency**	1.3103	1.6447	1.3967	1.6181	1.9979	1.7269	1.6834	1.5140
TPES/GDP (toe per thousand 2005 USD)	0.3268 e	0.3554	0.3389	0.2781	0.2515	0.2150	0.2092	0.2076
TPES/GDP PPP (toe per thousand 2005 USD)	0.3273 e	0.3560	0.3395	0.2785	0.2518	0.2153	0.2095	0.2079
TPES/population (toe per capita)	4.1853 e	6.4362	7.8565	7.5311	8.1940	7.4361	7.3833	7.4365
Net oil imports/GDP (toe per thousand 2005 USD)	0.0693 e	0.0045	0.0148	-0.0198	-0.0390	-0.0602	-0.0623	-0.0727
Oil supply/GDP (toe per thousand 2005 USD)	0.1802 e	0.1808	0.1558	0.1020	0.0871	0.0732	0.0718	0.0667
Oil supply/population (toe per capita)	2.3075 e	3.2743	3.6108	2.7631	2.8384	2.5324	2.5340	2.3886
Elect. cons./GDP (kWh per 2005 USD)	0.4328 e	0.5062	0.5524	0.5970	0.5228	0.4372	0.4291	0.4320
Elect. cons./population (kWh per capita)	5543 e	9167	12804	16168	17037	15123	15145	15474
Industry cons.***/industrial production (2005=100)	..	131.54	139.64	113.69	94.15	104.97	104.13	..
Industry oil cons.***/industrial production (2005=100)	..	137.72	139.12	95.69	79.00	93.03	99.51	..

\* Electricity consumption equals domestic supply less losses.

\*\* Production divided by TPES.

\*\*\* Includes non-energy use.

Canada

Figure 1. Energy production

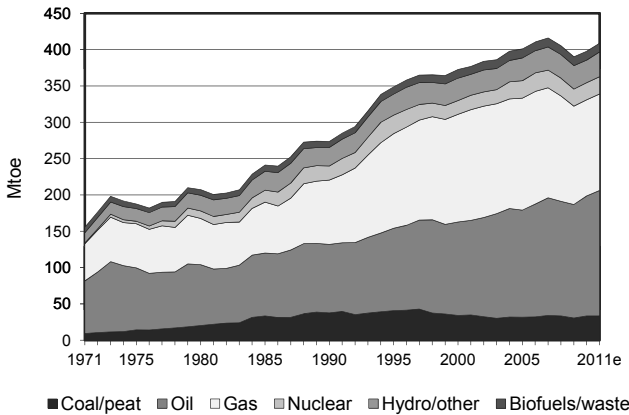


Figure 2. Total primary energy supply\*

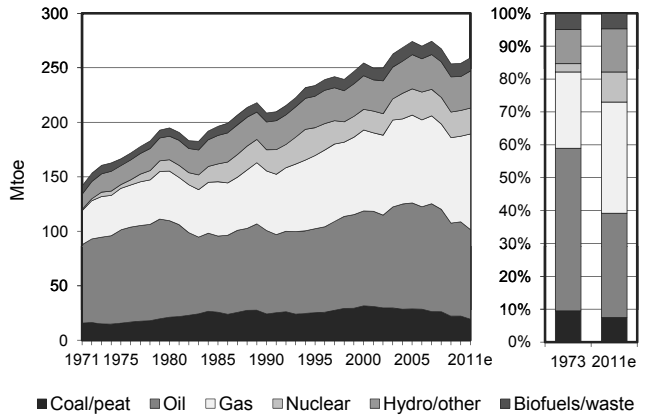


Figure 3. Energy self-sufficiency

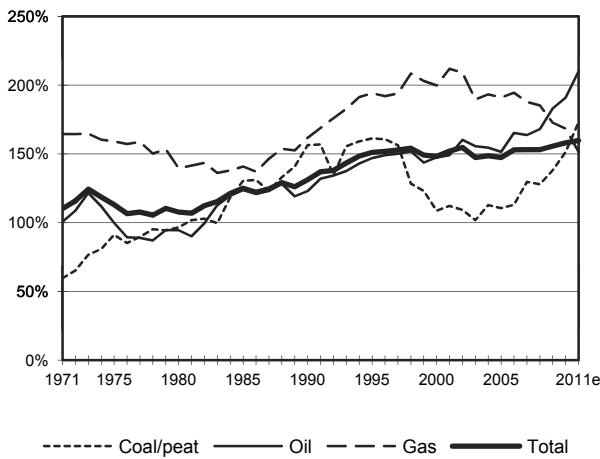


Figure 4. Breakdown of sectorial final consumption by source in 1973 and 2010\*\*

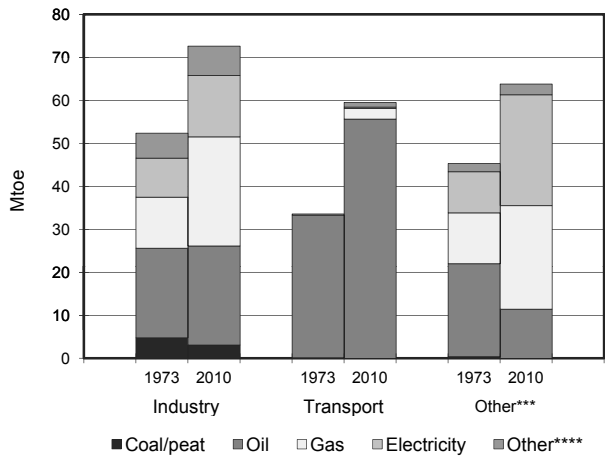


Figure 5. Electricity generation by fuel

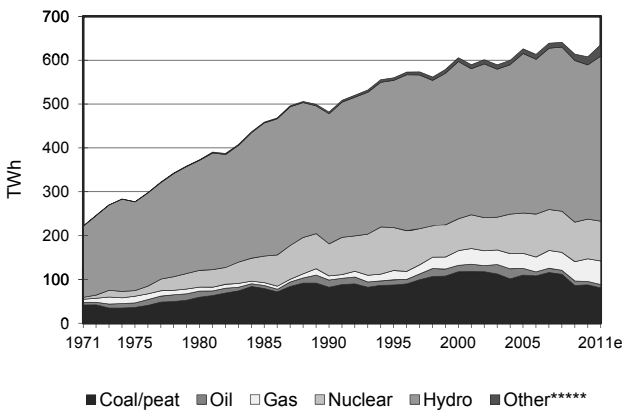
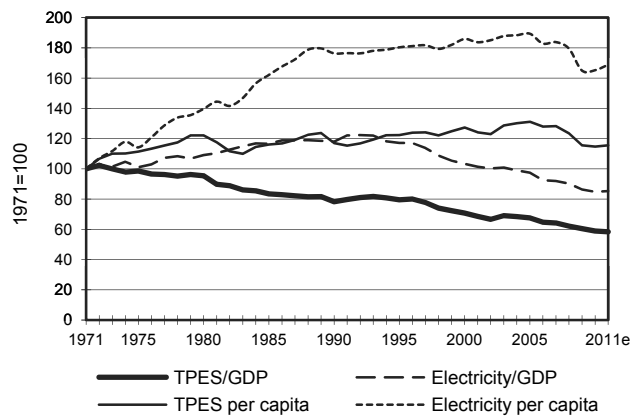


Figure 6. Selected indicators



\* Excluding electricity trade.  
 \*\* Includes non-energy use.  
 \*\*\* Includes residential, commercial and public services, agriculture/forestry, fishing and non-specified.  
 \*\*\*\* Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.  
 \*\*\*\*\* Includes geothermal, solar, wind, biofuels and waste, etc.

## Chile : 2009

Million tonnes of oil equivalent											
<b>SUPPLY AND CONSUMPTION</b>	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	0.24	0.72	-	1.55	-	2.18	0.01	5.51	-	-	10.20
Imports	3.34	10.22	6.94	1.22	-	-	-	-	0.12	-	21.84
Exports	-	-	-1.12	-	-	-	-	-	-	-	-1.12
Intl. marine bunkers	-	-	-0.82	-	-	-	-	-	-	-	-0.82
Intl. aviation bunkers	-	-	-0.44	-	-	-	-	-	-	-	-0.44
Stock changes	-0.05	-0.09	-0.05	0.02	-	-	-	-	-	-	-0.18
<b>TPES</b>	<b>3.52</b>	<b>10.86</b>	<b>4.51</b>	<b>2.79</b>	-	<b>2.18</b>	<b>0.01</b>	<b>5.51</b>	<b>0.12</b>	-	<b>29.48</b>
Transfers	-	0.90	-0.86	-	-	-	-	-	-	-	0.03
Statistical differences	0.39	0.16	1.01	-0.13	-	-	-	-	0.07	-	1.50
Electricity plants	-3.35	-	-2.36	-0.75	-	-2.18	-0.01	-	4.80	-	-3.84
CHP plants	-	-	-0.11	-0.01	-	-	-	-0.73	0.42	-	-0.43
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-0.16 e	-	-0.00	-	-	-	-	-	-	-	-0.16
Gas works	0.02	-	-0.08	0.06	-	-	-	-0.01	-	-	-0.01
Coke/pat. fuel/BKB plants	-0.00	-	-	-	-	-	-	-	-	-	-0.00
Oil refineries	-	-11.91	10.35	-	-	-	-	-	-	-	-1.57
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-0.27 e	-	-	-0.27
Energy industry own use	-0.11	-	-0.80	-0.51	-	-	-	-	-0.21	-	-1.64
Losses	-0.02	-	-	-	-	-	-	-	-0.55	-	-0.57
<b>TFC</b>	<b>0.27</b>	-	<b>11.65</b>	<b>1.45</b>	-	-	-	<b>4.50</b>	<b>4.65</b>	-	<b>22.52</b>
<b>INDUSTRY</b>	<b>0.24</b>	-	<b>3.17</b>	<b>0.15</b>	-	-	-	<b>1.50</b>	<b>3.15</b>	-	<b>8.21</b>
Iron and steel	0.10 e	-	0.01	0.00	-	-	-	-	0.04	-	0.17
Chemical and petrochem.	-	-	0.01	0.02	-	-	-	-	0.04	-	0.07
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	0.03	-	0.23	0.00	-	-	-	0.00	0.04	-	0.31
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	0.04	-	1.60	0.06	-	-	-	-	1.80	-	3.51
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper, pulp and printing	0.01	-	0.26	0.05	-	-	-	1.16	0.45	-	1.91
Wood and wood products	-	-	-	-	-	-	-	-	0.00	-	0.00
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	0.06	-	1.06	0.02	-	-	-	0.34	0.77	-	2.25
<b>TRANSPORT</b>	-	-	<b>6.84</b>	<b>0.02</b>	-	-	-	-	<b>0.04</b>	-	<b>6.89</b>
Domestic aviation	-	-	0.31	-	-	-	-	-	-	-	0.31
Road	-	-	6.00	0.02	-	-	-	-	-	-	6.02
Rail	-	-	0.04	-	-	-	-	-	0.04	-	0.08
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	0.48	-	-	-	-	-	-	-	0.48
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>0.03</b>	-	<b>1.43</b>	<b>0.51</b>	-	-	-	<b>3.00</b>	<b>1.46</b>	-	<b>6.43</b>
Residential	0.01	-	0.96	0.37	-	-	-	3.00 e	0.77	-	5.10
Comm. and public services	0.01	-	0.33	0.13	-	-	-	-	0.68	-	1.16
Agriculture/forestry	-	-	-	-	-	-	-	-	-	-	-
Fishing	0.01	-	0.15	0.01	-	-	-	-	0.01	-	0.17
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	-	-	<b>0.22</b>	<b>0.77</b>	-	-	-	-	-	-	<b>0.99</b>
in industry/transf./energy	-	-	0.22	0.77	-	-	-	-	-	-	0.99
of which: feedstocks	-	-	0.11	0.77	-	-	-	-	-	-	0.88
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>14.90</b>	-	<b>12.15</b>	<b>3.93</b>	-	<b>25.30</b>	<b>0.18</b>	<b>4.27</b>	-	-	<b>60.72</b>
Electricity plants	14.90	-	11.53	3.90	-	25.30	0.18	-	-	-	55.80
CHP plants	-	-	0.62	0.03	-	-	-	4.27	-	-	4.92
<b>Heat generated - PJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.



## Chile : 2010

Million tonnes of oil equivalent											
<b>SUPPLY AND CONSUMPTION</b>	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	0.25	0.61	-	1.55	-	1.87	0.03	4.90	-	-	9.21
Imports	3.81	8.66	7.34	3.01	-	-	-	-	0.08	-	22.90
Exports	-	-	-0.63	-	-	-	-	-	-	-	-0.63
Intl. marine bunkers	-	-	-0.40	-	-	-	-	-	-	-	-0.40
Intl. aviation bunkers	-	-	-0.51	-	-	-	-	-	-	-	-0.51
Stock changes	0.50	-0.00	-0.06	-0.09	-	-	-	-	-	-	0.35
<b>TPES</b>	<b>4.56</b>	<b>9.27</b>	<b>5.74</b>	<b>4.47</b>	-	<b>1.87</b>	<b>0.03</b>	<b>4.90</b>	<b>0.08</b>	-	<b>30.92</b>
Transfers	-	0.84	-0.80	-	-	-	-	-	-	-	0.04
Statistical differences	-0.06	-0.21	0.38	-0.02	-	-	-	-	0.08	-	0.16
Electricity plants	-3.86	-	-1.65	-1.73	-	-1.87	-0.03	-	4.92	-	-4.21
CHP plants	-	-	-0.10	-0.02	-	-	-	-0.37	0.27	-	-0.21
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-0.11 e	-	-	-	-	-	-	-	-	-	-0.11
Gas works	0.02	-	-0.00	-0.01	-	-	-	-0.01	-	-	-0.00
Coke/pat. fuel/BKB plants	-0.01	-	-	-	-	-	-	-	-	-	-0.01
Oil refineries	-	-9.89	8.87	-	-	-	-	-	-	-	-1.02
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-0.27 e	-	-	-0.27
Energy industry own use	-0.09	-	-0.36	-0.33	-	-	-	-	-0.23	-	-1.01
Losses	-0.02	-	-	-	-	-	-	-	-0.43	-	-0.45
<b>TFC</b>	<b>0.42</b>	-	<b>12.08</b>	<b>2.35</b>	-	-	-	<b>4.25</b>	<b>4.71</b>	-	<b>23.82</b>
<b>INDUSTRY</b>	<b>0.40</b>	-	<b>3.02</b>	<b>1.10</b>	-	-	-	<b>1.09</b>	<b>3.08</b>	-	<b>8.70</b>
Iron and steel	0.06 e	-	0.01	0.00	-	-	-	-	0.04	-	0.11
Chemical and petrochem.	-	-	-	0.12	-	-	-	-	0.04	-	0.16
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	0.05	-	0.19	0.00	-	-	-	0.00	0.05	-	0.29
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-	-
Mining and quarrying	0.06	-	1.79	0.76	-	-	-	-	1.88	-	4.50
Food and tobacco	-	-	-	-	-	-	-	-	-	-	-
Paper, pulp and printing	-	-	0.13	0.09	-	-	-	0.73	0.38	-	1.32
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	0.23	-	0.90	0.13	-	-	-	0.36	0.70	-	2.31
<b>TRANSPORT</b>	-	-	<b>7.09</b>	<b>0.02</b>	-	-	-	-	<b>0.04</b>	-	<b>7.14</b>
Domestic aviation	-	-	0.37	-	-	-	-	-	-	-	0.37
Road	-	-	6.26	0.02	-	-	-	-	-	-	6.28
Rail	-	-	0.04	-	-	-	-	-	0.04	-	0.08
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	0.42	-	-	-	-	-	-	-	0.42
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>0.02</b>	-	<b>1.67</b>	<b>0.51</b>	-	-	-	<b>3.16</b>	<b>1.59</b>	-	<b>6.95</b>
Residential	0.01	-	0.93	0.39	-	-	-	3.16 e	0.80	-	5.30
Comm. and public services	0.01	-	0.46	0.12	-	-	-	-	0.78	-	1.37
Agriculture/forestry	-	-	-	-	-	-	-	-	-	-	-
Fishing	0.00	-	0.27	0.00	-	-	-	-	0.01	-	0.29
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	-	-	<b>0.30</b>	<b>0.72</b>	-	-	-	-	-	-	<b>1.02</b>
in industry/transf./energy	-	-	0.30	0.72	-	-	-	-	-	-	1.02
of which: feedstocks	-	-	0.07	0.72	-	-	-	-	-	-	0.79
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>16.87</b>	-	<b>8.47</b>	<b>10.69</b>	-	<b>21.72</b>	<b>0.44</b>	<b>2.25</b>	-	-	<b>60.43</b>
Electricity plants	16.87	-	7.62	10.62	-	21.72	0.44	-	-	-	57.26
CHP plants	-	-	0.85	0.07	-	-	-	2.25	-	-	3.17
<b>Heat generated - PJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Chile

## Estimated energy supply balance for 2011

Million tonnes of oil equivalent											
SUPPLY	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	0.27	0.59	-	1.25	-	1.81	0.03	5.09	-	-	9.03
Imports	4.95	9.39	6.60	3.47	-	-	-	-	0.06	-	24.48
Exports	-	-	-0.42	-	-	-	-	-	-	-	-0.42
Intl. marine bunkers	-	-	-0.48	-	-	-	-	-	-	-	-0.48
Intl. aviation bunkers	-	-	-0.47	-	-	-	-	-	-	-	-0.47
Stock changes	..	0.06	0.22	-	-	-	-	-	-	-	0.28
<b>TPES</b>	<b>5.22</b>	<b>10.04</b>	<b>5.44</b>	<b>4.72</b>	<b>-</b>	<b>1.81</b>	<b>0.03</b>	<b>5.09</b>	<b>0.06</b>	<b>-</b>	<b>32.41</b>
Electricity and Heat Output											
Elec. generated - TWh	20.65	-	6.31	13.82	-	21.01	0.44	3.41	-	-	65.63
Heat generated - PJ	-	-	-	-	-	-	-	-	-	-	-

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1960	1971	1980	1990	2000	2009	2010	2011e
Energy production (Mtoe)	..	5.3	5.8	7.9	8.6	10.2	9.2	9.0
Net imports (Mtoe)	..	4.0	4.0	7.0	17.7	20.7	22.3	24.1
Total primary energy supply (Mtoe)	..	8.7	9.5	14.0	25.2	29.5	30.9	32.4
Net oil imports (Mtoe)	..	3.8	3.4	5.9	11.1	16.0	15.4	15.6
Oil supply (Mtoe)	..	4.9	5.1	6.5	10.5	15.4	15.0	15.5
Electricity consumption (TWh)*	..	7.6	10.3	16.4	38.4	55.7	56.4	61.4
GDP (billion 2005 USD)	..	29.4	35.8	51.8	96.2	131.9	138.7	147.0
GDP PPP (billion 2005 USD)	..	49.4	60.0	86.9	161.5	221.2	232.7	246.6
Population (millions)	..	9.77	11.19	13.18	15.40	16.93	17.09	17.26
Industrial production index (2005=100)	..	..	..	..	80.00	100.50	101.00	106.50
Total self-sufficiency**	..	0.6140	0.6120	0.5659	0.3411	0.3458	0.2979	0.2786
Coal and peat self-sufficiency**	..	0.8555	0.6391	0.5812	0.0792	0.0670	0.0556	0.0513
Oil self-sufficiency**	..	0.3578	0.3612	0.1802	0.0408	0.0469	0.0407	0.0379
Natural gas self-sufficiency**	..	1.0000	1.0000	1.2349	0.3069	0.5550	0.3461	0.2639
TPES/GDP (toe per thousand 2005 USD)	..	0.2959	0.2650	0.2706	0.2616	0.2236	0.2229	0.2205
TPES/GDP PPP (toe per thousand 2005 USD)	..	0.1764	0.1579	0.1613	0.1559	0.1333	0.1329	0.1314
TPES/population (toe per capita)	..	0.8906	0.8467	1.0630	1.6349	1.7417	1.8088	1.8776
Net oil imports/GDP (toe per thousand 2005 USD)	..	0.1306	0.0950	0.1138	0.1149	0.1217	0.1108	0.1059
Oil supply/GDP (toe per thousand 2005 USD)	..	0.1678	0.1417	0.1250	0.1089	0.1165	0.1082	0.1053
Oil supply/population (toe per capita)	..	0.5050	0.4527	0.4910	0.6803	0.9077	0.8780	0.8967
Elect. cons./GDP (kWh per 2005 USD)	..	0.2573	0.2882	0.3173	0.3984	0.4222	0.4068	0.4176
Elect. cons./population (kWh per capita)	..	775	921	1247	2490	3288	3301	3557
Industry cons.***/industrial production (2005=100)	..	..	..	..	116.40	94.21	99.07	..
Industry oil cons.***/industrial production (2005=100)	..	..	..	..	118.76	150.31	146.54	..

\* Electricity consumption equals domestic supply less losses.

\*\* Production divided by TPES.

\*\*\* Includes non-energy use.

Chile

Figure 1. Energy production

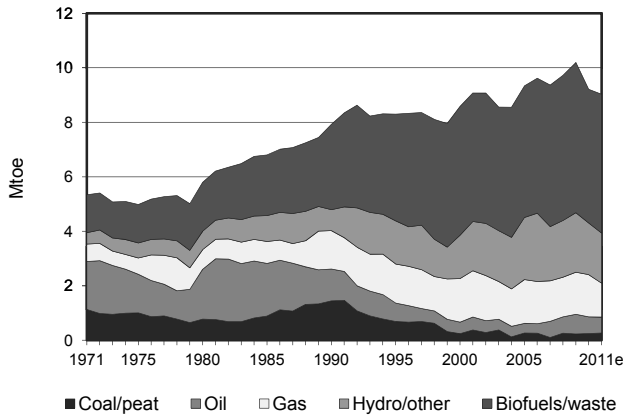


Figure 2. Total primary energy supply\*

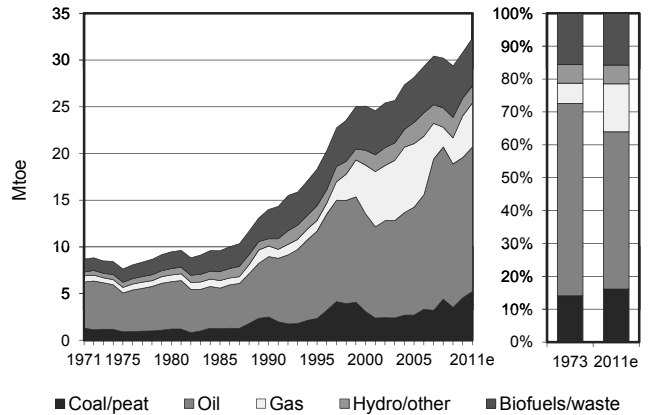


Figure 3. Energy self-sufficiency

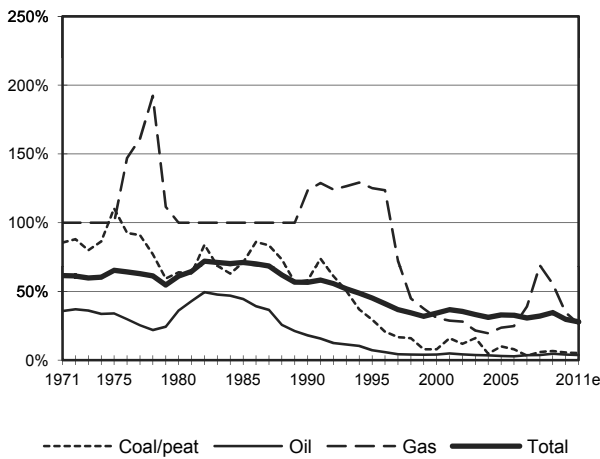


Figure 4. Breakdown of sectorial final consumption by source in 1973 and 2010\*\*

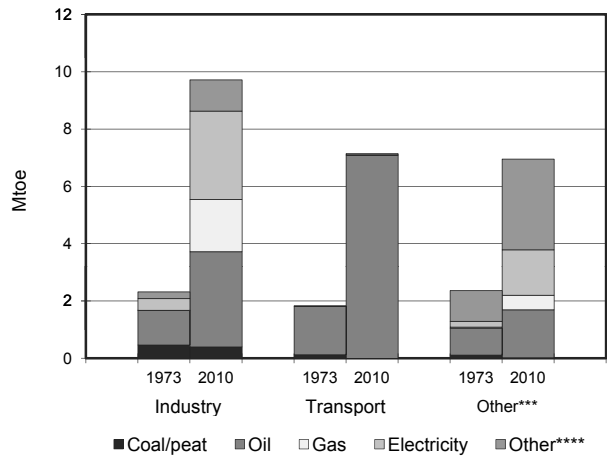


Figure 5. Electricity generation by fuel

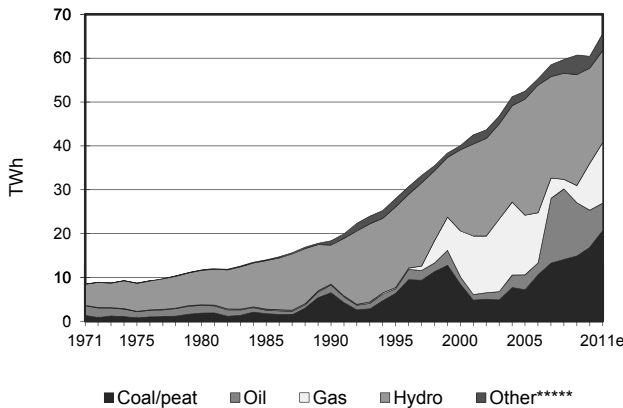
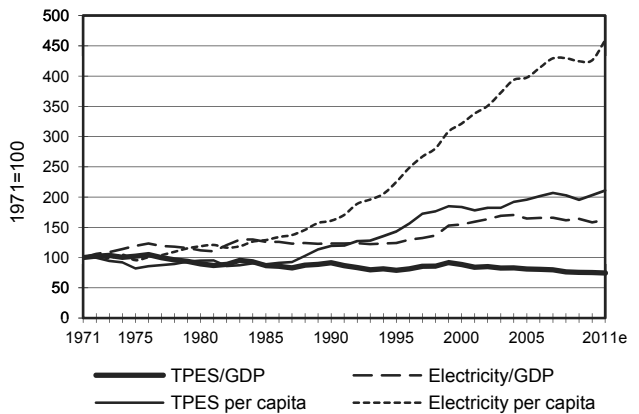


Figure 6. Selected indicators



\* Excluding electricity trade.  
 \*\* Includes non-energy use.  
 \*\*\* Includes residential, commercial and public services, agriculture/forestry, fishing and non-specified.  
 \*\*\*\* Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.  
 \*\*\*\*\* Includes geothermal, solar, wind, biofuels and waste, etc.

## Czech Republic : 2009

Million tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	20.85	0.31	-	0.15	7.11	0.21	0.04	2.54	-	0.02	31.23
Imports	1.92	7.32	3.04	7.93	-	-	-	0.11	0.74	-	21.05
Exports	-5.38	-0.02	-1.13	-0.91	-	-	-	-0.28	-1.91	-	-9.63
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-0.34	-	-	-	-	-	-	-	-0.34
Stock changes	0.20	-0.01	-0.00	-0.44	-	-	-	0.00	-	-	-0.25
<b>TPES</b>	<b>17.59</b>	<b>7.59</b>	<b>1.57</b>	<b>6.72</b>	<b>7.11</b>	<b>0.21</b>	<b>0.04</b>	<b>2.37</b>	<b>-1.17</b>	<b>0.02</b>	<b>42.07</b>
Transfers	-	0.13	-0.11	-	-	-	-	-	-	-	0.01
Statistical differences	0.32	0.01	0.00	-0.02	-	-	-	-	-	-	0.30
Electricity plants	-7.51	-	-0.01	-0.01	-7.09	-0.21	-0.03	-0.18	5.34	-0.00	-9.70
CHP plants	-6.14	-	-0.09	-0.39	-0.02	-	-	-0.25	1.69	2.22	-2.99
Heat plants	-0.10	-	-0.04	-0.56	-	-	-	-0.09	..	0.66	-0.13
Blast furnaces	-0.73 e	-	-	-	-	-	-	-	-	-	-0.73
Gas works	-0.14	-	-	-	-	-	-	-	-	-	-0.14
Coke/pat. fuel/BKB plants	0.01	-	-	-	-	-	-	-	-	-	0.01
Oil refineries	-	-7.80	7.78	-	-	-	-	-	-	-	-0.02
Petrochemical plants	-	0.07	-0.07	-	-	-	-	-	-	-	-0.00
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-0.31	-	-0.27	-0.11	-	-	-	-	-0.74	-0.41	-1.84
Losses	-0.05	-	-	-0.17	-	-	-	-	-0.39	-0.42	-1.03
<b>TFC</b>	<b>2.95</b>	<b>-</b>	<b>8.76</b>	<b>5.46</b>	<b>-</b>	<b>-</b>	<b>0.01</b>	<b>1.85</b>	<b>4.72</b>	<b>2.07</b>	<b>25.83</b>
<b>INDUSTRY</b>	<b>2.13</b>	<b>-</b>	<b>0.43</b>	<b>1.92</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.53</b>	<b>1.88</b>	<b>0.53</b>	<b>7.41</b>
Iron and steel	1.01 e	-	0.02	0.24	-	-	-	0.00	0.27	0.05	1.58
Chemical and petrochem.	0.81	-	0.03	0.18	-	-	-	0.00	0.29	0.19	1.51
Non-ferrous metals	0.00	-	-	0.03	-	-	-	-	0.02	0.00	0.06
Non-metallic minerals	0.14	-	0.04	0.48	-	-	-	0.13	0.17	0.01	0.98
Transport equipment	0.01	-	0.00	0.14	-	-	-	-	0.19	0.04	0.38
Machinery	0.03	-	0.01	0.27	-	-	-	0.00	0.27	0.10	0.67
Mining and quarrying	0.00	-	0.01	0.03	-	-	-	0.00	0.02	0.00	0.06
Food and tobacco	0.03	-	0.02	0.28	-	-	-	0.00	0.14	0.07	0.55
Paper, pulp and printing	0.08	-	0.01	0.09	-	-	-	0.25	0.15	0.02	0.59
Wood and wood products	0.00	-	0.01	0.03	-	-	-	0.13	0.04	0.01	0.21
Construction	0.01	-	0.05	0.06	-	-	-	0.00	0.04	0.02	0.20
Textile and leather	0.01	-	0.00	0.04	-	-	-	0.00	0.06	0.02	0.13
Non-specified	0.00	-	0.22	0.05	-	-	-	0.01	0.21	0.00	0.50
<b>TRANSPORT</b>	<b>0.00</b>	<b>-</b>	<b>5.78</b>	<b>0.07</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.20</b>	<b>0.18</b>	<b>-</b>	<b>6.22</b>
Domestic aviation	-	-	0.03	-	-	-	-	-	-	-	0.03
Road	-	-	5.64	0.01	-	-	-	0.20	-	-	5.84
Rail	0.00	-	0.10	-	-	-	-	-	0.09	-	0.19
Pipeline transport	-	-	-	0.07	-	-	-	-	0.00	-	0.07
Domestic navigation	-	-	0.01	-	-	-	-	-	-	-	0.01
Non-specified	-	-	-	-	-	-	-	-	0.08	-	0.08
<b>OTHER</b>	<b>0.58</b>	<b>-</b>	<b>0.37</b>	<b>3.41</b>	<b>-</b>	<b>-</b>	<b>0.01</b>	<b>1.12</b>	<b>2.67</b>	<b>1.54</b>	<b>9.70</b>
Residential	0.54	-	0.01	2.06	-	-	0.00	1.04	1.26	1.11	6.03
Comm. and public services	0.02	-	0.01	1.25	-	-	0.00	0.06	1.17	0.42	2.94
Agriculture/forestry	0.01	-	0.33	0.05	-	-	-	0.03	0.08	0.01	0.51
Fishing	-	-	-	-	-	-	-	-	0.00	-	0.00
Non-specified	0.00	-	0.02	0.05	-	-	-	-	0.15	0.00	0.22
<b>NON-ENERGY USE</b>	<b>0.24</b>	<b>-</b>	<b>2.19</b>	<b>0.06</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2.49</b>
in industry/transf./energy	0.24	-	2.06	0.06	-	-	-	-	-	-	2.36
of which: feedstocks	-	-	1.60	0.06	-	-	-	-	-	-	1.66
in transport	-	-	0.13	-	-	-	-	-	-	-	0.13
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>48.70</b>	<b>-</b>	<b>0.16</b>	<b>0.98</b>	<b>27.21</b>	<b>2.43</b>	<b>0.38</b>	<b>1.86</b>	<b>-</b>	<b>-</b>	<b>81.70</b>
Electricity plants	31.24	-	0.04	0.04	27.21	2.43	0.38	0.76	-	-	62.09
CHP plants	17.46	-	0.12	0.94	-	-	-	1.09	-	-	19.61
<b>Heat generated - PJ</b>	<b>83.23</b>	<b>-</b>	<b>2.85</b>	<b>28.45</b>	<b>0.99</b>	<b>-</b>	<b>0.22</b>	<b>4.81</b>	<b>-</b>	<b>1.03</b>	<b>121.57</b>
CHP plants	80.04	-	1.42	8.04	0.99	-	0.22	2.11	-	0.94	93.74
Heat plants	3.19	-	1.43	20.41	-	-	-	2.70	-	0.10	27.83

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Czech Republic : 2010

Million tonnes of oil equivalent											
<b>SUPPLY AND CONSUMPTION</b>	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	20.73	0.27	-	0.17	7.32	0.24	0.09	2.77	-	0.03	31.62
Imports	2.20	7.86	2.74	6.97	-	-	-	0.12	0.57	-	20.46
Exports	-5.20	-0.02	-1.61	-0.13	-	-	-	-0.24	-1.86	-	-9.05
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-0.31	-	-	-	-	-	-	-	-0.31
Stock changes	0.78	0.02	0.02	0.57	-	-	-	-0.00	-	-	1.39
<b>TPES</b>	<b>18.52</b>	<b>8.12</b>	<b>0.84</b>	<b>7.58</b>	<b>7.32</b>	<b>0.24</b>	<b>0.09</b>	<b>2.65</b>	<b>-1.29</b>	<b>0.03</b>	<b>44.11</b>
Transfers	-	0.13	-0.12	-	-	-	-	-	-	-	0.01
Statistical differences	0.14	-	-0.00	0.03	-	-	-	-0.00	-	-	0.16
Electricity plants	-8.12	-	-0.01	-0.01	-7.30	-0.24	-0.08	-0.24	5.70	-0.00	-10.30
CHP plants	-6.23	-	-0.07	-0.39	-0.03	-	-	-0.30	1.64	2.38	-3.00
Heat plants	-0.11	-	-0.02	-0.62	-	-	-	-0.07	..	0.70	-0.13
Blast furnaces	-0.78	-	-	-	-	-	-	-	-	-	-0.78
Gas works	-0.10	-	-	-	-	-	-	-	-	-	-0.10
Coke/pat. fuel/BKB plants	-0.01	-	-	-	-	-	-	-	-	-	-0.01
Oil refineries	-	-8.33	8.31	-	-	-	-	-	-	-	-0.02
Petrochemical plants	-	0.07	-0.07	-	-	-	-	-	-	-	-0.00
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-0.32	-	-0.28	-0.10	-	-	-	-	-0.75	-0.40	-1.84
Losses	-0.05	-	-	-0.13	-	-	-	-	-0.38	-0.47	-1.04
<b>TFC</b>	<b>2.92</b>	<b>-</b>	<b>8.57</b>	<b>6.35</b>	<b>-</b>	<b>-</b>	<b>0.01</b>	<b>2.04</b>	<b>4.92</b>	<b>2.25</b>	<b>27.06</b>
<b>INDUSTRY</b>	<b>2.01</b>	<b>-</b>	<b>0.47</b>	<b>2.29</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.54</b>	<b>1.98</b>	<b>0.60</b>	<b>7.90</b>
Iron and steel	0.86	-	0.03	0.28	-	-	-	0.00	0.26	0.07	1.51
Chemical and petrochem.	0.82	-	0.03	0.25	-	-	-	0.00	0.32	0.22	1.64
Non-ferrous metals	0.00	-	-	0.04	-	-	-	-	0.02	0.00	0.06
Non-metallic minerals	0.15	-	0.03	0.53	-	-	-	0.13	0.18	0.02	1.04
Transport equipment	0.01	-	0.00	0.17	-	-	-	-	0.21	0.05	0.44
Machinery	0.03	-	0.01	0.30	-	-	-	0.00	0.29	0.10	0.73
Mining and quarrying	0.00	-	0.00	0.06	-	-	-	-	0.02	0.00	0.08
Food and tobacco	0.03	-	0.02	0.30	-	-	-	0.00	0.15	0.07	0.57
Paper, pulp and printing	0.08	-	0.01	0.10	-	-	-	0.26	0.16	0.02	0.63
Wood and wood products	0.00	-	0.01	0.03	-	-	-	0.13	0.04	0.01	0.22
Construction	0.01	-	0.06	0.08	-	-	-	0.00	0.04	0.02	0.21
Textile and leather	0.01	-	0.00	0.05	-	-	-	0.00	0.06	0.02	0.14
Non-specified	0.00	-	0.27	0.11	-	-	-	0.01	0.23	0.00	0.63
<b>TRANSPORT</b>	<b>0.00</b>	<b>-</b>	<b>5.43</b>	<b>0.07</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.23</b>	<b>0.19</b>	<b>-</b>	<b>5.92</b>
Domestic aviation	-	-	0.03	-	-	-	-	-	-	-	0.03
Road	-	-	5.30	0.01	-	-	-	0.23	-	-	5.54
Rail	0.00	-	0.09	-	-	-	-	-	0.09	-	0.19
Pipeline transport	-	-	-	0.07	-	-	-	-	0.00	-	0.07
Domestic navigation	-	-	0.00	-	-	-	-	-	-	-	0.00
Non-specified	-	-	-	-	-	-	-	-	0.09	-	0.09
<b>OTHER</b>	<b>0.62</b>	<b>-</b>	<b>0.36</b>	<b>3.88</b>	<b>-</b>	<b>-</b>	<b>0.01</b>	<b>1.27</b>	<b>2.75</b>	<b>1.65</b>	<b>10.54</b>
Residential	0.58	-	0.00	2.38	-	-	0.01	1.16	1.29	1.20	6.62
Comm. and public services	0.03	-	0.01	1.38	-	-	0.00	0.07	1.20	0.44	3.13
Agriculture/forestry	0.01	-	0.33	0.06	-	-	-	0.04	0.09	0.01	0.55
Fishing	-	-	-	-	-	-	-	-	0.00	-	0.00
Non-specified	0.00	-	0.02	0.06	-	-	-	-	0.16	0.00	0.25
<b>NON-ENERGY USE</b>	<b>0.29</b>	<b>-</b>	<b>2.31</b>	<b>0.10</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2.69</b>
in industry/transf./energy	0.29	-	2.16	0.10	-	-	-	-	-	-	2.54
<i>of which: feedstocks</i>	-	-	1.73	0.10	-	-	-	-	-	-	1.82
in transport	-	-	0.15	-	-	-	-	-	-	-	0.15
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>50.16</b>	<b>-</b>	<b>0.16</b>	<b>1.07</b>	<b>28.00</b>	<b>2.79</b>	<b>0.95</b>	<b>2.19</b>	<b>-</b>	<b>-</b>	<b>85.32</b>
Electricity plants	33.44	-	0.03	0.06	28.00	2.79	0.95	0.97	-	-	66.24
CHP plants	16.72	-	0.13	1.01	-	-	-	1.22	-	-	19.08
<b>Heat generated - PJ</b>	<b>90.34</b>	<b>-</b>	<b>1.81</b>	<b>30.83</b>	<b>1.07</b>	<b>-</b>	<b>0.32</b>	<b>4.73</b>	<b>0.00</b>	<b>1.24</b>	<b>130.34</b>
CHP plants	86.55	-	1.13	8.24	1.07	-	0.32	2.57	-	1.13	100.99
Heat plants	3.80	-	0.68	22.60	-	-	-	2.16	0.00	0.11	29.35

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Czech Republic

## Estimated energy supply balance for 2011

Million tonnes of oil equivalent											
SUPPLY	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	20.41	0.33	-	0.15	7.39	0.18	0.23	2.99	-	0.03	31.71
Imports	2.17	7.03	3.24	7.64	-	-	-	0.16	0.90	-	21.14
Exports	-4.92	-0.02	-1.56	-0.14	-	-	-	-0.24	-2.37	-	-9.24
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-0.33	-	-	-	-	-	-	-	-0.33
Stock changes	..	0.02	0.04	-0.45	-	-	-	-0.00	-	-	-0.38
<b>TPES</b>	<b>17.67</b>	<b>7.36</b>	<b>1.39</b>	<b>7.21</b>	<b>7.39</b>	<b>0.18</b>	<b>0.23</b>	<b>2.90</b>	<b>-1.47</b>	<b>0.03</b>	<b>42.90</b>
Electricity and Heat Output											
Elec. generated - TWh	49.68	-	0.13	1.42	28.28	2.14	2.52	2.70	-	-	86.86
Heat generated - PJ	89.48	-	1.80	30.95	0.92	-	0.30	4.92	0.01	1.31	129.68

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1960	1971	1980	1990	2000	2009	2010	2011e
Energy production (Mtoe)	..	40.0	41.2	40.9	30.7	31.2	31.6	31.7
Net imports (Mtoe)	..	5.7	6.4	7.6	9.4	11.4	11.4	11.9
Total primary energy supply (Mtoe)	..	45.4	47.0	49.6	41.0	42.1	44.1	42.9
Net oil imports (Mtoe)	..	7.4	10.9	8.6	7.5	9.2	9.0	8.7
Oil supply (Mtoe)	..	7.2	10.8	8.7	7.7	9.2	9.0	8.8
Electricity consumption (TWh)*	..	33.7	47.3	57.9	58.5	64.1	66.5	66.1
GDP (billion 2005 USD)	..	70.7 e	89.8 e	102.0	106.5	144.6	148.6	151.0
GDP PPP (billion 2005 USD)	..	118.3 e	150.2 e	170.7	178.1	242.0	248.6	252.8
Population (millions)	..	9.83	10.33	10.36	10.27	10.49	10.52	10.53
Industrial production index (2005=100)	..	..	..	89.90	74.90	101.60	112.10	119.80
Total self-sufficiency**	..	0.8802	0.8777	0.8255	0.7479	0.7423	0.7169	0.7392
Coal and peat self-sufficiency**	..	1.0570	1.2094	1.1540	1.1607	1.1853	1.1196	1.1554
Oil self-sufficiency**	..	0.0049	0.0218	0.0250	0.0498	0.0333	0.0300	0.0375
Natural gas self-sufficiency**	..	0.4563	0.1220	0.0382	0.0226	0.0217	0.0221	0.0211
TPES/GDP (toe per thousand 2005 USD)	..	0.6421	0.5231 e	0.4861	0.3851	0.2909	0.2969	0.2840
TPES/GDP PPP (toe per thousand 2005 USD)	..	0.3837	0.3126 e	0.2905	0.2301	0.1738	0.1774	0.1697
TPES/population (toe per capita)	..	4.6164	4.5462	4.7834	3.9904	4.0103	4.1939	4.0761
Net oil imports/GDP (toe per thousand 2005 USD)	..	0.1040	0.1213 e	0.0841	0.0706	0.0637	0.0603	0.0575
Oil supply/GDP (toe per thousand 2005 USD)	..	0.1012	0.1207 e	0.0856	0.0725	0.0634	0.0603	0.0580
Oil supply/population (toe per capita)	..	0.7274	1.0495	0.8422	0.7516	0.8740	0.8524	0.8318
Elect. cons./GDP (kWh per 2005 USD)	..	0.4761	0.5264 e	0.5675	0.5495	0.4434	0.4475	0.4373
Elect. cons./population (kWh per capita)	..	3423	4575	5584	5694	6112	6323	6276
Industry cons.***/industrial production (2005=100)	..	..	..	168.97	128.60	83.81	81.11	..
Industry oil cons.***/industrial production (2005=100)	..	..	..	161.44	113.29	80.35	76.88	..

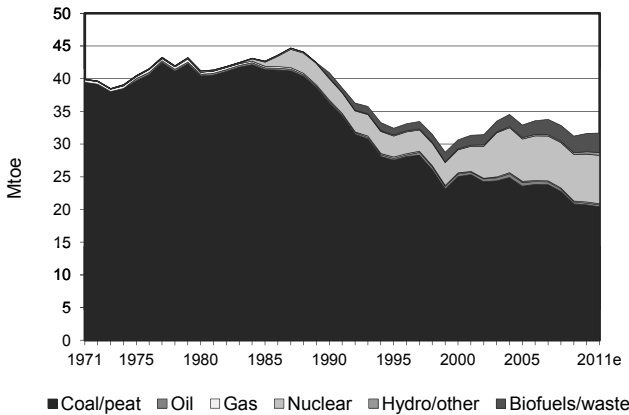
\* Electricity consumption equals domestic supply less losses.

\*\* Production divided by TPES.

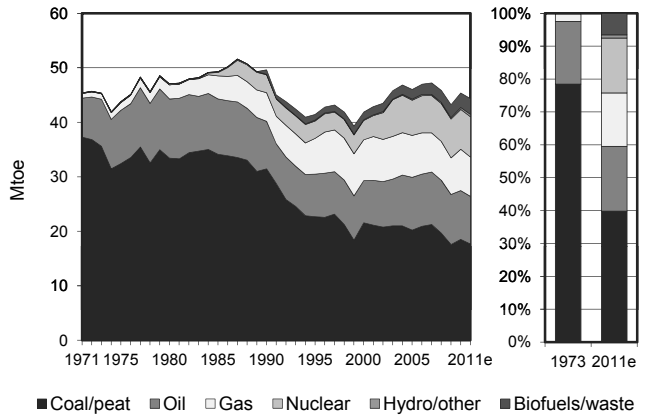
\*\*\* Includes non-energy use.

### Czech Republic

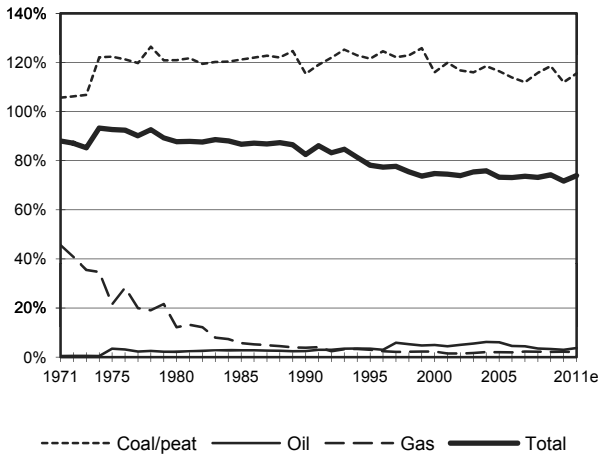
**Figure 1. Energy production**



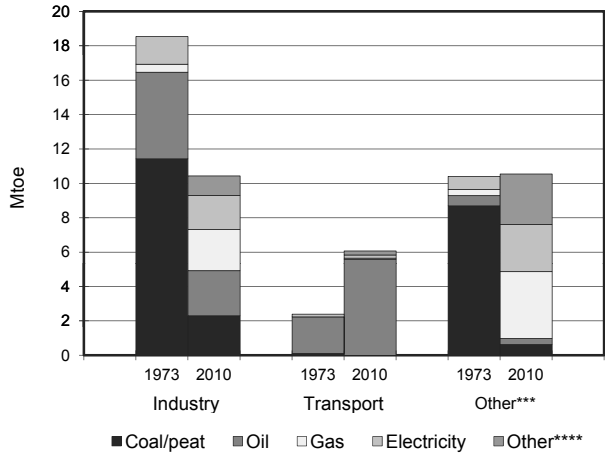
**Figure 2. Total primary energy supply\***



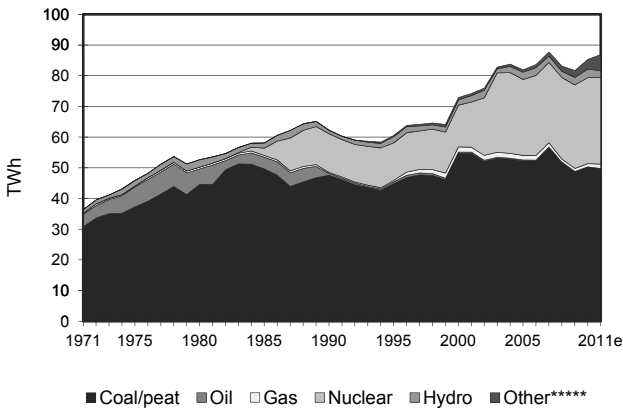
**Figure 3. Energy self-sufficiency**



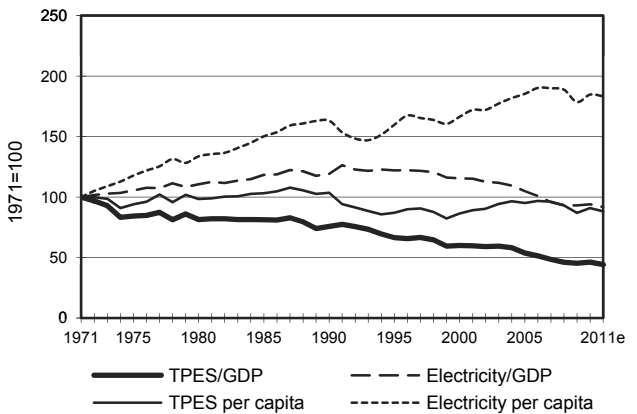
**Figure 4. Breakdown of sectorial final consumption by source in 1973 and 2010\*\***



**Figure 5. Electricity generation by fuel**



**Figure 6. Selected indicators**



\* Excluding electricity trade.

\*\* Includes non-energy use.

\*\*\* Includes residential, commercial and public services, agriculture/forestry, fishing and non-specified.

\*\*\*\* Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.

\*\*\*\*\* Includes geothermal, solar, wind, biofuels and waste, etc.

## Denmark : 2009

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	-	13.25	-	7.52	-	0.00	0.60	2.58	-	0.00	23.95
Imports	3.96	3.61	5.24	-	-	-	-	0.58	0.96	0.00	14.36
Exports	-0.04	-9.08	-4.68	-3.58	-	-	-	-0.07	-0.94	-	-18.39
Intl. marine bunkers	-	-	-0.51	-	-	-	-	-	-	-	-0.51
Intl. aviation bunkers	-	-	-0.77	-	-	-	-	-	-	-	-0.77
Stock changes	0.08	-0.03	-0.29	-0.05	-	-	-	-	-	-	-0.29
<b>TPES</b>	<b>4.00</b>	<b>7.75</b>	<b>-1.02</b>	<b>3.89</b>	<b>-</b>	<b>0.00</b>	<b>0.60</b>	<b>3.09</b>	<b>0.03</b>	<b>0.00</b>	<b>18.35</b>
Transfers	-	0.00	-0.00	-	-	-	-	-	-	-	-0.00
Statistical differences	0.02	0.26	0.18	0.05	-	-	-	0.00	-0.00	0.00	0.52
Electricity plants	-	-	-0.02	-	-	-0.00	-0.58	-0.00	0.58	-	-0.02
CHP plants	-3.90	-	-0.28	-1.53	-	-	-	-1.46	2.54	2.41	-2.22
Heat plants	-0.00	-	-0.04	-0.21	-	-	-0.01	-0.43	-0.00	0.71	0.01
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	0.01	-	-	-0.01	-	-	-	-	-	-	-0.00
Coke/pat. fuel/BKB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-8.02	7.71	-	-	-	-	-	-	-	-0.31
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-	-	-0.32	-0.63	-	-	-	-	-0.25	-0.04	-1.24
Losses	-0.00	-	-	-0.00	-	-	-	-	-0.20	-0.62	-0.83
<b>TFC</b>	<b>0.14</b>	<b>-</b>	<b>6.20</b>	<b>1.55</b>	<b>-</b>	<b>-</b>	<b>0.01</b>	<b>1.20</b>	<b>2.70</b>	<b>2.46</b>	<b>14.26</b>
<b>INDUSTRY</b>	<b>0.10</b>	<b>-</b>	<b>0.54</b>	<b>0.65</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.20</b>	<b>0.73</b>	<b>0.12</b>	<b>2.34</b>
Iron and steel	-	-	0.00	0.02	-	-	-	-	0.01	0.00	0.03
Chemical and petrochem.	-	-	0.01	0.08	-	-	-	-	0.10	0.02	0.22
Non-ferrous metals	-	-	-	0.00	-	-	-	-	0.00	0.00	0.01
Non-metallic minerals	0.05	-	0.16	0.09	-	-	-	0.03	0.06	0.01	0.41
Transport equipment	-	-	0.00	0.01	-	-	-	0.00	0.02	0.00	0.04
Machinery	-	-	0.06	0.08	-	-	-	0.01	0.13	0.02	0.30
Mining and quarrying	0.00	-	0.03	0.01	-	-	-	0.02	0.01	0.00	0.07
Food and tobacco	0.04	-	0.12	0.29	-	-	-	0.01	0.19	0.03	0.67
Paper, pulp and printing	-	-	0.01	0.03	-	-	-	0.05	0.05	0.01	0.15
Wood and wood products	-	-	0.01	0.00	-	-	-	0.06	0.02	0.00	0.10
Construction	-	-	0.13	0.01	-	-	-	-	0.03	-	0.17
Textile and leather	-	-	0.00	0.01	-	-	-	0.00	0.01	0.00	0.03
Non-specified	0.00	-	0.01	0.02	-	-	-	0.02	0.09	0.02	0.15
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>4.36</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.01</b>	<b>0.03</b>	<b>-</b>	<b>4.41</b>
Domestic aviation	-	-	0.04	-	-	-	-	-	-	-	0.04
Road	-	-	4.02	-	-	-	-	0.01	-	-	4.03
Rail	-	-	0.07	-	-	-	-	-	0.03	-	0.11
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	0.18	-	-	-	-	-	-	-	0.18
Non-specified	-	-	0.05	-	-	-	-	-	-	-	0.05
<b>OTHER</b>	<b>0.04</b>	<b>-</b>	<b>1.05</b>	<b>0.90</b>	<b>-</b>	<b>-</b>	<b>0.01</b>	<b>0.99</b>	<b>1.94</b>	<b>2.34</b>	<b>7.27</b>
Residential	0.01	-	0.46	0.63	-	-	0.01	0.89	0.87	1.57	4.43
Comm. and public services	0.00	-	0.08	0.21	-	-	0.00	0.04	0.91	0.72	1.97
Agriculture/forestry	0.03	-	0.37	0.04	-	-	-	0.06	0.16	0.05	0.71
Fishing	-	-	0.14	-	-	-	-	-	-	-	0.14
Non-specified	-	-	-	0.01	-	-	-	-	-	-	0.01
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>0.25</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.25</b>
in industry/transf./energy	-	-	0.21	-	-	-	-	-	-	-	0.21
of which: feedstocks	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	0.03	-	-	-	-	-	-	-	0.03
in other	-	-	0.01	-	-	-	-	-	-	-	0.01
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>17.69</b>	<b>-</b>	<b>1.15</b>	<b>6.73</b>	<b>-</b>	<b>0.02</b>	<b>6.73</b>	<b>4.08</b>	<b>-</b>	<b>-</b>	<b>36.38</b>
Electricity plants	-	-	0.06	-	-	0.02	6.73	0.00	-	-	6.80
CHP plants	17.69	-	1.09	6.73	-	-	-	4.08	-	-	29.58
<b>Heat generated - PJ</b>	<b>34.14</b>	<b>-</b>	<b>5.82</b>	<b>35.88</b>	<b>-</b>	<b>-</b>	<b>2.88</b>	<b>51.78</b>	<b>0.02</b>	<b>0.06</b>	<b>130.57</b>
CHP plants	34.05	-	4.51	27.31	-	-	-	34.97	-	-	100.84
Heat plants	0.09	-	1.31	8.57	-	-	2.88	16.80	0.02	0.06	29.73

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.



## Denmark : 2010

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	-	12.49	-	7.34	-	0.00	0.70	2.80	-	0.00	23.33
Imports	2.68	2.79	6.47	0.14	-	-	-	0.85	0.91	0.00	13.86
Exports	-0.04	-8.01	-5.22	-3.16	-	-	-	-0.07	-1.01	-	-17.51
Intl. marine bunkers	-	-	-0.69	-	-	-	-	-	-	-	-0.69
Intl. aviation bunkers	-	-	-0.81	-	-	-	-	-	-	-	-0.81
Stock changes	1.17	0.07	-0.26	0.10	-	-	-	-	-	-	1.07
<b>TPES</b>	<b>3.81</b>	<b>7.34</b>	<b>-0.50</b>	<b>4.42</b>	<b>-</b>	<b>0.00</b>	<b>0.70</b>	<b>3.58</b>	<b>-0.10</b>	<b>0.00</b>	<b>19.25</b>
Transfers	-	-	0.00	-	-	-	-	-	-	-	0.00
Statistical differences	0.12	0.11	0.08	0.04	-	-	-	-0.00	-0.00	0.00	0.34
Electricity plants	-	-	-0.03	-	-	-0.00	-0.67	-0.00	0.68	-	-0.02
CHP plants	-3.78	-	-0.19	-1.81	-	-	-	-1.81	2.65	2.77	-2.17
Heat plants	-0.00	-	-0.07	-0.23	-	-	-0.01	-0.49	-0.00	0.82	-0.00
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	0.01	-	-	-0.01	-	-	-	-	-	-	-0.00
Coke/pat. fuel/BKB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-7.44	7.15	-	-	-	-	-	-	-	-0.29
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-	-	-0.28	-0.62	-	-	-	-	-0.26	-0.04	-1.21
Losses	-0.00	-	-	-0.00	-	-	-	-	-0.22	-0.71	-0.93
<b>TFC</b>	<b>0.15</b>	<b>-</b>	<b>6.15</b>	<b>1.78</b>	<b>-</b>	<b>-</b>	<b>0.01</b>	<b>1.28</b>	<b>2.76</b>	<b>2.83</b>	<b>14.96</b>
<b>INDUSTRY</b>	<b>0.11</b>	<b>-</b>	<b>0.55</b>	<b>0.71</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.20</b>	<b>0.74</b>	<b>0.12</b>	<b>2.44</b>
Iron and steel	-	-	0.00	0.02	-	-	-	-	0.01	0.00	0.03
Chemical and petrochem.	-	-	0.01	0.09	-	-	-	-	0.11	0.02	0.23
Non-ferrous metals	-	-	-	0.00	-	-	-	-	0.00	0.00	0.01
Non-metallic minerals	0.06	-	0.15	0.10	-	-	-	0.03	0.06	0.01	0.41
Transport equipment	-	-	0.00	0.01	-	-	-	0.00	0.02	0.00	0.04
Machinery	-	-	0.06	0.09	-	-	-	0.01	0.13	0.02	0.31
Mining and quarrying	0.00	-	0.03	0.01	-	-	-	0.02	0.01	0.00	0.08
Food and tobacco	0.04	-	0.14	0.31	-	-	-	0.01	0.19	0.03	0.72
Paper, pulp and printing	-	-	0.01	0.04	-	-	-	0.05	0.05	0.01	0.15
Wood and wood products	-	-	0.01	0.00	-	-	-	0.06	0.02	0.00	0.10
Construction	-	-	0.13	0.01	-	-	-	-	0.03	-	0.17
Textile and leather	-	-	0.00	0.01	-	-	-	0.00	0.01	0.00	0.03
Non-specified	0.00	-	0.01	0.03	-	-	-	0.02	0.09	0.02	0.16
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>4.28</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.03</b>	<b>0.03</b>	<b>-</b>	<b>4.34</b>
Domestic aviation	-	-	0.04	-	-	-	-	-	-	-	0.04
Road	-	-	3.97	-	-	-	-	0.03	-	-	4.00
Rail	-	-	0.08	-	-	-	-	-	0.03	-	0.11
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	0.16	-	-	-	-	-	-	-	0.16
Non-specified	-	-	0.03	-	-	-	-	-	-	-	0.03
<b>OTHER</b>	<b>0.04</b>	<b>-</b>	<b>1.06</b>	<b>1.07</b>	<b>-</b>	<b>-</b>	<b>0.01</b>	<b>1.05</b>	<b>1.98</b>	<b>2.71</b>	<b>7.93</b>
Residential	0.01	-	0.47	0.74	-	-	0.01	0.95	0.89	1.82	4.90
Comm. and public services	0.00	-	0.07	0.27	-	-	0.00	0.04	0.92	0.84	2.15
Agriculture/forestry	0.03	-	0.37	0.05	-	-	-	0.06	0.16	0.05	0.72
Fishing	-	-	0.14	-	-	-	-	-	-	-	0.14
Non-specified	-	-	-	0.01	-	-	-	-	-	-	0.01
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>0.26</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.26</b>
in industry/transf./energy	-	-	0.22	-	-	-	-	-	-	-	0.22
of which: feedstocks	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	0.03	-	-	-	-	-	-	-	0.03
in other	-	-	0.01	-	-	-	-	-	-	-	0.01
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>16.98</b>	<b>-</b>	<b>0.75</b>	<b>7.91</b>	<b>-</b>	<b>0.02</b>	<b>7.82</b>	<b>5.32</b>	<b>-</b>	<b>-</b>	<b>38.79</b>
Electricity plants	-	-	0.09	-	-	0.02	7.82	0.00	-	-	7.93
CHP plants	16.98	-	0.66	7.91	-	-	-	5.31	-	-	30.85
<b>Heat generated - PJ</b>	<b>36.05</b>	<b>-</b>	<b>4.50</b>	<b>44.63</b>	<b>-</b>	<b>-</b>	<b>2.81</b>	<b>61.89</b>	<b>0.11</b>	<b>0.04</b>	<b>150.02</b>
CHP plants	35.94	-	1.99	34.96	-	-	-	42.91	-	-	115.80
Heat plants	0.12	-	2.51	9.66	-	-	2.81	18.97	0.11	0.04	34.22

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Denmark

## Estimated energy supply balance for 2011

Million tonnes of oil equivalent											
SUPPLY	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	-	11.53	-	6.32	-	0.00	0.87	2.74	-	0.00	21.46
Imports	3.60	2.89	6.15	0.33	-	-	-	0.93	1.01	0.00	14.91
Exports	-	-7.99	-5.57	-2.79	-	-	-	-0.07	-0.89	-	-17.32
Intl. marine bunkers	-	-	-0.68	-	-	-	-	-	-	-	-0.68
Intl. aviation bunkers	-	-	-1.05	-	-	-	-	-	-	-	-1.05
Stock changes	-0.35	-0.00	0.68	-0.14	-	-	-	-	-	-	0.19
<b>TPES</b>	<b>3.24</b>	<b>6.43</b>	<b>-0.47</b>	<b>3.71</b>	<b>-</b>	<b>0.00</b>	<b>0.87</b>	<b>3.60</b>	<b>0.11</b>	<b>0.01</b>	<b>17.51</b>
Electricity and Heat Output											
Elec. generated - TWh	13.48	-	0.29	6.49	-	0.02	9.78	4.88	-	-	34.93
Heat generated - PJ	34.46	-	3.70	33.95	-	-	3.28	55.57	0.06	0.20	131.22

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1960	1971	1980	1990	2000	2009	2010	2011e
Energy production (Mtoe)	1.0	0.3	1.0	10.1	27.7	24.0	23.3	21.5
Net imports (Mtoe)	8.6	19.9	19.2	8.7	-7.5	-4.0	-3.7	-2.4
Total primary energy supply (Mtoe)	8.8	18.5	19.1	17.4	18.6	18.4	19.3	17.5
Net oil imports (Mtoe)	5.2	18.7	13.2	2.8	-8.5	-4.9	-4.0	-4.5
Oil supply (Mtoe)	4.7	16.9	12.7	7.7	8.0	6.7	6.8	6.0
Electricity consumption (TWh)*	5.0	15.2	23.6	30.6	34.6	34.4	35.1	33.7
GDP (billion 2005 USD)	76.3 e	125.9	152.6	187.4	242.1	252.9	256.1	258.7
GDP PPP (billion 2005 USD)	53.3 e	87.9	106.5	130.8	169.0	176.5	178.8	180.6
Population (millions)	4.56 e	4.96	5.12	5.14	5.34	5.52	5.55	5.55
Industrial production index (2005=100)	..	..	54.70	72.10	96.50	85.80	87.30	88.90
Total self-sufficiency**	0.1130	0.0178	0.0498	0.5806	1.4884	1.3052	1.2116	1.2253
Coal and peat self-sufficiency**	0.2415	..	-	-	-	-	-	-
Oil self-sufficiency**	..	..	0.0239	0.7993	2.2782	1.9690	1.8275	1.9333
Natural gas self-sufficiency**	..	..	1.0000	1.5239	1.6659	1.9309	1.6603	1.7008
TPES/GDP (toe per thousand 2005 USD)	0.1155 e	0.1470	0.1254	0.0927	0.0770	0.0726	0.0752	0.0677
TPES/GDP PPP (toe per thousand 2005 USD)	0.1654 e	0.2106	0.1797	0.1328	0.1103	0.1040	0.1077	0.0970
TPES/population (toe per capita)	1.9308 e	3.7286	3.7344	3.3781	3.4908	3.3236	3.4715	3.1535
Net oil imports/GDP (toe per thousand 2005 USD)	0.0679 e	0.1484	0.0868	0.0147	-0.0351	-0.0194	-0.0155	-0.0175
Oil supply/GDP (toe per thousand 2005 USD)	0.0614 e	0.1343	0.0834	0.0408	0.0331	0.0266	0.0267	0.0231
Oil supply/population (toe per capita)	1.0271 e	3.4048	2.4817	1.4880	1.5016	1.2188	1.2319	1.0740
Elect. cons./GDP (kWh per 2005 USD)	0.0654 e	0.1206	0.1544	0.1631	0.1430	0.1359	0.1370	0.1303
Elect. cons./population (kWh per capita)	1094 e	3059	4598	5946	6485	6221	6329	6068
Industry cons.***/industrial production (2005=100)	..	..	209.88	132.00	106.33	95.67	98.03	..
Industry oil cons.***/industrial production (2005=100)	..	..	458.25	162.82	103.15	87.06	88.24	..

\* Electricity consumption equals domestic supply less losses.

\*\* Production divided by TPES.

\*\*\* Includes non-energy use.

Denmark

Figure 1. Energy production

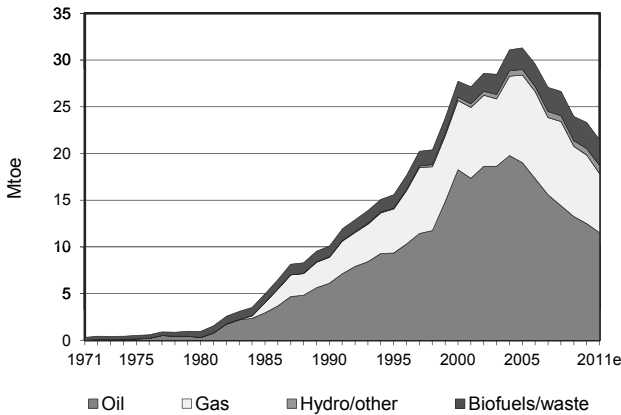


Figure 2. Total primary energy supply\*

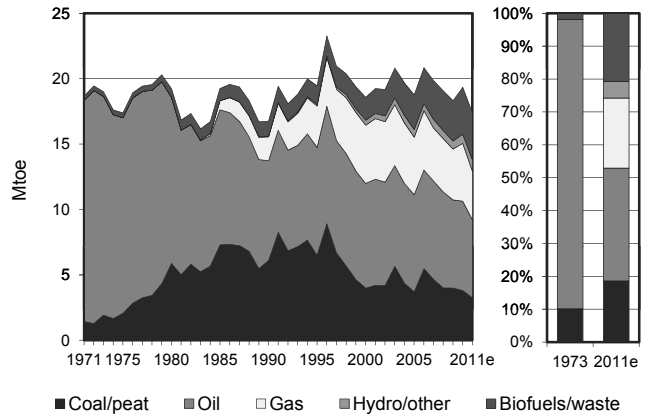


Figure 3. Energy self-sufficiency

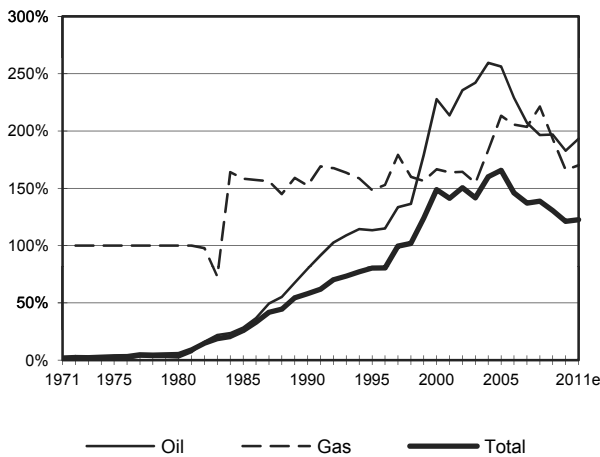


Figure 4. Breakdown of sectorial final consumption by source in 1973 and 2010\*\*

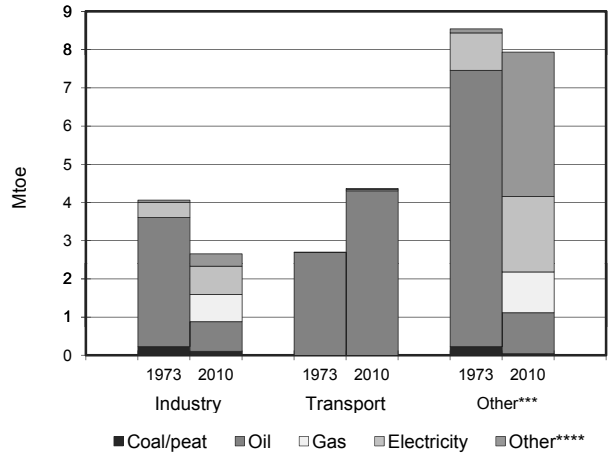


Figure 5. Electricity generation by fuel

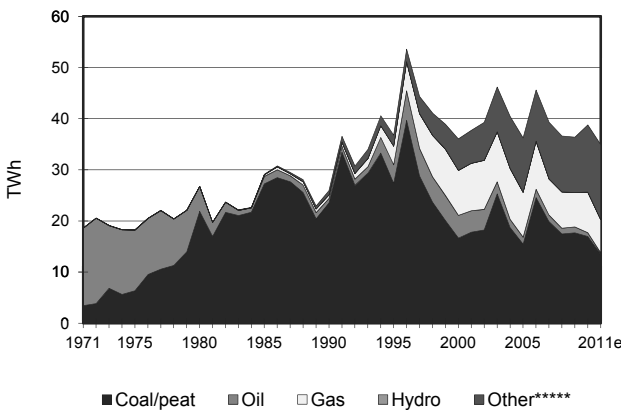
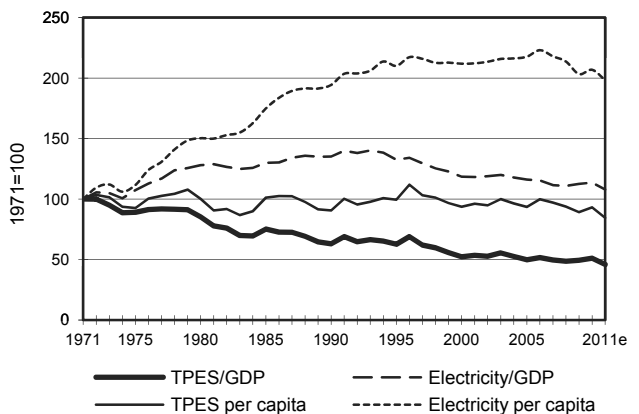


Figure 6. Selected indicators



\* Excluding electricity trade.  
 \*\* Includes non-energy use.  
 \*\*\* Includes residential, commercial and public services, agriculture/forestry, fishing and non-specified.  
 \*\*\*\* Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.  
 \*\*\*\*\* Includes geothermal, solar, wind, biofuels and waste, etc.

## Estonia : 2009

Million tonnes of oil equivalent											
<b>SUPPLY AND CONSUMPTION</b>	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	3.29	-	-	-	-	0.00	0.02	0.84	-	-	4.16
Imports	0.02	-	1.18	0.52	-	-	-	-	0.26	-	1.99
Exports	-0.03	-0.37	-	-	-	-	-	-0.14	-0.25	-	-0.79
Intl. marine bunkers	-	-	-0.22	-	-	-	-	-	-	-	-0.22
Intl. aviation bunkers	-	-	-0.03	-	-	-	-	-	-	-	-0.03
Stock changes	-0.29	-	-0.06	-	-	-	-	-0.01	-	-	-0.35
<b>TPES</b>	<b>3.00</b>	<b>-0.37</b>	<b>0.87</b>	<b>0.52</b>	<b>-</b>	<b>0.00</b>	<b>0.02</b>	<b>0.70</b>	<b>0.01</b>	<b>-</b>	<b>4.75</b>
Transfers	-	-0.09	0.09	-	-	-	-	-	-	-	0.00
Statistical differences	0.32	-0.00	-	-	-	-	-	-	-	-	0.32
Electricity plants	-2.11	-	-0.01	-	-	-0.00	-0.02	-0.01	0.69	-	-1.46
CHP plants	-0.22	-	-0.00	-0.09	-	-	-	-0.07	0.07	0.23	-0.07
Heat plants	-0.04	-	-0.05	-0.23	-	-	-	-0.10	-	0.36	-0.06
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-0.10	-	-	-	-	-	-	-	-	-	-0.10
Coke/pat. fuel/BKB plants	-0.01	-	-	-	-	-	-	-	-	-	-0.01
Oil refineries	-	-	-	-	-	-	-	-	-	-	-
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-0.71	0.46	-	-	-	-	-	-	-	-	-0.26
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-0.02	-	-0.01	-0.01	-	-	-	-0.00	-0.11	-0.01	-0.17
Losses	-	-	-	-	-	-	-	-	-0.08	-0.09	-0.16
<b>TFC</b>	<b>0.11</b>	<b>-</b>	<b>0.89</b>	<b>0.20</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.52</b>	<b>0.57</b>	<b>0.49</b>	<b>2.78</b>
<b>INDUSTRY</b>	<b>0.09</b>	<b>-</b>	<b>0.05</b>	<b>0.10</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.09</b>	<b>0.17</b>	<b>0.04</b>	<b>0.54</b>
Iron and steel	-	-	-	0.00	-	-	-	-	0.00	-	0.00
Chemical and petrochem.	-	-	0.00	0.01	-	-	-	0.00	0.03	0.01	0.05
Non-ferrous metals	0.00	-	-	0.00	-	-	-	-	0.00	0.00	0.00
Non-metallic minerals	0.09	-	0.00	0.02	-	-	-	0.00	0.02	0.00	0.13
Transport equipment	-	-	0.00	0.00	-	-	-	0.00	0.00	0.00	0.01
Machinery	-	-	0.01	0.00	-	-	-	0.00	0.02	0.00	0.04
Mining and quarrying	-	-	0.00	0.00	-	-	-	0.00	0.00	0.00	0.01
Food and tobacco	-	-	0.01	0.02	-	-	-	0.00	0.02	0.00	0.06
Paper, pulp and printing	-	-	0.00	0.02	-	-	-	0.00	0.02	0.00	0.05
Wood and wood products	-	-	0.00	0.01	-	-	-	0.06	0.02	0.00	0.09
Construction	-	-	0.02	0.00	-	-	-	0.00	0.01	0.00	0.04
Textile and leather	-	-	0.00	0.00	-	-	-	0.00	0.01	0.01	0.02
Non-specified	-	-	0.00	0.00	-	-	-	0.02	0.01	0.01	0.04
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>0.71</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.01</b>	<b>-</b>	<b>0.71</b>
Domestic aviation	-	-	0.00	-	-	-	-	-	-	-	0.00
Road	-	-	0.66	-	-	-	-	-	-	-	0.66
Rail	-	-	0.04	-	-	-	-	-	0.00	-	0.04
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	0.01	-	-	-	-	-	-	-	0.01
Non-specified	-	-	-	-	-	-	-	-	0.00	-	0.00
<b>OTHER</b>	<b>0.01</b>	<b>-</b>	<b>0.11</b>	<b>0.09</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.43</b>	<b>0.40</b>	<b>0.45</b>	<b>1.48</b>
Residential	0.01	-	0.01	0.05	-	-	-	0.41	0.16	0.33	0.97
Comm. and public services	0.00	-	0.03	0.03	-	-	-	0.02	0.22	0.12	0.42
Agriculture/forestry	-	-	0.06	0.01	-	-	-	0.00	0.02	0.00	0.09
Fishing	-	-	-	-	-	-	-	-	0.00	-	0.00
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	<b>0.01</b>	<b>-</b>	<b>0.02</b>	<b>0.01</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.05</b>
in industry/transf./energy	0.01	-	0.02	0.01	-	-	-	-	-	-	0.04
<i>of which: feedstocks</i>	-	-	-	0.01	-	-	-	-	-	-	0.01
in transport	-	-	0.00	-	-	-	-	-	-	-	0.00
in other	-	-	0.00	-	-	-	-	-	-	-	0.00
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>8.09</b>	<b>-</b>	<b>0.05</b>	<b>0.11</b>	<b>-</b>	<b>0.03</b>	<b>0.20</b>	<b>0.31</b>	<b>-</b>	<b>-</b>	<b>8.78</b>
Electricity plants	7.62	-	0.04	-	-	0.03	0.20	0.11	-	-	8.00
CHP plants	0.47	-	0.00	0.11	-	-	-	0.21	-	-	0.78
<b>Heat generated - PJ</b>	<b>6.51</b>	<b>-</b>	<b>1.64</b>	<b>11.25</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>5.32</b>	<b>-</b>	<b>-</b>	<b>24.73</b>
CHP plants	5.07	-	0.03	2.86	-	-	-	1.86	-	-	9.81
Heat plants	1.44	-	1.62	8.40	-	-	-	3.47	-	-	14.92

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Estonia : 2010

Million tonnes of oil equivalent											
<b>SUPPLY AND CONSUMPTION</b>	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	3.94	-	-	-	-	0.00	0.02	0.96	-	-	4.93
Imports	0.05	-	1.10	0.56	-	-	-	-	0.09	-	1.81
Exports	-0.06	-0.37	-	-	-	-	-	-0.15	-0.37	-	-0.96
Intl. marine bunkers	-	-	-0.22	-	-	-	-	-	-	-	-0.22
Intl. aviation bunkers	-	-	-0.04	-	-	-	-	-	-	-	-0.04
Stock changes	-0.01	-	0.03	-	-	-	-	0.01	-	-	0.04
<b>TPES</b>	<b>3.92</b>	<b>-0.37</b>	<b>0.88</b>	<b>0.56</b>	<b>-</b>	<b>0.00</b>	<b>0.02</b>	<b>0.82</b>	<b>-0.28</b>	<b>-</b>	<b>5.57</b>
Transfers	-	-0.13	0.13	-	-	-	-	-	-	-	0.00
Statistical differences	0.31	-	-0.01	-	-	-	-	-	-	-	0.30
Electricity plants	-2.92	-	-0.01	-	-	-0.00	-0.02	-0.03	1.00	-	-1.99
CHP plants	-0.24	-	-0.00	-0.08	-	-	-	-0.14	0.11	0.25	-0.11
Heat plants	-0.04	-	-0.05	-0.26	-	-	-	-0.09	-	0.36	-0.09
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-0.12	-	-	-	-	-	-	-	-	-	-0.12
Coke/pat. fuel/BKB plants	-0.01	-	-	-	-	-	-	-	-	-	-0.01
Oil refineries	-	-	-	-	-	-	-	-	-	-	-
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-0.79	0.50	-	-	-	-	-	-	-	-	-0.29
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-0.01	-	-0.02	-0.01	-	-	-	-0.00	-0.15	-0.01	-0.20
Losses	-	-	-	-	-	-	-	-	-0.09	-0.07	-0.16
<b>TFC</b>	<b>0.10</b>	<b>-</b>	<b>0.93</b>	<b>0.21</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.55</b>	<b>0.59</b>	<b>0.53</b>	<b>2.91</b>
<b>INDUSTRY</b>	<b>0.07</b>	<b>-</b>	<b>0.06</b>	<b>0.11</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.10</b>	<b>0.18</b>	<b>0.04</b>	<b>0.58</b>
Iron and steel	-	-	-	0.00	-	-	-	-	0.00	0.00	0.00
Chemical and petrochem.	-	-	0.00	0.01	-	-	-	0.00	0.02	0.02	0.05
Non-ferrous metals	0.00	-	-	0.00	-	-	-	-	0.00	0.00	0.00
Non-metallic minerals	0.07	-	0.00	0.02	-	-	-	0.00	0.02	0.00	0.11
Transport equipment	-	-	0.00	0.00	-	-	-	0.00	0.00	0.00	0.01
Machinery	-	-	0.00	0.01	-	-	-	0.00	0.03	0.01	0.04
Mining and quarrying	-	-	0.00	0.00	-	-	-	0.00	0.00	0.00	0.01
Food and tobacco	0.00	-	0.01	0.03	-	-	-	0.00	0.02	0.00	0.07
Paper, pulp and printing	-	-	0.00	0.03	-	-	-	0.01	0.03	0.00	0.07
Wood and wood products	-	-	0.00	0.01	-	-	-	0.08	0.02	0.00	0.11
Construction	-	-	0.03	0.00	-	-	-	0.00	0.01	0.00	0.04
Textile and leather	-	-	-	0.00	-	-	-	0.00	0.01	0.01	0.02
Non-specified	-	-	0.00	0.00	-	-	-	0.02	0.02	0.01	0.05
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>0.74</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.00</b>	<b>-</b>	<b>0.75</b>
Domestic aviation	-	-	0.00	-	-	-	-	-	-	-	0.00
Road	-	-	0.68	-	-	-	-	-	-	-	0.68
Rail	-	-	0.05	-	-	-	-	-	0.00	-	0.05
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	0.01	-	-	-	-	-	-	-	0.01
Non-specified	-	-	-	-	-	-	-	-	0.00	-	0.00
<b>OTHER</b>	<b>0.01</b>	<b>-</b>	<b>0.10</b>	<b>0.09</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.45</b>	<b>0.41</b>	<b>0.49</b>	<b>1.55</b>
Residential	0.01	-	0.01	0.05	-	-	-	0.42	0.17	0.36	1.03
Comm. and public services	0.00	-	0.03	0.03	-	-	-	0.02	0.22	0.13	0.43
Agriculture/forestry	-	-	0.07	0.01	-	-	-	0.00	0.02	0.00	0.10
Fishing	-	-	-	-	-	-	-	-	0.00	-	0.00
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	<b>0.02</b>	<b>-</b>	<b>0.02</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.04</b>
in industry/transf./energy	0.02	-	0.02	-	-	-	-	-	-	-	0.03
of which: feedstocks	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	0.00	-	-	-	-	-	-	-	0.00
in other	-	-	0.00	-	-	-	-	-	-	-	0.00
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>11.58</b>	<b>-</b>	<b>0.04</b>	<b>0.30</b>	<b>-</b>	<b>0.03</b>	<b>0.28</b>	<b>0.74</b>	<b>-</b>	<b>-</b>	<b>12.96</b>
Electricity plants	11.06	-	0.04	-	-	0.03	0.28	0.26	-	-	11.65
CHP plants	0.52	-	0.00	0.30	-	-	-	0.49	-	-	1.31
<b>Heat generated - PJ</b>	<b>6.95</b>	<b>-</b>	<b>1.75</b>	<b>10.89</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>5.96</b>	<b>-</b>	<b>-</b>	<b>25.55</b>
CHP plants	5.47	-	0.04	1.72	-	-	-	3.24	-	-	10.47
Heat plants	1.48	-	1.72	9.17	-	-	-	2.71	-	-	15.07

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Estonia

## Estimated energy supply balance for 2011

Million tonnes of oil equivalent											
SUPPLY	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	4.11	-	-	-	-	0.00	0.03	0.87	-	-	5.01
Imports	0.04	-	1.16	0.51	-	-	-	-	0.15	-	1.85
Exports	-0.06	-0.39	-	-	-	-	-	-0.14	-0.45	-	-1.05
Intl. marine bunkers	-	-	-0.27	-	-	-	-	-	-	-	-0.27
Intl. aviation bunkers	-	-	-0.02	-	-	-	-	-	-	-	-0.02
Stock changes	0.01	-	0.01	-	-	-	-	0.01	-	-	0.03
<b>TPES</b>	<b>4.10</b>	<b>-0.39</b>	<b>0.87</b>	<b>0.51</b>	<b>-</b>	<b>0.00</b>	<b>0.03</b>	<b>0.73</b>	<b>-0.31</b>	<b>-</b>	<b>5.55</b>
Electricity and Heat Output											
Elec. generated - TWh	11.42	-	0.04	0.25	-	0.03	0.37	0.78	-	-	12.89
Heat generated - PJ	6.22	-	1.57	9.76	-	-	-	5.34	-	-	22.89

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1960	1971	1980	1990	2000	2009	2010	2011e
Energy production (Mtoe)	..	..	..	5.4	3.2	4.2	4.9	5.0
Net imports (Mtoe)	..	..	..	4.6	1.6	1.2	0.9	0.8
Total primary energy supply (Mtoe)	..	..	..	9.9	4.7	4.8	5.6	5.6
Net oil imports (Mtoe)	..	..	..	3.3	0.8	0.8	0.7	0.8
Oil supply (Mtoe)	..	..	..	3.0	0.7	0.5	0.5	0.5
Electricity consumption (TWh)*	..	..	..	9.2	6.3	8.0	8.7	8.3
GDP (billion 2005 USD)	..	..	..	10.1	9.8	13.6	13.9	15.0
GDP PPP (billion 2005 USD)	..	..	..	16.2	15.8	21.8	22.3	24.0
Population (millions)	..	..	..	1.59	1.37	1.34	1.34	1.34
Industrial production index (2005=100)	..	..	..	..	62.30	84.30	104.10	121.70
Total self-sufficiency**	..	..	..	0.5463	0.6747	0.8754	0.8855	0.9024
Coal and peat self-sufficiency**	..	..	..	0.8517	0.8980	1.0980	1.0055	1.0014
Oil self-sufficiency**	..	..	..	-	-	-	-	-
Natural gas self-sufficiency**	..	..	..	-	-	-	-	-
TPES/GDP (toe per thousand 2005 USD)	..	..	..	0.9782	0.4791	0.3495	0.4006	0.3709
TPES/GDP PPP (toe per thousand 2005 USD)	..	..	..	0.6105	0.2990	0.2181	0.2501	0.2315
TPES/population (toe per capita)	..	..	..	6.2411	3.4363	3.5443	4.1550	4.1402
Net oil imports/GDP (toe per thousand 2005 USD)	..	..	..	0.3239	0.0799	0.0596	0.0530	0.0512
Oil supply/GDP (toe per thousand 2005 USD)	..	..	..	0.2927	0.0658	0.0368	0.0372	0.0324
Oil supply/population (toe per capita)	..	..	..	1.8678	0.4722	0.3736	0.3861	0.3612
Elect. cons./GDP (kWh per 2005 USD)	..	..	..	0.9123	0.6441	0.5868	0.6233	0.5538
Elect. cons./population (kWh per capita)	..	..	..	5821	4620	5952	6465	6182
Industry cons.***/industrial production (2005=100)	..	..	..	..	133.37	76.95	65.19	..
Industry oil cons.***/industrial production (2005=100)	..	..	..	..	161.90	64.46	59.39	..

\* Electricity consumption equals domestic supply less losses.

\*\* Production divided by TPES.

\*\*\* Includes non-energy use.

Estonia

Figure 1. Energy production

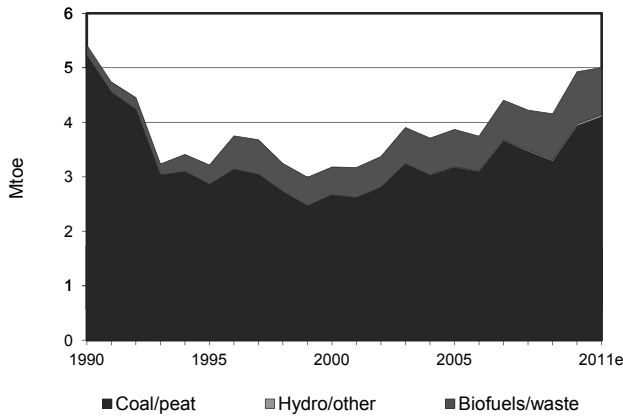


Figure 2. Total primary energy supply\*

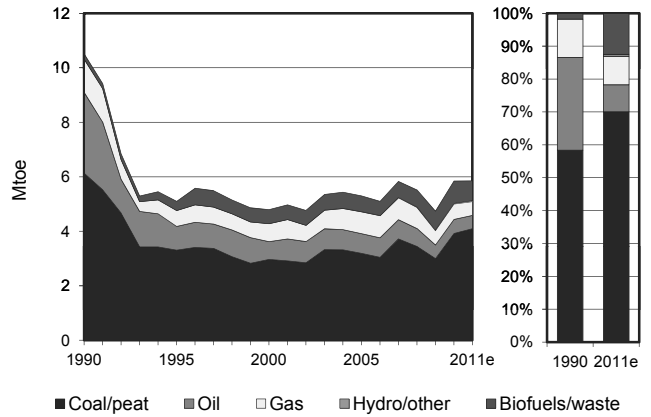


Figure 3. Energy self-sufficiency

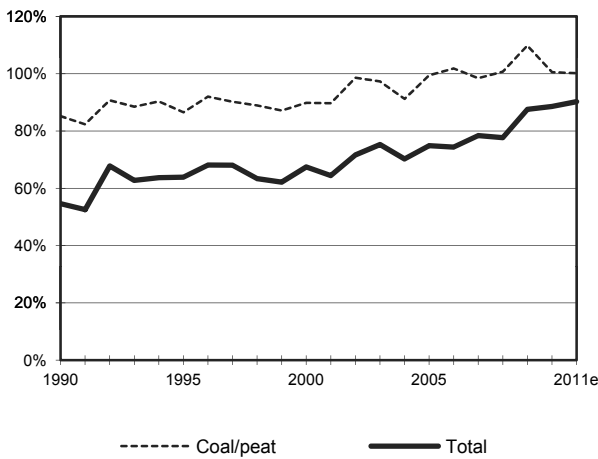


Figure 4. Breakdown of sectorial final consumption by source in 1990 and 2010\*\*

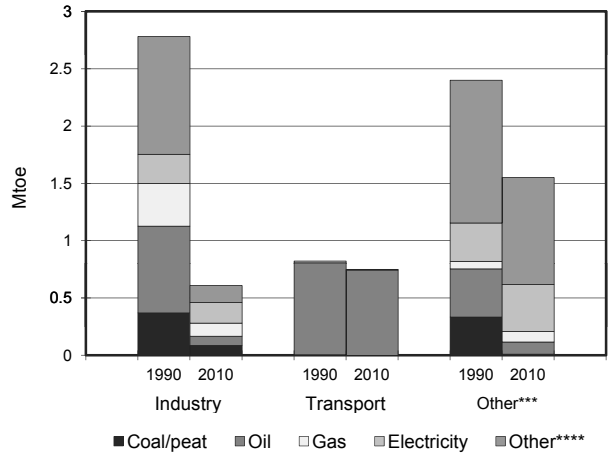


Figure 5. Electricity generation by fuel

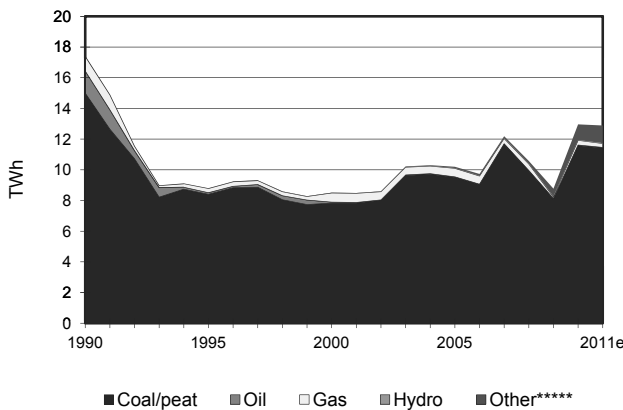
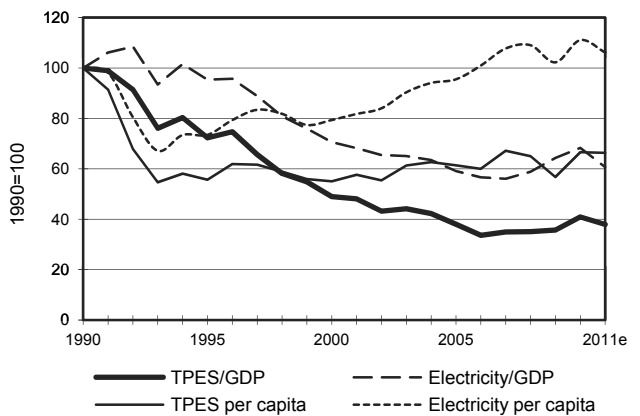


Figure 6. Selected indicators



\* Excluding electricity trade.  
 \*\* Includes non-energy use.  
 \*\*\* Includes residential, commercial and public services, agriculture/forestry, fishing and non-specified.  
 \*\*\*\* Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.  
 \*\*\*\*\* Includes geothermal, solar, wind, biofuels and waste, etc.

## Finland : 2009

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	2.19	0.06	-	-	6.13	1.09	0.03	6.90	-	0.09	16.49
Imports	3.87	11.71	5.08	3.48	-	-	-	0.26	1.33	-	25.73
Exports	-0.01	-0.12	-6.62	-	-	-	-	-0.16	-0.29	-	-7.21
Intl. marine bunkers	-	-	-0.25	-	-	-	-	-	-	-	-0.25
Intl. aviation bunkers	-	-	-0.51	-	-	-	-	-	-	-	-0.51
Stock changes	-0.78	0.24	-0.47	-	-	-	-	-	-	-	-1.01
<b>TPES</b>	<b>5.27</b>	<b>11.89</b>	<b>-2.77</b>	<b>3.48</b>	<b>6.13</b>	<b>1.09</b>	<b>0.03</b>	<b>7.00</b>	<b>1.04</b>	<b>0.09</b>	<b>33.25</b>
Transfers	-	2.60	-2.45	-	-	-	-	-	-	-	0.15
Statistical differences	0.16	0.51	-0.70	-0.00	-	-	-	-0.04	-	-	-0.07
Electricity plants	-1.74	-	-0.05	-0.04	-6.13	-1.09	-0.02	-0.23	3.99	-0.04	-5.34
CHP plants	-2.36	-	-0.10	-1.81	-	-	-	-1.87	2.20	3.09	-0.85
Heat plants	-0.22	-	-0.31	-0.35	-	-	-	-0.58	-0.01	1.30	-0.18
Blast furnaces	-0.28 e	-	-0.13	-	-	-	-	-	-	-	-0.41
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB plants	-0.09	-	-	-	-	-	-	-	-	-	-0.09
Oil refineries	-	-15.18	15.23	-	-	-	-	-	-	-	0.05
Petrochemical plants	-	0.18	-0.20	-	-	-	-	-	-	-	-0.02
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-0.13	-	-0.63	-0.30	-	-	-	-0.01	-0.36	-0.03	-1.47
Losses	-0.06	-	-0.01	-	-	-	-	-	-0.24	-0.28	-0.59
<b>TFC</b>	<b>0.54</b>	<b>-</b>	<b>7.89</b>	<b>0.98</b>	<b>-</b>	<b>-</b>	<b>0.00</b>	<b>4.27</b>	<b>6.63</b>	<b>4.13</b>	<b>24.44</b>
<b>INDUSTRY</b>	<b>0.51</b>	<b>-</b>	<b>1.18</b>	<b>0.62</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2.65</b>	<b>3.11</b>	<b>1.59</b>	<b>9.64</b>
Iron and steel	0.22 e	-	0.13	0.04	-	-	-	-	0.21	0.04	0.63
Chemical and petrochem.	-	-	0.25	0.02	-	-	-	0.01	0.37	0.25	0.90
Non-ferrous metals	-	-	0.03	0.00	-	-	-	0.01	0.16	0.06	0.26
Non-metallic minerals	0.07	-	0.08	0.05	-	-	-	0.00	0.08	0.01	0.29
Transport equipment	-	-	0.02	0.00	-	-	-	-	0.03	0.02	0.06
Machinery	-	-	0.03	0.02	-	-	-	-	0.22	0.10	0.37
Mining and quarrying	-	-	0.02	-	-	-	-	-	0.08	0.00	0.10
Food and tobacco	0.01	-	0.05	0.01	-	-	-	0.00	0.17	0.16	0.40
Paper, pulp and printing	0.19	-	0.14	0.45	-	-	-	2.51	1.62	0.65	5.57
Wood and wood products	0.01	-	0.03	0.00	-	-	-	0.11	0.13	0.23	0.51
Construction	-	-	0.27	-	-	-	-	0.00	0.03	-	0.30
Textile and leather	-	-	0.01	0.00	-	-	-	-	0.02	0.01	0.03
Non-specified	0.00	-	0.13	0.02	-	-	-	0.01	-	0.05	0.21
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>4.02</b>	<b>0.01</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.12</b>	<b>0.06</b>	<b>-</b>	<b>4.21</b>
Domestic aviation	-	-	0.14	-	-	-	-	-	-	-	0.14
Road	-	-	3.69	0.01	-	-	-	0.12	-	-	3.81
Rail	-	-	0.03	-	-	-	-	-	0.06	-	0.09
Pipeline transport	-	-	-	0.01	-	-	-	-	-	-	0.01
Domestic navigation	-	-	0.16	-	-	-	-	0.00	-	-	0.16
Non-specified	-	-	-	-	-	-	-	-	0.01	-	0.01
<b>OTHER</b>	<b>0.03</b>	<b>-</b>	<b>1.57</b>	<b>0.08</b>	<b>-</b>	<b>-</b>	<b>0.00</b>	<b>1.50</b>	<b>3.46</b>	<b>2.54</b>	<b>9.17</b>
Residential	0.01	-	0.51	0.04	-	-	0.00	1.27	1.90	1.55	5.28
Comm. and public services	0.00	-	0.27	0.03	-	-	-	0.08	1.48	-	1.86
Agriculture/forestry	0.02	-	0.56	0.01	-	-	-	0.14	0.08	-	0.80
Fishing	-	-	0.04	-	-	-	-	-	-	-	0.04
Non-specified	-	-	0.19	-	-	-	-	0.02	-	0.99	1.20
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>1.14</b>	<b>0.27</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.41</b>
in industry/transf./energy	-	-	1.14	0.27	-	-	-	-	-	-	1.41
of which: feedstocks	-	-	0.67	0.27	-	-	-	-	-	-	0.94
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>16.00</b>	<b>-</b>	<b>0.54</b>	<b>9.79</b>	<b>23.53</b>	<b>12.69</b>	<b>0.35</b>	<b>8.94</b>	<b>-</b>	<b>0.24</b>	<b>72.06</b>
Electricity plants	8.32	-	0.22	0.17	23.53	12.69	0.29	0.99	-	0.05	46.26
CHP plants	7.68	-	0.32	9.62	-	-	0.06	7.95	-	0.18	25.81
<b>Heat generated - PJ</b>	<b>65.44</b>	<b>-</b>	<b>14.20</b>	<b>45.61</b>	<b>-</b>	<b>-</b>	<b>0.70</b>	<b>57.20</b>	<b>0.11</b>	<b>4.07</b>	<b>187.34</b>
CHP plants	57.39	-	2.42	32.33	-	-	0.56	36.50	-	1.11	130.30
Heat plants	8.05	-	11.79	13.29	-	-	0.13	20.70	0.11	2.97	57.04

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.



## Finland : 2010

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	1.81	0.04	-	-	5.94	1.11	0.03	8.29	-	0.10	17.31
Imports	3.99	11.39	4.84	3.84	-	-	-	0.18	1.35	-	25.58
Exports	-0.01	-0.01	-6.86	-	-	-	-	-0.23	-0.45	-	-7.55
Intl. marine bunkers	-	-	-0.21	-	-	-	-	-	-	-	-0.21
Intl. aviation bunkers	-	-	-0.54	-	-	-	-	-	-	-	-0.54
Stock changes	1.10	-0.13	0.84	-	-	-	-	-	-	-	1.80
<b>TPES</b>	<b>6.89</b>	<b>11.29</b>	<b>-1.92</b>	<b>3.84</b>	<b>5.94</b>	<b>1.11</b>	<b>0.03</b>	<b>8.23</b>	<b>0.90</b>	<b>0.10</b>	<b>36.40</b>
Transfers	-	2.48	-2.31	-	-	-	-	-	-	-	0.16
Statistical differences	-0.03	0.29	-0.38	-0.00	-	-	-	-0.05	-	-	-0.16
Electricity plants	-2.75	-	-0.03	-0.05	-5.94	-1.11	-0.03	-0.41	4.44	-0.04	-5.92
CHP plants	-2.51	-	-0.09	-2.06	-	-	-	-2.33	2.50	3.51	-0.99
Heat plants	-0.28	-	-0.31	-0.38	-	-	-	-0.62	-0.01	1.42	-0.18
Blast furnaces	-0.33 e	-	-0.19	-	-	-	-	-	-	-	-0.53
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB plants	-0.10	-	-	-	-	-	-	-	-	-	-0.10
Oil refineries	-	-14.20	14.26	-	-	-	-	-	-	-	0.06
Petrochemical plants	-	0.15	-0.16	-	-	-	-	-	-	-	-0.01
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-0.13	-	-0.59	-0.29	-	-	-	-0.01	-0.41	-0.03	-1.47
Losses	-0.04	-	-0.01	-	-	-	-	-	-0.24	-0.30	-0.58
<b>TFC</b>	<b>0.71</b>	<b>-</b>	<b>8.25</b>	<b>1.06</b>	<b>-</b>	<b>-</b>	<b>0.00</b>	<b>4.81</b>	<b>7.18</b>	<b>4.66</b>	<b>26.67</b>
<b>INDUSTRY</b>	<b>0.68</b>	<b>-</b>	<b>1.24</b>	<b>0.67</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>3.02</b>	<b>3.47</b>	<b>1.87</b>	<b>10.95</b>
Iron and steel	0.34 e	-	0.18	0.05	-	-	-	-	0.28	0.06	0.91
Chemical and petrochem.	-	-	0.26	0.02	-	-	-	0.01	0.40	0.27	0.96
Non-ferrous metals	-	-	0.03	0.00	-	-	-	0.01	0.18	0.08	0.30
Non-metallic minerals	0.10	-	0.08	0.04	-	-	-	0.00	0.08	0.02	0.32
Transport equipment	-	-	0.01	0.00	-	-	-	-	0.03	0.04	0.08
Machinery	-	-	0.03	0.02	-	-	-	-	0.23	0.13	0.42
Mining and quarrying	-	-	0.02	-	-	-	-	-	0.10	0.01	0.12
Food and tobacco	0.01	-	0.04	0.01	-	-	-	0.00	0.17	0.17	0.40
Paper, pulp and printing	0.22	-	0.18	0.50	-	-	-	2.86	1.80	0.77	6.32
Wood and wood products	0.01	-	0.02	0.00	-	-	-	0.12	0.15	0.26	0.57
Construction	-	-	0.31	-	-	-	-	0.01	0.03	-	0.34
Textile and leather	-	-	0.01	0.00	-	-	-	-	0.02	0.01	0.03
Non-specified	0.00	-	0.06	0.02	-	-	-	0.02	0.00	0.06	0.16
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>4.18</b>	<b>0.01</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.12</b>	<b>0.06</b>	<b>-</b>	<b>4.38</b>
Domestic aviation	-	-	0.14	-	-	-	-	-	-	-	0.14
Road	-	-	3.82	0.01	-	-	-	0.12	-	-	3.95
Rail	-	-	0.03	-	-	-	-	-	0.06	-	0.09
Pipeline transport	-	-	-	0.01	-	-	-	-	-	-	0.01
Domestic navigation	-	-	0.18	-	-	-	-	0.00	-	-	0.18
Non-specified	-	-	-	-	-	-	-	-	0.01	-	0.01
<b>OTHER</b>	<b>0.04</b>	<b>-</b>	<b>1.67</b>	<b>0.09</b>	<b>-</b>	<b>-</b>	<b>0.00</b>	<b>1.67</b>	<b>3.64</b>	<b>2.80</b>	<b>9.90</b>
Residential	0.01	-	0.56	0.05	-	-	0.00	1.40	2.03	1.69	5.76
Comm. and public services	0.00	-	0.30	0.03	-	-	-	0.09	1.53	-	1.96
Agriculture/forestry	0.02	-	0.56	0.01	-	-	-	0.15	0.08	-	0.82
Fishing	-	-	0.04	-	-	-	-	-	-	-	0.04
Non-specified	-	-	0.20	-	-	-	-	0.02	-	1.10	1.32
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>1.16</b>	<b>0.28</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.45</b>
in industry/transf./energy	-	-	1.16	0.28	-	-	-	-	-	-	1.45
of which: feedstocks	-	-	0.71	0.28	-	-	-	-	-	-	0.99
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>21.42</b>	<b>-</b>	<b>0.48</b>	<b>11.26</b>	<b>22.80</b>	<b>12.92</b>	<b>0.35</b>	<b>11.17</b>	<b>-</b>	<b>0.27</b>	<b>80.67</b>
Electricity plants	13.24	-	0.13	0.21	22.80	12.92	0.31	1.77	-	0.05	51.43
CHP plants	8.17	-	0.35	11.05	-	-	0.04	9.41	-	0.22	29.24
<b>Heat generated - PJ</b>	<b>71.00</b>	<b>-</b>	<b>14.16</b>	<b>51.04</b>	<b>-</b>	<b>-</b>	<b>0.71</b>	<b>69.19</b>	<b>0.16</b>	<b>4.57</b>	<b>210.83</b>
CHP plants	60.90	-	2.22	36.54	-	-	0.57	46.87	-	1.20	148.30
Heat plants	10.10	-	11.94	14.51	-	-	0.14	22.32	0.16	3.37	62.54

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Finland

## Estimated energy supply balance for 2011

Million tonnes of oil equivalent											
SUPPLY	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	1.61	0.04	-	-	6.04	1.07	0.04	8.05	-	0.10	16.96
Imports	4.62	11.48	5.44	3.36	-	-	-	0.18	1.52	-	26.60
Exports	-0.01	-	-7.35	-	-	-	-	-0.16	-0.33	-	-7.85
Intl. marine bunkers	-	-	-0.15	-	-	-	-	-	-	-	-0.15
Intl. aviation bunkers	-	-	-0.58	-	-	-	-	-	-	-	-0.58
Stock changes	-0.44	0.11	-0.40	-	-	-	-	-	-	-	-0.73
<b>TPES</b>	<b>5.78</b>	<b>11.63</b>	<b>-3.04</b>	<b>3.36</b>	<b>6.04</b>	<b>1.07</b>	<b>0.04</b>	<b>8.07</b>	<b>1.19</b>	<b>0.10</b>	<b>34.25</b>
Electricity and Heat Output											
Elec. generated - TWh	16.34	-	0.47	9.66	23.19	12.48	0.54	10.59	-	0.28	73.55
Heat generated - PJ	59.16	-	12.75	44.90	-	-	0.75	72.19	0.14	4.71	194.60

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1960	1971	1980	1990	2000	2009	2010	2011e
Energy production (Mtoe)	5.3	5.0	6.9	12.1	14.9	16.5	17.3	17.0
Net imports (Mtoe)	4.7	14.4	18.3	17.8	18.4	18.5	18.0	18.8
Total primary energy supply (Mtoe)	9.7	18.2	24.6	28.4	32.2	33.3	36.4	34.3
Net oil imports (Mtoe)	2.7	11.9	13.7	10.3	10.4	10.0	9.4	9.6
Oil supply (Mtoe)	2.5	10.9	12.6	9.5	8.9	9.1	9.4	8.6
Electricity consumption (TWh)*	8.3	22.6	39.7	62.3	79.2	81.4	88.4	84.6
GDP (billion 2005 USD)	44.8 e	73.3	103.7	140.2	171.9	197.9	205.3	211.2
GDP PPP (billion 2005 USD)	36.9 e	60.3	85.4	115.4	141.5	162.9	168.9	173.8
Population (millions)	4.43 e	4.61	4.78	4.99	5.18	5.34	5.36	5.36
Industrial production index (2005=100)	13.80	29.80	44.50	58.90	91.20	94.60	100.00	100.80
Total self-sufficiency**	0.5438	0.2743	0.2810	0.4257	0.4620	0.4959	0.4756	0.4951
Coal and peat self-sufficiency**	0.0141	0.0126	0.1466	0.3406	0.2118	0.4159	0.2623	0.2781
Oil self-sufficiency**	..	..	-	-	0.0067	0.0064	0.0043	0.0047
Natural gas self-sufficiency**	..	..	-	-	-	-	-	-
TPES/GDP (toe per thousand 2005 USD)	0.2173 e	0.2480	0.2371	0.2024	0.1874	0.1680	0.1773	0.1622
TPES/GDP PPP (toe per thousand 2005 USD)	0.2641 e	0.3014	0.2882	0.2460	0.2278	0.2041	0.2155	0.1972
TPES/population (toe per capita)	2.1968 e	3.9393	5.1461	5.6921	6.2266	6.2269	6.7877	6.3932
Net oil imports/GDP (toe per thousand 2005 USD)	0.0595 e	0.1618	0.1318	0.0738	0.0604	0.0507	0.0456	0.0453
Oil supply/GDP (toe per thousand 2005 USD)	0.0558 e	0.1488	0.1214	0.0675	0.0518	0.0461	0.0456	0.0407
Oil supply/population (toe per capita)	0.5644 e	2.3641	2.6354	1.8974	1.7212	1.7077	1.7465	1.6029
Elect. cons./GDP (kWh per 2005 USD)	0.1853 e	0.3078	0.3823	0.4440	0.4607	0.4112	0.4306	0.4008
Elect. cons./population (kWh per capita)	1873 e	4890	8295	12487	15305	15241	16484	15795
Industry cons.***/industrial production (2005=100)	147.81	148.10	131.07	143.67	111.67	94.35	100.15	..
Industry oil cons.***/industrial production (2005=100)	227.08	454.12	326.52	169.92	105.14	95.18	93.75	..

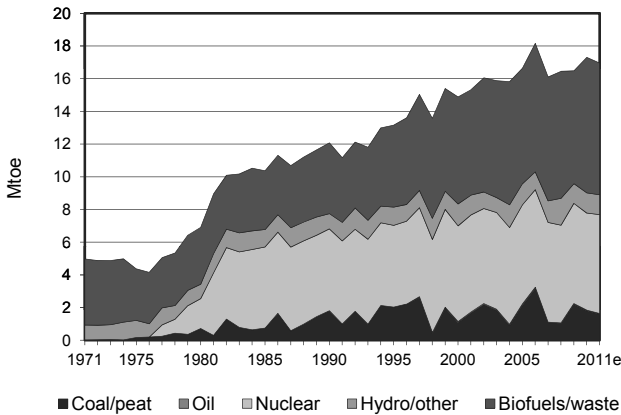
\* Electricity consumption equals domestic supply less losses.

\*\* Production divided by TPES.

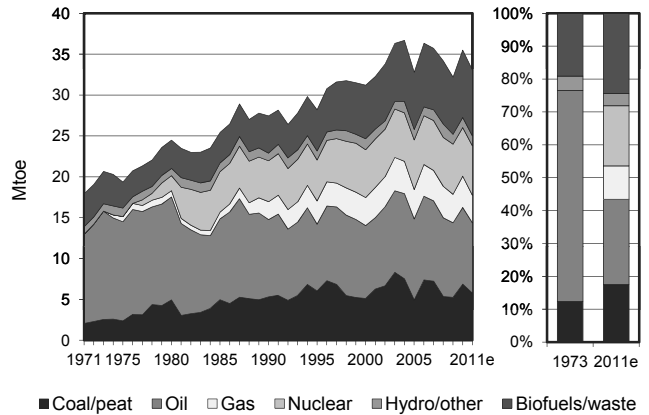
\*\*\* Includes non-energy use.

**Finland**

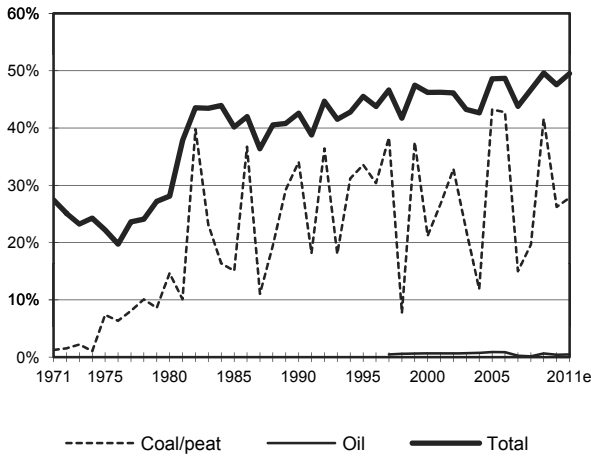
**Figure 1. Energy production**



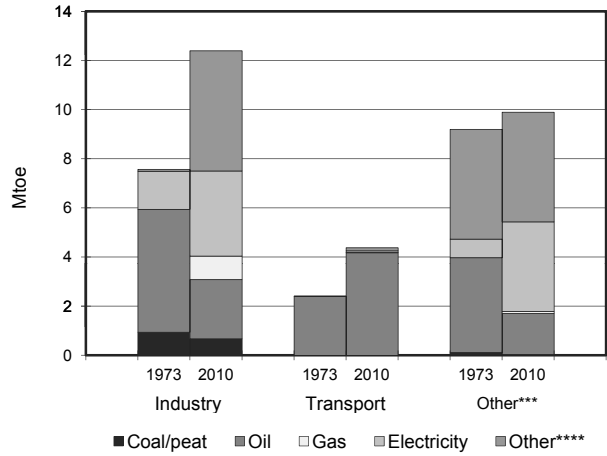
**Figure 2. Total primary energy supply\***



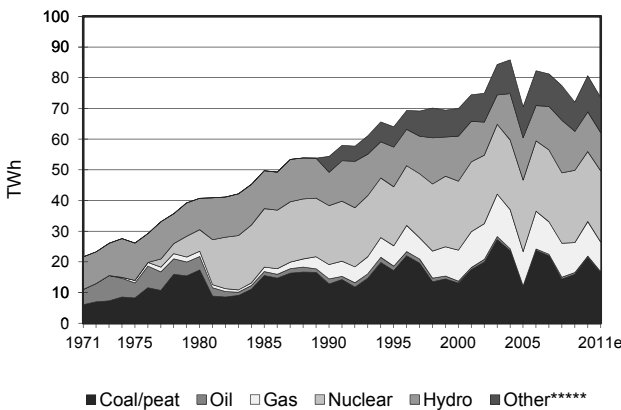
**Figure 3. Energy self-sufficiency**



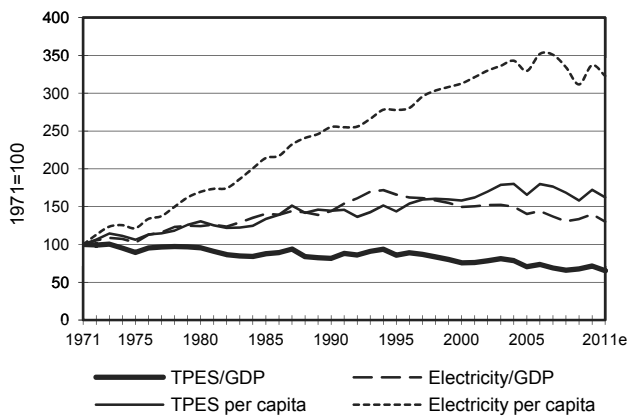
**Figure 4. Breakdown of sectorial final consumption by source in 1973 and 2010\*\***



**Figure 5. Electricity generation by fuel**



**Figure 6. Selected indicators**



\* Excluding electricity trade.

\*\* Includes non-energy use.

\*\*\* Includes residential, commercial and public services, agriculture/forestry, fishing and non-specified.

\*\*\*\* Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.

\*\*\*\*\* Includes geothermal, solar, wind, biofuels and waste, etc.

## France : 2009

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	0.09	1.11	-	0.76	106.78	4.92	0.88	14.32	-	-	128.86
Imports	10.76	71.78	39.05	40.71	-	-	-	0.41	1.59	-	164.30
Exports	-0.49	-0.07	-25.50	-1.93	-	-	-	-0.27	-3.82	-	-32.08
Intl. marine bunkers	-	-	-2.52	-	-	-	-	-	-	-	-2.52
Intl. aviation bunkers	-	-	-5.40	-	-	-	-	-	-	-	-5.40
Stock changes	0.84	0.43	0.16	-1.09	-	-	-	-0.00	-	-	0.33
<b>TPES</b>	<b>11.20</b>	<b>73.25</b>	<b>5.78</b>	<b>38.45</b>	<b>106.78</b>	<b>4.92</b>	<b>0.88</b>	<b>14.47</b>	<b>-2.23</b>	-	<b>253.49</b>
Transfers	-	4.51	-4.23	-	-	-	-	-	-	-	0.28
Statistical differences	0.47	-0.28	-0.88	0.00	-	-	0.00	0.00	0.30 e	-	-0.38
Electricity plants	-5.79	-	-1.27	-2.56	-106.78	-4.92	-0.74	-1.22	44.43	-	-78.85
CHP plants	-0.51	-	-0.90	-3.14	-	-	-	-0.91	1.22 e	2.85 e	-1.39
Heat plants	-	-	-	-	-	-	-	-0.26	-	0.13	-0.12
Blast furnaces	-1.52 e	-	-	-	-	-	-	-	-	-	-1.52
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB plants	-0.42	-	-0.06	-	-	-	-	-	-	-	-0.48
Oil refineries	-	-78.82	79.85	-	-	-	-	-	-	-	1.03
Petrochemical plants	-	1.34	-1.40	-	-	-	-	-	-	-	-0.06
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-0.35	-	-4.29	-0.73	-	-	-	-	-4.78	-	-10.15
Losses	-	-	-	-0.95	-	-	-	-	-3.00	-	-3.95
<b>TFC</b>	<b>3.08</b>	-	<b>72.61</b>	<b>31.07</b>	-	-	<b>0.14</b>	<b>12.08</b>	<b>35.94</b>	<b>2.98</b>	<b>157.90</b>
<b>INDUSTRY</b>	<b>2.64</b>	-	<b>5.47</b>	<b>8.14</b>	-	-	-	<b>1.90</b>	<b>9.61</b>	-	<b>27.76</b>
Iron and steel	1.58 e	-	0.03	0.62	-	-	-	-	0.76	-	2.99
Chemical and petrochem.	0.22	-	2.46	1.24	-	-	-	-	2.28	-	6.20
Non-ferrous metals	0.00	-	0.15	0.31	-	-	-	-	0.62	-	1.08
Non-metallic minerals	0.40	-	0.97	1.37	-	-	-	-	0.75	-	3.49
Transport equipment	0.00	-	0.03	0.43	-	-	-	-	0.63	-	1.10
Machinery	0.02	-	0.12	0.61	-	-	-	-	1.26	-	2.01
Mining and quarrying	-	-	0.12	0.06	-	-	-	-	0.05	-	0.23
Food and tobacco	0.37	-	0.30	1.99	-	-	-	0.35	1.73	-	4.74
Paper, pulp and printing	0.02	-	0.08	0.71	-	-	-	0.59	0.78	-	2.18
Wood and wood products	-	-	0.03	0.06	-	-	-	0.96	-	-	1.04
Construction	-	-	0.77	0.26	-	-	-	-	0.16	-	1.20
Textile and leather	-	-	0.02	0.18	-	-	-	-	0.15	-	0.36
Non-specified	0.02	-	0.37	0.30	-	-	-	-	0.45	-	1.14
<b>TRANSPORT</b>	-	-	<b>40.53</b>	<b>0.09</b>	-	-	-	<b>2.47</b>	<b>1.08</b>	-	<b>44.17</b>
Domestic aviation	-	-	1.31	-	-	-	-	-	-	-	1.31
Road	-	-	38.73	0.06	-	-	-	2.47	-	-	41.26
Rail	-	-	0.18	-	-	-	-	-	0.76	-	0.94
Pipeline transport	-	-	-	0.00	-	-	-	-	-	-	0.00
Domestic navigation	-	-	0.31	-	-	-	-	-	-	-	0.31
Non-specified	-	-	-	0.03	-	-	-	-	0.32	-	0.35
<b>OTHER</b>	<b>0.38</b>	-	<b>15.75</b>	<b>21.68</b>	-	-	<b>0.14</b>	<b>7.71</b>	<b>25.26</b>	<b>2.98</b>	<b>73.90</b>
Residential	0.34	-	8.24	14.19	-	-	0.09	6.98	13.05	-	42.89
Comm. and public services	-	-	3.86	5.90	-	-	0.04	0.69	11.68	-	22.17
Agriculture/forestry	-	-	3.10	0.20	-	-	0.01	0.04	0.27	-	3.62
Fishing	-	-	0.30	0.00	-	-	-	-	0.01	-	0.31
Non-specified	0.04	-	0.26	1.38	-	-	-	-	0.25	2.98 e	4.91
<b>NON-ENERGY USE</b>	<b>0.06</b>	-	<b>10.85</b>	<b>1.16</b>	-	-	-	-	-	-	<b>12.07</b>
in industry/transf./energy	-	-	10.52	1.16	-	-	-	-	-	-	11.69
of which: feedstocks	-	-	6.83	1.16	-	-	-	-	-	-	7.99
in transport	-	-	0.25	-	-	-	-	-	-	-	0.25
in other	0.06	-	0.07	-	-	-	-	-	-	-	0.13
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>24.02</b>	-	<b>4.82</b>	<b>20.50</b>	<b>409.74</b>	<b>57.20</b>	<b>8.58</b>	<b>6.02</b>	-	-	<b>530.88</b>
Electricity plants	23.36	-	3.82	10.57	409.74	57.20	8.58	3.36	-	-	516.64
CHP plants	0.66	-	1.00	9.93 e	-	-	-	2.65	-	-	14.24
<b>Heat generated - PJ</b>	<b>12.93</b>	-	<b>27.23</b>	<b>61.68</b>	-	-	-	<b>22.84</b>	-	-	<b>124.68</b>
CHP plants	12.93	-	27.23	61.68 e	-	-	-	17.30	-	-	119.14
Heat plants	-	-	-	-	-	-	-	5.54	-	-	5.54

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## France : 2010

Million tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	0.16	1.08	-	0.65	111.68	5.33	1.10	15.57	-	-	135.57
Imports	12.33	64.20	40.76	42.10	-	-	-	0.36	1.67	-	161.43
Exports	-0.18	-0.05	-22.04	-2.56	-	-	-	-0.20	-4.32	-	-29.34
Intl. marine bunkers	-	-	-2.45	-	-	-	-	-	-	-	-2.45
Intl. aviation bunkers	-	-	-5.51	-	-	-	-	-	-	-	-5.51
Stock changes	-0.28	0.31	0.22	2.34	-	-	-	-0.00	-	-	2.59
<b>TPES</b>	<b>12.04</b>	<b>65.55</b>	<b>10.98</b>	<b>42.53</b>	<b>111.68</b>	<b>5.33</b>	<b>1.10</b>	<b>15.73</b>	<b>-2.64</b>	<b>-</b>	<b>262.29</b>
Transfers	-	4.86	-4.56	-	-	-	-	-	-	-	0.30
Statistical differences	0.12	0.77	-1.09	0.02	-	-	-	-	-0.01 e	-	-0.20
Electricity plants	-5.60	-	-1.32	-3.23	-111.68	-5.33	-0.95	-1.29	46.94 e	-	-82.45
CHP plants	-0.44	-	-0.92	-4.29	-	-	-	-1.10	1.58	3.53 e	-1.64
Heat plants	-	-	-	-	-	-	-	-0.26	-	0.13	-0.13
Blast furnaces	-1.87 e	-	-	-	-	-	-	-	-	-	-1.87
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB plants	-0.47	-	-	-	-	-	-	-	-	-	-0.47
Oil refineries	-	-72.45	73.35	-	-	-	-	-	-	-	0.91
Petrochemical plants	-	1.27	-1.32	-	-	-	-	-	-	-	-0.05
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-0.32	-	-3.84	-0.84	-	-	-	-	-4.64	-	-9.64
Losses	-	-	-	-1.20	-	-	-	-	-3.05	-	-4.24
<b>TFC</b>	<b>3.46</b>	<b>-</b>	<b>71.28</b>	<b>32.99</b>	<b>-</b>	<b>-</b>	<b>0.15</b>	<b>13.08</b>	<b>38.19</b>	<b>3.67</b>	<b>162.81</b>
<b>INDUSTRY</b>	<b>3.00</b>	<b>-</b>	<b>5.18</b>	<b>9.09</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.96</b>	<b>10.10</b>	<b>-</b>	<b>29.32</b>
Iron and steel	1.92 e	-	0.02	0.78	-	-	-	-	0.88	-	3.60
Chemical and petrochem.	0.26	-	2.50	0.78	-	-	-	-	2.38	-	5.92
Non-ferrous metals	0.00	-	0.17	0.21	-	-	-	-	0.64	-	1.02
Non-metallic minerals	0.39	-	0.91	1.50	-	-	-	-	0.79	-	3.58
Transport equipment	0.01	-	0.03	0.45	-	-	-	-	0.65	-	1.13
Machinery	0.03	-	0.11	0.72	-	-	-	-	1.37	-	2.24
Mining and quarrying	-	-	0.13	0.06	-	-	-	-	0.05	-	0.23
Food and tobacco	0.34	-	0.33	2.27	-	-	-	0.38	1.73	-	5.05
Paper, pulp and printing	0.02	-	0.07	0.85	-	-	-	0.62	0.79	-	2.36
Wood and wood products	-	-	0.03	0.06	-	-	-	0.95	-	-	1.04
Construction	-	-	0.59	0.36	-	-	-	-	0.19	-	1.13
Textile and leather	-	-	0.02	0.16	-	-	-	-	0.15	-	0.33
Non-specified	0.02	-	0.27	0.90	-	-	-	-	0.49	-	1.68
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>40.50</b>	<b>0.28</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2.42</b>	<b>1.08</b>	<b>-</b>	<b>44.27</b>
Domestic aviation	-	-	1.17	-	-	-	-	-	-	-	1.17
Road	-	-	38.84	0.25	-	-	-	2.42	-	-	41.51
Rail	-	-	0.17	-	-	-	-	-	0.76	-	0.93
Pipeline transport	-	-	-	0.00	-	-	-	-	-	-	0.00
Domestic navigation	-	-	0.31	-	-	-	-	-	-	-	0.31
Non-specified	-	-	-	0.03	-	-	-	-	0.32	-	0.35
<b>OTHER</b>	<b>0.40</b>	<b>-</b>	<b>15.01</b>	<b>22.29</b>	<b>-</b>	<b>-</b>	<b>0.15</b>	<b>8.71</b>	<b>27.01</b>	<b>3.67</b>	<b>77.23</b>
Residential	0.36	-	7.76	13.87	-	-	0.10	7.99	13.97	-	44.05
Comm. and public services	-	-	3.72	6.46	-	-	0.05	0.67	12.51	-	23.40
Agriculture/forestry	-	-	2.98	0.20	-	-	0.01	0.04	0.29	-	3.52
Fishing	-	-	0.29	0.00	-	-	-	-	0.01	-	0.31
Non-specified	0.04	-	0.26	1.76	-	-	-	-	0.23	3.67 e	5.95
<b>NON-ENERGY USE</b>	<b>0.06</b>	<b>-</b>	<b>10.60</b>	<b>1.33</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>12.00</b>
in industry/transf./energy	-	-	10.28	1.33	-	-	-	-	-	-	11.62
of which: feedstocks	-	-	6.69	1.33	-	-	-	-	-	-	8.03
in transport	-	-	0.25	-	-	-	-	-	-	-	0.25
in other	0.06	-	0.07	-	-	-	-	-	-	-	0.13
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>26.32</b>	<b>-</b>	<b>5.82</b>	<b>23.76</b>	<b>428.52</b>	<b>62.01</b>	<b>11.06</b>	<b>6.80</b>	<b>-</b>	<b>-</b>	<b>564.29</b>
Electricity plants	25.78 e	-	4.72	10.21	428.52	62.01	11.06	3.56	-	-	545.87
CHP plants	0.54	-	1.10	13.55	-	-	-	3.24	-	-	18.42
<b>Heat generated - PJ</b>	<b>11.93</b>	<b>-</b>	<b>34.77</b>	<b>84.26</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>22.52</b>	<b>-</b>	<b>-</b>	<b>153.48</b>
CHP plants	11.93 e	-	34.77	84.26	-	-	-	16.87	-	-	147.83
Heat plants	-	-	-	-	-	-	-	5.65	-	-	5.65

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## France

## Estimated energy supply balance for 2011

Million tonnes of oil equivalent											
SUPPLY	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	0.09	1.09	-	0.51	115.29	3.88	1.43	13.93	-	-	136.21
Imports	10.27	64.45	39.47	40.90	-	-	-	0.53	0.82	-	156.44
Exports	-0.10	-0.23	-20.87	-4.38	-	-	-	-0.16	-5.67	-	-31.40
Intl. marine bunkers	-	-	-2.62	-	-	-	-	-	-	-	-2.62
Intl. aviation bunkers	-	-	-5.79	-	-	-	-	-	-	-	-5.79
Stock changes	0.02	0.71	-0.37	-1.74	-	-	-	-	-	-	-1.38
<b>TPES</b>	<b>10.28</b>	<b>66.02</b>	<b>9.81</b>	<b>35.30</b>	<b>115.29</b>	<b>3.88</b>	<b>1.43</b>	<b>14.30</b>	<b>-4.85</b>	<b>-</b>	<b>251.45</b>
Electricity and Heat Output											
Elec. generated - TWh	22.61	-	5.00	20.42	442.38	45.11	14.78	7.10	-	-	557.40
Heat generated - PJ	10.49	-	30.58	74.09	-	-	-	19.80	-	-	134.96

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1960	1971	1980	1990	2000	2009	2010	2011e
Energy production (Mtoe)	45.3	47.6	52.6	111.9	130.8	128.9	135.6	136.2
Net imports (Mtoe)	38.5	117.8	149.0	119.4	132.6	132.2	132.1	125.0
Total primary energy supply (Mtoe)	79.2	158.6	191.8	223.9	251.9	253.5	262.3	251.5
Net oil imports (Mtoe)	29.0	103.9	112.3	85.9	89.8	85.3	82.9	82.8
Oil supply (Mtoe)	28.6	99.3	106.3	83.9	82.0	79.0	76.5	75.8
Electricity consumption (TWh)*	68.2	144.1	243.9	347.6	440.8	475.0	502.9	470.6
GDP (billion 2005 USD)	514.1 e	942.1	1283.6	1623.8	1973.0	2176.4	2208.6	2245.7
GDP PPP (billion 2005 USD)	447.7 e	820.5	1117.9	1414.2	1718.3	1895.4	1923.5	1955.8
Population (millions)	46.62 e	52.41	55.11	58.17	60.73	64.50	64.85	65.00
Industrial production index (2005=100)	33.70	59.70	75.60	88.20	99.80	86.50	90.80	92.90
Total self-sufficiency**	0.5718	0.3002	0.2743	0.4997	0.5193	0.5084	0.5169	0.5417
Coal and peat self-sufficiency**	0.8324	0.6847	0.4067	0.4077	0.1650	0.0082	0.0135	0.0090
Oil self-sufficiency**	0.0707	0.0252	0.0212	0.0414	0.0221	0.0140	0.0141	0.0143
Natural gas self-sufficiency**	1.0397	0.6215	0.2923	0.0966	0.0421	0.0198	0.0152	0.0143
TPES/GDP (toe per thousand 2005 USD)	0.1541 e	0.1683	0.1494	0.1379	0.1277	0.1165	0.1188	0.1120
TPES/GDP PPP (toe per thousand 2005 USD)	0.1770 e	0.1933	0.1715	0.1583	0.1466	0.1337	0.1364	0.1286
TPES/population (toe per capita)	1.6993 e	3.0258	3.4798	3.8488	4.1477	3.9303	4.0447	3.8683
Net oil imports/GDP (toe per thousand 2005 USD)	0.0564 e	0.1103	0.0875	0.0529	0.0455	0.0392	0.0375	0.0369
Oil supply/GDP (toe per thousand 2005 USD)	0.0555 e	0.1054	0.0828	0.0517	0.0416	0.0363	0.0346	0.0338
Oil supply/population (toe per capita)	0.6124 e	1.8951	1.9292	1.4426	1.3509	1.2252	1.1801	1.1666
Elect. cons./GDP (kWh per 2005 USD)	0.1327 e	0.1530	0.1900	0.2141	0.2234	0.2183	0.2277	0.2096
Elect. cons./population (kWh per capita)	1463 e	2750	4426	5975	7260	7365	7756	7240
Industry cons.***/industrial production (2005=100)	169.32	196.58	150.88	108.77	105.97	96.10	95.00	..
Industry oil cons.***/industrial production (2005=100)	149.75	321.27	211.21	104.00	100.02	98.53	90.70	..

\* Electricity consumption equals domestic supply less losses.

\*\* Production divided by TPES.

\*\*\* Includes non-energy use.

France

Figure 1. Energy production

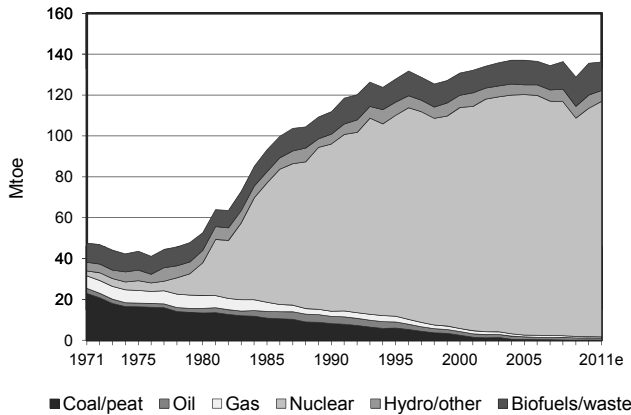


Figure 2. Total primary energy supply\*

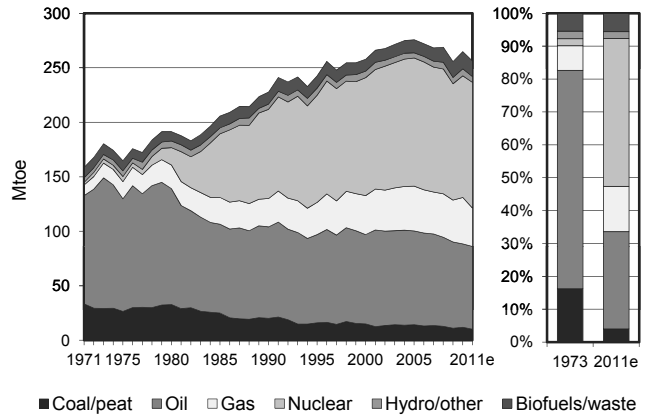


Figure 3. Energy self-sufficiency

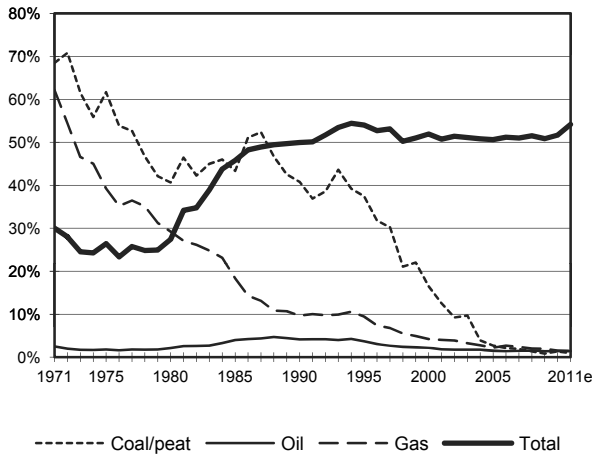


Figure 4. Breakdown of sectorial final consumption by source in 1973 and 2010\*\*

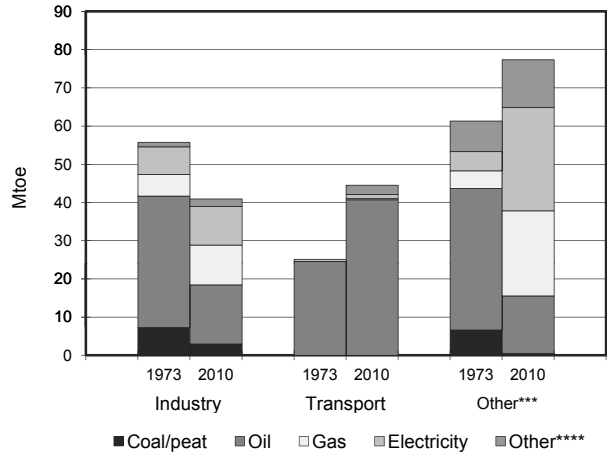


Figure 5. Electricity generation by fuel

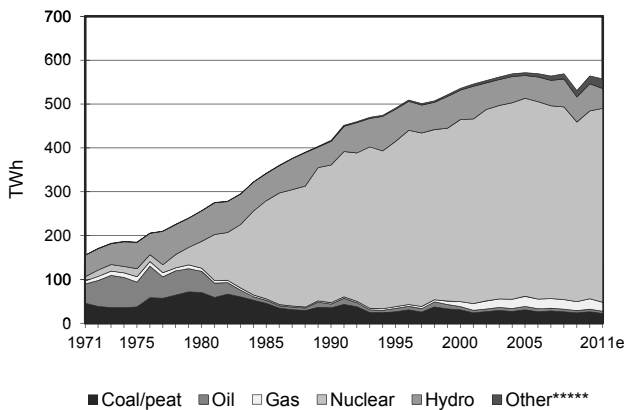
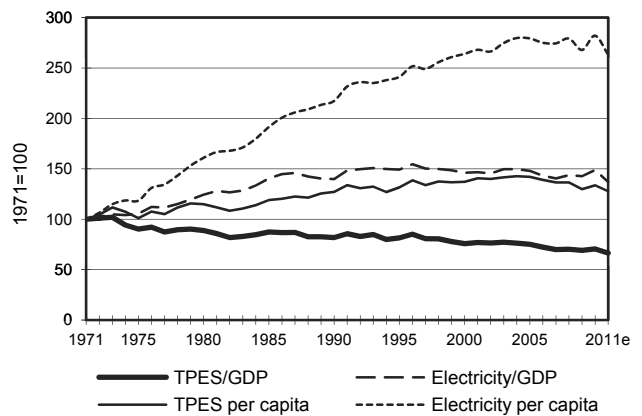


Figure 6. Selected indicators



\* Excluding electricity trade.  
 \*\* Includes non-energy use.  
 \*\*\* Includes residential, commercial and public services, agriculture/forestry, fishing and non-specified.  
 \*\*\*\* Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.  
 \*\*\*\*\* Includes geothermal, solar, wind, biofuels and waste, etc.

## Germany : 2009

Million tonnes of oil equivalent

<b>SUPPLY AND CONSUMPTION</b>	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	45.70	3.85	-	11.11	35.16	1.60	4.76	24.95	-	-	127.15
Imports	26.76	99.64	33.37	76.32	-	-	-	0.25	3.60	-	239.94
Exports	-0.87	-0.11	-22.27	-9.05	-	-	-	-0.42	-4.66	-0.01	-37.39
Intl. marine bunkers	-	-	-2.70	-	-	-	-	-	-	-	-2.70
Intl. aviation bunkers	-	-	-8.23	-	-	-	-	-	-	-	-8.23
Stock changes	0.02	0.40	-0.25	-1.83	-	-	-	-	-	-	-1.66
<b>TPES</b>	<b>71.62</b>	<b>103.77</b>	<b>-0.09</b>	<b>76.56</b>	<b>35.16</b>	<b>1.60</b>	<b>4.76</b>	<b>24.78</b>	<b>-1.06</b>	<b>-0.01</b>	<b>317.10</b>
Transfers	-	2.27	-1.64	-	-	-	-	-	-	-	0.63
Statistical differences	0.94	-0.17	0.51	-1.92	-	-	-	-0.00	-0.00	-	-0.65
Electricity plants	-53.86	-	-1.50	-4.58	-35.16	-1.60	-3.90	-9.44	43.62	-	-66.43
CHP plants	-6.63	-	-0.53	-10.10	-	-	-	-3.24	6.63 e	8.20	-5.68
Heat plants	-0.62	-	-0.18	-1.90	-	-	-0.05	-1.05	-	3.04	-0.76
Blast furnaces	-3.60	-	-0.25	-	-	-	-	-	-	-	-3.85
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB plants	0.09	-	-0.55	-0.04	-	-	-	-	-	-	-0.50
Oil refineries	-	-111.08	109.99	-	-	-	-	-	-	-	-1.09
Petrochemical plants	-	5.21	-5.32	-	-	-	-	-	-	-	-0.11
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-0.80	-	-6.47	-0.74	-	-	-	-0.00	-4.42 e	-0.12	-12.57
Losses	-0.32	-	-	-0.00	-	-	-	-0.02	-2.15	-0.87	-3.36
<b>TFC</b>	<b>6.83</b>	<b>-</b>	<b>93.97</b>	<b>57.27</b>	<b>-</b>	<b>-</b>	<b>0.81</b>	<b>11.01</b>	<b>42.62</b>	<b>10.24</b>	<b>222.73</b>
<b>INDUSTRY</b>	<b>5.37</b>	<b>-</b>	<b>2.96</b>	<b>15.16</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>3.31</b>	<b>17.38</b>	<b>3.63</b>	<b>47.80</b>
Iron and steel	3.07	-	0.36	1.58	-	-	-	0.00	1.93	0.04	6.98
Chemical and petrochem.	0.42	-	-	3.92	-	-	-	0.40	3.86	2.12	10.71
Non-ferrous metals	0.02	-	0.13	0.58	-	-	-	0.01	0.95	0.02	1.70
Non-metallic minerals	1.21	-	0.75	2.03	-	-	-	0.96	1.00	0.01	5.96
Transport equipment	0.03	-	0.06	0.68	-	-	-	0.00	1.36	0.35	2.48
Machinery	0.02	-	0.40	1.46	-	-	-	0.03	0.86	0.12	2.90
Mining and quarrying	0.05	-	0.08	0.13	-	-	-	0.02	0.18	0.00	0.46
Food and tobacco	0.18	-	0.52	2.06	-	-	-	0.08	1.53	0.16	4.54
Paper, pulp and printing	0.36	-	0.10	1.86	-	-	-	0.86	2.06	0.38	5.61
Wood and wood products	0.00	-	0.05	0.11	-	-	-	0.84	0.38	0.09	1.48
Construction	-	-	-	-	-	-	-	-	0.07	-	0.07
Textile and leather	0.01	-	0.04	0.21	-	-	-	0.00	0.20	0.01	0.47
Non-specified	0.01	-	0.47	0.54	-	-	-	0.12	2.99	0.32	4.44
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>48.64</b>	<b>0.13</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2.70</b>	<b>1.37</b>	<b>-</b>	<b>52.84</b>
Domestic aviation	-	-	0.70	-	-	-	-	-	-	-	0.70
Road	-	-	47.32	0.13	-	-	-	2.70	-	-	50.15
Rail	-	-	0.42	-	-	-	-	-	1.37	-	1.78
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	0.14	-	-	-	-	-	-	-	0.14
Non-specified	-	-	0.07	-	-	-	-	-	-	-	0.07
<b>OTHER</b>	<b>1.20</b>	<b>-</b>	<b>21.98</b>	<b>40.23</b>	<b>-</b>	<b>-</b>	<b>0.81</b>	<b>5.00</b>	<b>23.88</b>	<b>6.61</b>	<b>99.70</b>
Residential	0.96	-	14.02	28.80	-	-	0.79	4.99	11.97	4.21	65.74
Comm. and public services	0.24	-	7.95	7.52	-	-	0.01	0.01	11.17	2.40	29.31
Agriculture/forestry	-	-	-	0.26	-	-	-	-	0.74	-	1.00
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	3.65	-	-	-	-	-	-	3.65
<b>NON-ENERGY USE</b>	<b>0.25</b>	<b>-</b>	<b>20.39</b>	<b>1.75</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>22.39</b>
in industry/transf./energy	0.25	-	20.07	1.75	-	-	-	-	-	-	22.07
of which: feedstocks	0.01	-	16.57	1.75	-	-	-	-	-	-	18.33
in transport	-	-	0.30	-	-	-	-	-	-	-	0.30
in other	-	-	0.01	-	-	-	-	-	-	-	0.01
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>258.65</b>	<b>-</b>	<b>9.64</b>	<b>78.88</b>	<b>134.93</b>	<b>18.66</b>	<b>47.99</b>	<b>35.56</b>	<b>-</b>	<b>-</b>	<b>584.32</b>
Electricity plants	240.02 e	-	7.22	31.28	134.93	18.66	46.84	28.32	-	-	507.26
CHP plants	18.63 e	-	2.42	47.60	-	-	1.16	7.24	-	-	77.06
<b>Heat generated - PJ</b>	<b>149.75</b>	<b>-</b>	<b>7.12</b>	<b>232.82</b>	<b>-</b>	<b>-</b>	<b>1.05</b>	<b>65.97</b>	<b>-</b>	<b>13.84</b>	<b>470.55</b>
CHP plants	139.53	-	1.83	157.20	-	-	-	42.88	-	1.85 e	343.30
Heat plants	10.21	-	5.29	75.62	-	-	1.05	23.09	-	11.99 e	127.25

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.



## Germany : 2010

Million tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	45.12	3.32	-	9.69	36.63	1.76	5.23	29.60	-	-	131.35
Imports	32.78	95.25	36.01	74.29	-	-	-	0.45	3.69	-	242.47
Exports	-0.95	-0.72	-17.87	-14.19	-	-	-	-0.64	-4.98	-0.01	-39.36
Intl. marine bunkers	-	-	-2.75	-	-	-	-	-	-	-	-2.75
Intl. aviation bunkers	-	-	-8.11	-	-	-	-	-	-	-	-8.11
Stock changes	0.16	0.43	-0.41	3.60	-	-	-	-	-	-	3.78
<b>TPES</b>	<b>77.12</b>	<b>98.27</b>	<b>6.87</b>	<b>73.38</b>	<b>36.63</b>	<b>1.76</b>	<b>5.23</b>	<b>29.41</b>	<b>-1.29</b>	<b>-0.01</b>	<b>327.37</b>
Transfers	-	1.04	-0.28	-	-	-	-	-	-	-	0.76
Statistical differences	-0.32	-0.08	-0.27	0.78	-	-	-	-0.00	-0.09	-	0.02
Electricity plants	-54.90	-	-1.14	-5.86	-36.63	-1.76	-4.28	-10.95	46.25	-	-69.27
CHP plants	-7.11	-	-0.49	-11.27	-	-	-	-3.67	7.25 e	8.67	-6.62
Heat plants	-0.71	-	-0.19	-2.64	-	-	-0.05	-1.22	-	3.65	-1.14
Blast furnaces	-5.12	-	-0.28	-	-	-	-	-	-	-	-5.40
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB plants	-0.26	-	-0.77	-	-	-	-	-	-	-	-1.04
Oil refineries	-	-105.23	103.63	-	-	-	-	-	-	-	-1.60
Petrochemical plants	-	6.00	-6.14	-	-	-	-	-	-	-	-0.14
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-0.94	-	-6.25	-0.91	-	-	-	-0.01	-4.57	-0.09	-12.77
Losses	-0.39	-	-	-	-	-	-	-0.02	-2.06	-0.94	-3.41
<b>TFC</b>	<b>7.36</b>	<b>-</b>	<b>94.68</b>	<b>53.49</b>	<b>-</b>	<b>-</b>	<b>0.90</b>	<b>13.54</b>	<b>45.49</b>	<b>11.29</b>	<b>226.75</b>
<b>INDUSTRY</b>	<b>5.76</b>	<b>-</b>	<b>2.63</b>	<b>19.58</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>4.32</b>	<b>19.38</b>	<b>3.48</b>	<b>55.14</b>
Iron and steel	3.12	-	0.28	2.38	-	-	-	0.00	2.33	0.04	8.15
Chemical and petrochem.	0.71	-	-	5.27	-	-	-	0.81	4.50	1.80	13.10
Non-ferrous metals	0.03	-	0.10	0.77	-	-	-	0.01	1.22	0.02	2.15
Non-metallic minerals	1.24	-	0.68	2.45	-	-	-	0.94	1.05	0.01	6.37
Transport equipment	0.02	-	0.10	0.91	-	-	-	0.01	1.53	0.38	2.95
Machinery	0.02	-	0.54	1.79	-	-	-	0.08	2.83	0.31	5.57
Mining and quarrying	0.05	-	0.04	0.15	-	-	-	0.02	0.19	0.00	0.44
Food and tobacco	0.19	-	0.40	2.51	-	-	-	0.19	1.51	0.13	4.92
Paper, pulp and printing	0.35	-	0.10	2.25	-	-	-	1.02	2.09	0.42	6.24
Wood and wood products	0.00	-	0.06	0.15	-	-	-	1.15	0.39	0.10	1.85
Construction	-	-	-	-	-	-	-	-	0.07	-	0.07
Textile and leather	0.01	-	0.04	0.26	-	-	-	0.00	0.21	0.06	0.59
Non-specified	0.01	-	0.29	0.70	-	-	-	0.10	1.46	0.19	2.74
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>48.42</b>	<b>0.23</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2.96</b>	<b>1.44</b>	<b>-</b>	<b>53.05</b>
Domestic aviation	-	-	0.66	-	-	-	-	-	-	-	0.66
Road	-	-	47.05	0.23	-	-	-	2.96	-	-	50.25
Rail	-	-	0.38	-	-	-	-	-	1.44	-	1.82
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	0.26	-	-	-	-	-	-	-	0.26
Non-specified	-	-	0.07	-	-	-	-	-	-	-	0.07
<b>OTHER</b>	<b>1.28</b>	<b>-</b>	<b>22.28</b>	<b>31.71</b>	<b>-</b>	<b>-</b>	<b>0.90</b>	<b>6.26</b>	<b>24.67</b>	<b>7.81</b>	<b>94.91</b>
Residential	1.10	-	14.12	22.97	-	-	0.89	6.25	12.19	4.51	62.03
Comm. and public services	0.18	-	8.16	8.74	-	-	0.01	0.01	11.71	3.30	32.11
Agriculture/forestry	-	-	-	-	-	-	-	-	0.77	-	0.77
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	<b>0.33</b>	<b>-</b>	<b>21.34</b>	<b>1.98</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>23.65</b>
in industry/transf./energy	0.33	-	21.02	1.98	-	-	-	-	-	-	23.33
of which: feedstocks	0.04	-	17.51	1.98	-	-	-	-	-	-	19.53
in transport	-	-	0.30	-	-	-	-	-	-	-	0.30
in other	-	-	0.01	-	-	-	-	-	-	-	0.01
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>273.55</b>	<b>-</b>	<b>8.36</b>	<b>86.83</b>	<b>140.56</b>	<b>20.43</b>	<b>52.46</b>	<b>39.87</b>	<b>-</b>	<b>-</b>	<b>622.06</b>
Electricity plants	252.18 e	-	6.11	35.47	140.56	20.43	51.24	31.81	-	-	537.79
CHP plants	21.37	-	2.25	51.36	-	-	1.22	8.06	-	-	84.27
<b>Heat generated - PJ</b>	<b>169.35</b>	<b>-</b>	<b>8.14</b>	<b>256.77</b>	<b>-</b>	<b>-</b>	<b>1.03</b>	<b>73.97</b>	<b>-</b>	<b>6.85</b>	<b>516.11</b>
CHP plants	149.08	-	1.87	161.38	-	-	-	47.66	-	3.11 e	363.11
Heat plants	20.27	-	6.27	95.39	-	-	1.03	26.31	-	3.74 e	153.00

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Germany

## Estimated energy supply balance for 2011

Million tonnes of oil equivalent											
SUPPLY	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	46.14	3.46	-	9.00	28.14	1.58	6.70	30.48	-	-	125.49
Imports	29.37	92.44	33.66	73.19	-	-	-	0.49	4.39	-	233.54
Exports	-0.97	-0.38	-17.79	-16.50	-	-	-	-0.52	-4.71	-0.01	-40.87
Intl. marine bunkers	-	-	-2.70	-	-	-	-	-	-	-	-2.70
Intl. aviation bunkers	-	-	-7.72	-	-	-	-	-	-	-	-7.72
Stock changes	0.01	0.33	0.72	-1.62	-	-	-	0.00	-	-	-0.57
<b>TPES</b>	<b>74.55</b>	<b>95.83</b>	<b>6.17</b>	<b>64.06</b>	<b>28.14</b>	<b>1.58</b>	<b>6.70</b>	<b>30.45</b>	<b>-0.32</b>	<b>-0.01</b>	<b>307.16</b>
Electricity and Heat Output											
Elec. generated - TWh	278.33	-	7.00	84.00	107.97	18.37	69.03	43.57	-	-	608.27
Heat generated - PJ	153.14	-	4.49	223.13	-	-	1.23	69.94	-	-	451.93

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1960	1971	1980	1990	2000	2009	2010	2011e
Energy production (Mtoe)	125.3	175.2	185.6	186.2	135.3	127.2	131.4	125.5
Net imports (Mtoe)	16.4	143.3	183.4	167.3	205.7	202.6	203.1	192.7
Total primary energy supply (Mtoe)	142.2	305.1	357.2	351.2	336.6	317.1	327.4	307.2
Net oil imports (Mtoe)	29.0	141.3	148.9	122.1	126.9	110.6	112.7	107.9
Oil supply (Mtoe)	30.6	140.6	143.9	121.4	124.7	103.7	105.1	102.0
Electricity consumption (TWh)*	115.5	318.3	453.9	527.4	545.5	553.1	590.1	586.8
GDP (billion 2005 USD)	857.7 e	1365.1	1760.6	2216.3	2685.2	2840.9	2945.8	3034.0
GDP PPP (billion 2005 USD)	795.6 e	1266.2	1633.2	2055.8	2490.8	2635.3	2732.5	2814.4
Population (millions)	71.22 e	78.35	78.30	79.36	82.19	81.88	81.76	81.62
Industrial production index (2005=100)	33.80	59.60	71.00	85.70	93.90	94.10	105.00	114.40
Total self-sufficiency**	0.8810	0.5744	0.5197	0.5302	0.4021	0.4010	0.4012	0.4085
Coal and peat self-sufficiency**	1.0769	1.0585	1.0151	0.9472	0.7147	0.6382	0.5851	0.6189
Oil self-sufficiency**	0.1843	0.0549	0.0393	0.0388	0.0316	0.0371	0.0315	0.0339
Natural gas self-sufficiency**	1.0000	0.7212	0.3177	0.2461	0.2199	0.1452	0.1321	0.1404
TPES/GDP (toe per thousand 2005 USD)	0.1658 e	0.2235	0.2029	0.1584	0.1253	0.1116	0.1111	0.1012
TPES/GDP PPP (toe per thousand 2005 USD)	0.1787 e	0.2409	0.2187	0.1708	0.1351	0.1203	0.1198	0.1091
TPES/population (toe per capita)	1.9963 e	3.8937	4.5615	4.4245	4.0953	3.8730	4.0042	3.7631
Net oil imports/GDP (toe per thousand 2005 USD)	0.0338 e	0.1035	0.0845	0.0551	0.0473	0.0389	0.0382	0.0356
Oil supply/GDP (toe per thousand 2005 USD)	0.0357 e	0.1030	0.0817	0.0548	0.0464	0.0365	0.0357	0.0336
Oil supply/population (toe per capita)	0.4298 e	1.7943	1.8373	1.5295	1.5171	1.2664	1.2860	1.2497
Elect. cons./GDP (kWh per 2005 USD)	0.1347 e	0.2332	0.2578	0.2380	0.2032	0.1947	0.2003	0.1934
Elect. cons./population (kWh per capita)	1622 e	4063	5796	6646	6637	6755	7217	7189
Industry cons.***/industrial production (2005=100)	167.75	190.96	173.60	125.88	98.56	90.42	91.01	..
Industry oil cons.***/industrial production (2005=100)	98.72	257.34	195.16	118.35	112.05	94.04	86.57	..

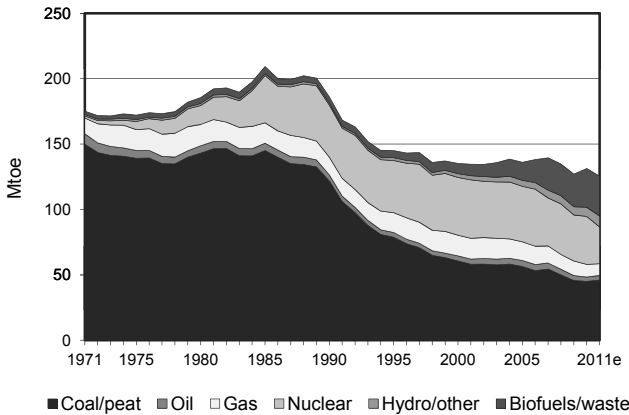
\* Electricity consumption equals domestic supply less losses.

\*\* Production divided by TPES.

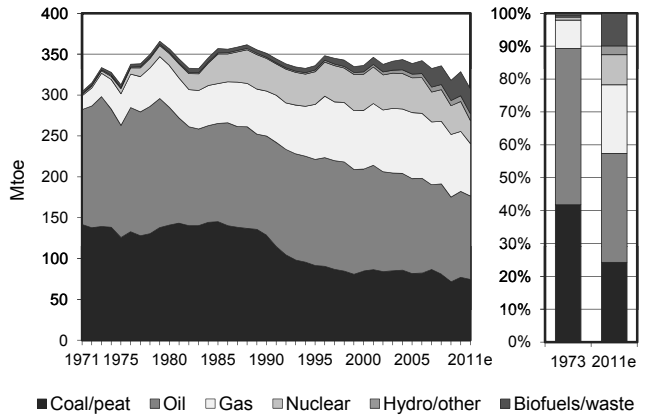
\*\*\* Includes non-energy use.

## Germany

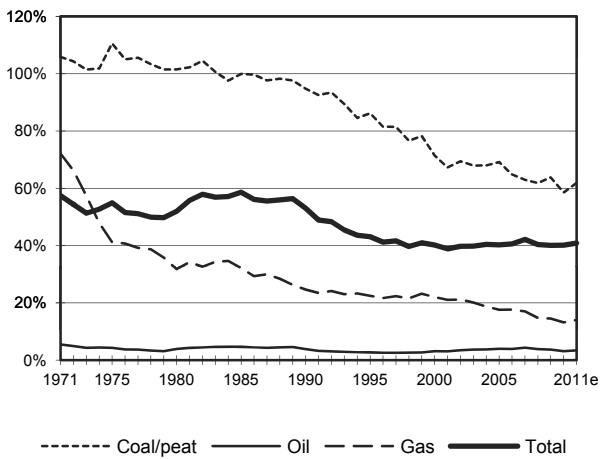
**Figure 1. Energy production**



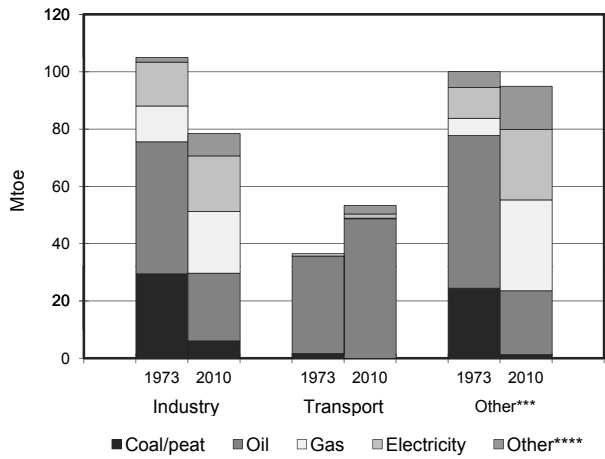
**Figure 2. Total primary energy supply\***



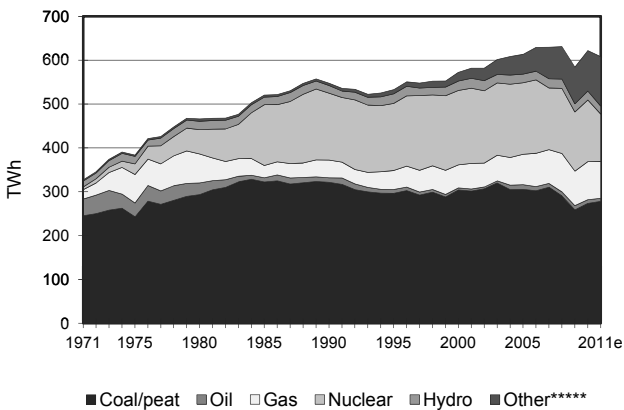
**Figure 3. Energy self-sufficiency**



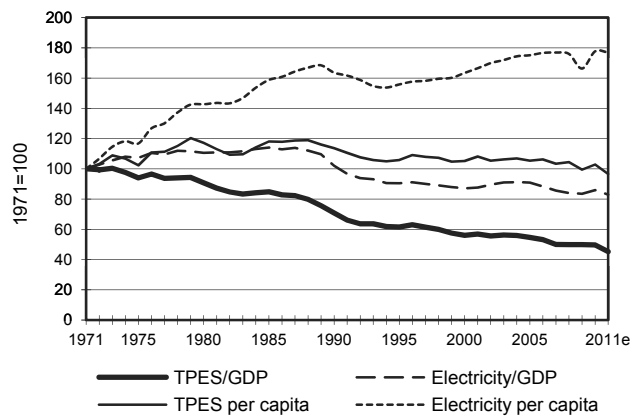
**Figure 4. Breakdown of sectorial final consumption by source in 1973 and 2010\*\***



**Figure 5. Electricity generation by fuel**



**Figure 6. Selected indicators**



\* Excluding electricity trade.

\*\* Includes non-energy use.

\*\*\* Includes residential, commercial and public services, agriculture/forestry, fishing and non-specified.

\*\*\*\* Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.

\*\*\*\*\* Includes geothermal, solar, wind, biofuels and waste, etc.

## Greece : 2009

Million tonnes of oil equivalent											
<b>SUPPLY AND CONSUMPTION</b>	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	8.18	0.07	-	0.01	-	0.46	0.43	0.93 e	-	-	10.08
Imports	0.17	20.47	6.99	2.96	-	-	-	0.06	0.65	-	31.30
Exports	-0.00	-1.00	-7.84	-	-	-	-	-	-0.28	-	-9.12
Intl. marine bunkers	-	-	-2.60	-	-	-	-	-	-	-	-2.60
Intl. aviation bunkers	-	-	-0.85	-	-	-	-	-	-	-	-0.85
Stock changes	0.08	0.13	0.42	-0.00	-	-	-	-	-	-	0.63
<b>TPES</b>	<b>8.43</b>	<b>19.67</b>	<b>-3.88</b>	<b>2.97</b>	<b>-</b>	<b>0.46</b>	<b>0.43</b>	<b>0.99</b>	<b>0.38</b>	<b>-</b>	<b>29.44</b>
Transfers	-	1.55	-1.55	-	-	-	-	-	-	-	-0.00
Statistical differences	0.04	-0.04	0.33	-0.03	-	-	-	-	-	-	0.30
Electricity plants	-6.48	-	-1.61	-1.65	-	-0.46	-0.22	-0.05	4.45	-	-6.02
CHP plants	-1.78	-	-0.24	-0.16	-	-	-	-0.01	0.80	0.05	-1.34
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-21.19	21.48	-	-	-	-	-	-	-	0.29
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-0.00 e	-	-	-0.00
Energy industry own use	-0.03	-	-1.06	-0.03	-	-	-	-	-0.65	-	-1.77
Losses	-	-	-	-0.02	-	-	-	-	-0.28	-	-0.30
<b>TFC</b>	<b>0.17</b>	<b>-</b>	<b>13.46</b>	<b>1.07</b>	<b>-</b>	<b>-</b>	<b>0.20</b>	<b>0.93</b>	<b>4.71</b>	<b>0.05</b>	<b>20.59</b>
<b>INDUSTRY</b>	<b>0.17</b>	<b>-</b>	<b>1.43</b>	<b>0.41</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.24</b>	<b>1.21</b>	<b>-</b>	<b>3.46</b>
Iron and steel	-	-	0.00	0.06	-	-	-	-	0.12	-	0.19
Chemical and petrochem.	-	-	0.12	0.05	-	-	-	-	0.06	-	0.22
Non-ferrous metals	0.07	-	0.13	0.06	-	-	-	-	0.35	-	0.61
Non-metallic minerals	0.08	-	0.54	0.08	-	-	-	0.00	0.15	-	0.86
Transport equipment	-	-	0.02	-	-	-	-	-	0.01	-	0.03
Machinery	-	-	0.00	0.00	-	-	-	-	0.00	-	0.01
Mining and quarrying	-	-	0.05	-	-	-	-	-	0.02	-	0.08
Food and tobacco	-	-	0.11	0.10	-	-	-	0.22	0.19	-	0.62
Paper, pulp and printing	-	-	0.04	0.03	-	-	-	-	0.05	-	0.12
Wood and wood products	-	-	0.00	0.00	-	-	-	0.02	0.02	-	0.04
Construction	-	-	0.15	-	-	-	-	-	0.00	-	0.15
Textile and leather	-	-	0.02	0.02	-	-	-	-	0.05	-	0.09
Non-specified	0.01	-	0.23	0.01	-	-	-	-	0.17	-	0.43
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>8.24</b>	<b>0.02</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.08</b>	<b>0.02</b>	<b>-</b>	<b>8.36</b>
Domestic aviation	-	-	0.29	-	-	-	-	-	-	-	0.29
Road	-	-	7.04	0.01	-	-	-	0.08	-	-	7.13
Rail	-	-	0.03	-	-	-	-	-	0.01	-	0.04
Pipeline transport	-	-	-	0.00	-	-	-	-	-	-	0.00
Domestic navigation	-	-	0.88	-	-	-	-	-	-	-	0.88
Non-specified	-	-	-	-	-	-	-	-	0.01	-	0.01
<b>OTHER</b>	<b>0.00</b>	<b>-</b>	<b>3.13</b>	<b>0.40</b>	<b>-</b>	<b>-</b>	<b>0.20</b>	<b>0.61</b>	<b>3.48</b>	<b>0.05</b>	<b>7.87</b>
Residential	0.00	-	2.20	0.26	-	-	0.19	0.59	1.56	0.05	4.85
Comm. and public services	-	-	0.29	0.14	-	-	0.00	0.00	1.70	-	2.14
Agriculture/forestry	-	-	0.63	-	-	-	0.01	0.01	0.22	-	0.87
Fishing	-	-	-	-	-	-	0.00	-	-	-	0.00
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>0.66</b>	<b>0.25</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.91</b>
in industry/transf./energy	-	-	0.62	0.25	-	-	-	-	-	-	0.87
of which: feedstocks	-	-	0.23	0.25	-	-	-	-	-	-	0.48
in transport	-	-	0.03	-	-	-	-	-	-	-	0.03
in other	-	-	0.00	-	-	-	-	-	-	-	0.00
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>34.19</b>	<b>-</b>	<b>7.68</b>	<b>11.02</b>	<b>-</b>	<b>5.37</b>	<b>2.59</b>	<b>0.24</b>	<b>-</b>	<b>-</b>	<b>61.09</b>
Electricity plants	26.83	-	6.90	9.86	-	5.37	2.59	0.18	-	-	51.75
CHP plants	7.35	-	0.78	1.16	-	-	-	0.05	-	-	9.34
<b>Heat generated - PJ</b>	<b>2.02</b>	<b>-</b>	<b>0.03</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2.05</b>
CHP plants	2.02	-	0.03	-	-	-	-	-0.03	-	-	2.05
Heat plants	-	-	-	-	-	-	-	-	-	-	-

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Greece : 2010

Million tonnes of oil equivalent											
<b>SUPPLY AND CONSUMPTION</b>	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	7.32	0.10	-	0.01	-	0.64	0.46	0.92 e	-	-	9.45
Imports	0.40	21.07	5.55	3.23	-	-	-	0.16	0.73	-	31.13
Exports	-	-0.85	-8.75	-	-	-	-	-0.00	-0.24	-	-9.83
Intl. marine bunkers	-	-	-2.71	-	-	-	-	-	-	-	-2.71
Intl. aviation bunkers	-	-	-0.68	-	-	-	-	-	-	-	-0.68
Stock changes	0.15	0.33	-0.21	-0.00	-	-	-	-	-	-	0.26
<b>TPES</b>	<b>7.86</b>	<b>20.66</b>	<b>-6.80</b>	<b>3.23</b>	<b>-</b>	<b>0.64</b>	<b>0.46</b>	<b>1.08</b>	<b>0.49</b>	<b>-</b>	<b>27.62</b>
Transfers	-	0.77	-0.75	-	-	-	-	-	-	-	0.02
Statistical differences	0.10	0.47	-0.12	-0.00	-	-	-	-	-	-	0.44
Electricity plants	-5.49	-	-1.23	-1.90	-	-0.64	-0.25	-0.04	4.00	-	-5.54
CHP plants	-2.17	-	-0.26	-0.16	-	-	-	-0.04	0.93	0.05	-1.65
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-21.89	22.45	-	-	-	-	-	-	-	0.57
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-0.00 e	-	-	-0.00
Energy industry own use	-	-	-1.08	-0.02	-	-	-	-	-0.53	-	-1.63
Losses	-	-	-	-0.02	-	-	-	-	-0.33	-	-0.34
<b>TFC</b>	<b>0.30</b>	<b>-</b>	<b>12.22</b>	<b>1.14</b>	<b>-</b>	<b>-</b>	<b>0.21</b>	<b>0.99</b>	<b>4.57</b>	<b>0.05</b>	<b>19.47</b>
<b>INDUSTRY</b>	<b>0.30</b>	<b>-</b>	<b>1.34</b>	<b>0.37</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.25</b>	<b>1.22</b>	<b>-</b>	<b>3.47</b>
Iron and steel	-	-	0.00	0.06	-	-	-	-	0.11	-	0.18
Chemical and petrochem.	-	-	0.10	0.04	-	-	-	-	0.05	-	0.19
Non-ferrous metals	0.12	-	0.11	0.06	-	-	-	-	0.46	-	0.76
Non-metallic minerals	0.17	-	0.59	0.06	-	-	-	0.00	0.15	-	0.97
Transport equipment	-	-	0.02	-	-	-	-	-	0.01	-	0.03
Machinery	-	-	0.00	0.00	-	-	-	-	0.01	-	0.02
Mining and quarrying	-	-	0.05	-	-	-	-	-	0.01	-	0.06
Food and tobacco	-	-	0.10	0.08	-	-	-	0.22	0.19	-	0.58
Paper, pulp and printing	-	-	0.04	0.03	-	-	-	-	0.06	-	0.12
Wood and wood products	-	-	0.00	0.00	-	-	-	0.03	0.02	-	0.05
Construction	-	-	0.13	-	-	-	-	-	0.00	-	0.13
Textile and leather	-	-	0.02	0.02	-	-	-	-	0.05	-	0.09
Non-specified	0.01	-	0.18	0.01	-	-	-	-	0.10	-	0.30
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>7.32</b>	<b>0.01</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.13</b>	<b>0.02</b>	<b>-</b>	<b>7.48</b>
Domestic aviation	-	-	0.24	-	-	-	-	-	-	-	0.24
Road	-	-	6.35	0.01	-	-	-	0.13	-	-	6.49
Rail	-	-	0.02	-	-	-	-	-	0.00	-	0.02
Pipeline transport	-	-	-	0.00	-	-	-	-	-	-	0.00
Domestic navigation	-	-	0.72	-	-	-	-	-	-	-	0.72
Non-specified	-	-	-	-	-	-	-	-	0.01	-	0.01
<b>OTHER</b>	<b>0.00</b>	<b>-</b>	<b>2.80</b>	<b>0.39</b>	<b>-</b>	<b>-</b>	<b>0.21</b>	<b>0.62</b>	<b>3.34</b>	<b>0.05</b>	<b>7.41</b>
Residential	0.00	-	1.97	0.25	-	-	0.20	0.61	1.56	0.05	4.63
Comm. and public services	-	-	0.27	0.14	-	-	0.00	0.00	1.55	-	1.96
Agriculture/forestry	-	-	0.57	-	-	-	0.01	0.01	0.23	-	0.82
Fishing	-	-	-	-	-	-	0.00	-	-	-	0.00
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>0.75</b>	<b>0.35</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.11</b>
in industry/transf./energy	-	-	0.72	0.35	-	-	-	-	-	-	1.07
of which: feedstocks	-	-	0.41	0.35	-	-	-	-	-	-	0.77
in transport	-	-	0.03	-	-	-	-	-	-	-	0.03
in other	-	-	0.00	-	-	-	-	-	-	-	0.00
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>30.80</b>	<b>-</b>	<b>6.09</b>	<b>9.83</b>	<b>-</b>	<b>7.46</b>	<b>2.87</b>	<b>0.32</b>	<b>-</b>	<b>-</b>	<b>57.37</b>
Electricity plants	22.48	-	5.23	8.29	-	7.46	2.87	0.16	-	-	46.50
CHP plants	8.32	-	0.86	1.54	-	-	-	0.16	-	-	10.87
<b>Heat generated - PJ</b>	<b>1.91</b>	<b>-</b>	<b>0.04</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.94</b>
CHP plants	1.91	-	0.04	-	-	-	-	-	-	-	1.94
Heat plants	-	-	-	-	-	-	-	-	-	-	-

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Greece

## Estimated energy supply balance for 2011

Million tonnes of oil equivalent											
SUPPLY	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	7.61	0.09	-	0.01	-	0.33	0.55	0.89	-	-	9.47
Imports	0.29	18.13	6.29	3.80	-	-	-	0.16	0.62	-	29.29
Exports	-	-0.70	-8.88	-	-	-	-	-0.00	-0.34	-	-9.93
Intl. marine bunkers	-	-	-2.56	-	-	-	-	-	-	-	-2.56
Intl. aviation bunkers	-	-	-0.70	-	-	-	-	-	-	-	-0.70
Stock changes	0.08	0.50	0.40	0.01	-	-	-	-	-	-	0.98
<b>TPES</b>	<b>7.97</b>	<b>18.02</b>	<b>-5.46</b>	<b>3.81</b>	<b>-</b>	<b>0.33</b>	<b>0.55</b>	<b>1.05</b>	<b>0.28</b>	<b>-</b>	<b>26.54</b>
Electricity and Heat Output											
Elec. generated - TWh	30.88	-	5.72	8.50	-	3.83	3.93	0.32	-	-	53.19
Heat generated - PJ	1.86	-	0.04	-	-	-	-	-	-	-	1.90

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1960	1971	1980	1990	2000	2009	2010	2011e
Energy production (Mtoe)	0.3	2.1	3.7	9.2	10.0	10.1	9.5	9.5
Net imports (Mtoe)	2.7	7.7	13.7	15.3	21.8	22.2	21.3	19.4
Total primary energy supply (Mtoe)	2.4	8.7	15.0	21.4	27.1	29.4	27.6	26.5
Net oil imports (Mtoe)	2.6	7.4	13.2	14.3	19.3	18.6	17.0	14.8
Oil supply (Mtoe)	2.0	6.4	10.9	12.1	14.9	15.8	13.9	12.6
Electricity consumption (TWh)*	2.0	10.6	21.7	32.9	49.6	62.5	59.3	52.9
GDP (billion 2005 USD)	41.2 e	100.4	145.9	156.3	197.0	252.1	243.2	226.4
GDP PPP (billion 2005 USD)	46.4 e	113.1	164.3	176.0	221.8	283.9	273.9	255.0
Population (millions)	8.47 e	8.98	9.81	10.34	10.92	11.28	11.31	11.33
Industrial production index (2005=100)	..	43.60	76.10	83.70	100.60	92.40	87.00	79.60
Total self-sufficiency**	0.1338	0.2399	0.2467	0.4290	0.3687	0.3424	0.3420	0.3568
Coal and peat self-sufficiency**	0.7141	0.8671	0.9048	0.8825	0.9097	0.9704	0.9303	0.9545
Oil self-sufficiency**	..	..	-	0.0694	0.0172	0.0046	0.0076	0.0071
Natural gas self-sufficiency**	..	..	-	1.0000	0.0248	0.0039	0.0024	0.0016
TPES/GDP (toe per thousand 2005 USD)	0.0584 e	0.0866	0.1027	0.1372	0.1375	0.1168	0.1135	0.1172
TPES/GDP PPP (toe per thousand 2005 USD)	0.0519 e	0.0769	0.0912	0.1218	0.1221	0.1037	0.1008	0.1041
TPES/population (toe per capita)	0.2843 e	0.9673	1.5273	2.0742	2.4811	2.6089	2.4421	2.3434
Net oil imports/GDP (toe per thousand 2005 USD)	0.0639 e	0.0741	0.0906	0.0918	0.0981	0.0738	0.0700	0.0655
Oil supply/GDP (toe per thousand 2005 USD)	0.0478 e	0.0637	0.0749	0.0772	0.0755	0.0626	0.0570	0.0554
Oil supply/population (toe per capita)	0.2328 e	0.7113	1.1134	1.1677	1.3630	1.3993	1.2251	1.1082
Elect. cons./GDP (kWh per 2005 USD)	0.0488 e	0.1054	0.1485	0.2102	0.2516	0.2480	0.2439	0.2336
Elect. cons./population (kWh per capita)	238 e	1178	2209	3178	4540	5540	5245	4670
Industry cons.***/industrial production (2005=100)	..	125.88	118.73	112.91	105.24	97.08	108.18	..
Industry oil cons.***/industrial production (2005=100)	..	177.74	169.47	103.97	105.32	94.46	100.41	..

\* Electricity consumption equals domestic supply less losses.

\*\* Production divided by TPES.

\*\*\* Includes non-energy use.

## Greece

Figure 1. Energy production

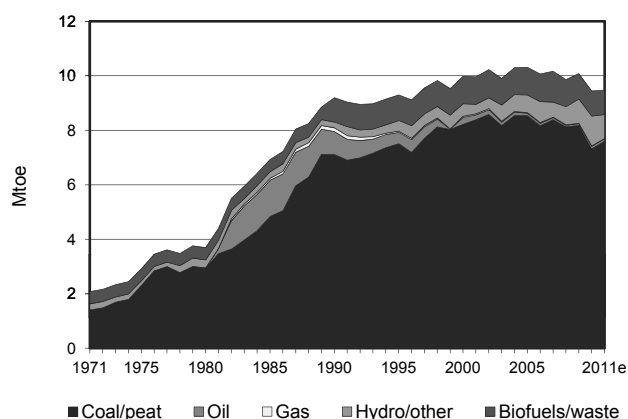


Figure 2. Total primary energy supply\*

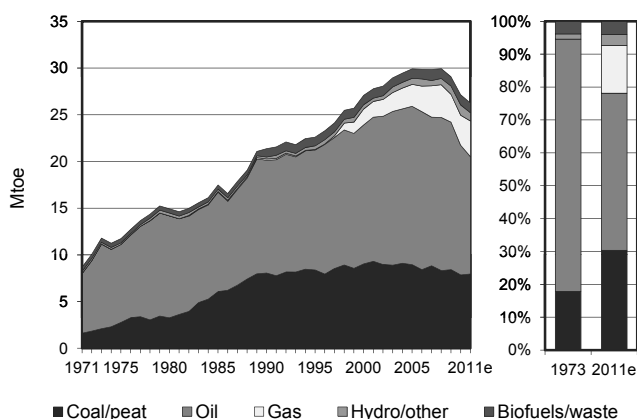


Figure 3. Energy self-sufficiency

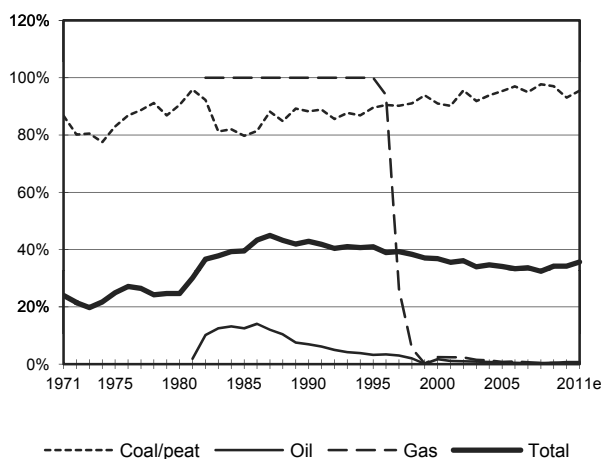


Figure 4. Breakdown of sectorial final consumption by source in 1973 and 2010\*\*

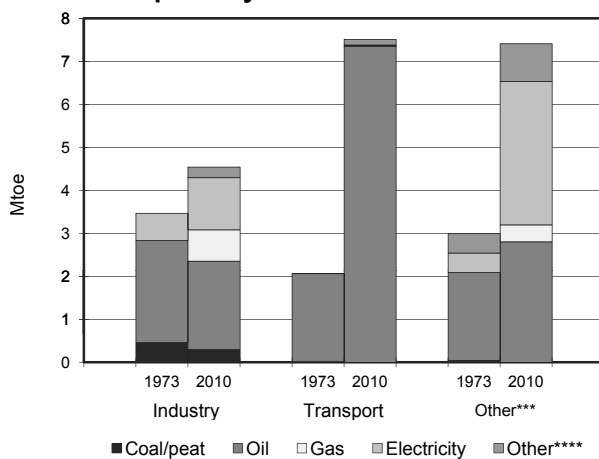


Figure 5. Electricity generation by fuel

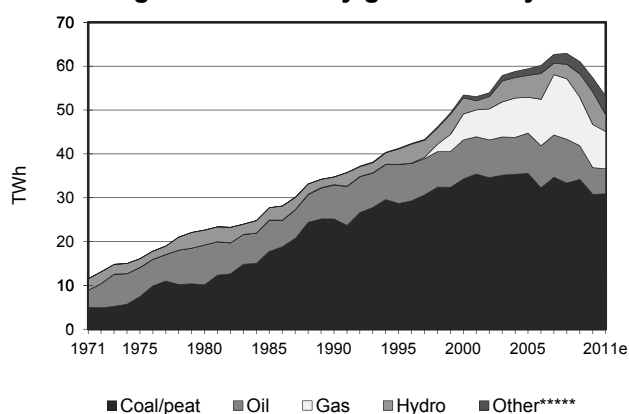
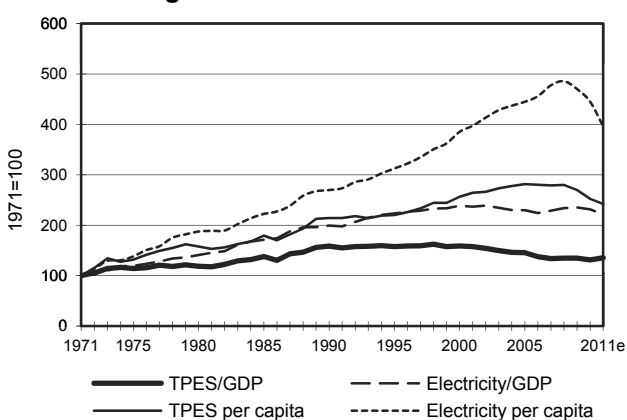


Figure 6. Selected indicators



\* Excluding electricity trade.

\*\* Includes non-energy use.

\*\*\* Includes residential, commercial and public services, agriculture/forestry, fishing and non-specified.

\*\*\*\* Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.

\*\*\*\*\* Includes geothermal, solar, wind, biofuels and waste, etc.

## Hungary : 2009

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	1.56	1.21	-	2.29	4.03	0.02	0.13	1.77	-	-	11.00
Imports	1.11	5.68	2.23	7.90	-	-	-	0.05 e	0.94	-	17.91
Exports	-0.16	-0.02	-2.28	-0.07	-	-	-	-0.06 e	-0.47	-	-3.06
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-0.24	-	-	-	-	-	-	-	-0.24
Stock changes	0.06	0.10	0.05	-0.97	-	-	-	-0.00 e	-	-	-0.77
<b>TPES</b>	<b>2.56</b>	<b>6.97</b>	<b>-0.23</b>	<b>9.15</b>	<b>4.03</b>	<b>0.02</b>	<b>0.13</b>	<b>1.76</b>	<b>0.47</b>	<b>-</b>	<b>24.86</b>
Transfers	-	0.33	-0.12	-	-	-	-	-	-	-	0.21
Statistical differences	-0.01	0.01	-	-	-	-	-	0.00	-	-	0.00
Electricity plants	-1.56	-	-0.11	-0.85	-4.02	-0.02	-0.03	-0.59	2.46	-	-4.73
CHP plants	-0.18	-	-0.07	-1.55	-0.01	-	-	-0.16	0.63	0.92	-0.42
Heat plants	-0.08	-	-0.02	-0.30	-	-	-0.01	-0.00	-	0.35	-0.07
Blast furnaces	-0.24 e	-	-	-0.01	-	-	-	-	-	-	-0.25
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB plants	-0.06	-	-0.01	-0.00	-	-	-	-	-	-	-0.07
Oil refineries	-	-7.65	7.64	-	-	-	-	-	-	-	-0.01
Petrochemical plants	-	0.35	-0.37	-	-	-	-	-	-	-	-0.02
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-0.07	-	-0.35	-0.17	-	-	-	-0.01	-0.40	-0.09	-1.10
Losses	-0.00	-	-	-0.17	-	-	-	-	-0.31	-0.09	-0.57
<b>TFC</b>	<b>0.35</b>	<b>0.01</b>	<b>6.36</b>	<b>6.09</b>	<b>-</b>	<b>-</b>	<b>0.10</b>	<b>1.00</b>	<b>2.85</b>	<b>1.09</b>	<b>17.84</b>
<b>INDUSTRY</b>	<b>0.21</b>	<b>-</b>	<b>0.15</b>	<b>0.89</b>	<b>-</b>	<b>-</b>	<b>0.00</b>	<b>0.12</b>	<b>0.74</b>	<b>0.33</b>	<b>2.43</b>
Iron and steel	0.15 e	-	0.00	0.03	-	-	-	-	0.04	0.02	0.24
Chemical and petrochem.	-	-	0.00	0.13	-	-	-	0.00	0.19	0.18	0.50
Non-ferrous metals	-	-	-	0.07	-	-	-	-	0.03	0.04	0.14
Non-metallic minerals	0.05	-	0.10	0.16	-	-	0.00	0.06	0.08	0.00	0.45
Transport equipment	-	-	0.00	0.04	-	-	0.00	-	0.07	0.01	0.12
Machinery	0.00	-	0.00	0.11	-	-	0.00	0.00	0.11	0.01	0.23
Mining and quarrying	-	-	0.01	0.00	-	-	-	-	0.01	-	0.02
Food and tobacco	0.00	-	0.01	0.22	-	-	-	0.04	0.11	0.02	0.40
Paper, pulp and printing	-	-	0.00	0.05	-	-	-	0.01	0.03	0.04	0.14
Wood and wood products	-	-	-	0.01	-	-	-	0.00	0.01	-	0.03
Construction	0.01	-	0.02	0.01	-	-	-	-	0.01	0.00	0.04
Textile and leather	-	-	-	0.01	-	-	-	0.00	0.01	0.00	0.02
Non-specified	-	-	-	0.04	-	-	-	0.00	0.05	0.01	0.10
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>4.23</b>	<b>0.00</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.17</b>	<b>0.10</b>	<b>-</b>	<b>4.51</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	4.17	0.00	-	-	-	0.17	-	-	4.34
Rail	-	-	0.06	-	-	-	-	-	0.10	-	0.17
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	0.00	-	-	-	-	-	-	-	0.00
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>0.15</b>	<b>-</b>	<b>0.35</b>	<b>4.88</b>	<b>-</b>	<b>-</b>	<b>0.09</b>	<b>0.71</b>	<b>2.01</b>	<b>0.76</b>	<b>8.95</b>
Residential	0.14	-	0.10	3.18	-	-	0.00	0.58	0.97	0.54	5.52
Comm. and public services	0.00	-	0.02	1.57	-	-	0.08	0.12	0.98	0.22	2.99
Agriculture/forestry	0.00	-	0.23	0.12	-	-	0.01	0.01	0.07	0.00	0.44
Fishing	-	-	-	-	-	-	-	-	0.00	-	0.00
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	<b>-</b>	<b>0.01</b>	<b>1.62</b>	<b>0.32</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.95</b>
in industry/transf./energy	-	0.01	1.57	0.32	-	-	-	-	-	-	1.89
of which: feedstocks	-	0.01	1.35	0.32	-	-	-	-	-	-	1.68
in transport	-	-	0.06	-	-	-	-	-	-	-	0.06
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>6.42</b>	<b>-</b>	<b>0.63</b>	<b>10.42</b>	<b>15.43</b>	<b>0.23</b>	<b>0.33</b>	<b>2.45</b>	<b>-</b>	<b>-</b>	<b>35.91</b>
Electricity plants	6.05	-	0.50	3.94	15.43	0.23	0.33	2.07	-	-	28.55
CHP plants	0.36	-	0.13	6.48	-	-	-	0.38	-	-	7.36
<b>Heat generated - PJ</b>	<b>6.71</b>	<b>-</b>	<b>2.43</b>	<b>41.07</b>	<b>0.51</b>	<b>-</b>	<b>0.21</b>	<b>2.22</b>	<b>-</b>	<b>-</b>	<b>53.15</b>
CHP plants	4.20	-	1.73	30.10	0.51	-	-	2.09	-	-	38.63
Heat plants	2.51	-	0.70	10.98	-	-	0.21	0.14	-	-	14.53

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.



## Hungary : 2010

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	1.59	1.09	-	2.23	4.12	0.02	0.15	1.84	-	-	11.05
Imports	1.41	5.99	2.57	7.91	-	-	-	0.12 e	0.85	-	18.85
Exports	-0.28	-0.02	-2.77	-0.19	-	-	-	-0.08 e	-0.40	-	-3.74
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-0.24	-	-	-	-	-	-	-	-0.24
Stock changes	-0.02	-0.12	0.03	-0.15	-	-	-	-0.00 e	-	-	-0.26
<b>TPES</b>	<b>2.70</b>	<b>6.95</b>	<b>-0.40</b>	<b>9.81</b>	<b>4.12</b>	<b>0.02</b>	<b>0.15</b>	<b>1.88</b>	<b>0.45</b>	<b>-</b>	<b>25.67</b>
Transfers	-	1.19	-1.19	-	-	-	-	-	-	-	-0.00
Statistical differences	-0.01	-	-0.01	-	-	-	-	-0.00	-	-	-0.02
Electricity plants	-1.58	-	-0.11	-1.00	-4.11	-0.02	-0.05	-0.60	2.57	-	-4.89
CHP plants	-0.17	-	-0.00	-1.59	-0.01	-	-	-0.18	0.64	0.90	-0.41
Heat plants	-0.10	-	-0.01	-0.36	-	-	-0.01	-0.00	-	0.36	-0.11
Blast furnaces	-0.27 e	-	-	-0.04	-	-	-	-	-	-	-0.30
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB plants	-0.08	-	-	-0.00	-	-	-	-	-	-	-0.08
Oil refineries	-	-8.53	8.56	-	-	-	-	-	-	-	0.03
Petrochemical plants	-	0.39	-0.41	-	-	-	-	-	-	-	-0.02
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-0.09	-	-0.34	-0.23	-	-	-	-0.01	-0.39	-0.08	-1.13
Losses	-0.01	-	-	-0.17	-	-	-	-	-0.33	-0.10	-0.60
<b>TFC</b>	<b>0.39</b>	<b>0.00</b>	<b>6.08</b>	<b>6.43</b>	<b>-</b>	<b>-</b>	<b>0.10</b>	<b>1.09</b>	<b>2.94</b>	<b>1.09</b>	<b>18.12</b>
<b>INDUSTRY</b>	<b>0.24</b>	<b>-</b>	<b>0.14</b>	<b>0.97</b>	<b>-</b>	<b>-</b>	<b>0.00</b>	<b>0.12</b>	<b>0.84</b>	<b>0.30</b>	<b>2.61</b>
Iron and steel	0.19 e	-	0.00	0.04	-	-	-	-	0.04	0.02	0.29
Chemical and petrochem.	0.00	-	0.00	0.16	-	-	-	0.00	0.20	0.15	0.51
Non-ferrous metals	-	-	-	0.08	-	-	-	-	0.04	0.05	0.17
Non-metallic minerals	0.04	-	0.10	0.15	-	-	0.00	0.07	0.08	0.00	0.44
Transport equipment	-	-	0.00	0.05	-	-	0.00	-	0.08	0.01	0.14
Machinery	0.00	-	0.00	0.12	-	-	0.00	0.00	0.13	0.01	0.26
Mining and quarrying	-	-	0.01	0.00	-	-	-	-	0.00	-	0.02
Food and tobacco	0.00	-	0.01	0.24	-	-	-	0.03	0.12	0.02	0.41
Paper, pulp and printing	-	-	0.00	0.07	-	-	-	0.01	0.05	0.04	0.16
Wood and wood products	-	-	0.00	0.02	-	-	-	0.00	0.01	-	0.03
Construction	0.00	-	0.02	0.02	-	-	-	-	0.01	0.00	0.05
Textile and leather	-	-	-	0.01	-	-	-	0.00	0.01	0.00	0.02
Non-specified	-	-	-	0.03	-	-	-	0.00	0.06	0.01	0.11
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>3.85</b>	<b>0.00</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.17</b>	<b>0.10</b>	<b>-</b>	<b>4.12</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	3.79	0.00	-	-	-	0.17	-	-	3.97
Rail	-	-	0.06	-	-	-	-	-	0.10	-	0.15
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	0.00	-	-	-	-	-	-	-	0.00
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>0.15</b>	<b>-</b>	<b>0.43</b>	<b>5.10</b>	<b>-</b>	<b>-</b>	<b>0.10</b>	<b>0.79</b>	<b>2.01</b>	<b>0.79</b>	<b>9.36</b>
Residential	0.15	-	0.13	3.26	-	-	0.01	0.66	0.96	0.57	5.74
Comm. and public services	0.00	-	0.02	1.71	-	-	0.08	0.12	0.98	0.22	3.13
Agriculture/forestry	0.00	-	0.28	0.12	-	-	0.01	0.01	0.06	0.00	0.49
Fishing	-	-	-	-	-	-	-	-	0.00	-	0.00
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	<b>-</b>	<b>0.00</b>	<b>1.67</b>	<b>0.36</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2.03</b>
in industry/transf./energy	-	0.00	1.61	0.36	-	-	-	-	-	-	1.98
of which: feedstocks	-	0.00	1.41	0.36	-	-	-	-	-	-	1.78
in transport	-	-	0.06	-	-	-	-	-	-	-	0.06
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>6.35</b>	<b>-</b>	<b>0.49</b>	<b>11.60</b>	<b>15.76</b>	<b>0.19</b>	<b>0.54</b>	<b>2.45</b>	<b>-</b>	<b>-</b>	<b>37.37</b>
Electricity plants	6.15	-	0.48	4.75	15.76	0.19	0.54	2.05	-	-	29.91
CHP plants	0.20	-	0.01	6.85	-	-	-	0.40	-	-	7.46
<b>Heat generated - PJ</b>	<b>7.05</b>	<b>-</b>	<b>0.21</b>	<b>41.47</b>	<b>0.50</b>	<b>-</b>	<b>0.24</b>	<b>3.56</b>	<b>-</b>	<b>-</b>	<b>53.03</b>
CHP plants	4.24	-	0.04	29.59	0.50	-	-	3.39	-	-	37.75
Heat plants	2.81	-	0.17	11.88	-	-	0.24	0.17	-	-	15.27

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Hungary

## Estimated energy supply balance for 2011

Million tonnes of oil equivalent											
SUPPLY	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	1.67	0.96	-	2.11	4.10	0.02	0.16	1.82	-	-	10.83
Imports	1.28	6.20	2.13	6.60	-	-	-	0.12	1.26	-	17.60
Exports	-0.28	-0.01	-2.91	-0.47	-	-	-	-0.08	-0.69	-	-4.44
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-0.23	-	-	-	-	-	-	-	-0.23
Stock changes	0.07	0.07	0.06	1.11	-	-	-	0.00	-	-	1.31
<b>TPES</b>	<b>2.74</b>	<b>7.22</b>	<b>-0.94</b>	<b>9.35</b>	<b>4.10</b>	<b>0.02</b>	<b>0.16</b>	<b>1.86</b>	<b>0.57</b>	<b>-</b>	<b>25.07</b>
Electricity and Heat Output											
Elec. generated - TWh	6.61	-	0.14	11.04	15.69	0.22	0.63	1.92	-	-	36.24
Heat generated - PJ	5.85	-	0.18	42.54	0.51	-	0.24	3.40	-	-	52.71

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1960	1971	1980	1990	2000	2009	2010	2011e
Energy production (Mtoe)	..	11.9	14.5	14.7	11.6	11.0	11.1	10.8
Net imports (Mtoe)	..	7.7	14.3	14.2	13.9	14.9	15.1	13.2
Total primary energy supply (Mtoe)	..	19.0	28.4	28.8	25.0	24.9	25.7	25.1
Net oil imports (Mtoe)	..	5.1	8.3	6.4	5.2	5.6	5.8	5.4
Oil supply (Mtoe)	..	7.0	10.8	8.4	6.6	6.7	6.5	6.3
Electricity consumption (TWh)*	..	17.7	28.9	35.6	33.8	37.8	38.8	39.1
GDP (billion 2005 USD)	..	51.3 e	78.3 e	87.7 e	90.0	107.9	109.3	111.1
GDP PPP (billion 2005 USD)	..	79.6 e	121.5 e	136.1 e	139.6	167.5	169.6	172.5
Population (millions)	..	10.37	10.71	10.37	10.21	10.02	10.00	9.97
Industrial production index (2005=100)	..	..	53.20	51.90	76.00	97.60	107.80	113.70
Total self-sufficiency**	..	0.6225	0.5110	0.5107	0.4647	0.4427	0.4304	0.4322
Coal and peat self-sufficiency**	..	0.7879	0.7522	0.6810	0.7516	0.6079	0.5894	0.6103
Oil self-sufficiency**	..	0.2841	0.2337	0.2723	0.2536	0.1790	0.1666	0.1524
Natural gas self-sufficiency**	..	0.9500	0.6385	0.4276	0.2563	0.2499	0.2277	0.2261
TPES/GDP (toe per thousand 2005 USD)	..	0.3713 e	0.3621 e	0.3279 e	0.2779	0.2304	0.2349	0.2256
TPES/GDP PPP (toe per thousand 2005 USD)	..	0.2393 e	0.2333 e	0.2113 e	0.1790	0.1484	0.1514	0.1453
TPES/population (toe per capita)	..	1.8364	2.6481	2.7745	2.4482	2.4802	2.5667	2.5148
Net oil imports/GDP (toe per thousand 2005 USD)	..	0.0999 e	0.1061 e	0.0733 e	0.0579	0.0520	0.0529	0.0488
Oil supply/GDP (toe per thousand 2005 USD)	..	0.1367 e	0.1378 e	0.0952 e	0.0737	0.0624	0.0599	0.0564
Oil supply/population (toe per capita)	..	0.6758	1.0079	0.8055	0.6494	0.6719	0.6542	0.6293
Elect. cons./GDP (kWh per 2005 USD)	..	0.3461 e	0.3690 e	0.4054 e	0.3756	0.3505	0.3548	0.3517
Elect. cons./population (kWh per capita)	..	1712	2699	3430	3309	3773	3877	3921
Industry cons.***/industrial production (2005=100)	..	..	348.04	281.13	119.76	83.22	79.86	..
Industry oil cons.***/industrial production (2005=100)	..	..	289.50	190.73	95.45	84.08	77.29	..

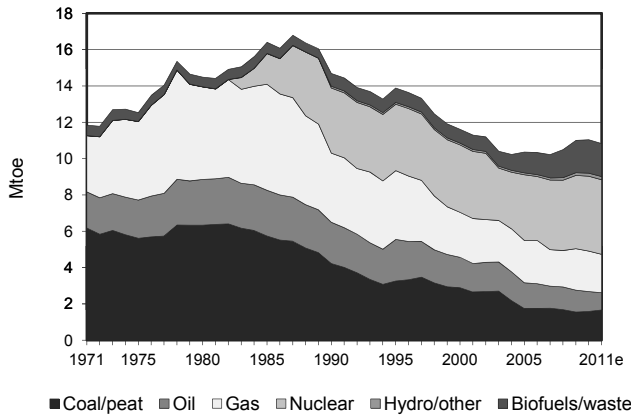
\* Electricity consumption equals domestic supply less losses.

\*\* Production divided by TPES.

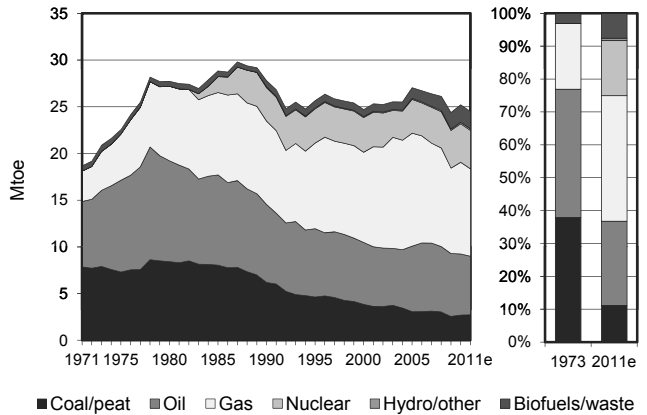
\*\*\* Includes non-energy use.

## Hungary

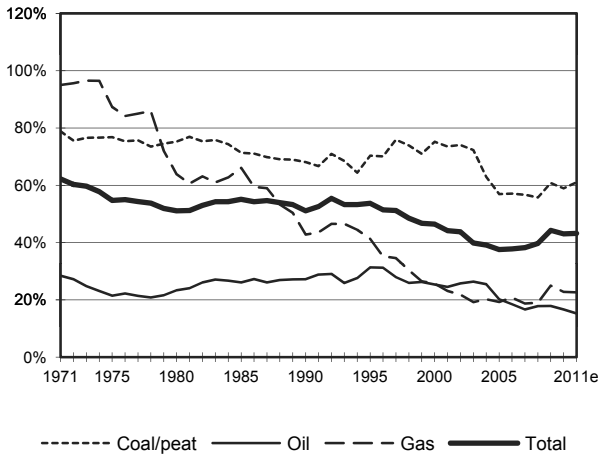
**Figure 1. Energy production**



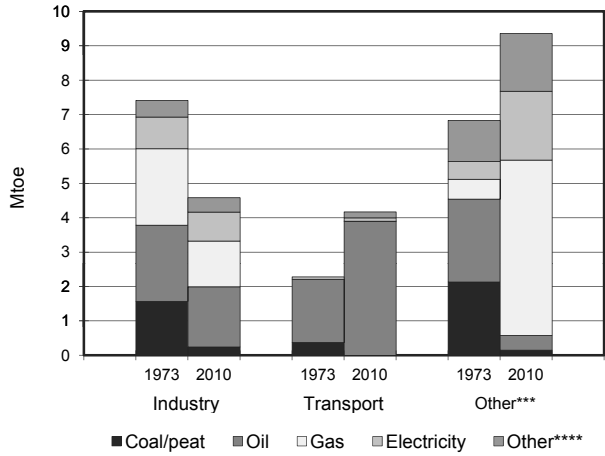
**Figure 2. Total primary energy supply\***



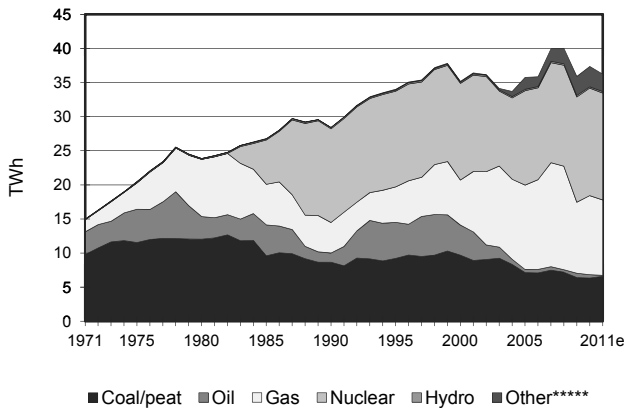
**Figure 3. Energy self-sufficiency**



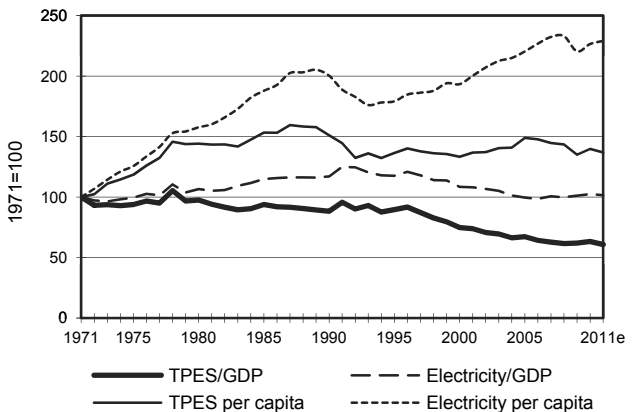
**Figure 4. Breakdown of sectorial final consumption by source in 1973 and 2010\*\***



**Figure 5. Electricity generation by fuel**



**Figure 6. Selected indicators**



\* Excluding electricity trade.  
 \*\* Includes non-energy use.  
 \*\*\* Includes residential, commercial and public services, agriculture/forestry, fishing and non-specified.  
 \*\*\*\* Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.  
 \*\*\*\*\* Includes geothermal, solar, wind, biofuels and waste, etc.

## Iceland : 2009

Million tonnes of oil equivalent											
<b>SUPPLY AND CONSUMPTION</b>	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	-	-	-	-	-	1.06	3.34	0.00	-	-	4.40
Imports	0.09	-	1.09	-	-	-	-	-	-	-	1.18
Exports	-	-	-0.01	-	-	-	-	-	-	-	-0.01
Intl. marine bunkers	-	-	-0.05	-	-	-	-	-	-	-	-0.05
Intl. aviation bunkers	-	-	-0.11	-	-	-	-	-	-	-	-0.11
Stock changes	-0.01	-	-0.02	-	-	-	-	-	-	-	-0.03
<b>TPES</b>	<b>0.09</b>	-	<b>0.90</b>	-	-	<b>1.06</b>	<b>3.34</b>	<b>0.00</b>	-	-	<b>5.38</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-	-	0.01	-	-	-	-	-	-	-	0.01
Electricity plants	-	-	-0.00	-	-	-1.06	-1.73	-0.00	1.32	-	-1.47
CHP plants	-	-	-	-	-	-	-1.03	-	0.13	0.23	-0.67
Heat plants	-	-	-	-	-	-	-0.03	-0.00	-0.02	0.03	-0.02
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	-	-	-	-	-	-	-
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-	-	-	-	-	-	-	-	-0.04	-	-0.04
Losses	-	-	-	-	-	-	-0.14	-	-0.04	-0.02	-0.21
<b>TFC</b>	<b>0.09</b>	-	<b>0.91</b>	-	-	-	<b>0.41</b>	<b>0.00</b>	<b>1.35</b>	<b>0.24</b>	<b>2.99</b>
<b>INDUSTRY</b>	<b>0.09</b>	-	<b>0.05</b>	-	-	-	<b>0.01</b>	-	<b>1.16</b>	-	<b>1.31</b>
Iron and steel	0.08	-	0.00	-	-	-	-	-	0.08	-	0.16
Chemical and petrochem.	-	-	0.00	-	-	-	-	-	0.00	-	0.01
Non-ferrous metals	-	-	0.00	-	-	-	-	-	1.03	-	1.04
Non-metallic minerals	0.01	-	-	-	-	-	-	-	0.00	-	0.01
Transport equipment	-	-	-	-	-	-	-	-	0.00	-	0.00
Machinery	-	-	-	-	-	-	-	-	0.00	-	0.00
Mining and quarrying	-	-	-	-	-	-	-	-	0.00	-	0.00
Food and tobacco	-	-	0.01	-	-	-	-	-	0.04	-	0.04
Paper, pulp and printing	-	-	-	-	-	-	-	-	0.00	-	0.00
Wood and wood products	-	-	-	-	-	-	-	-	0.00	-	0.00
Construction	-	-	0.04	-	-	-	-	-	0.00	-	0.04
Textile and leather	-	-	-	-	-	-	-	-	0.00	-	0.00
Non-specified	-	-	0.00	-	-	-	0.01	-	0.00	-	0.02
<b>TRANSPORT</b>	-	-	<b>0.30</b>	-	-	-	-	<b>0.00</b>	-	-	<b>0.30</b>
Domestic aviation	-	-	0.01	-	-	-	-	-	-	-	0.01
Road	-	-	0.28	-	-	-	-	0.00	-	-	0.28
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	0.01	-	-	-	-	-	-	-	0.01
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	-	-	<b>0.22</b>	-	-	-	<b>0.40</b>	-	<b>0.19</b>	<b>0.24</b>	<b>1.04</b>
Residential	-	-	0.00	-	-	-	0.29	-	0.08	0.16	0.53
Comm. and public services	-	-	0.00	-	-	-	0.08	-	0.09	0.04	0.21
Agriculture/forestry	-	-	0.01	-	-	-	0.01	-	0.02	0.01	0.04
Fishing	-	-	0.21	-	-	-	0.03	-	0.00	0.02	0.25
Non-specified	-	-	-	-	-	-	-	-	-	0.01	0.01
<b>NON-ENERGY USE</b>	-	-	<b>0.34</b>	-	-	-	-	-	-	-	<b>0.34</b>
in industry/transf./energy	-	-	0.34	-	-	-	-	-	-	-	0.34
of which: feedstocks	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	0.01	-	-	-	-	-	-	-	0.01
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	-	-	<b>0.00</b>	-	-	<b>12.28</b>	<b>4.55</b>	-	-	-	<b>16.83</b>
Electricity plants	-	-	0.00	-	-	12.28	3.01	-	-	-	15.29
CHP plants	-	-	-	-	-	-	1.54	-	-	-	1.54
<b>Heat generated - PJ</b>	-	-	<b>0.02</b>	-	-	-	<b>10.20</b>	<b>0.03</b>	<b>0.65</b>	-	<b>10.89</b>
CHP plants	-	-	-	-	-	-	9.50	-	-	-	9.50
Heat plants	-	-	0.02	-	-	-	0.70	0.03	0.65	-	1.39

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Iceland : 2010

Million tonnes of oil equivalent											
<b>SUPPLY AND CONSUMPTION</b>	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	-	-	-	-	-	1.08	3.34	0.00	-	-	4.43
Imports	0.09	-	1.00	-	-	-	-	-	-	-	1.09
Exports	-	-	-	-	-	-	-	-	-	-	-
Intl. marine bunkers	-	-	-0.06	-	-	-	-	-	-	-	-0.06
Intl. aviation bunkers	-	-	-0.12	-	-	-	-	-	-	-	-0.12
Stock changes	0.00	-	0.03	-	-	-	-	-	-	-	0.03
<b>TPES</b>	<b>0.09</b>	-	<b>0.85</b>	-	-	<b>1.08</b>	<b>3.34</b>	<b>0.00</b>	-	-	<b>5.37</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-	-	-0.00	-	-	-	-	-	-	0.00	-0.00
Electricity plants	-	-	-0.00	-	-	-1.08	-1.73	-	1.34	-	-1.47
CHP plants	-	-	-	-	-	-	-1.03	-	0.13	0.23	-0.68
Heat plants	-	-	-	-	-	-	-0.03	-0.00	-0.02	0.03	-0.02
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	-	-	-	-	-	-	-
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-	-	-	-	-	-	-	-	-0.04	-	-0.04
Losses	-	-	-	-	-	-	-0.14	-	-0.06	-0.02	-0.23
<b>TFC</b>	<b>0.09</b>	-	<b>0.85</b>	-	-	-	<b>0.41</b>	<b>0.00</b>	<b>1.35</b>	<b>0.24</b>	<b>2.94</b>
<b>INDUSTRY</b>	<b>0.09</b>	-	<b>0.04</b>	-	-	-	<b>0.01</b>	-	<b>1.18</b>	-	<b>1.32</b>
Iron and steel	0.08	-	0.00	-	-	-	-	-	0.08	-	0.16
Chemical and petrochem.	-	-	-	-	-	-	-	-	0.00	-	0.00
Non-ferrous metals	-	-	0.00	-	-	-	-	-	1.03	-	1.03
Non-metallic minerals	0.01	-	-	-	-	-	-	-	0.00	-	0.01
Transport equipment	-	-	-	-	-	-	-	-	0.00	-	0.00
Machinery	-	-	-	-	-	-	-	-	0.02	-	0.02
Mining and quarrying	-	-	-	-	-	-	-	-	0.00	-	0.00
Food and tobacco	-	-	0.00	-	-	-	-	-	0.04	-	0.04
Paper, pulp and printing	-	-	-	-	-	-	-	-	0.00	-	0.00
Wood and wood products	-	-	-	-	-	-	-	-	0.00	-	0.00
Construction	-	-	0.03	-	-	-	-	-	0.00	-	0.03
Textile and leather	-	-	-	-	-	-	-	-	0.00	-	0.00
Non-specified	-	-	0.00	-	-	-	0.01	-	0.00	-	0.02
<b>TRANSPORT</b>	-	-	<b>0.28</b>	-	-	-	-	<b>0.00</b>	-	-	<b>0.28</b>
Domestic aviation	-	-	0.01	-	-	-	-	-	-	-	0.01
Road	-	-	0.26	-	-	-	-	0.00	-	-	0.26
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	0.01	-	-	-	-	-	-	-	0.01
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	-	-	<b>0.19</b>	-	-	-	<b>0.40</b>	-	<b>0.17</b>	<b>0.24</b>	<b>1.00</b>
Residential	-	-	0.00	-	-	-	0.29	-	0.06	0.16	0.51
Comm. and public services	-	-	0.00	-	-	-	0.08	-	0.09	0.04	0.21
Agriculture/forestry	-	-	0.01	-	-	-	0.01	-	0.02	0.01	0.04
Fishing	-	-	0.18	-	-	-	0.03	-	0.00	0.02	0.23
Non-specified	-	-	-	-	-	-	-	-	-	0.01	0.01
<b>NON-ENERGY USE</b>	-	-	<b>0.33</b>	-	-	-	-	-	-	-	<b>0.33</b>
in industry/transf./energy	-	-	0.33	-	-	-	-	-	-	-	0.33
<i>of which: feedstocks</i>	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	0.00	-	-	-	-	-	-	-	0.00
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	-	-	<b>0.00</b>	-	-	<b>12.59</b>	<b>4.47</b>	-	-	-	<b>17.06</b>
Electricity plants	-	-	0.00	-	-	12.59	3.00	-	-	-	15.59
CHP plants	-	-	-	-	-	-	1.47	-	-	-	1.47
<b>Heat generated - PJ</b>	-	-	<b>0.01</b>	-	-	-	<b>10.20</b>	<b>0.03</b>	<b>0.65</b>	-	<b>10.89</b>
CHP plants	-	-	-	-	-	-	9.50	-	-	-	9.50
Heat plants	-	-	0.01	-	-	-	0.70	0.03	0.65	-	1.39

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Iceland

## Estimated energy supply balance for 2011

Million tonnes of oil equivalent											
SUPPLY	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	-	-	-	-	-	1.08	3.76	0.00	-	-	4.84
Imports	0.09	-	1.08	-	-	-	-	-	-	-	1.17
Exports	-	-	-0.08	-	-	-	-	-	-	-	-0.08
Intl. marine bunkers	-	-	-0.06	-	-	-	-	-	-	-	-0.06
Intl. aviation bunkers	-	-	-0.14	-	-	-	-	-	-	-	-0.14
Stock changes	-	-	-	-	-	-	-	-	-	-	-
<b>TPES</b>	<b>0.09</b>	<b>-</b>	<b>0.81</b>	<b>-</b>	<b>-</b>	<b>1.08</b>	<b>3.76</b>	<b>0.00</b>	<b>-</b>	<b>-</b>	<b>5.74</b>
Electricity and Heat Output											
Elec. generated - TWh	-	-	0.00	-	-	12.51	4.70	-	-	-	17.21
Heat generated - PJ	-	-	0.01	-	-	-	10.20	0.03	0.66	-	10.90

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1960	1971	1980	1990	2000	2009	2010	2011e
Energy production (Mtoe)	0.2	0.4	0.9	1.4	2.3	4.4	4.4	4.8
Net imports (Mtoe)	0.4	0.6	0.6	0.8	1.0	1.2	1.1	1.1
Total primary energy supply (Mtoe)	0.5	0.9	1.5	2.1	3.1	5.4	5.4	5.7
Net oil imports (Mtoe)	0.4	0.6	0.6	0.7	0.9	1.1	1.0	1.0
Oil supply (Mtoe)	0.4	0.5	0.6	0.6	0.7	0.9	0.9	0.8
Electricity consumption (TWh)*	0.5	1.4	2.9	4.1	7.4	16.3	16.4	16.5
GDP (billion 2005 USD)	2.7 e	4.8	7.8	10.3	13.2	17.1	16.4	16.9
GDP PPP (billion 2005 USD)	1.7 e	3.1	5.0	6.5	8.4	10.9	10.4	10.7
Population (millions)	0.18 e	0.21	0.23	0.26	0.28	0.32	0.32	0.32
Industrial production index (2005=100)	..	..	..	..	..	..	..	..
Total self-sufficiency**	0.2787	0.4687	0.6040	0.6704	0.7438	0.8176	0.8249	0.8440
Coal and peat self-sufficiency**	..	..	-	-	-	-	-	-
Oil self-sufficiency**	..	..	-	-	-	-	-	-
Natural gas self-sufficiency**	..	..	-	-	-	-	-	-
TPES/GDP (toe per thousand 2005 USD)	0.2005 e	0.1882	0.1909	0.2033	0.2346	0.3152	0.3274	0.3395
TPES/GDP PPP (toe per thousand 2005 USD)	0.3154 e	0.2961	0.3003	0.3198	0.3691	0.4958	0.5151	0.5340
TPES/population (toe per capita)	3.0753 e	4.3804	6.5650	8.1901	11.0312	16.8784	16.8847	18.0399
Net oil imports/GDP (toe per thousand 2005 USD)	0.1410 e	0.1146	0.0736	0.0707	0.0709	0.0632	0.0609	0.0593
Oil supply/GDP (toe per thousand 2005 USD)	0.1376 e	0.0999	0.0734	0.0608	0.0527	0.0525	0.0518	0.0477
Oil supply/population (toe per capita)	2.1107 e	2.3242	2.5228	2.4477	2.4792	2.8103	2.6729	2.5369
Elect. cons./GDP (kWh per 2005 USD)	0.1700 e	0.3010	0.3690	0.4005	0.5576	0.9557	0.9976	0.9770
Elect. cons./population (kWh per capita)	2608 e	7005	12689	16137	26221	51179	51447	51921
Industry cons.***/industrial production (2005=100)	..	..	..	..	..	..	..	..
Industry oil cons.***/industrial production (2005=100)	..	..	..	..	..	..	..	..

\* Electricity consumption equals domestic supply less losses.

\*\* Production divided by TPES.

\*\*\* Includes non-energy use.

Iceland

Figure 1. Energy production

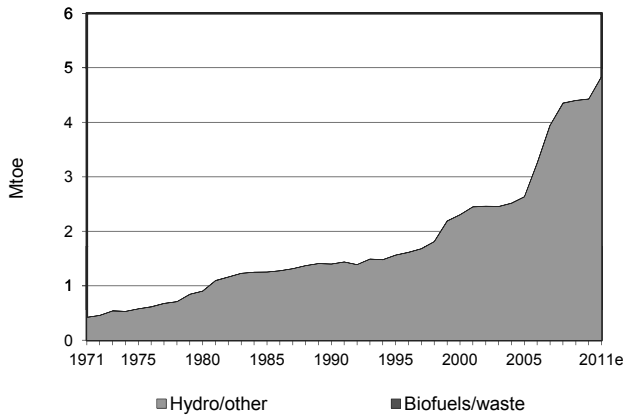


Figure 2. Total primary energy supply\*

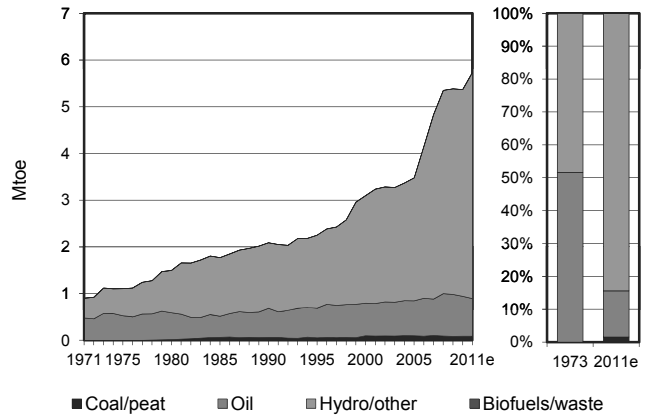


Figure 3. Energy self-sufficiency

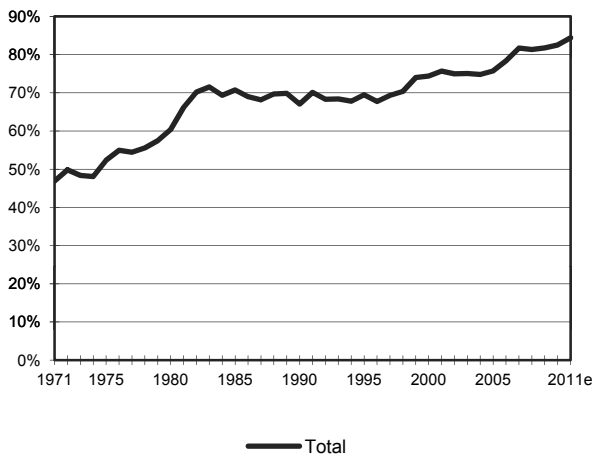


Figure 4. Breakdown of sectorial final consumption by source in 1973 and 2010\*\*

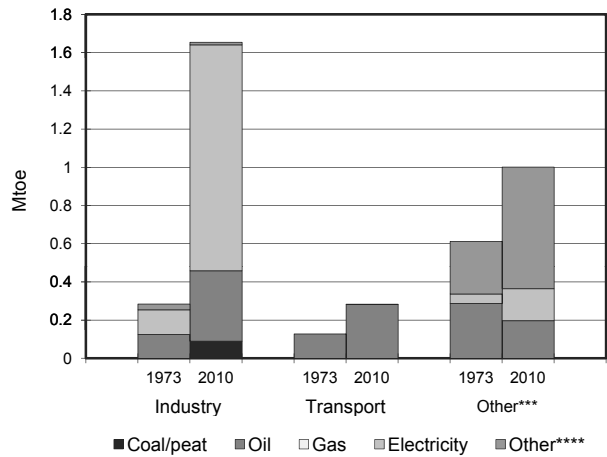


Figure 5. Electricity generation by fuel

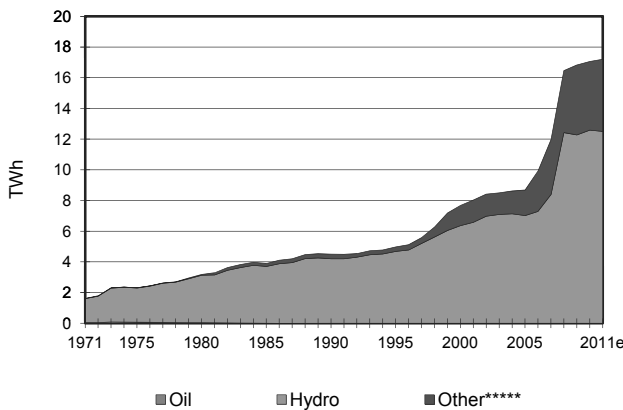
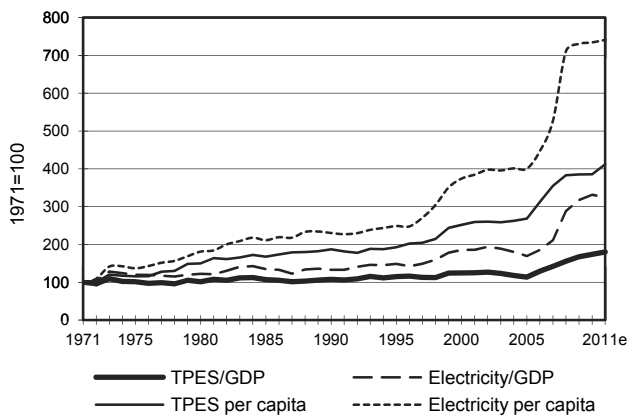


Figure 6. Selected indicators



\* Excluding electricity trade.  
 \*\* Includes non-energy use.  
 \*\*\* Includes residential, commercial and public services, agriculture/forestry, fishing and non-specified.  
 \*\*\*\* Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.  
 \*\*\*\*\* Includes geothermal, solar, wind, biofuels and waste, etc.

## Ireland : 2009

Million tonnes of oil equivalent											
<b>SUPPLY AND CONSUMPTION</b>	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	0.63	-	-	0.32	-	0.08	0.26	0.31	-	-	1.59
Imports	1.38	2.75	5.96	3.96	-	-	-	0.03	0.08	-	14.17
Exports	-0.01	-	-0.94	-	-	-	-	-0.00	-0.02	-	-0.96
Intl. marine bunkers	-	-	-0.11	-	-	-	-	-	-	-	-0.11
Intl. aviation bunkers	-	-	-0.55	-	-	-	-	-	-	-	-0.55
Stock changes	0.20	0.12	-0.05	0.00	-	-	-	-0.00	-	-	0.27
<b>TPES</b>	<b>2.21</b>	<b>2.87</b>	<b>4.31</b>	<b>4.28</b>	<b>-</b>	<b>0.08</b>	<b>0.26</b>	<b>0.34</b>	<b>0.07</b>	<b>-</b>	<b>14.40</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-0.21	0.02	0.04	0.01	-	-	-	-	-0.01	-	-0.14
Electricity plants	-1.33	-	-0.20	-2.51	-	-0.08	-0.25	-0.05	2.25	-	-2.18
CHP plants	-0.02	-	-0.01	-0.24	-	-	-	-0.01	0.16	-	-0.12
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB plants	-0.04	-	-0.02	-	-	-	-	-	-	-	-0.06
Oil refineries	-	-2.89	2.76	-	-	-	-	-	-	-	-0.13
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-0.03	-	-0.11	-	-	-	-	-	-0.13	-	-0.27
Losses	-	-	-	-0.06	-	-	-	-	-0.18	-	-0.25
<b>TFC</b>	<b>0.58</b>	<b>-</b>	<b>6.77</b>	<b>1.48</b>	<b>-</b>	<b>-</b>	<b>0.00</b>	<b>0.27</b>	<b>2.15</b>	<b>-</b>	<b>11.26</b>
<b>INDUSTRY</b>	<b>0.11</b>	<b>-</b>	<b>0.65</b>	<b>0.43</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.15</b>	<b>0.72</b>	<b>-</b>	<b>2.06</b>
Iron and steel	-	-	0.00	-	-	-	-	-	-	-	0.00
Chemical and petrochem.	-	-	0.11	0.05	-	-	-	0.00	0.13	-	0.28
Non-ferrous metals	-	-	0.13	0.15	-	-	-	-	0.04	-	0.32
Non-metallic minerals	0.09	-	0.15	0.01	-	-	-	0.03	0.07	-	0.36
Transport equipment	-	-	0.00	0.00	-	-	-	-	0.01	-	0.01
Machinery	-	-	0.03	0.11	-	-	-	-	0.13	-	0.27
Mining and quarrying	-	-	0.05	0.01	-	-	-	-	0.05	-	0.11
Food and tobacco	0.02	-	0.13	0.08	-	-	-	0.04	0.14	-	0.41
Paper, pulp and printing	-	-	0.01	0.00	-	-	-	-	0.02	-	0.02
Wood and wood products	-	-	0.01	0.00	-	-	-	0.08	0.03	-	0.12
Construction	-	-	-	-	-	-	-	-	0.01	-	0.01
Textile and leather	-	-	0.01	0.00	-	-	-	-	0.01	-	0.02
Non-specified	0.01	-	0.03	0.01	-	-	-	-	0.09	-	0.13
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>4.03</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.07</b>	<b>0.00</b>	<b>-</b>	<b>4.11</b>
Domestic aviation	-	-	0.03	-	-	-	-	-	-	-	0.03
Road	-	-	3.94	-	-	-	-	0.07	-	-	4.01
Rail	-	-	0.04	-	-	-	-	-	-	-	0.04
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	0.02	-	-	-	-	-	-	-	0.02
Non-specified	-	-	-	-	-	-	-	-	0.00	-	0.00
<b>OTHER</b>	<b>0.47</b>	<b>-</b>	<b>1.92</b>	<b>1.05</b>	<b>-</b>	<b>-</b>	<b>0.00</b>	<b>0.05</b>	<b>1.43</b>	<b>-</b>	<b>4.92</b>
Residential	0.47	-	1.22	0.62	-	-	0.00	0.03	0.70	-	3.05
Comm. and public services	-	-	0.48	0.43	-	-	0.00	0.02	0.68	-	1.61
Agriculture/forestry	-	-	0.22	-	-	-	-	0.00	0.05	-	0.27
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>0.16</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.16</b>
in industry/transf./energy	-	-	0.13	-	-	-	-	-	-	-	0.13
of which: feedstocks	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	0.03	-	-	-	-	-	-	-	0.03
in other	-	-	0.00	-	-	-	-	-	-	-	0.00
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>6.63</b>	<b>-</b>	<b>0.92</b>	<b>16.30</b>	<b>-</b>	<b>0.90</b>	<b>2.96</b>	<b>0.25</b>	<b>-</b>	<b>-</b>	<b>27.96</b>
Electricity plants	6.60	-	0.89	14.56	-	0.90	2.96	0.22	-	-	26.13
CHP plants	0.04	-	0.03	1.73	-	-	-	0.03	-	-	1.83
<b>Heat generated - PJ</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.



## Ireland : 2010

Million tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	1.04	-	-	0.32	-	0.05	0.25	0.33	-	-	1.98
Imports	1.06	3.11	5.87	4.38	-	-	-	0.04	0.07	-	14.53
Exports	-0.02	-0.09	-1.35	-	-	-	-	-0.00	-0.02	-	-1.49
Intl. marine bunkers	-	-	-0.08	-	-	-	-	-	-	-	-0.08
Intl. aviation bunkers	-	-	-0.72	-	-	-	-	-	-	-	-0.72
Stock changes	0.01	-0.05	0.23	-0.01	-	-	-	-0.00	-	-	0.18
<b>TPES</b>	<b>2.09</b>	<b>2.97</b>	<b>3.94</b>	<b>4.69</b>	<b>-</b>	<b>0.05</b>	<b>0.25</b>	<b>0.37</b>	<b>0.04</b>	<b>-</b>	<b>14.40</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-0.11	-	0.02	0.01	-	-	-	-	-0.01	-	-0.09
Electricity plants	-1.35	-	-0.13	-2.76	-	-0.05	-0.24	-0.06	2.28	-	-2.32
CHP plants	-0.02	-	-0.01	-0.25	-	-	-	-0.01	0.17	-	-0.12
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB plants	-0.04	-	-0.02	-	-	-	-	-	-	-	-0.06
Oil refineries	-	-2.97	2.91	-	-	-	-	-	-	-	-0.06
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-0.03	-	-0.10	-	-	-	-	-	-0.13	-	-0.25
Losses	-	-	-	-0.07	-	-	-	-	-0.18	-	-0.25
<b>TFC</b>	<b>0.55</b>	<b>-</b>	<b>6.62</b>	<b>1.61</b>	<b>-</b>	<b>-</b>	<b>0.01</b>	<b>0.29</b>	<b>2.16</b>	<b>-</b>	<b>11.24</b>
<b>INDUSTRY</b>	<b>0.10</b>	<b>-</b>	<b>0.61</b>	<b>0.47</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.15</b>	<b>0.59</b>	<b>-</b>	<b>1.92</b>
Iron and steel	-	-	0.00	-	-	-	-	-	-	-	0.00
Chemical and petrochem.	-	-	0.09	0.05	-	-	-	0.00	0.11	-	0.25
Non-ferrous metals	-	-	0.18	0.16	-	-	-	-	0.04	-	0.39
Non-metallic minerals	0.08	-	0.08	0.01	-	-	-	0.02	0.04	-	0.23
Transport equipment	-	-	0.00	0.00	-	-	-	-	0.01	-	0.02
Machinery	-	-	0.02	0.13	-	-	-	-	0.09	-	0.24
Mining and quarrying	-	-	0.05	0.01	-	-	-	-	0.04	-	0.10
Food and tobacco	0.02	-	0.11	0.09	-	-	-	0.04	0.13	-	0.39
Paper, pulp and printing	0.00	-	0.00	0.00	-	-	-	-	0.01	-	0.02
Wood and wood products	-	-	0.01	0.00	-	-	-	0.09	0.03	-	0.12
Construction	-	-	-	-	-	-	-	-	0.01	-	0.01
Textile and leather	-	-	0.01	0.00	-	-	-	-	0.01	-	0.02
Non-specified	0.00	-	0.05	0.01	-	-	-	-	0.08	-	0.14
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>3.82</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.09</b>	<b>0.00</b>	<b>-</b>	<b>3.91</b>
Domestic aviation	-	-	0.03	-	-	-	-	-	-	-	0.03
Road	-	-	3.73	-	-	-	-	0.09	-	-	3.82
Rail	-	-	0.04	-	-	-	-	-	-	-	0.04
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	0.02	-	-	-	-	-	-	-	0.02
Non-specified	-	-	-	-	-	-	-	-	0.00	-	0.00
<b>OTHER</b>	<b>0.44</b>	<b>-</b>	<b>1.93</b>	<b>1.15</b>	<b>-</b>	<b>-</b>	<b>0.01</b>	<b>0.05</b>	<b>1.57</b>	<b>-</b>	<b>5.14</b>
Residential	0.44	-	1.26	0.71	-	-	0.01	0.03	0.73	-	3.18
Comm. and public services	-	-	0.44	0.44	-	-	0.00	0.02	0.79	-	1.69
Agriculture/forestry	-	-	0.22	-	-	-	-	0.00	0.05	-	0.27
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>0.27</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.27</b>
in industry/transf./energy	-	-	0.23	-	-	-	-	-	-	-	0.23
of which: feedstocks	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	0.03	-	-	-	-	-	-	-	0.03
in other	-	-	0.00	-	-	-	-	-	-	-	0.00
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>6.38</b>	<b>-</b>	<b>0.61</b>	<b>17.71</b>	<b>-</b>	<b>0.60</b>	<b>2.82</b>	<b>0.32</b>	<b>-</b>	<b>-</b>	<b>28.43</b>
Electricity plants	6.35	-	0.56	15.88	-	0.60	2.82	0.28	-	-	26.48
CHP plants	0.04	-	0.05	1.83	-	-	-	0.04	-	-	1.96
<b>Heat generated - PJ</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Ireland

## Estimated energy supply balance for 2011

Million tonnes of oil equivalent											
SUPPLY	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	0.78	-	-	0.28	-	0.06	0.38	0.32	-	-	1.83
Imports	1.53	3.15	5.62	3.83	-	-	-	0.05	0.06	-	14.25
Exports	-0.02	-0.04	-1.57	-	-	-	-	-0.00	-0.02	-	-1.64
Intl. marine bunkers	-	-	-0.08	-	-	-	-	-	-	-	-0.08
Intl. aviation bunkers	-	-	-0.57	-	-	-	-	-	-	-	-0.57
Stock changes	-0.14	-0.02	-0.11	0.00	-	-	-	0.00	-	-	-0.27
<b>TPES</b>	<b>2.16</b>	<b>3.09</b>	<b>3.29</b>	<b>4.12</b>	-	<b>0.06</b>	<b>0.38</b>	<b>0.37</b>	<b>0.04</b>	-	<b>13.51</b>
Electricity and Heat Output											
Elec. generated - TWh	6.72	-	0.25	15.04	-	0.71	4.38	0.34	-	-	27.44
Heat generated - PJ	-	-	-	-	-	-	-	-	-	-	-

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1960	1971	1980	1990	2000	2009	2010	2011e
Energy production (Mtoe)	1.4	1.4	1.9	3.5	2.2	1.6	2.0	1.8
Net imports (Mtoe)	2.6	5.8	6.6	7.1	12.2	13.2	13.0	12.6
Total primary energy supply (Mtoe)	3.7	6.7	8.2	10.0	13.7	14.4	14.4	13.5
Net oil imports (Mtoe)	1.4	5.1	5.8	5.1	8.0	7.8	7.5	7.2
Oil supply (Mtoe)	1.2	4.6	5.5	4.5	7.4	7.2	6.9	6.4
Electricity consumption (TWh)*	2.0	5.6	9.8	13.2	22.1	27.0	27.0	25.8
GDP (billion 2005 USD)	24.1 e	37.6	57.8	82.4	159.8	203.2	202.3	203.8
GDP PPP (billion 2005 USD)	19.2 e	30.0	46.0	65.6	127.2	161.7	161.1	162.2
Population (millions)	2.83 e	2.98	3.40	3.51	3.80	4.47	4.48	4.56
Industrial production index (2005=100)	..	..	12.80	23.60	74.90	101.40	109.00	..
Total self-sufficiency**	0.3705	0.2119	0.2299	0.3471	0.1595	0.1107	0.1379	0.1353
Coal and peat self-sufficiency**	0.5300	0.6696	0.5683	0.4108	0.3749	0.2863	0.4985	0.3615
Oil self-sufficiency**	..	..	-	-	-	-	-	-
Natural gas self-sufficiency**	..	..	1.0000	1.0000	0.2789	0.0743	0.0674	0.0690
TPES/GDP (toe per thousand 2005 USD)	0.1547 e	0.1786	0.1426	0.1212	0.0859	0.0709	0.0712	0.0663
TPES/GDP PPP (toe per thousand 2005 USD)	0.1944 e	0.2243	0.1792	0.1522	0.1080	0.0890	0.0894	0.0833
TPES/population (toe per capita)	1.3163 e	2.2559	2.4215	2.8487	3.6095	3.2234	3.2165	2.9644
Net oil imports/GDP (toe per thousand 2005 USD)	0.0593 e	0.1359	0.1010	0.0614	0.0502	0.0383	0.0372	0.0352
Oil supply/GDP (toe per thousand 2005 USD)	0.0495 e	0.1226	0.0956	0.0543	0.0463	0.0353	0.0342	0.0313
Oil supply/population (toe per capita)	0.4213 e	1.5495	1.6226	1.2762	1.9436	1.6061	1.5439	1.3999
Elect. cons./GDP (kWh per 2005 USD)	0.0815 e	0.1499	0.1695	0.1606	0.1380	0.1327	0.1332	0.1267
Elect. cons./population (kWh per capita)	694 e	1894	2878	3776	5798	6037	6023	5661
Industry cons.***/industrial production (2005=100)	..	..	631.95	340.13	139.80	74.81	68.37	..
Industry oil cons.***/industrial production (2005=100)	..	..	948.18	268.99	131.58	58.64	58.76	..

\* Electricity consumption equals domestic supply less losses.

\*\* Production divided by TPES.

\*\*\* Includes non-energy use.

## Ireland

Figure 1. Energy production

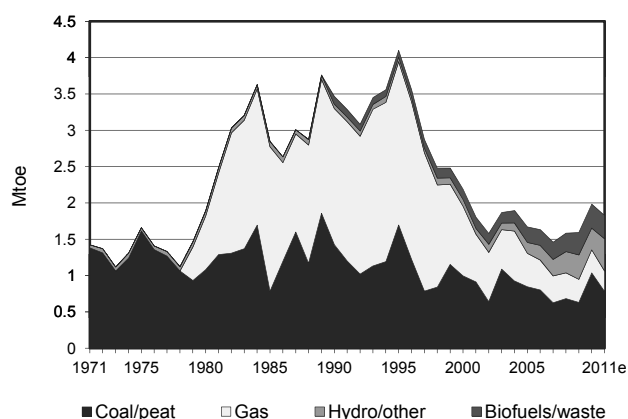


Figure 2. Total primary energy supply\*

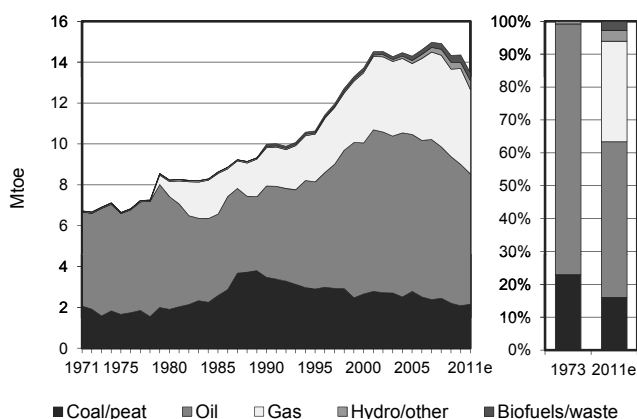


Figure 3. Energy self-sufficiency

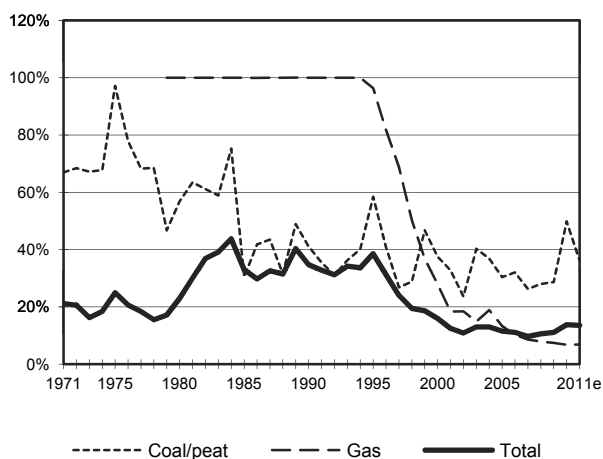


Figure 4. Breakdown of sectorial final consumption by source in 1973 and 2010\*\*

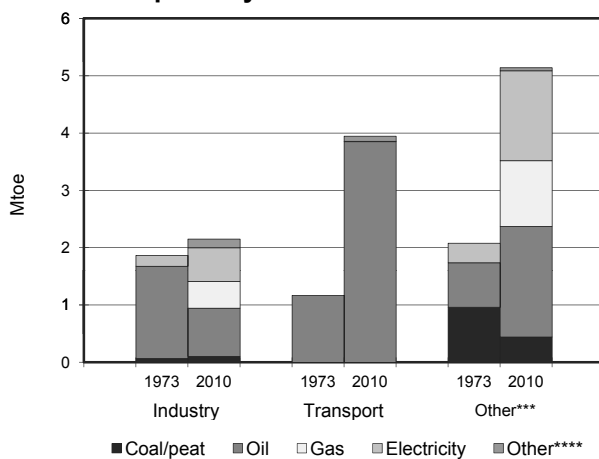


Figure 5. Electricity generation by fuel

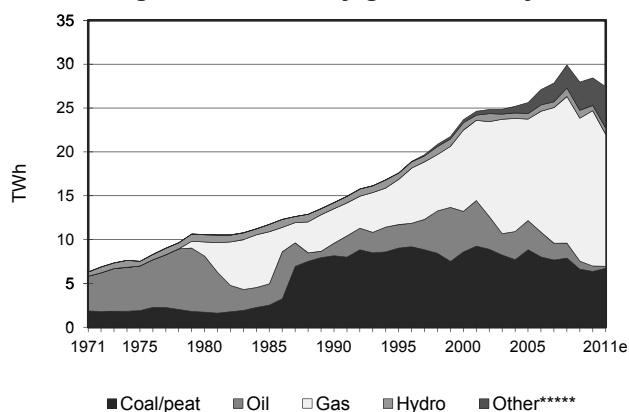
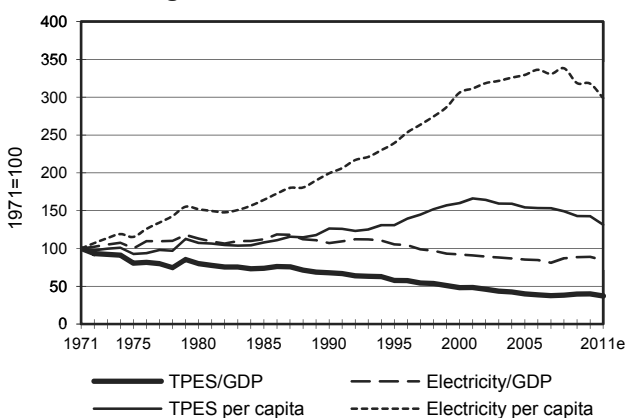


Figure 6. Selected indicators



\* Excluding electricity trade.

\*\* Includes non-energy use.

\*\*\* Includes residential, commercial and public services, agriculture/forestry, fishing and non-specified.

\*\*\*\* Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.

\*\*\*\*\* Includes geothermal, solar, wind, biofuels and waste, etc.

## Israel : 2009

Million tonnes of oil equivalent											
<b>SUPPLY AND CONSUMPTION</b>	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	0.03	0.00	-	2.17	-	0.00	1.04	0.02	-	-	3.27
Imports	7.11	12.71	1.85	1.25	-	-	-	0.00	-	-	22.93
Exports	-	-	-3.21	-	-	-	-	-	-0.33	-	-3.53
Intl. marine bunkers	-	-	-0.35	-	-	-	-	-	-	-	-0.35
Intl. aviation bunkers	-	-	-0.80	-	-	-	-	-	-	-	-0.80
Stock changes	0.00	-	-	-	-	-	-	-	-	-	0.00
<b>TPES</b>	<b>7.15</b>	<b>12.71</b>	<b>-2.50</b>	<b>3.42</b>	<b>-</b>	<b>0.00</b>	<b>1.04</b>	<b>0.03</b>	<b>-0.33</b>	<b>-</b>	<b>21.53</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	0.22	-0.39	0.21	0.19	-	-	-	-	0.04	-	0.28
Electricity plants	-7.37	-	-0.56	-3.34	-	-0.00	-0.00	-0.02	4.73	-	-6.56
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-12.33	12.26	-	-	-	-	-	-	-	-0.07
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-0.01	-	-	-	-	-	-	-	-0.01
Energy industry own use	-	-	-0.61	-0.10 e	-	-	-	-	-0.38	-	-1.09
Losses	-	-	-	-	-	-	-	-	-0.15	-	-0.15
<b>TFC</b>	<b>-</b>	<b>-</b>	<b>8.79</b>	<b>0.17</b>	<b>-</b>	<b>-</b>	<b>1.04</b>	<b>0.01</b>	<b>3.91</b>	<b>-</b>	<b>13.92</b>
<b>INDUSTRY</b>	<b>-</b>	<b>-</b>	<b>0.52</b>	<b>0.17</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.91</b>	<b>-</b>	<b>1.59</b>
Iron and steel	-	-	-	-	-	-	-	-	0.08	-	0.08
Chemical and petrochem.	-	-	-	-	-	-	-	-	0.18	-	0.18
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	-	-	-	-	0.06	-	0.06
Transport equipment	-	-	-	-	-	-	-	-	0.03	-	0.03
Machinery	-	-	-	-	-	-	-	-	0.07	-	0.07
Mining and quarrying	-	-	-	-	-	-	-	-	0.09	-	0.09
Food and tobacco	-	-	-	-	-	-	-	-	0.11	-	0.11
Paper, pulp and printing	-	-	-	-	-	-	-	-	0.05	-	0.05
Wood and wood products	-	-	-	-	-	-	-	-	0.01	-	0.01
Construction	-	-	-	-	-	-	-	-	0.08	-	0.08
Textile and leather	-	-	-	-	-	-	-	-	0.03	-	0.03
Non-specified	-	-	0.52	0.17	-	-	-	-	0.12	-	0.81
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>3.80</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>3.80</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	3.80	-	-	-	-	-	-	-	3.80
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>-</b>	<b>-</b>	<b>3.13</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.04</b>	<b>0.01</b>	<b>3.00</b>	<b>-</b>	<b>7.18</b>
Residential	-	-	0.98	-	-	-	1.04	0.00	1.30	-	3.33
Comm. and public services	-	-	-	-	-	-	-	-	1.34	-	1.34
Agriculture/forestry	-	-	-	-	-	-	-	-	0.15	-	0.15
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	2.15	-	-	-	-	0.01	0.21	-	2.37
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>1.34</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.34</b>
in industry/transf./energy	-	-	1.34	-	-	-	-	-	-	-	1.34
of which: feedstocks	-	-	0.87	-	-	-	-	-	-	-	0.87
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>34.40</b>	<b>-</b>	<b>2.23</b>	<b>18.02</b>	<b>-</b>	<b>0.02</b>	<b>0.30</b>	<b>0.04</b>	<b>-</b>	<b>-</b>	<b>55.01</b>
Electricity plants	34.40	-	2.23	18.02	-	0.02	0.30	0.04	-	-	55.01
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - PJ</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Israel : 2010

Million tonnes of oil equivalent											
<b>SUPPLY AND CONSUMPTION</b>	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	0.03	0.00	-	2.67	-	0.00	1.13	0.02	-	-	3.85
Imports	7.38	12.81	2.61	1.73	-	-	-	0.00	-	-	24.53
Exports	-	-0.28	-3.73	-	-	-	-	-	-0.34	-	-4.35
Intl. marine bunkers	-	-	-0.33	-	-	-	-	-	-	-	-0.33
Intl. aviation bunkers	-	-	-0.80	-	-	-	-	-	-	-	-0.80
Stock changes	-	-0.02	0.02	-	-	-	-	-	-	-	0.00
<b>TPES</b>	<b>7.41</b>	<b>12.51</b>	<b>-2.22</b>	<b>4.41</b>	<b>-</b>	<b>0.00</b>	<b>1.13</b>	<b>0.02</b>	<b>-0.34</b>	<b>-</b>	<b>22.91</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	0.01	0.60	0.22	-0.07	-	-	-	-	-0.08	-	0.68
Electricity plants	-7.42	-	-0.58	-4.16	-	-0.00	-0.01	-0.01	5.04	-	-7.14
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-13.10	12.89	-	-	-	-	-	-	-	-0.21
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-	-	-0.88	-0.12	-	-	-	-	-0.23	-	-1.23
Losses	-	-	-	-	-	-	-	-	-0.20	-	-0.20
<b>TFC</b>	<b>-</b>	<b>-</b>	<b>9.42</b>	<b>0.06</b>	<b>-</b>	<b>-</b>	<b>1.12</b>	<b>0.01</b>	<b>4.19</b>	<b>-</b>	<b>14.81</b>
<b>INDUSTRY</b>	<b>-</b>	<b>-</b>	<b>0.90</b>	<b>0.06</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.07</b>	<b>-</b>	<b>2.03</b>
Iron and steel	-	-	-	-	-	-	-	-	0.09	-	0.09
Chemical and petrochem.	-	-	0.57	-	-	-	-	-	0.21	-	0.78
Non-ferrous metals	-	-	-	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	-	-	-	-	0.07	-	0.07
Transport equipment	-	-	-	-	-	-	-	-	0.03	-	0.03
Machinery	-	-	-	-	-	-	-	-	0.06	-	0.06
Mining and quarrying	-	-	-	-	-	-	-	-	0.12	-	0.12
Food and tobacco	-	-	-	-	-	-	-	-	0.11	-	0.11
Paper, pulp and printing	-	-	-	-	-	-	-	-	0.06	-	0.06
Wood and wood products	-	-	-	-	-	-	-	-	0.01	-	0.01
Construction	-	-	-	-	-	-	-	-	0.07	-	0.07
Textile and leather	-	-	-	-	-	-	-	-	0.03	-	0.03
Non-specified	-	-	0.33	0.06	-	-	-	-	0.22	-	0.61
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>4.05</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>4.05</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	4.05	-	-	-	-	-	-	-	4.05
Rail	-	-	-	-	-	-	-	-	-	-	-
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>-</b>	<b>-</b>	<b>3.08</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.12</b>	<b>0.01</b>	<b>3.12</b>	<b>-</b>	<b>7.33</b>
Residential	-	-	0.95	-	-	-	1.12	0.00	1.32	-	3.39
Comm. and public services	-	-	-	-	-	-	-	-	1.46	-	1.46
Agriculture/forestry	-	-	-	-	-	-	-	-	0.14	-	0.14
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	2.13	-	-	-	-	0.01	0.20	-	2.33
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>1.39</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.39</b>
in industry/transf./energy	-	-	1.39	-	-	-	-	-	-	-	1.39
of which: feedstocks	-	-	0.84	-	-	-	-	-	-	-	0.84
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>34.29</b>	<b>-</b>	<b>2.15</b>	<b>21.96</b>	<b>-</b>	<b>0.03</b>	<b>0.11</b>	<b>0.04</b>	<b>-</b>	<b>-</b>	<b>58.57</b>
Electricity plants	34.29	-	2.15	21.96	-	0.03	0.11	0.04	-	-	58.57
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - PJ</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Israel

## Estimated energy supply balance for 2011

Million tonnes of oil equivalent											
SUPPLY	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	0.03	0.00	-	3.52	-	0.00	1.12	0.01	-	-	4.68
Imports	7.38	14.07	2.98	0.58	-	-	-	0.00	-	-	25.01
Exports	-	-0.28	-3.71	-	-	-	-	-	-0.36	-	-4.36
Intl. marine bunkers	-	-	-0.35	-	-	-	-	-	-	-	-0.35
Intl. aviation bunkers	-	-	-0.85	-	-	-	-	-	-	-	-0.85
Stock changes	0.18	-0.02	0.02	-	-	-	-	-	-	-	0.19
<b>TPES</b>	<b>7.59</b>	<b>13.78</b>	<b>-1.91</b>	<b>4.10</b>	<b>-</b>	<b>0.00</b>	<b>1.12</b>	<b>0.01</b>	<b>-0.36</b>	<b>-</b>	<b>24.33</b>
Electricity and Heat Output											
Elec. generated - TWh	35.19	-	4.19	19.61	-	0.03	0.47	0.09	-	-	59.57
Heat generated - PJ	-	-	-	-	-	-	-	-	-	-	-

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1960	1971	1980	1990	2000	2009	2010	2011e
Energy production (Mtoe)	..	5.9	0.2	0.4	0.6	3.3	3.9	4.7
Net imports (Mtoe)	..	0.4	8.5	11.4	18.2	19.4	20.2	20.7
Total primary energy supply (Mtoe)	..	5.7	7.8	11.5	18.3	21.5	22.9	24.3
Net oil imports (Mtoe)	..	0.4	8.5	9.0	12.3	11.4	11.4	13.1
Oil supply (Mtoe)	..	5.6	7.7	8.8	11.3	10.2	10.3	11.9
Electricity consumption (TWh)*	..	7.0	11.7	19.5	39.8	49.5	52.3	53.0
GDP (billion 2005 USD)	..	31.3	47.1	68.1	120.9	156.6	164.1	171.9
GDP PPP (billion 2005 USD)	..	37.8	56.8	82.3	146.0	189.0	198.2	207.6
Population (millions)	..	3.10	3.90	4.68	6.30	7.48	7.62	7.76
Industrial production index (2005=100)	..	..	..	54.90	97.00	115.80	124.90	127.40
Total self-sufficiency**	..	1.0347	0.0196	0.0370	0.0352	0.1519	0.1683	0.1925
Coal and peat self-sufficiency**	..	..	-	0.0093	0.0042	0.0043	0.0041	0.0038
Oil self-sufficiency**	..	1.0358	0.0026	0.0015	0.0004	0.0003	0.0003	0.0003
Natural gas self-sufficiency**	..	1.0000	1.0000	1.0000	1.0000	0.6343	0.6063	0.8588
TPES/GDP (toe per thousand 2005 USD)	..	0.1834	0.1662	0.1685	0.1509	0.1375	0.1396	0.1415
TPES/GDP PPP (toe per thousand 2005 USD)	..	0.1519	0.1376	0.1395	0.1250	0.1139	0.1156	0.1172
TPES/population (toe per capita)	..	1.8544	2.0069	2.4541	2.8962	2.8764	3.0060	3.1341
Net oil imports/GDP (toe per thousand 2005 USD)	..	0.0128	0.1799	0.1323	0.1013	0.0725	0.0695	0.0759
Oil supply/GDP (toe per thousand 2005 USD)	..	0.1798	0.1636	0.1298	0.0933	0.0653	0.0627	0.0690
Oil supply/population (toe per capita)	..	1.8185	1.9762	1.8904	1.7910	1.3651	1.3495	1.5288
Elect. cons./GDP (kWh per 2005 USD)	..	0.2244	0.2490	0.2857	0.3289	0.3160	0.3184	0.3084
Elect. cons./population (kWh per capita)	..	2270	3007	4162	6311	6609	6858	6830
Industry cons.***/industrial production (2005=100)	..	..	..	145.83	120.41	93.39	101.10	..
Industry oil cons.***/industrial production (2005=100)	..	..	..	179.96	136.35	94.61	107.91	..

\* Electricity consumption equals domestic supply less losses.

\*\* Production divided by TPES.

\*\*\* Includes non-energy use.

## Israel

Figure 1. Energy production

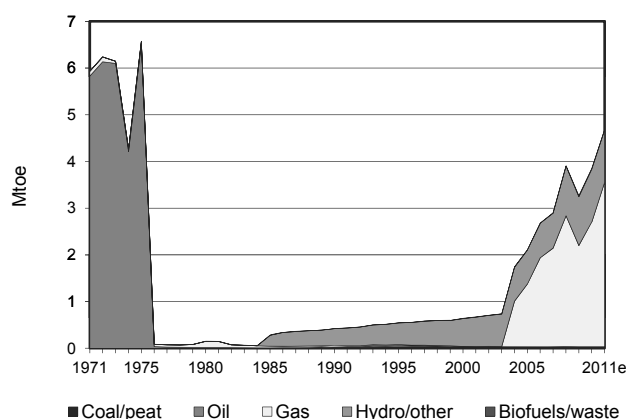


Figure 2. Total primary energy supply\*

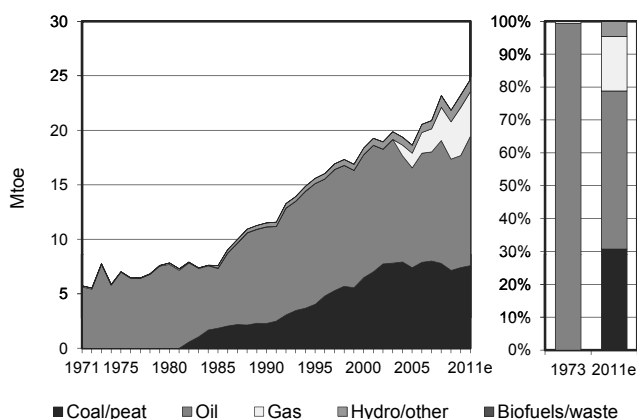


Figure 3. Energy self-sufficiency

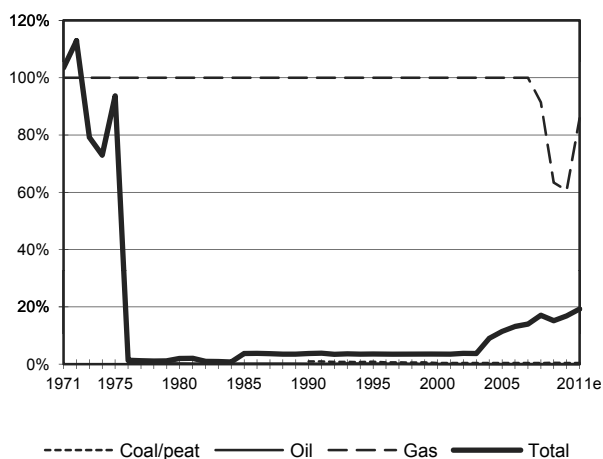


Figure 4. Breakdown of sectorial final consumption by source in 1973 and 2010\*\*

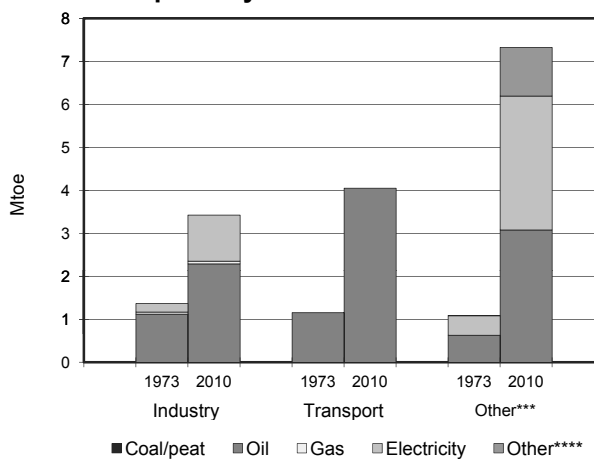


Figure 5. Electricity generation by fuel

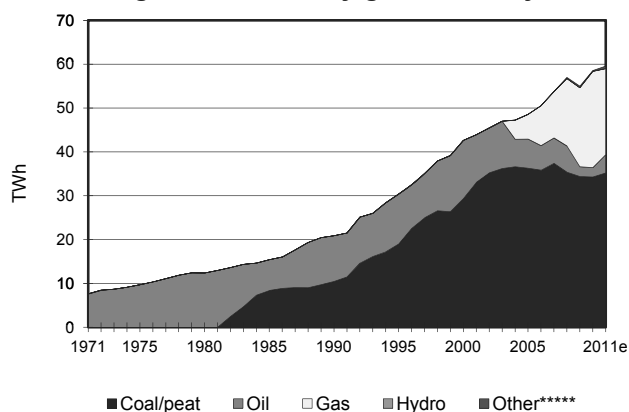
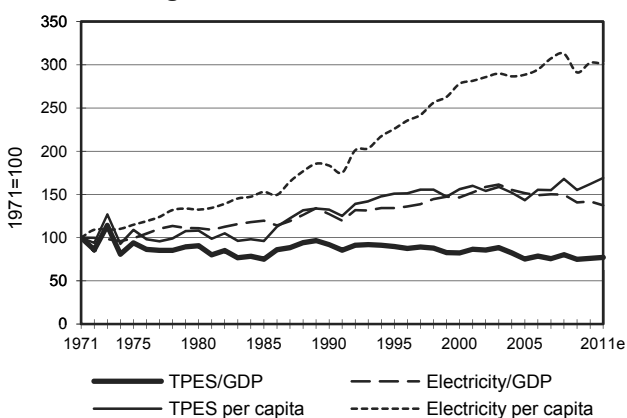


Figure 6. Selected indicators



\* Excluding electricity trade.

\*\* Includes non-energy use.

\*\*\* Includes residential, commercial and public services, agriculture/forestry, fishing and non-specified.

\*\*\*\* Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.

\*\*\*\*\* Includes geothermal, solar, wind, biofuels and waste, etc.

## Italy : 2009

Million tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	0.05	4.92	-	6.56	-	4.23	5.51	5.73	-	-	26.99
Imports	12.61	82.52	11.63	56.70	-	-	-	1.35	4.05	-	168.86
Exports	-0.19	-2.30	-24.78	-0.10	-	-	-	-0.09	-0.18	-	-27.65
Intl. marine bunkers	-	-	-2.35	-	-	-	-	-	-	-	-2.35
Intl. aviation bunkers	-	-	-3.00	-	-	-	-	-	-	-	-3.00
Stock changes	0.29	0.08	0.90	0.73	-	-	-	0.01	-	-	2.00
<b>TPES</b>	<b>12.75</b>	<b>85.21</b>	<b>-17.60</b>	<b>63.88</b>	<b>-</b>	<b>4.23</b>	<b>5.51</b>	<b>7.01</b>	<b>3.87</b>	<b>-</b>	<b>164.86</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-0.35	-0.13	-0.34	-	-	-	-	-0.00	-	-	-0.82
Electricity plants	-9.29	-	-2.90	-11.35	-	-4.23	-5.21	-1.93	16.16	-	-18.75
CHP plants	-0.76	-	-4.71	-15.08	-	-	-	-1.15	8.64	4.32	-8.75
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-0.86 e	-	-	-	-	-	-	-	-	-	-0.86
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB plants	-0.33	-	-	-	-	-	-	-	-	-	-0.33
Oil refineries	-	-86.66	87.72	-	-	-	-	-	-	-	1.06
Petrochemical plants	-	1.57	-1.63	-	-	-	-	-	-	-	-0.06
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-0.10	-	-	-0.10
Energy industry own use	-0.04	-	-4.85	-0.46	-	-	-	-	-1.97	-1.22	-8.55
Losses	-	-	-	-0.37	-	-	-	-	-1.75	-	-2.12
<b>TFC</b>	<b>1.10</b>	<b>-</b>	<b>55.68</b>	<b>36.63</b>	<b>-</b>	<b>-</b>	<b>0.30</b>	<b>3.83</b>	<b>24.94</b>	<b>3.09</b>	<b>125.58</b>
<b>INDUSTRY</b>	<b>1.00</b>	<b>-</b>	<b>4.33</b>	<b>9.89</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.39</b>	<b>10.37</b>	<b>2.94</b>	<b>28.92</b>
Iron and steel	0.87 e	-	0.13	1.08	-	-	-	-	1.35	0.27	3.70
Chemical and petrochem.	0.00	-	0.43	1.59	-	-	-	0.00	1.25	1.09	4.36
Non-ferrous metals	0.01	-	0.05	0.36	-	-	-	-	0.44	0.00	0.86
Non-metallic minerals	0.11	-	2.37	2.27	-	-	-	0.37	1.01	0.07	6.20
Transport equipment	-	-	-	-	-	-	-	-	0.31	0.10	0.41
Machinery	-	-	0.46	1.61	-	-	-	-	1.64	0.02	3.73
Mining and quarrying	-	-	0.03	0.04	-	-	-	-	0.08	0.00	0.15
Food and tobacco	-	-	0.44	1.28	-	-	-	0.01	1.08	0.18	2.99
Paper, pulp and printing	-	-	0.13	0.95	-	-	-	-	0.81	0.54	2.43
Wood and wood products	-	-	-	-	-	-	-	-	0.33	0.03	0.36
Construction	-	-	0.04	-	-	-	-	-	0.16	0.00	0.19
Textile and leather	-	-	0.14	0.68	-	-	-	-	0.53	0.03	1.38
Non-specified	0.00	-	0.11	0.04	-	-	-	-	1.38	0.61	2.14
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>36.40</b>	<b>0.60</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.18</b>	<b>0.91</b>	<b>-</b>	<b>39.09</b>
Domestic aviation	-	-	0.69	-	-	-	-	-	-	-	0.69
Road	-	-	34.46	0.60	-	-	-	1.18	-	-	36.24
Rail	-	-	0.06	-	-	-	-	-	0.38	-	0.44
Pipeline transport	-	-	-	-	-	-	-	-	0.04	-	0.04
Domestic navigation	-	-	1.19	-	-	-	-	-	-	-	1.19
Non-specified	-	-	-	-	-	-	-	-	0.48	-	0.48
<b>OTHER</b>	<b>0.00</b>	<b>-</b>	<b>7.14</b>	<b>25.57</b>	<b>-</b>	<b>-</b>	<b>0.30</b>	<b>2.25</b>	<b>13.66</b>	<b>0.16</b>	<b>49.08</b>
Residential	0.00	-	3.79	16.82	-	-	0.08	2.00	5.93	0.05	28.68
Comm. and public services	-	-	0.84	8.61	-	-	-	-	7.25	0.06	16.76
Agriculture/forestry	-	-	2.18	0.14	-	-	-	0.25	0.48	0.01	3.06
Fishing	-	-	0.23	-	-	-	-	-	0.01	-	0.23
Non-specified	-	-	0.11	-	-	-	0.21	-	-	0.03	0.35
<b>NON-ENERGY USE</b>	<b>0.10</b>	<b>-</b>	<b>7.82</b>	<b>0.57</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>8.49</b>
in industry/transf./energy	-	-	7.61	0.57	-	-	-	-	-	-	8.18
of which: feedstocks	-	-	4.64	0.57	-	-	-	-	-	-	5.21
in transport	-	-	0.20	-	-	-	-	-	-	-	0.20
in other	0.10	-	0.01	-	-	-	-	-	-	-	0.11
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>43.42</b>	<b>-</b>	<b>26.02</b>	<b>147.27</b>	<b>-</b>	<b>49.14</b>	<b>13.16</b>	<b>9.33</b>	<b>-</b>	<b>-</b>	<b>288.34</b>
Electricity plants	40.07	-	10.91	68.54	-	49.14	13.16	6.08	-	-	187.90
CHP plants	3.35	-	15.11	78.73	-	-	-	3.25	-	-	100.44
<b>Heat generated - PJ</b>	<b>1.00</b>	<b>-</b>	<b>62.53</b>	<b>107.96</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>9.33</b>	<b>-</b>	<b>-</b>	<b>180.82</b>
CHP plants	1.00	-	62.53	107.96	-	-	-	9.33	-	-	180.82
Heat plants	-	-	-	-	-	-	-	-	-	-	-

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.



## Italy : 2010

Million tonnes of oil equivalent											
<b>SUPPLY AND CONSUMPTION</b>	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	0.06	5.56	-	6.88	-	4.40	5.86	7.03	-	-	29.79
Imports	14.51	85.61	11.28	61.70	-	-	-	1.84	3.95	-	178.89
Exports	-0.21	-1.75	-28.34	-0.12	-	-	-	-0.11	-0.16	-	-30.68
Intl. marine bunkers	-	-	-2.97	-	-	-	-	-	-	-	-2.97
Intl. aviation bunkers	-	-	-3.17	-	-	-	-	-	-	-	-3.17
Stock changes	-0.19	-0.96	-0.01	-0.43	-	-	-	-0.03	-	-	-1.62
<b>TPES</b>	<b>14.17</b>	<b>88.45</b>	<b>-23.21</b>	<b>68.04</b>	<b>-</b>	<b>4.40</b>	<b>5.86</b>	<b>8.74</b>	<b>3.80</b>	<b>-</b>	<b>170.24</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-0.44	0.14	0.69	-0.00	-	-	-	-0.00	-0.00	0.00	0.38
Electricity plants	-9.22	-	-1.52	-11.05	-	-4.40	-5.57	-2.14	16.11	-	-17.79
CHP plants	-0.93	-	-5.85	-16.80	-	-	-	-1.39	9.59	4.84	-10.54
Heat plants	-	-	-	-	-	-	-0.03	-0.08	-	0.07	-0.04
Blast furnaces	-1.15 e	-	-	-	-	-	-	-	-	-	-1.15
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB plants	-0.45	-	-	-	-	-	-	-	-	-	-0.45
Oil refineries	-	-90.32	91.30	-	-	-	-	-	-	-	0.98
Petrochemical plants	-	1.73	-1.80	-	-	-	-	-	-	-	-0.07
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-0.01	-	-	-0.01
Energy industry own use	-0.04	-	-5.29	-0.65	-	-	-	-	-1.98	-1.57	-9.54
Losses	-	-	-	-0.49	-	-	-	-	-1.77	-	-2.26
<b>TFC</b>	<b>1.93</b>	<b>-</b>	<b>54.32</b>	<b>39.05</b>	<b>-</b>	<b>-</b>	<b>0.26</b>	<b>5.12</b>	<b>25.74</b>	<b>3.33</b>	<b>129.77</b>
<b>INDUSTRY</b>	<b>1.80</b>	<b>-</b>	<b>3.48</b>	<b>10.35</b>	<b>-</b>	<b>-</b>	<b>0.01</b>	<b>0.19</b>	<b>11.00</b>	<b>3.13</b>	<b>29.95</b>
Iron and steel	1.72 e	-	0.07	1.40	-	-	0.01	-	1.61	0.04	4.83
Chemical and petrochem.	0.00	-	0.20	1.58	-	-	-	-	1.34	1.05	4.16
Non-ferrous metals	0.01	-	0.03	0.41	-	-	-	-	0.39	0.00	0.84
Non-metallic minerals	0.07	-	2.23	2.35	-	-	-	0.19	1.02	0.08	5.93
Transport equipment	-	-	-	-	-	-	-	-	0.33	0.17	0.50
Machinery	-	-	0.40	1.64	-	-	-	-	1.83	0.02	3.90
Mining and quarrying	-	-	0.03	0.04	-	-	-	-	0.08	0.00	0.15
Food and tobacco	-	-	0.23	1.28	-	-	-	-	1.10	0.16	2.77
Paper, pulp and printing	-	-	0.07	0.98	-	-	-	-	0.84	0.52	2.41
Wood and wood products	-	-	-	-	-	-	-	-	0.34	0.03	0.37
Construction	-	-	0.05	-	-	-	-	-	0.15	0.00	0.20
Textile and leather	-	-	0.12	0.63	-	-	-	-	0.54	0.04	1.34
Non-specified	0.00	-	0.05	0.04	-	-	0.00	-	1.43	1.03	2.55
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>35.43</b>	<b>0.70</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.47</b>	<b>0.92</b>	<b>-</b>	<b>38.51</b>
Domestic aviation	-	-	0.72	-	-	-	-	-	-	-	0.72
Road	-	-	33.52	0.70	-	-	-	1.47	-	-	35.68
Rail	-	-	0.06	-	-	-	-	-	0.37	-	0.44
Pipeline transport	-	-	-	-	-	-	-	-	0.04	-	0.04
Domestic navigation	-	-	1.13	-	-	-	-	-	-	-	1.13
Non-specified	-	-	-	-	-	-	-	-	0.50	-	0.50
<b>OTHER</b>	<b>0.00</b>	<b>-</b>	<b>6.55</b>	<b>27.45</b>	<b>-</b>	<b>-</b>	<b>0.25</b>	<b>3.47</b>	<b>13.83</b>	<b>0.20</b>	<b>51.75</b>
Residential	0.00	-	3.33	18.69	-	-	0.10	3.16	5.98	0.12	31.39
Comm. and public services	-	-	0.83	8.61	-	-	0.10	0.00	7.36	0.05	16.96
Agriculture/forestry	-	-	2.08	0.14	-	-	0.02	0.30	0.48	0.00	3.02
Fishing	-	-	0.19	-	-	-	0.03	-	0.01	-	0.22
Non-specified	-	-	0.13	-	-	-	-	-	-	0.03	0.16
<b>NON-ENERGY USE</b>	<b>0.13</b>	<b>-</b>	<b>8.86</b>	<b>0.57</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>9.56</b>
in industry/transf./energy	-	-	8.66	0.57	-	-	-	-	-	-	9.22
of which: feedstocks	-	-	5.07	0.57	-	-	-	-	-	-	5.63
in transport	-	-	0.21	-	-	-	-	-	-	-	0.21
in other	0.13	-	-	-	-	-	-	-	-	-	0.13
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>44.43</b>	<b>-</b>	<b>21.71</b>	<b>152.74</b>	<b>-</b>	<b>51.12</b>	<b>17.19</b>	<b>11.59</b>	<b>-</b>	<b>-</b>	<b>298.77</b>
Electricity plants	40.53	-	5.10	66.03	-	51.12	17.19	7.35	-	-	187.31
CHP plants	3.91	-	16.62	86.71	-	-	-	4.24	-	-	111.47
<b>Heat generated - PJ</b>	<b>2.26</b>	<b>-</b>	<b>60.27</b>	<b>128.83</b>	<b>-</b>	<b>-</b>	<b>0.59</b>	<b>13.39</b>	<b>-</b>	<b>-</b>	<b>205.34</b>
CHP plants	2.26	-	60.27	128.83	-	-	-	11.14	-	-	202.51
Heat plants	-	-	-	-	-	-	0.59	2.25	-	-	2.84

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Italy

## Estimated energy supply balance for 2011

Million tonnes of oil equivalent											
SUPPLY	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	0.06	5.62	-	6.92	-	3.99	6.96	7.52	-	-	31.07
Imports	15.49	78.45	10.49	57.62	-	-	-	2.09	4.07	-	168.21
Exports	-0.19	-1.43	-25.84	-0.10	-	-	-	-0.16	-0.15	-	-27.86
Intl. marine bunkers	-	-	-3.09	-	-	-	-	-	-	-	-3.09
Intl. aviation bunkers	-	-	-3.07	-	-	-	-	-	-	-	-3.07
Stock changes	-0.20	1.94	-1.11	-0.64	-	-	-	-0.10	-	-	-0.12
<b>TPES</b>	<b>15.15</b>	<b>84.58</b>	<b>-22.62</b>	<b>63.80</b>	<b>-</b>	<b>3.99</b>	<b>6.96</b>	<b>9.35</b>	<b>3.92</b>	<b>-</b>	<b>165.14</b>
Electricity and Heat Output											
Elec. generated - TWh	51.38	-	18.00	142.05	-	46.35	27.32	13.37	-	-	298.47
Heat generated - PJ	2.61	-	56.61	124.34	-	-	0.60	16.16	-	-	200.31

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1960	1971	1980	1990	2000	2009	2010	2011e
Energy production (Mtoe)	13.8	19.5	19.9	25.3	28.2	27.0	29.8	31.1
Net imports (Mtoe)	31.0	96.4	116.8	127.3	152.4	141.2	148.2	140.4
Total primary energy supply (Mtoe)	39.9	105.4	130.8	146.6	171.5	164.9	170.2	165.1
Net oil imports (Mtoe)	23.8	87.9	92.8	85.1	88.0	67.1	66.8	61.7
Oil supply (Mtoe)	20.9	79.1	88.2	83.3	86.9	67.6	65.2	62.0
Electricity consumption (TWh)*	49.0	116.4	175.2	235.1	301.8	317.3	325.7	325.4
GDP (billion 2005 USD)	452.3 e	802.3	1144.3	1451.6	1701.0	1734.0	1765.3	1772.9
GDP PPP (billion 2005 USD)	419.6 e	744.4	1061.8	1346.9	1578.3	1608.9	1637.9	1645.0
Population (millions)	49.94 e	54.07	56.43	56.72	56.94	60.19	60.48	60.24
Industrial production index (2005=100)	29.20	57.10	80.90	90.20	104.30	82.60	87.90	87.90
Total self-sufficiency**	0.3468	0.1853	0.1521	0.1727	0.1642	0.1637	0.1750	0.1881
Coal and peat self-sufficiency**	0.0889	0.0597	0.0275	0.0188	0.0003	0.0036	0.0045	0.0039
Oil self-sufficiency**	0.1003	0.0159	0.0197	0.0536	0.0540	0.0727	0.0852	0.0907
Natural gas self-sufficiency**	1.0000	1.0158	0.4516	0.3597	0.2351	0.1027	0.1012	0.1084
TPES/GDP (toe per thousand 2005 USD)	0.0882 e	0.1314	0.1143	0.1010	0.1008	0.0951	0.0964	0.0931
TPES/GDP PPP (toe per thousand 2005 USD)	0.0951 e	0.1416	0.1232	0.1088	0.1087	0.1025	0.1039	0.1004
TPES/population (toe per capita)	0.7989 e	1.9491	2.3184	2.5839	3.0122	2.7388	2.8147	2.7413
Net oil imports/GDP (toe per thousand 2005 USD)	0.0525 e	0.1095	0.0811	0.0587	0.0517	0.0387	0.0378	0.0348
Oil supply/GDP (toe per thousand 2005 USD)	0.0463 e	0.0986	0.0771	0.0574	0.0511	0.0390	0.0370	0.0349
Oil supply/population (toe per capita)	0.4189 e	1.4630	1.5635	1.4690	1.5253	1.1232	1.0787	1.0286
Elect. cons./GDP (kWh per 2005 USD)	0.1082 e	0.1451	0.1531	0.1620	0.1774	0.1830	0.1845	0.1835
Elect. cons./population (kWh per capita)	980 e	2153	3105	4145	5300	5271	5384	5402
Industry cons.***/industrial production (2005=100)	128.50	161.80	118.64	105.60	95.07	96.80	96.05	..
Industry oil cons.***/industrial production (2005=100)	200.30	356.48	204.31	135.95	96.00	107.36	102.59	..

\* Electricity consumption equals domestic supply less losses.

\*\* Production divided by TPES.

\*\*\* Includes non-energy use.

Italy

Figure 1. Energy production

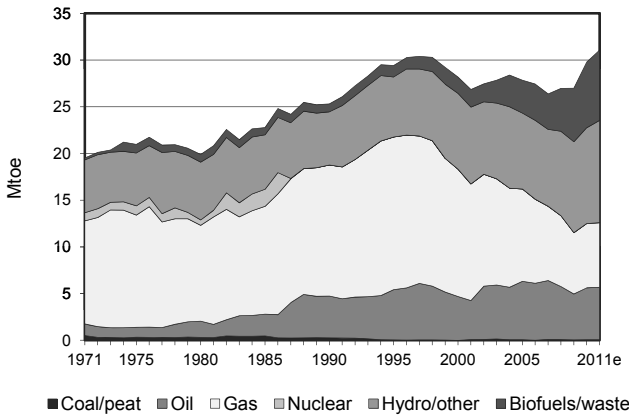


Figure 2. Total primary energy supply\*

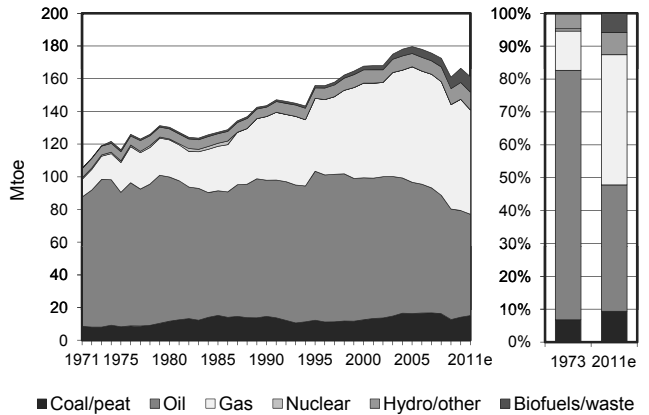


Figure 3. Energy self-sufficiency

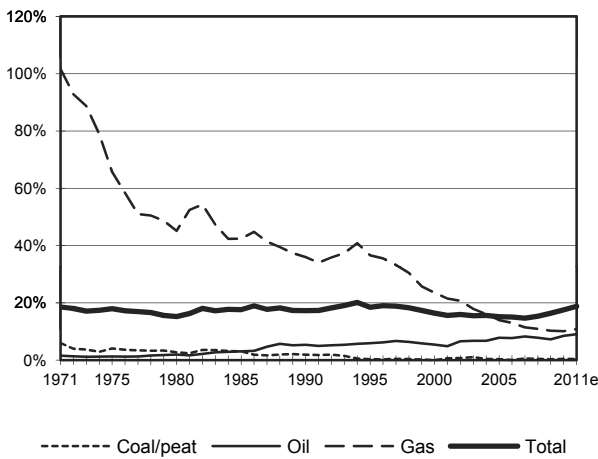


Figure 4. Breakdown of sectorial final consumption by source in 1973 and 2010\*\*

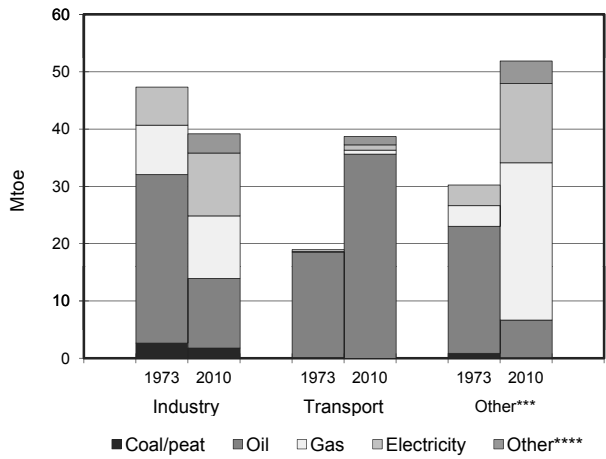


Figure 5. Electricity generation by fuel

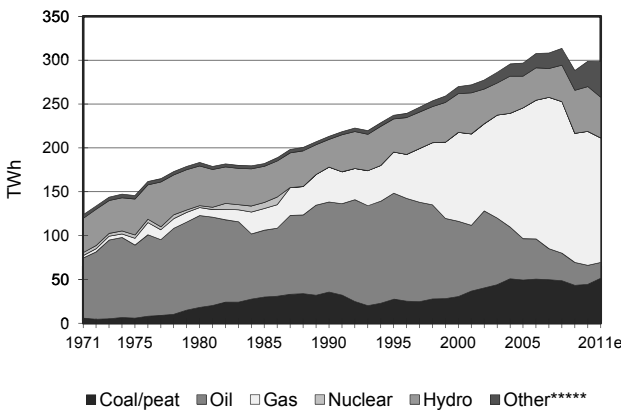
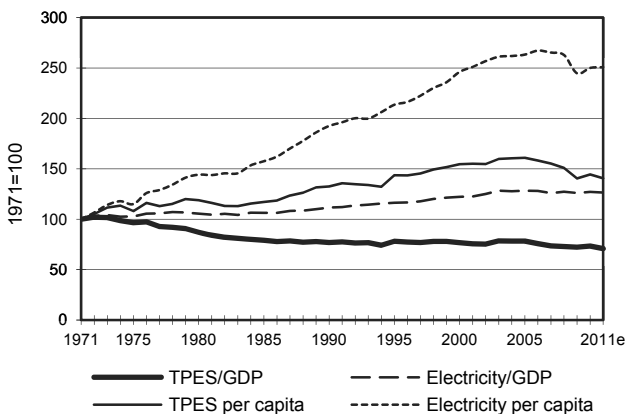


Figure 6. Selected indicators



\* Excluding electricity trade.  
 \*\* Includes non-energy use.  
 \*\*\* Includes residential, commercial and public services, agriculture/forestry, fishing and non-specified.  
 \*\*\*\* Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.  
 \*\*\*\*\* Includes geothermal, solar, wind, biofuels and waste, etc.

## Japan : 2009

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	-	0.75	-	3.43	72.90	6.61	3.67	6.60	-	-	93.96
Imports	101.62	182.12	40.98	77.76	-	-	-	-	-	-	402.48
Exports	-0.75	-	-17.36	-	-	-	-	-	-	-	-18.11
Intl. marine bunkers	-	-	-4.72	-	-	-	-	-	-	-	-4.72
Intl. aviation bunkers	-	-	-5.21	-	-	-	-	-	-	-	-5.21
Stock changes	0.28	2.33	1.60	-0.53	-	-	-	-0.01	-	-	3.68
<b>TPES</b>	<b>101.15</b>	<b>185.20</b>	<b>15.30</b>	<b>80.66</b>	<b>72.90</b>	<b>6.61</b>	<b>3.67</b>	<b>6.59</b>	<b>-</b>	<b>-</b>	<b>472.10</b>
Transfers	-	-	-0.01	-	-	-	-	-	-	-	-0.01
Statistical differences	0.76	-0.28	-0.85	5.42	-	-	-	-	-0.00	0.01 e	5.08
Electricity plants	-58.14	-3.18	-13.63	-51.77	-72.90	-6.61	-3.03	-4.09	89.73 e	-	-123.63
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-0.01	-0.35	-	-	-	-0.14	-0.09	0.56 e	-0.03
Blast furnaces	-14.35 e	-	-	-	-	-	-	-	-	-	-14.35
Gas works	-	-	-1.44	1.38	-	-	-	-	-	-	-0.06
Coke/pat. fuel/BKB plants	-0.67	-	-0.41	-	-	-	-	-	-	-	-1.08
Oil refineries	-	-185.62	185.78	-	-	-	-	-	-	-	0.16
Petrochemical plants	-	4.32	-4.51	-	-	-	-	-	-	-	-0.19
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-0.02	-	-	-0.02
Energy industry own use	-2.91	-0.00	-8.36	-3.12	-	-	-	-	-4.80	-0.02	-19.21
Losses	-	-	-	-	-	-	-	-	-4.35	-	-4.35
<b>TFC</b>	<b>25.85</b>	<b>0.44</b>	<b>171.87</b>	<b>32.22</b>	<b>-</b>	<b>-</b>	<b>0.64</b>	<b>2.34</b>	<b>80.49</b>	<b>0.55</b>	<b>314.41</b>
<b>INDUSTRY</b>	<b>25.00</b>	<b>0.02</b>	<b>23.94</b>	<b>7.34</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2.32</b>	<b>24.94</b>	<b>-</b>	<b>83.56</b>
Iron and steel	11.14 e	-	1.48	1.78	-	-	-	-	5.04	-	19.44
Chemical and petrochem.	2.83	0.02	9.24	1.05	-	-	-	0.02	4.20	-	17.36
Non-ferrous metals	0.23	-	0.30	0.05	-	-	-	-	1.34	-	1.93
Non-metallic minerals	3.60	-	1.94	0.38	-	-	-	0.08	1.86	-	7.87
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	0.11	-	0.77	1.40	-	-	-	-	6.10	-	8.38
Mining and quarrying	0.01	-	0.11	0.09	-	-	-	-	0.07	-	0.27
Food and tobacco	-	-	1.98	1.18	-	-	-	-	1.44	-	4.60
Paper, pulp and printing	1.45	-	0.90	0.42	-	-	-	2.23	2.60	-	7.61
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	0.00	-	3.07	0.69	-	-	-	-	0.07	-	3.83
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	5.62	-	4.15	0.30	-	-	-	-	2.21	-	12.29
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>74.68</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.66</b>	<b>-</b>	<b>76.34</b>
Domestic aviation	-	-	3.31	-	-	-	-	-	-	-	3.31
Road	-	-	67.92	-	-	-	-	-	-	-	67.92
Rail	-	-	0.20	-	-	-	-	-	1.66	-	1.86
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	3.25	-	-	-	-	-	-	-	3.25
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>0.52</b>	<b>-</b>	<b>34.31</b>	<b>24.57</b>	<b>-</b>	<b>-</b>	<b>0.64</b>	<b>0.02</b>	<b>53.89</b>	<b>0.55</b>	<b>114.51</b>
Residential	-	-	12.82	9.04	-	-	0.43	0.02	24.60	0.03	46.93
Comm. and public services	0.52	-	18.19	15.53	-	-	0.13	-	28.98	0.52	63.87
Agriculture/forestry	-	-	1.53	-	-	-	0.09	-	0.08	-	1.69
Fishing	-	-	1.78	-	-	-	-	-	-	-	1.78
Non-specified	-	-	-	-	-	-	-	-	0.24 e	-	0.24
<b>NON-ENERGY USE</b>	<b>0.33</b>	<b>0.42</b>	<b>38.94</b>	<b>0.31</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>40.00</b>
in industry/transf./energy	0.33	0.42	38.16	0.31	-	-	-	-	-	-	39.22
of which: feedstocks	0.33	0.42	32.68	0.31	-	-	-	-	-	-	33.73
in transport	-	-	0.78	-	-	-	-	-	-	-	0.78
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>280.45</b>	<b>15.32</b>	<b>72.77</b>	<b>287.50</b>	<b>279.75</b>	<b>76.90</b>	<b>9.26</b>	<b>21.45</b>	<b>-</b>	<b>-</b>	<b>1043.39</b>
Electricity plants	280.45	15.32	72.77	287.50	279.75	76.90	9.26	21.45	-	-	1043.39
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - PJ</b>	<b>-</b>	<b>-</b>	<b>0.29</b>	<b>14.23</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>5.37</b>	<b>3.56</b>	<b>-</b>	<b>23.44</b>
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	0.29	14.23 e	-	-	-	5.37	3.56	-	23.44

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Japan : 2010

Million tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	-	0.69	-	3.21	75.11	7.07	3.54	7.16	-	-	96.79
Imports	115.33	184.61	44.54	82.79	-	-	-	-	-	-	427.27
Exports	-0.47	-	-17.57	-	-	-	-	-	-	-	-18.04
Intl. marine bunkers	-	-	-4.63	-	-	-	-	-	-	-	-4.63
Intl. aviation bunkers	-	-	-5.52	-	-	-	-	-	-	-	-5.52
Stock changes	0.09	0.77	0.12	0.02	-	-	-	-0.02	-	-	0.98
<b>TPES</b>	<b>114.95</b>	<b>186.08</b>	<b>16.93</b>	<b>86.01</b>	<b>75.11</b>	<b>7.07</b>	<b>3.54</b>	<b>7.14</b>	<b>-</b>	<b>-</b>	<b>496.85</b>
Transfers	-	-	-0.02	-	-	-	-	-	-	-	-0.02
Statistical differences	-5.03	-2.22	-1.65	4.67	-	-	-0.00	-	-0.00	0.02 e	-4.20
Electricity plants	-61.64	-4.13	-13.90	-53.96	-75.11	-7.07	-2.93	-4.26	95.52 e	-	-127.48
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-0.02	-0.37	-	-	-	-0.13	-0.10	0.59 e	-0.03
Blast furnaces	-17.06 e	-	-	-	-	-	-	-	-	-	-17.06
Gas works	-	-	-1.50	1.44	-	-	-	-	-	-	-0.06
Coke/pat. fuel/BKB plants	0.48	-	-0.36	-	-	-	-	-0.00	-	-	0.12
Oil refineries	-	-183.84	184.67	-	-	-	-	-	-	-	0.83
Petrochemical plants	-	4.64	-4.83	-	-	-	-	-	-	-	-0.19
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-0.02	-	-	-0.02
Energy industry own use	-3.04	-0.00	-8.48	-3.35	-	-	-	-	-5.02	-0.03	-19.92
Losses	-	-	-	-	-	-	-	-	-4.25	-	-4.25
<b>TFC</b>	<b>28.67</b>	<b>0.53</b>	<b>170.84</b>	<b>34.45</b>	<b>-</b>	<b>-</b>	<b>0.61</b>	<b>2.73</b>	<b>86.16</b>	<b>0.58</b>	<b>324.58</b>
<b>INDUSTRY</b>	<b>27.82</b>	<b>0.03</b>	<b>22.98</b>	<b>7.80</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2.71</b>	<b>28.69</b>	<b>-</b>	<b>90.03</b>
Iron and steel	12.60 e	-	1.70	1.97	-	-	-	0.01	5.48	-	21.75
Chemical and petrochem.	3.03	0.03	8.40	1.14	-	-	-	0.04	4.38	-	17.01
Non-ferrous metals	0.23	-	0.26	0.05	-	-	-	0.00	1.46	-	2.00
Non-metallic minerals	3.63	-	1.67	0.42	-	-	-	0.15	1.97	-	7.83
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	0.11	-	0.74	1.46	-	-	-	-	6.52	-	8.83
Mining and quarrying	0.01	-	0.11	0.11	-	-	-	-	0.08	-	0.30
Food and tobacco	-	-	1.77	1.24	-	-	-	-	1.48	-	4.49
Paper, pulp and printing	1.43	-	0.74	0.44	-	-	-	2.52	2.62	-	7.75
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	0.00	-	3.11	0.72	-	-	-	-	0.07	-	3.89
Textile and leather	-	-	-	-	-	-	-	-	-	-	-
Non-specified	6.79	-	4.48	0.26	-	-	-	-	4.64	-	16.17
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>75.29</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.66</b>	<b>-</b>	<b>76.95</b>
Domestic aviation	-	-	3.11	-	-	-	-	-	-	-	3.11
Road	-	-	68.63	-	-	-	-	-	-	-	68.63
Rail	-	-	0.20	-	-	-	-	-	1.66	-	1.86
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	3.35	-	-	-	-	-	-	-	3.35
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>0.51</b>	<b>-</b>	<b>33.88</b>	<b>26.29</b>	<b>-</b>	<b>-</b>	<b>0.61</b>	<b>0.02</b>	<b>55.81</b>	<b>0.58</b>	<b>117.71</b>
Residential	-	-	13.83	9.17	-	-	0.39	0.02	26.25	0.03	49.69
Comm. and public services	0.51	-	16.70	17.13	-	-	0.13	-	29.15	0.55	64.17
Agriculture/forestry	-	-	1.54	-	-	-	0.09	-	0.08	-	1.70
Fishing	-	-	1.82	-	-	-	-	-	-	-	1.82
Non-specified	-	-	-	-	-	-	-	-	0.32 e	-	0.32
<b>NON-ENERGY USE</b>	<b>0.34</b>	<b>0.51</b>	<b>38.69</b>	<b>0.36</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>39.90</b>
in industry/transf./energy	0.34	0.51	37.92	0.36	-	-	-	-	-	-	39.12
of which: feedstocks	0.34	0.51	32.66	0.36	-	-	-	-	-	-	33.87
in transport	-	-	0.78	-	-	-	-	-	-	-	0.78
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>304.50</b>	<b>20.18</b>	<b>77.28</b>	<b>304.52</b>	<b>288.23</b>	<b>82.21</b>	<b>10.39</b>	<b>23.45</b>	<b>-</b>	<b>-</b>	<b>1110.75</b>
Electricity plants	304.50	20.18	77.28	304.52	288.23	82.21	10.39	23.45	-	-	1110.75
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - PJ</b>	<b>-</b>	<b>-</b>	<b>0.73</b>	<b>14.93</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>5.08</b>	<b>3.83</b>	<b>-</b>	<b>24.57</b>
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	0.73	14.93 e	-	-	-	5.08	3.83	-	24.57

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Japan

## Estimated energy supply balance for 2011

Million tonnes of oil equivalent											
SUPPLY	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	-	0.67	-	3.20	26.52	7.17	3.52	6.46	-	-	47.54
Imports	108.99	180.32	49.77	97.60	-	-	-	-	-	-	436.68
Exports	-0.69	-	-14.14	-	-	-	-	-	-	-	-14.83
Intl. marine bunkers	-	-	-4.11	-	-	-	-	-	-	-	-4.11
Intl. aviation bunkers	-	-	-5.42	-	-	-	-	-	-	-	-5.42
Stock changes	-0.09	-0.89	0.13	-0.85	-	-	-	-0.01	-	-	-1.71
<b>TPES</b>	<b>108.22</b>	<b>180.10</b>	<b>26.23</b>	<b>99.94</b>	<b>26.52</b>	<b>7.17</b>	<b>3.52</b>	<b>6.45</b>	-	-	<b>458.15</b>
Electricity and Heat Output											
Elec. generated - TWh	357.02	24.19	86.49	362.82	101.76	83.33	10.79	23.15	-	-	1049.56
Heat generated - PJ	-	-	0.81	17.34	-	-	-	3.90	4.12	-	26.17

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1960	1971	1980	1990	2000	2009	2010	2011e
Energy production (Mtoe)	47.0	35.8	43.3	75.2	105.8	94.0	96.8	47.5
Net imports (Mtoe)	35.6	253.0	318.8	377.7	429.0	384.4	409.2	421.9
Total primary energy supply (Mtoe)	80.8	267.5	344.5	439.3	519.0	472.1	496.9	458.2
Net oil imports (Mtoe)	29.5	219.8	251.7	263.3	270.0	205.7	211.6	216.0
Oil supply (Mtoe)	27.7	198.9	233.7	250.4	255.2	200.5	203.0	206.3
Electricity consumption (TWh)*	102.7	361.0	550.9	801.3	1011.6	999.8	1069.8	1008.4
GDP (billion 2005 USD)	576.8 e	1631.8	2411.7	3794.1	4266.9	4403.9	4578.6	4544.3
GDP PPP (billion 2005 USD)	490.7 e	1388.3	2051.8	3227.9	3630.1	3746.7	3895.3	3866.1
Population (millions)	93.66 e	104.98	117.06	123.61	126.93	127.51	127.38	126.91
Industrial production index (2005=100)	12.40	45.10	65.80	96.90	98.40	81.70	94.80	91.40
Total self-sufficiency**	0.5812	0.1338	0.1257	0.1712	0.2039	0.1990	0.1948	0.1038
Coal and peat self-sufficiency**	0.8586	0.4187	0.1831	0.0583	0.0159	-	-	-
Oil self-sufficiency**	0.0184	0.0043	0.0024	0.0028	0.0030	0.0037	0.0034	0.0033
Natural gas self-sufficiency**	1.0028	0.6474	0.0905	0.0434	0.0348	0.0425	0.0373	0.0320
TPES/GDP (toe per thousand 2005 USD)	0.1402 e	0.1639	0.1429	0.1158	0.1216	0.1072	0.1085	0.1008
TPES/GDP PPP (toe per thousand 2005 USD)	0.1647 e	0.1927	0.1679	0.1361	0.1430	0.1260	0.1276	0.1185
TPES/population (toe per capita)	0.8631 e	2.5483	2.9431	3.5541	4.0887	3.7025	3.9004	3.6100
Net oil imports/GDP (toe per thousand 2005 USD)	0.0511 e	0.1347	0.1044	0.0694	0.0633	0.0467	0.0462	0.0475
Oil supply/GDP (toe per thousand 2005 USD)	0.0479 e	0.1219	0.0969	0.0660	0.0598	0.0455	0.0443	0.0454
Oil supply/population (toe per capita)	0.2952 e	1.8941	1.9962	2.0258	2.0107	1.5725	1.5937	1.6258
Elect. cons./GDP (kWh per 2005 USD)	0.1781 e	0.2212	0.2284	0.2112	0.2371	0.2270	0.2337	0.2219
Elect. cons./population (kWh per capita)	1097 e	3439	4707	6482	7970	7841	8399	7945
Industry cons.***/industrial production (2005=100)	208.39	193.28	130.08	101.50	102.79	108.33	98.20	..
Industry oil cons.***/industrial production (2005=100)	126.84	255.46	143.87	101.44	107.46	108.18	91.56	..

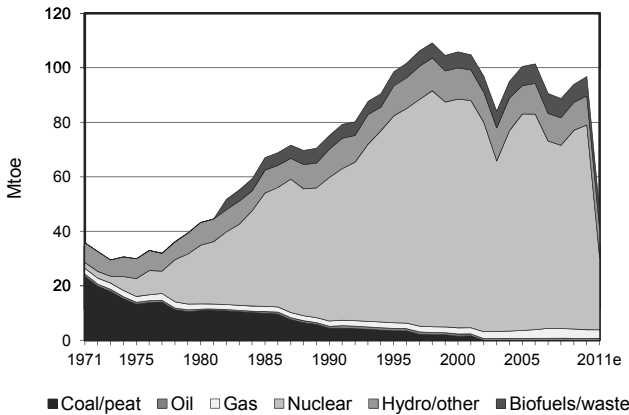
\* Electricity consumption equals domestic supply less losses.

\*\* Production divided by TPES.

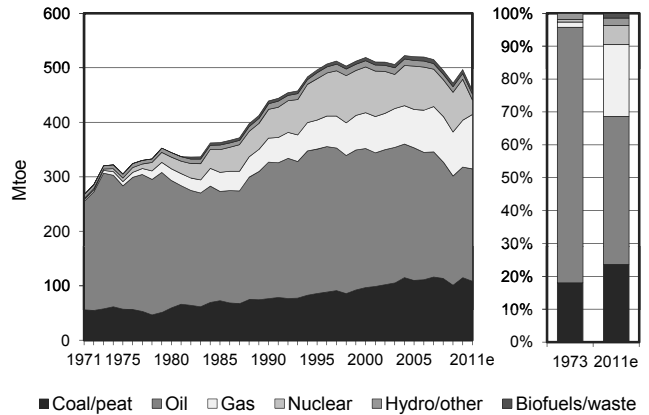
\*\*\* Includes non-energy use.

## Japan

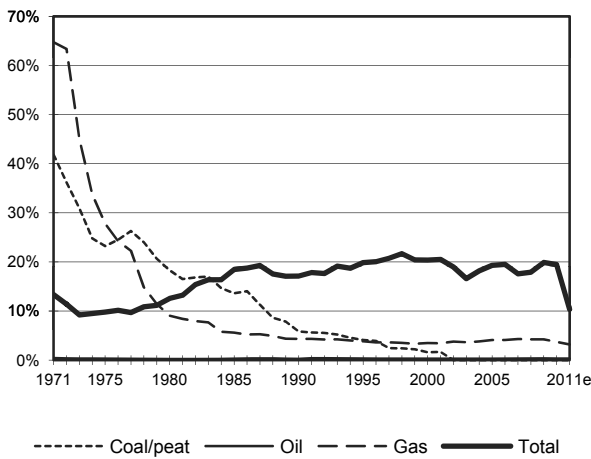
**Figure 1. Energy production**



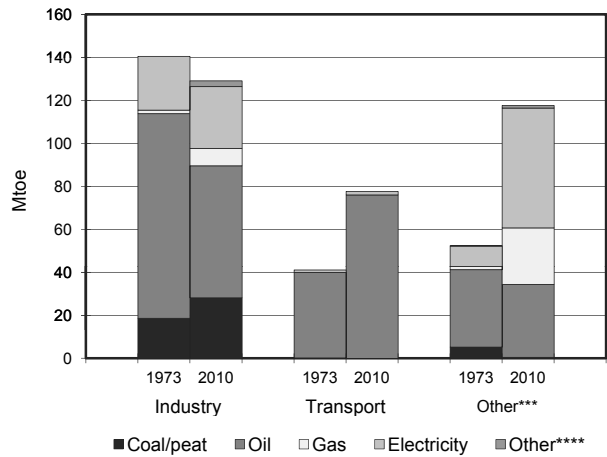
**Figure 2. Total primary energy supply\***



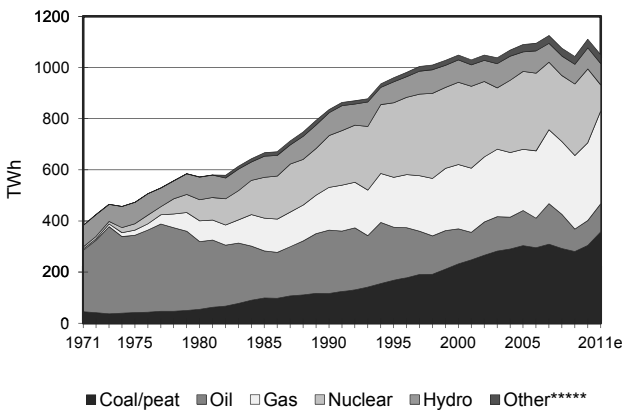
**Figure 3. Energy self-sufficiency**



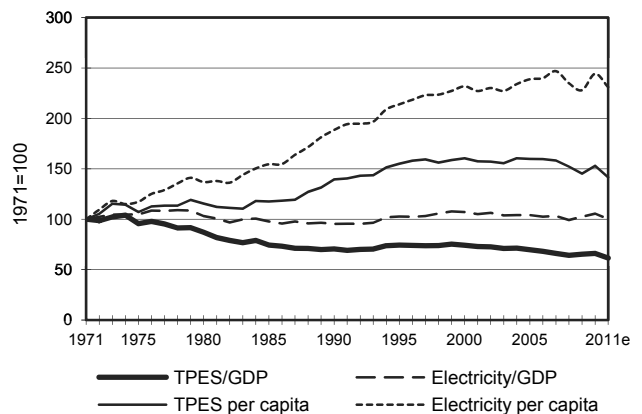
**Figure 4. Breakdown of sectorial final consumption by source in 1973 and 2010\*\***



**Figure 5. Electricity generation by fuel**



**Figure 6. Selected indicators**



\* Excluding electricity trade.

\*\* Includes non-energy use.

\*\*\* Includes residential, commercial and public services, agriculture/forestry, fishing and non-specified.

\*\*\*\* Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.

\*\*\*\*\* Includes geothermal, solar, wind, biofuels and waste, etc.

## Korea : 2009

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	1.16	0.69	-	0.45	38.51	0.24	0.17	3.02	-	0.07	44.31
Imports	62.92	117.64	31.64	30.20	-	-	-	0.02	-	-	242.42
Exports	-	-0.32	-44.00	-	-	-	-	-	-	-	-44.33
Intl. marine bunkers	-	-	-8.40	-	-	-	-	-	-	-	-8.40
Intl. aviation bunkers	-	-	-3.69	-	-	-	-	-	-	-	-3.69
Stock changes	0.76	-2.99	0.04	1.05	-	-	-	-	-	-	-1.14
<b>TPES</b>	<b>64.84</b>	<b>115.01</b>	<b>-24.42</b>	<b>31.70</b>	<b>38.51</b>	<b>0.24</b>	<b>0.17</b>	<b>3.04</b>	<b>-</b>	<b>0.07</b>	<b>229.18</b>
Transfers	-	-2.57	2.65	-	-	-	-	-	-	-	0.08
Statistical differences	2.33	1.46	-0.44	-1.10	-	-	-	0.01	0.02	0.02	2.29
Electricity plants	-45.48	-	-3.25	-9.00	-38.51	-0.24	-0.12	-0.11	35.83	-0.02 e	-60.90
CHP plants	-4.27	-	-1.39	-3.31	-	-	-	-0.23	3.01	4.05 e	-2.13
Heat plants	-	-	-0.37	-0.08	-	-	-	-0.27	-	0.43	-0.30
Blast furnaces	-5.85 e	-	-	-	-	-	-	-	-	-	-5.85
Gas works	-	-	-0.24	0.22	-	-	-	-	-	-	-0.02
Coke/pat. fuel/BKB plants	-1.55	-	-	-	-	-	-	-	-	-	-1.55
Oil refineries	-	-121.65	120.04	-	-	-	-	-	-	-	-1.60
Petrochemical plants	-	7.77	-7.55	-	-	-	-	-	-	-	0.22
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-1.85	-0.02	-5.32	-0.32	-	-	-	-	-2.53	..	-10.04
Losses	-	-	-	-	-	-	-	-	-1.44	-0.12	-1.56
<b>TFC</b>	<b>8.18</b>	<b>-</b>	<b>79.70</b>	<b>18.12</b>	<b>-</b>	<b>-</b>	<b>0.05</b>	<b>2.44</b>	<b>34.89</b>	<b>4.44</b>	<b>147.82</b>
<b>INDUSTRY</b>	<b>6.91</b>	<b>-</b>	<b>5.83</b>	<b>5.63</b>	<b>-</b>	<b>-</b>	<b>0.00</b>	<b>1.74</b>	<b>17.14</b>	<b>2.70</b>	<b>39.96</b>
Iron and steel	3.46 e	-	0.26	1.37	-	-	-	0.11	3.55	0.01	8.78
Chemical and petrochem.	0.01	-	1.17	1.05	-	-	-	0.13	3.02	1.49	6.87
Non-ferrous metals	-	-	0.08	0.18	-	-	-	0.02	0.69	0.08	1.04
Non-metallic minerals	2.62	-	0.83	0.44	-	-	-	0.59	0.98	-	5.46
Transport equipment	-	-	0.20	0.49	-	-	-	-	1.47	-	2.17
Machinery	-	-	0.28	0.54	-	-	-	0.02	4.37	0.04	5.24
Mining and quarrying	-	-	0.06	-	-	-	-	-	0.12	-	0.17
Food and tobacco	0.02	-	0.31	0.45	-	-	-	0.00	0.70	0.20	1.69
Paper, pulp and printing	0.02	-	0.48	0.21	-	-	-	0.33	0.86	0.16	2.06
Wood and wood products	-	-	0.03	0.06	-	-	-	0.04	0.14	0.02	0.28
Construction	-	-	0.76	0.00	-	-	-	-	-	-	0.76
Textile and leather	0.12	-	0.42	0.39	-	-	-	0.01	1.05	0.70	2.67
Non-specified	0.65	-	0.98	0.45	-	-	0.00	0.50	0.19	-	2.78
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>27.97</b>	<b>0.90</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.22</b>	<b>0.19</b>	<b>-</b>	<b>29.28</b>
Domestic aviation	-	-	0.27	-	-	-	-	-	-	-	0.27
Road	-	-	26.60	0.90	-	-	-	0.22	-	-	27.72
Rail	-	-	0.19	-	-	-	-	-	0.19	-	0.38
Pipeline transport	-	-	0.00	-	-	-	-	-	-	-	0.00
Domestic navigation	-	-	0.82	-	-	-	-	-	-	-	0.82
Non-specified	-	-	0.09	-	-	-	-	-	-	-	0.09
<b>OTHER</b>	<b>0.89</b>	<b>-</b>	<b>9.26</b>	<b>11.59</b>	<b>-</b>	<b>-</b>	<b>0.05</b>	<b>0.48</b>	<b>17.56</b>	<b>1.73</b>	<b>41.57</b>
Residential	0.89	-	2.93	8.26	-	-	0.02	0.02	4.96	1.54	18.64
Comm. and public services	-	-	3.40	3.32	-	-	0.03	0.46	11.81	0.19	19.21
Agriculture/forestry	-	-	1.14	0.00	-	-	-	-	0.63	-	1.77
Fishing	-	-	0.85	-	-	-	-	-	0.16	-	1.01
Non-specified	-	-	0.94	-	-	-	-	-	-	-	0.94
<b>NON-ENERGY USE</b>	<b>0.38</b>	<b>-</b>	<b>36.63</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>37.01</b>
in industry/transf./energy	0.38	-	35.97	-	-	-	-	-	-	-	36.35
of which: feedstocks	0.38	-	34.47	-	-	-	-	-	-	-	34.85
in transport	-	-	0.63	-	-	-	-	-	-	-	0.63
in other	-	-	0.03	-	-	-	-	-	-	-	0.03
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>208.86</b>	<b>-</b>	<b>19.81</b>	<b>70.28</b>	<b>147.77</b>	<b>2.81</b>	<b>1.34</b>	<b>0.72</b>	<b>-</b>	<b>0.08</b>	<b>451.68</b>
Electricity plants	193.63	-	15.07	55.45	147.77	2.81	1.34	0.50	-	-	416.56
CHP plants	15.24	-	4.75	14.83	-	-	-	0.21	-	0.08	35.11
<b>Heat generated - PJ</b>	<b>51.18</b>	<b>-</b>	<b>67.29</b>	<b>54.16</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>14.98</b>	<b>-</b>	<b>2.96</b>	<b>190.57</b>
CHP plants	51.18	-	63.46	51.12	-	-	-	3.85	-	2.96 e	172.57
Heat plants	-	-	3.83	3.04	-	-	-	11.13	-	-	18.00

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.



## Korea : 2010

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	0.96	0.70	-	0.49	38.73	0.32	0.22	3.43	-	0.09	44.92
Imports	72.95	121.57	33.03	39.28	-	-	-	0.02	-	-	266.84
Exports	-	-0.48	-45.31	-	-	-	-	-	-	-	-45.80
Intl. marine bunkers	-	-	-9.00	-	-	-	-	-	-	-	-9.00
Intl. aviation bunkers	-	-	-4.01	-	-	-	-	-	-	-	-4.01
Stock changes	-0.48	-0.79	-0.57	-1.09	-	-	-	-	-	-	-2.94
<b>TPES</b>	<b>73.43</b>	<b>120.99</b>	<b>-25.88</b>	<b>38.67</b>	<b>38.73</b>	<b>0.32</b>	<b>0.22</b>	<b>3.45</b>	<b>-</b>	<b>0.09</b>	<b>250.01</b>
Transfers	-	-2.60	2.69	-	-	-	-	-	-	-	0.09
Statistical differences	-0.56	-0.41	-0.44	-0.43	-	-	0.00	0.00	-0.02	-0.07	-1.94
Electricity plants	-47.12	-	-2.99	-13.43	-38.73	-0.32	-0.15	-0.18	38.89	-0.04 e	-64.06
CHP plants	-5.16	-	-1.71	-4.44	-	-	-	-0.24	3.83	3.92 e	-3.80
Heat plants	-	-	-0.37	-0.13	-	-	-	-0.39	-	0.56 e	-0.32
Blast furnaces	-7.73 e	-	-	-	-	-	-	-	-	-	-7.73
Gas works	-	-	-0.48	0.37	-	-	-	-	-	-	-0.12
Coke/pat. fuel/BKB plants	-0.96	-	-	-	-	-	-	-	-	-	-0.96
Oil refineries	-	-124.97	123.46	-	-	-	-	-	-	-	-1.51
Petrochemical plants	-	7.01	-6.80	-	-	-	-	-	-	-	0.21
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-2.36	-0.02	-5.63	-0.24	-	-	-	-0.01	-2.50	-0.08	-10.85
Losses	-	-	-	-	-	-	-	-	-1.55	-0.05	-1.60
<b>TFC</b>	<b>9.54</b>	<b>-</b>	<b>81.87</b>	<b>20.36</b>	<b>-</b>	<b>-</b>	<b>0.06</b>	<b>2.63</b>	<b>38.64</b>	<b>4.33</b>	<b>157.44</b>
<b>INDUSTRY</b>	<b>8.28</b>	<b>-</b>	<b>5.90</b>	<b>6.87</b>	<b>-</b>	<b>-</b>	<b>0.00</b>	<b>1.74</b>	<b>19.62</b>	<b>2.34</b>	<b>44.76</b>
Iron and steel	4.32 e	-	0.28	1.60	-	-	-	0.01	4.24	0.00	10.44
Chemical and petrochem.	0.10	-	1.14	1.49	-	-	-	0.09	3.51	1.46	7.79
Non-ferrous metals	-	-	0.09	0.16	-	-	-	0.02	0.75	0.00	1.02
Non-metallic minerals	2.68	-	0.81	0.45	-	-	-	0.71	1.01	0.00	5.66
Transport equipment	-	-	0.21	0.60	-	-	-	-	1.74	-	2.55
Machinery	-	-	0.27	0.62	-	-	-	0.02	5.10	0.07	6.08
Mining and quarrying	-	-	0.09	-	-	-	-	-	0.14	-	0.23
Food and tobacco	0.02	-	0.27	0.52	-	-	-	0.01	0.76	0.08	1.66
Paper, pulp and printing	0.02	-	0.46	0.27	-	-	-	0.35	0.88	0.23	2.21
Wood and wood products	-	-	0.03	0.05	-	-	-	0.04	0.15	0.01	0.28
Construction	-	-	0.82	0.00	-	-	-	-	-	-	0.82
Textile and leather	0.13	-	0.37	0.47	-	-	-	0.02	1.12	0.45	2.57
Non-specified	1.01	-	1.06	0.63	-	-	0.00	0.49	0.21	0.04	3.44
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>28.40</b>	<b>1.02</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.30</b>	<b>0.19</b>	<b>-</b>	<b>29.91</b>
Domestic aviation	-	-	0.34	-	-	-	-	-	-	-	0.34
Road	-	-	27.12	1.02	-	-	-	0.30	-	-	28.44
Rail	-	-	0.18	-	-	-	-	-	0.19	-	0.37
Pipeline transport	-	-	0.00	-	-	-	-	-	-	-	0.00
Domestic navigation	-	-	0.67	-	-	-	-	-	-	-	0.67
Non-specified	-	-	0.09	-	-	-	-	-	-	-	0.09
<b>OTHER</b>	<b>0.86</b>	<b>-</b>	<b>9.61</b>	<b>12.47</b>	<b>-</b>	<b>-</b>	<b>0.06</b>	<b>0.58</b>	<b>18.84</b>	<b>1.99</b>	<b>44.41</b>
Residential	0.86	-	2.98	8.94	-	-	0.02	0.03	5.27	1.76	19.86
Comm. and public services	-	-	3.45	3.53	-	-	0.04	0.55	12.70	0.24	20.50
Agriculture/forestry	-	-	1.25	0.00	-	-	-	-	0.69	-	1.95
Fishing	-	-	0.91	-	-	-	-	-	0.18	-	1.09
Non-specified	-	-	1.01	-	-	-	-	-	-	-	1.01
<b>NON-ENERGY USE</b>	<b>0.40</b>	<b>-</b>	<b>37.95</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>38.36</b>
in industry/transf./energy	0.40	-	37.25	-	-	-	-	-	-	-	37.66
of which: feedstocks	0.40	-	35.91	-	-	-	-	-	-	-	36.32
in transport	-	-	0.67	-	-	-	-	-	-	-	0.67
in other	-	-	0.03	-	-	-	-	-	-	-	0.03
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>219.28</b>	<b>-</b>	<b>18.94</b>	<b>103.18</b>	<b>148.60</b>	<b>3.68</b>	<b>1.79</b>	<b>1.11</b>	<b>-</b>	<b>0.15</b>	<b>496.72</b>
Electricity plants	200.49	-	14.03	82.68	148.60	3.68	1.79	0.78	-	0.07	452.11
CHP plants	18.79	-	4.91	20.51	-	-	-	0.33	-	0.08	44.61
<b>Heat generated - PJ</b>	<b>53.34</b>	<b>-</b>	<b>52.72</b>	<b>61.77</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>20.10</b>	<b>-</b>	<b>3.83</b>	<b>191.76</b>
CHP plants	53.34	-	49.80	57.31	-	-	-	3.90	-	3.04 e	167.39
Heat plants	-	-	2.92	4.46	-	-	-	16.21	-	0.79 e	24.37

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Korea

## Estimated energy supply balance for 2011

Million tonnes of oil equivalent											
SUPPLY	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	0.96	0.69	-	0.41	39.13	0.41	0.24	3.47	-	0.14	45.45
Imports	79.46	127.54	32.66	41.98	-	-	-	-	-	-	281.64
Exports	-	-0.74	-54.05	-	-	-	-	-	-	-	-54.79
Intl. marine bunkers	-	-	-8.82	-	-	-	-	-	-	-	-8.82
Intl. aviation bunkers	-	-	-4.15	-	-	-	-	-	-	-	-4.15
Stock changes	-0.62	-0.51	0.16	-0.77	-	-	-	-	-	-	-1.74
<b>TPES</b>	<b>79.80</b>	<b>126.98</b>	<b>-34.20</b>	<b>41.62</b>	<b>39.13</b>	<b>0.41</b>	<b>0.24</b>	<b>3.47</b>	<b>-</b>	<b>0.14</b>	<b>257.59</b>
Electricity and Heat Output											
Elec. generated - TWh	233.08	-	15.17	109.12	150.16	4.72	1.92	1.21	-	0.15	515.54
Heat generated - PJ	62.71	-	49.87	58.60	-	-	-	15.78	-	5.98	192.94

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1960	1971	1980	1990	2000	2009	2010	2011e
Energy production (Mtoe)	..	6.4	9.3	22.6	34.4	44.3	44.9	45.5
Net imports (Mtoe)	..	10.6	30.8	70.2	165.7	198.1	221.1	226.9
Total primary energy supply (Mtoe)	..	17.0	41.2	93.1	188.2	229.2	250.0	257.6
Net oil imports (Mtoe)	..	10.7	27.3	51.7	109.5	105.0	108.8	105.4
Oil supply (Mtoe)	..	10.6	26.7	49.7	99.0	90.6	95.1	92.8
Electricity consumption (TWh)*	..	9.7	34.8 e	101.7	277.7	437.7	481.5	500.8
GDP (billion 2005 USD)	..	66.7	142.5	360.3	678.3	958.5	1017.6	1054.6
GDP PPP (billion 2005 USD)	..	86.6	184.9	467.7	880.5	1244.3	1320.9	1368.9
Population (millions)	..	32.88	38.12	42.87	47.01	48.75	48.88	48.92
Industrial production index (2005=100)	..	..	10.53	31.70	74.30	119.70	139.20	148.80
Total self-sufficiency**	..	0.3758	0.2250	0.2430	0.1831	0.1934	0.1797	0.1764
Coal and peat self-sufficiency**	..	0.9990	0.6077	0.2964	0.0867	0.0179	0.0131	0.0120
Oil self-sufficiency**	..	..	-	-	0.0068	0.0076	0.0073	0.0074
Natural gas self-sufficiency**	..	..	-	-	-	0.0141	0.0125	0.0097
TPES/GDP (toe per thousand 2005 USD)	..	0.2544	0.2893	0.2584	0.2774	0.2391	0.2457	0.2443
TPES/GDP PPP (toe per thousand 2005 USD)	..	0.1960	0.2228	0.1990	0.2137	0.1842	0.1893	0.1882
TPES/population (toe per capita)	..	0.5161	1.0810	2.1714	4.0028	4.7014	5.1153	5.2655
Net oil imports/GDP (toe per thousand 2005 USD)	..	0.1609	0.1915	0.1435	0.1614	0.1095	0.1069	0.1000
Oil supply/GDP (toe per thousand 2005 USD)	..	0.1587	0.1871	0.1380	0.1460	0.0945	0.0935	0.0880
Oil supply/population (toe per capita)	..	0.3220	0.6990	1.1601	2.1069	1.8585	1.9461	1.8966
Elect. cons./GDP (kWh per 2005 USD)	..	0.1457	0.2445 e	0.2824	0.4094	0.4567	0.4732	0.4749
Elect. cons./population (kWh per capita)	..	296	914 e	2373	5907	8980	9851	10236
Industry cons.***/industrial production (2005=100)	..	..	184.76	119.28	123.35	92.76	86.15	..
Industry oil cons.***/industrial production (2005=100)	..	..	254.07	147.58	126.92	92.78	82.37	..

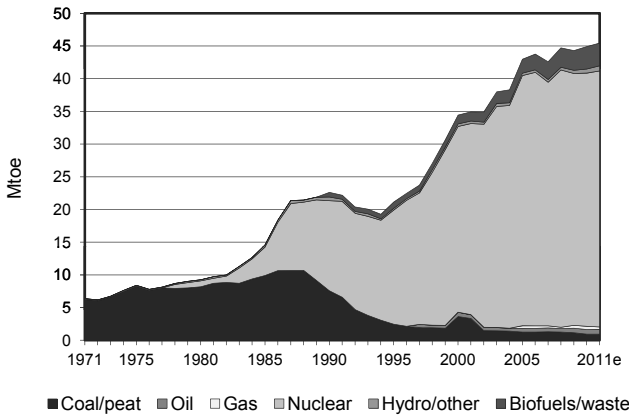
\* Electricity consumption equals domestic supply less losses.

\*\* Production divided by TPES.

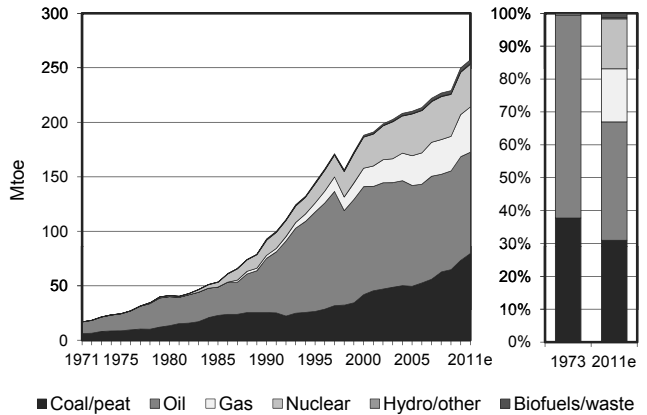
\*\*\* Includes non-energy use.

**Korea**

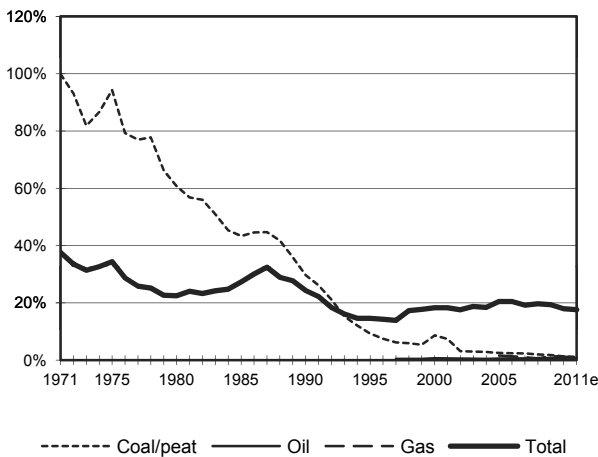
**Figure 1. Energy production**



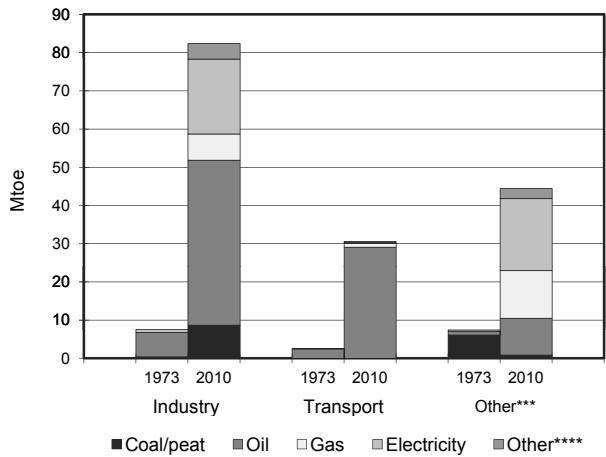
**Figure 2. Total primary energy supply\***



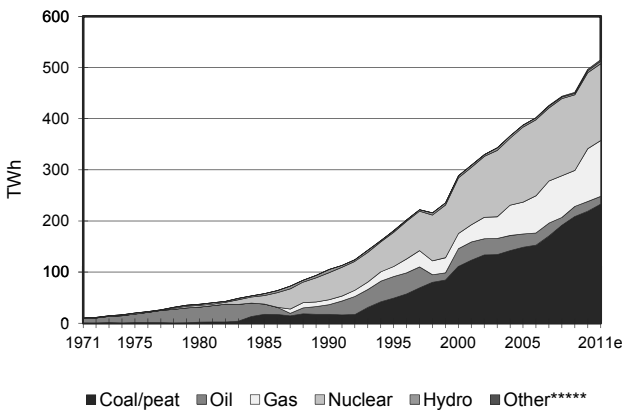
**Figure 3. Energy self-sufficiency**



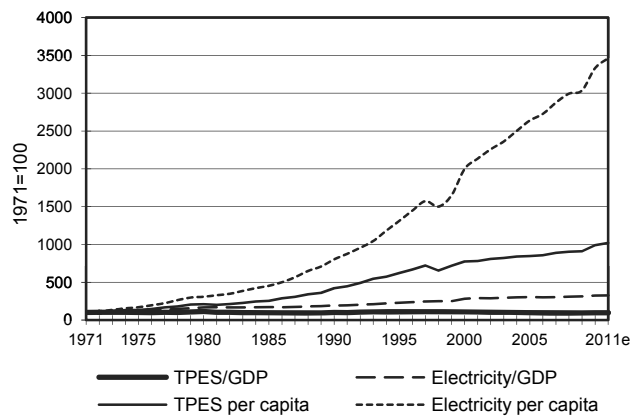
**Figure 4. Breakdown of sectorial final consumption by source in 1973 and 2010\*\***



**Figure 5. Electricity generation by fuel**



**Figure 6. Selected indicators**



\* Excluding electricity trade.  
 \*\* Includes non-energy use.  
 \*\*\* Includes residential, commercial and public services, agriculture/forestry, fishing and non-specified.  
 \*\*\*\* Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.  
 \*\*\*\*\* Includes geothermal, solar, wind, biofuels and waste, etc.

## Luxembourg : 2009

Million tonnes of oil equivalent											
<b>SUPPLY AND CONSUMPTION</b>	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	-	-	-	-	-	0.01	0.01	0.09	-	-	0.11
Imports	0.08	-	2.75	1.11	-	-	-	0.04	0.52	-	4.50
Exports	-	-	-0.01	-	-	-	-	-	-0.22	-	-0.23
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-0.42	-	-	-	-	-	-	-	-0.42
Stock changes	-	-	-0.00	-	-	-	-	-	-	-	-0.00
<b>TPES</b>	<b>0.08</b>	-	<b>2.32</b>	<b>1.11</b>	-	<b>0.01</b>	<b>0.01</b>	<b>0.13</b>	<b>0.29</b>	-	<b>3.95</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-	-	-0.00	-	-	-	-	-	0.00	0.00	-0.00
Electricity plants	-	-	-	-0.40	-	-0.01	-0.01	-0.03	0.24	-	-0.20
CHP plants	-	-	-0.00	-0.10	-	-	-	-0.01	0.03	0.02	-0.05
Heat plants	-	-	-	-0.00	-	-	-	-0.00	-	0.00	-0.00
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	-	-	-	-	-	-	-
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-	-	-	-	-	-	-	-	-0.03	-	-0.03
Losses	-	-	-	-	-	-	-	-	-0.01	-	-0.01
<b>TFC</b>	<b>0.08</b>	-	<b>2.32</b>	<b>0.62</b>	-	-	<b>0.00</b>	<b>0.10</b>	<b>0.53</b>	<b>0.02</b>	<b>3.66</b>
<b>INDUSTRY</b>	<b>0.08</b>	-	<b>0.01</b>	<b>0.27</b>	-	-	-	<b>0.03</b>	<b>0.27</b>	-	<b>0.65</b>
Iron and steel	0.02	-	0.00	0.16	-	-	-	-	0.19	-	0.38
Chemical and petrochem.	-	-	0.00	0.00	-	-	-	-	0.02	-	0.02
Non-ferrous metals	-	-	-	c	-	-	-	-	-	-	-
Non-metallic minerals	0.05	-	-	0.08	-	-	-	0.02	0.01	-	0.15
Transport equipment	-	-	-	0.00	-	-	-	-	0.00	-	0.00
Machinery	-	-	-	0.00	-	-	-	-	0.00	-	0.00
Mining and quarrying	-	-	-	0.00	-	-	-	-	0.00	-	0.00
Food and tobacco	-	-	-	0.00	-	-	-	-	0.01	-	0.01
Paper, pulp and printing	-	-	-	0.00	-	-	-	-	0.01	-	0.01
Wood and wood products	-	-	-	0.00	-	-	-	0.02	0.00	-	0.02
Construction	0.00	-	0.00	0.00	-	-	-	-	0.01	-	0.02
Textile and leather	-	-	-	0.02	-	-	-	-	0.01	-	0.03
Non-specified	-	-	0.00	0.00	-	-	-	-	0.01	-	0.02
<b>TRANSPORT</b>	-	-	<b>2.02</b>	-	-	-	-	<b>0.04</b>	<b>0.01</b>	-	<b>2.07</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	2.02	-	-	-	-	0.04	-	-	2.06
Rail	-	-	0.00	-	-	-	-	-	0.01	-	0.01
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>0.00</b>	-	<b>0.27</b>	<b>0.35</b>	-	-	<b>0.00</b>	<b>0.02</b>	<b>0.25</b>	<b>0.02</b>	<b>0.92</b>
Residential	0.00	-	0.23	0.20	-	-	0.00	0.02	0.08	-	0.52
Comm. and public services	-	-	0.03	0.15	-	-	-	0.00	0.17	0.02	0.37
Agriculture/forestry	-	-	0.02	0.00	-	-	-	0.01	0.00	-	0.03
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	0.00	-	-	-	-	-	-	-	0.00
<b>NON-ENERGY USE</b>	-	-	<b>0.01</b>	-	-	-	-	-	-	-	<b>0.01</b>
in industry/transf./energy	-	-	0.01	-	-	-	-	-	-	-	0.01
<i>of which: feedstocks</i>	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	-	-	-	<b>2.84</b>	-	<b>0.11</b>	<b>0.08</b>	<b>0.12</b>	-	-	<b>3.15</b>
Electricity plants	-	-	-	2.51	-	0.11	0.08	0.07	-	-	2.76
CHP plants	-	-	-	0.34	-	-	-	0.05	-	-	0.39
<b>Heat generated - PJ</b>	-	-	<b>0.04</b>	<b>0.93</b>	-	-	-	<b>0.04</b>	-	-	<b>1.01</b>
CHP plants	-	-	0.03	0.91	-	-	-	-	-	-	0.93
Heat plants	-	-	0.01	0.03	-	-	-	0.04	-	-	0.08

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Luxembourg : 2010

Million tonnes of oil equivalent											
<b>SUPPLY AND CONSUMPTION</b>	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	-	-	-	-	-	0.01	0.01	0.11	-	-	0.13
Imports	0.08	-	2.86	1.20	-	-	-	0.04	0.63	-	4.79
Exports	-	-	-0.01	-	-	-	-	-	-0.28	-	-0.28
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-0.43	-	-	-	-	-	-	-	-0.43
Stock changes	-	-	0.02	-	-	-	-	-	-	-	0.02
<b>TPES</b>	<b>0.08</b>	-	<b>2.44</b>	<b>1.20</b>	-	<b>0.01</b>	<b>0.01</b>	<b>0.15</b>	<b>0.35</b>	-	<b>4.23</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-	-	-0.00	-	-	-	-	-	0.00	-	-0.00
Electricity plants	-	-	-	-0.52	-	-0.01	-0.01	-0.04	0.24	-	-0.33
CHP plants	-	-	-	c	-	-	-	-0.01	0.04	0.03	0.06
Heat plants	-	-	-	c	-	-	-	-0.00	-	0.00	0.00
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	-	-	-	-	-	-	-
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-	-	-	-	-	-	-	-	-0.05	-	-0.05
Losses	-	-	-	-	-	-	-	-	-0.01	-	-0.01
<b>TFC</b>	<b>0.08</b>	-	<b>2.43</b>	<b>0.68</b>	-	-	<b>0.00</b>	<b>0.11</b>	<b>0.57</b>	<b>0.03</b>	<b>3.89</b>
<b>INDUSTRY</b>	<b>0.07</b>	-	<b>0.01</b>	<b>0.32</b>	-	-	-	<b>0.04</b>	<b>0.31</b>	-	<b>0.76</b>
Iron and steel	0.02	-	0.00	0.21	-	-	-	-	0.23	-	0.45
Chemical and petrochem.	-	-	0.00	0.00	-	-	-	-	0.02	-	0.03
Non-ferrous metals	-	-	-	c	-	-	-	-	-	-	-
Non-metallic minerals	0.05	-	-	0.08	-	-	-	0.02	0.01	-	0.16
Transport equipment	-	-	-	0.00	-	-	-	-	0.00	-	0.00
Machinery	-	-	-	0.00	-	-	-	-	0.00	-	0.01
Mining and quarrying	-	-	-	0.00	-	-	-	-	0.00	-	0.00
Food and tobacco	-	-	0.00	0.00	-	-	-	-	0.01	-	0.01
Paper, pulp and printing	-	-	-	0.00	-	-	-	-	0.00	-	0.01
Wood and wood products	-	-	-	0.00	-	-	-	0.02	0.00	-	0.02
Construction	0.00	-	0.00	0.00	-	-	-	-	0.01	-	0.02
Textile and leather	-	-	-	0.02	-	-	-	-	0.01	-	0.03
Non-specified	-	-	0.01	0.00	-	-	-	-	0.01	-	0.02
<b>TRANSPORT</b>	-	-	<b>2.13</b>	-	-	-	-	<b>0.04</b>	<b>0.01</b>	-	<b>2.19</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	2.13	-	-	-	-	0.04	-	-	2.17
Rail	-	-	0.00	-	-	-	-	-	0.01	-	0.01
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>0.00</b>	-	<b>0.27</b>	<b>0.36</b>	-	-	<b>0.00</b>	<b>0.02</b>	<b>0.25</b>	<b>0.03</b>	<b>0.93</b>
Residential	0.00	-	0.19	0.20	-	-	0.00	0.02	0.08	-	0.49
Comm. and public services	-	-	0.06	0.16	-	-	-	0.00	0.17	0.03	0.42
Agriculture/forestry	-	-	0.02	0.00	-	-	-	0.00	0.00	-	0.03
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	-	-	<b>0.02</b>	-	-	-	-	-	-	-	<b>0.02</b>
in industry/transf./energy	-	-	0.02	-	-	-	-	-	-	-	0.02
of which: feedstocks	-	-	-	-	-	-	-	-	-	-	-
in transport	-	-	0.00	-	-	-	-	-	-	-	0.00
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	-	-	<b>0.00</b>	<b>2.92</b>	-	<b>0.11</b>	<b>0.08</b>	<b>0.13</b>	-	-	<b>3.23</b>
Electricity plants	-	-	-	2.53	-	0.11	0.08	0.07	-	-	2.79
CHP plants	-	-	0.00	0.39	-	-	-	0.06	-	-	0.44
<b>Heat generated - PJ</b>	-	-	<b>0.01</b>	<b>1.10</b>	-	-	-	<b>0.07</b>	-	-	<b>1.18</b>
CHP plants	-	-	0.00	1.06	-	-	-	0.03	-	-	1.10
Heat plants	-	-	0.01	0.04	-	-	-	0.04	-	-	0.08

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Luxembourg

## Estimated energy supply balance for 2011

Million tonnes of oil equivalent											
SUPPLY	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	-	-	-	-	-	0.01	0.01	0.10	-	-	0.11
Imports	0.07	-	2.94	1.03	-	-	-	0.04	0.61	-	4.69
Exports	-	-	-	-	-	-	-	-	-0.22	-	-0.22
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-0.44	-	-	-	-	-	-	-	-0.44
Stock changes	..	-	0.01	-	-	-	-	-	-	-	0.01
<b>TPES</b>	<b>0.07</b>	<b>-</b>	<b>2.51</b>	<b>1.03</b>	<b>-</b>	<b>0.01</b>	<b>0.01</b>	<b>0.14</b>	<b>0.39</b>	<b>-</b>	<b>4.15</b>
Electricity and Heat Output											
Elec. generated - TWh	-	-	0.00	2.34	-	0.06	0.09	0.16	-	-	2.64
Heat generated - PJ	-	-	0.01	1.13	-	-	-	0.04	-	-	1.18

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1960	1971	1980	1990	2000	2009	2010	2011e
Energy production (Mtoe)	-	-	0.0	0.0	0.1	0.1	0.1	0.1
Net imports (Mtoe)	3.3	4.1	3.6	3.5	3.6	4.3	4.5	4.5
Total primary energy supply (Mtoe)	3.3	4.1	3.6	3.4	3.3	4.0	4.2	4.2
Net oil imports (Mtoe)	0.2	1.4	1.1	1.6	2.3	2.7	2.9	2.9
Oil supply (Mtoe)	0.2	1.4	1.0	1.5	2.0	2.3	2.4	2.5
Electricity consumption (TWh)*	1.4	4.1	3.9	5.2	6.8	7.2	8.5	8.1
GDP (billion 2005 USD)	6.5 e	9.5	11.9	19.3	31.6	40.2	41.3	41.9
GDP PPP (billion 2005 USD)	5.5 e	8.0	10.1	16.3	26.6	33.9	34.9	35.4
Population (millions)	0.31 e	0.34	0.36	0.38	0.44	0.50	0.51	0.52
Industrial production index (2005=100)	36.40	45.80	46.40	66.50	83.70	80.50	89.50	86.50
Total self-sufficiency**	0.0005	0.0012	0.0083	0.0084	0.0192	0.0274	0.0307	0.0274
Coal and peat self-sufficiency**	..	..	-	-	-	-	-	-
Oil self-sufficiency**	..	..	-	-	-	-	-	-
Natural gas self-sufficiency**	..	..	-	-	-	-	-	-
TPES/GDP (toe per thousand 2005 USD)	0.5060 e	0.4288	0.2988	0.1766	0.1053	0.0982	0.1024	0.0989
TPES/GDP PPP (toe per thousand 2005 USD)	0.5996 e	0.5081	0.3540	0.2093	0.1248	0.1164	0.1213	0.1173
TPES/population (toe per capita)	10.5224 e	11.8777	9.7787	8.9284	7.6232	7.9515	8.3583	8.0583
Net oil imports/GDP (toe per thousand 2005 USD)	0.0352 e	0.1484	0.0926	0.0841	0.0742	0.0681	0.0690	0.0700
Oil supply/GDP (toe per thousand 2005 USD)	0.0347 e	0.1447	0.0871	0.0767	0.0625	0.0576	0.0590	0.0598
Oil supply/population (toe per capita)	0.7210 e	4.0097	2.8498	3.8791	4.5229	4.6656	4.8156	4.8708
Elect. cons./GDP (kWh per 2005 USD)	0.2187 e	0.4291	0.3296	0.2702	0.2165	0.1785	0.2066	0.1924
Elect. cons./population (kWh per capita)	4548 e	11886	10789	13662	15679	14447	16866	15672
Industry cons.***/industrial production (2005=100)	461.85	531.38	482.17	271.39	118.32	110.79	115.15	..
Industry oil cons.***/industrial production (2005=100)	332.67	3422.01	976.82	975.17	144.29	61.56	72.36	..

\* Electricity consumption equals domestic supply less losses.

\*\* Production divided by TPES.

\*\*\* Includes non-energy use.

## Luxembourg

Figure 1. Energy production

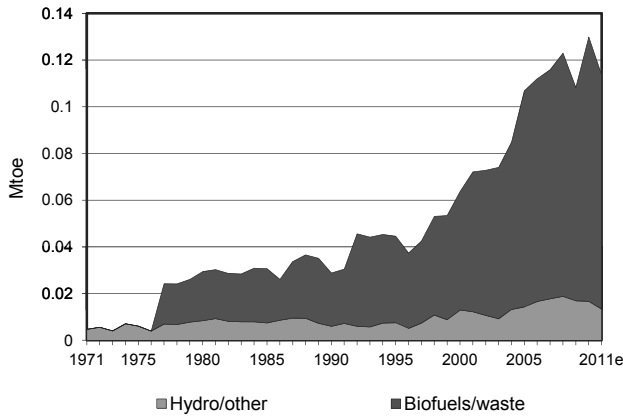


Figure 2. Total primary energy supply\*

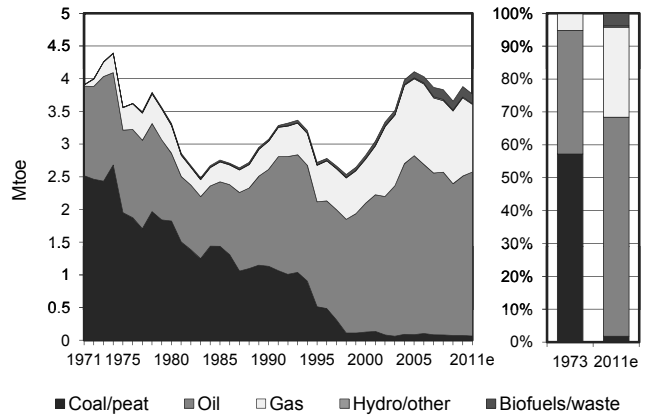


Figure 3. Energy self-sufficiency

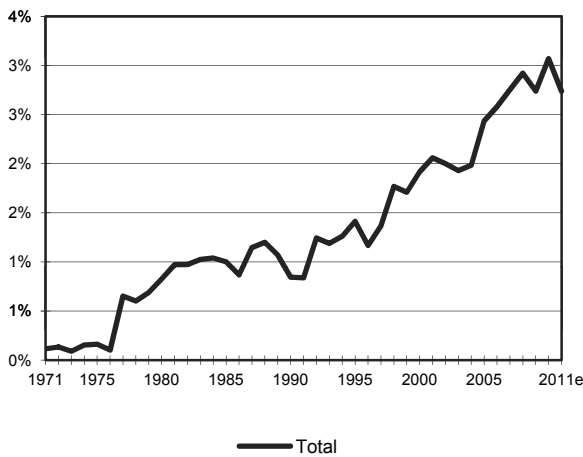


Figure 4. Breakdown of sectorial final consumption by source in 1973 and 2010\*\*

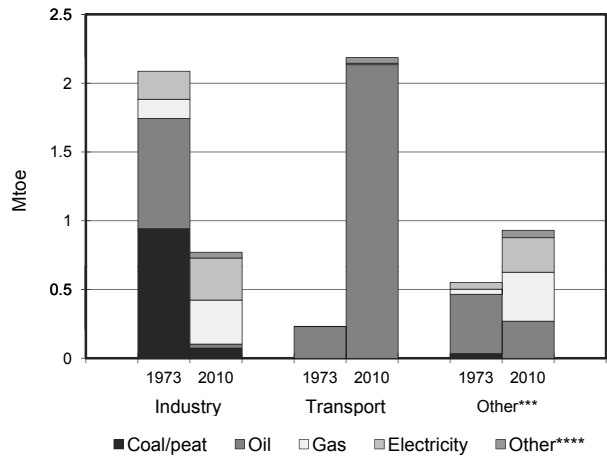


Figure 5. Electricity generation by fuel

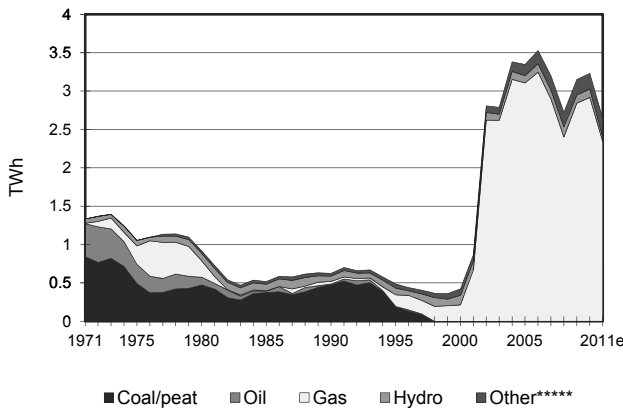
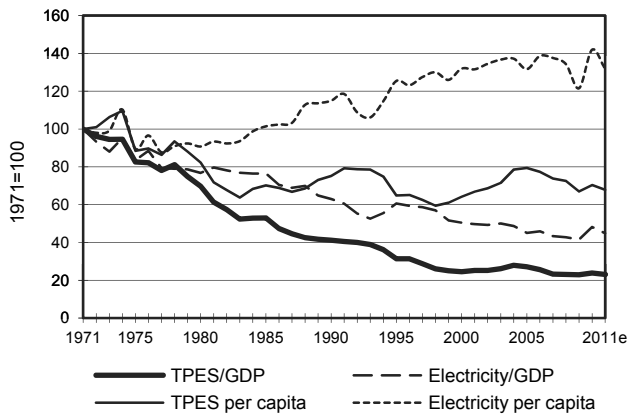


Figure 6. Selected indicators



\* Excluding electricity trade.  
 \*\* Includes non-energy use.  
 \*\*\* Includes residential, commercial and public services, agriculture/forestry, fishing and non-specified.  
 \*\*\*\* Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.  
 \*\*\*\*\* Includes geothermal, solar, wind, biofuels and waste, etc.

## Mexico : 2009

Million tonnes of oil equivalent

<b>SUPPLY AND CONSUMPTION</b>	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	5.06	157.15	-	38.40	2.74	2.30	6.01	8.38	-	-	220.03
Imports	2.97	0.50	24.44	10.77	-	-	-	-	0.03	-	38.71
Exports	-0.00	-70.21	-10.15	-0.59	-	-	-	-	-0.11	-	-81.05
Intl. marine bunkers	-	-	-0.77	-	-	-	-	-	-	-	-0.77
Intl. aviation bunkers	-	-	-2.69	-	-	-	-	-	-	-	-2.69
Stock changes	-0.28	0.45	0.31	-0.07	-	-	-	-	-	-	0.41
<b>TPES</b>	<b>7.75</b>	<b>87.90</b>	<b>11.14</b>	<b>48.51</b>	<b>2.74</b>	<b>2.30</b>	<b>6.01</b>	<b>8.38</b>	<b>-0.08</b>	-	<b>174.64</b>
Transfers	-	-10.72	11.87	-	-	-	-	-	-	-	1.15
Statistical differences	0.91	-0.66	-3.72	-0.45	-	-	-	-	0.15	-	-3.76
Electricity plants	-7.14	-	-10.61	-23.73	-2.74	-2.30	-5.85	-1.13	22.45	-	-31.04
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-0.13	-	-	-	-	-	-	-	-	-	-0.13
Gas works	-	-	-0.86	0.61	-	-	-	-	-	-	-0.25
Coke/pat. fuel/BKB plants	-0.24	-	-	-	-	-	-	-	-	-	-0.24
Oil refineries	-	-76.52	71.42	-	-	-	-	-	-	-	-5.10
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-0.07	-	-6.73	-13.14	-	-	-	-	-1.58	-	-21.52
Losses	-	-	-	-	-	-	-	-	-3.65	-	-3.65
<b>TFC</b>	<b>1.09</b>	-	<b>72.50</b>	<b>11.80</b>	-	-	<b>0.16</b>	<b>7.25</b>	<b>17.29</b>	-	<b>110.10</b>
<b>INDUSTRY</b>	<b>1.09</b>	-	<b>6.18</b>	<b>8.24</b>	-	-	<b>0.01</b>	<b>1.03</b>	<b>9.29</b>	-	<b>25.84</b>
Iron and steel	0.95	-	0.29	2.18	-	-	-	-	0.68	-	4.09
Chemical and petrochem.	-	-	0.39	1.54	-	-	-	-	0.73	-	2.66
Non-ferrous metals	-	-	0.00	0.02	-	-	-	-	0.07	-	0.09
Non-metallic minerals	0.10	-	2.78	1.09	-	-	-	-	0.36	-	4.33
Transport equipment	-	-	0.01	0.04	-	-	-	-	0.16	-	0.22
Machinery	-	-	0.01	-	-	-	-	-	-	-	0.01
Mining and quarrying	0.03	-	0.33	0.65	-	-	-	-	0.48	-	1.49
Food and tobacco	-	-	0.38	0.23	-	-	-	0.95	0.29	-	1.85
Paper, pulp and printing	-	-	0.29	0.62	-	-	-	-	0.30	-	1.22
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	0.26	-	-	-	-	-	0.04	-	0.30
Textile and leather	-	-	-	-	-	-	-	-	0.01	-	0.01
Non-specified	0.01	-	1.45	1.86	-	-	0.01	0.08	6.17	-	9.58
<b>TRANSPORT</b>	-	-	<b>50.37</b>	<b>0.01</b>	-	-	-	-	<b>0.10</b>	-	<b>50.47</b>
Domestic aviation	-	-	0.02	-	-	-	-	-	-	-	0.02
Road	-	-	49.15	0.01	-	-	-	-	-	-	49.16
Rail	-	-	0.55	-	-	-	-	-	0.10	-	0.65
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	0.64	-	-	-	-	-	-	-	0.64
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	-	-	<b>10.70</b>	<b>0.90</b>	-	-	<b>0.15</b>	<b>6.22</b>	<b>7.91</b>	-	<b>25.88</b>
Residential	-	-	6.45	0.69	-	-	0.09	6.22	4.23	-	17.69
Comm. and public services	-	-	1.45	0.21	-	-	0.06	-	1.84	-	3.56
Agriculture/forestry	-	-	2.80	-	-	-	-	-	0.80	-	3.60
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	1.04	-	1.04
<b>NON-ENERGY USE</b>	-	-	<b>5.25</b>	<b>2.65</b>	-	-	-	-	-	-	<b>7.90</b>
in industry/transf./energy	-	-	5.25	2.65	-	-	-	-	-	-	7.90
of which: feedstocks	-	-	3.21	2.65	-	-	-	-	-	-	5.86
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>29.52</b>	-	<b>45.75</b>	<b>138.47</b>	<b>10.50</b>	<b>26.71</b>	<b>7.35</b>	<b>2.72</b>	-	-	<b>261.02</b>
Electricity plants	29.52	-	45.75	138.47	10.50	26.71	7.35	2.72	-	-	261.02
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - PJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.



## Mexico : 2010

Million tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	4.84	160.62	-	41.90	1.53	3.19	5.92	8.36	-	-	226.36
Imports	3.97	0.40	29.99	12.43	-	-	-	-	0.03	-	46.83
Exports	-0.00	-80.00	-9.67	-0.74	-	-	-	-	-0.12	-	-90.52
Intl. marine bunkers	-	-	-0.81	-	-	-	-	-	-	-	-0.81
Intl. aviation bunkers	-	-	-2.73	-	-	-	-	-	-	-	-2.73
Stock changes	-0.17	-0.13	-0.38	-0.33	-	-	-	-	-	-	-1.01
<b>TPES</b>	<b>8.63</b>	<b>80.88</b>	<b>16.41</b>	<b>53.26</b>	<b>1.53</b>	<b>3.19</b>	<b>5.92</b>	<b>8.36</b>	<b>-0.08</b>	<b>-</b>	<b>178.11</b>
Transfers	-	-10.93	12.10	-	-	-	-	-	-	-	1.17
Statistical differences	1.04	3.87	-4.78	-0.00	-	-	-	-	0.04	-	0.17
Electricity plants	-7.69	-	-10.07	-25.30	-1.53	-3.19	-5.80	-1.13	23.30	-	-31.42
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-0.17	-	-	-	-	-	-	-	-	-	-0.17
Gas works	-	-	-0.82	0.64	-	-	-	-	-	-	-0.18
Coke/pat. fuel/BKB plants	-0.10	-	-	-	-	-	-	-	-	-	-0.10
Oil refineries	-	-73.82	67.30	-	-	-	-	-	-	-	-6.53
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-0.08	-	-6.28	-15.85	-	-	-	-	-1.58	-	-23.80
Losses	-	-	-	-	-	-	-	-	-3.81	-	-3.81
<b>TFC</b>	<b>1.63</b>	<b>-</b>	<b>73.86</b>	<b>12.74</b>	<b>-</b>	<b>-</b>	<b>0.12</b>	<b>7.23</b>	<b>17.88</b>	<b>-</b>	<b>113.45</b>
<b>INDUSTRY</b>	<b>1.63</b>	<b>-</b>	<b>5.84</b>	<b>9.01</b>	<b>-</b>	<b>-</b>	<b>0.01</b>	<b>1.02</b>	<b>9.90</b>	<b>-</b>	<b>27.41</b>
Iron and steel	1.48	-	0.21	1.94	-	-	-	-	0.62	-	4.25
Chemical and petrochem.	-	-	0.30	2.08	-	-	-	-	0.79	-	3.17
Non-ferrous metals	-	-	0.00	0.04	-	-	-	-	0.06	-	0.10
Non-metallic minerals	0.10	-	2.54	1.03	-	-	-	-	0.57	-	4.25
Transport equipment	-	-	0.01	0.04	-	-	-	-	0.17	-	0.22
Machinery	-	-	0.01	-	-	-	-	-	-	-	0.01
Mining and quarrying	0.03	-	0.32	0.71	-	-	-	-	0.48	-	1.54
Food and tobacco	-	-	0.35	0.28	-	-	-	0.94	0.29	-	1.86
Paper, pulp and printing	-	-	0.22	0.69	-	-	-	-	0.41	-	1.32
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	0.26	-	-	-	-	-	0.05	-	0.30
Textile and leather	-	-	-	-	-	-	-	-	0.01	-	0.01
Non-specified	0.01	-	1.61	2.22	-	-	0.01	0.08	6.45	-	10.38
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>51.73</b>	<b>0.01</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.10</b>	<b>-</b>	<b>51.85</b>
Domestic aviation	-	-	0.02	-	-	-	-	-	-	-	0.02
Road	-	-	50.42	0.01	-	-	-	-	-	-	50.43
Rail	-	-	0.58	-	-	-	-	-	0.10	-	0.68
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	0.71	-	-	-	-	-	-	-	0.71
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>-</b>	<b>-</b>	<b>10.87</b>	<b>0.97</b>	<b>-</b>	<b>-</b>	<b>0.11</b>	<b>6.20</b>	<b>7.87</b>	<b>-</b>	<b>26.03</b>
Residential	-	-	6.59	0.74	-	-	0.07	6.20	4.25	-	17.84
Comm. and public services	-	-	1.51	0.23	-	-	0.05	-	1.79	-	3.57
Agriculture/forestry	-	-	2.78	-	-	-	-	-	0.74	-	3.52
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	1.09	-	1.09
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>5.41</b>	<b>2.75</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>8.16</b>
in industry/transf./energy	-	-	5.41	2.75	-	-	-	-	-	-	8.16
of which: feedstocks	-	-	3.43	2.75	-	-	-	-	-	-	6.18
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>32.54</b>	<b>-</b>	<b>43.88</b>	<b>140.98</b>	<b>5.88</b>	<b>37.12</b>	<b>7.89</b>	<b>2.69</b>	<b>-</b>	<b>-</b>	<b>270.97</b>
Electricity plants	32.54	-	43.88	140.98	5.88	37.12	7.89	2.69	-	-	270.97
CHP plants	-	-	-	-	-	-	-	-	-	-	-
<b>Heat generated - PJ</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Mexico

## Estimated energy supply balance for 2011

Million tonnes of oil equivalent											
SUPPLY	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	5.99	159.53	-	42.19	2.63	3.08	5.85	8.43	-	-	227.70
Imports	3.88	0.37	31.97	14.87	-	-	-	-	0.05	-	51.14
Exports	-0.01	-78.61	-9.01	-0.21	-	-	-	-	-0.11	-	-87.94
Intl. marine bunkers	-	-	-0.93	-	-	-	-	-	-	-	-0.93
Intl. aviation bunkers	-	-	-2.74	-	-	-	-	-	-	-	-2.74
Stock changes	-0.38	0.70	-0.35	-0.23	-	-	-	-	-	-	-0.26
<b>TPES</b>	<b>9.49</b>	<b>81.99</b>	<b>18.93</b>	<b>56.62</b>	<b>2.63</b>	<b>3.08</b>	<b>5.85</b>	<b>8.43</b>	<b>-0.06</b>	<b>-</b>	<b>186.97</b>
Electricity and Heat Output											
Elec. generated - TWh	33.74	-	48.24	135.09	10.09	35.80	7.93	0.92	-	-	271.80
Heat generated - PJ	-	-	-	-	-	-	-	-	-	-	-

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1960	1971	1980	1990	2000	2009	2010	2011e
Energy production (Mtoe)	..	43.4	147.0	194.7	222.3	220.0	226.4	227.7
Net imports (Mtoe)	..	0.3	-49.4	-69.9	-71.6	-42.3	-43.7	-36.8
Total primary energy supply (Mtoe)	..	43.0	95.1	122.5	145.1	174.6	178.1	187.0
Net oil imports (Mtoe)	..	0.6	-47.6	-70.4	-75.6	-55.4	-59.3	-55.3
Oil supply (Mtoe)	..	25.5	64.5	80.3	90.2	99.0	97.3	100.9
Electricity consumption (TWh)*	..	26.9	60.1	99.5	176.6	217.7	225.8	226.9
GDP (billion 2005 USD)	..	251.8	458.0	547.8	770.7	871.6	920.0	956.2
GDP PPP (billion 2005 USD)	..	385.0	700.3	837.7	1178.6	1332.7	1406.8	1462.2
Population (millions)	..	49.88	65.70	81.25	98.30	107.44	108.29	109.15
Industrial production index (2005=100)	..	..	56.37	67.13	99.68	99.49	105.57	109.64
Total self-sufficiency**	..	1.0088	1.5458	1.5891	1.5318	1.2599	1.2709	1.2179
Coal and peat self-sufficiency**	..	0.8226	0.7322	0.9771	0.7909	0.6536	0.5604	0.6311
Oil self-sufficiency**	..	1.0071	1.7787	1.9032	1.8964	1.5868	1.6508	1.5807
Natural gas self-sufficiency**	..	1.0547	1.1264	0.9840	0.9239	0.7915	0.7866	0.7451
TPES/GDP (toe per thousand 2005 USD)	..	0.1707	0.2077	0.2236	0.1883	0.2004	0.1936	0.1955
TPES/GDP PPP (toe per thousand 2005 USD)	..	0.1116	0.1358	0.1462	0.1231	0.1310	0.1266	0.1279
TPES/population (toe per capita)	..	0.8618	1.4478	1.5076	1.4764	1.6254	1.6447	1.7130
Net oil imports/GDP (toe per thousand 2005 USD)	..	0.0022	-0.1039	-0.1284	-0.0981	-0.0636	-0.0644	-0.0578
Oil supply/GDP (toe per thousand 2005 USD)	..	0.1012	0.1407	0.1465	0.1171	0.1136	0.1058	0.1055
Oil supply/population (toe per capita)	..	0.5107	0.9810	0.9879	0.9180	0.9217	0.8985	0.9247
Elect. cons./GDP (kWh per 2005 USD)	..	0.1070	0.1312	0.1816	0.2291	0.2497	0.2454	0.2372
Elect. cons./population (kWh per capita)	..	540	915	1224	1796	2026	2085	2078
Industry cons.***/industrial production (2005=100)	..	..	136.00	148.66	106.42	95.55	94.94	..
Industry oil cons.***/industrial production (2005=100)	..	..	117.98	152.11	103.23	84.02	77.90	..

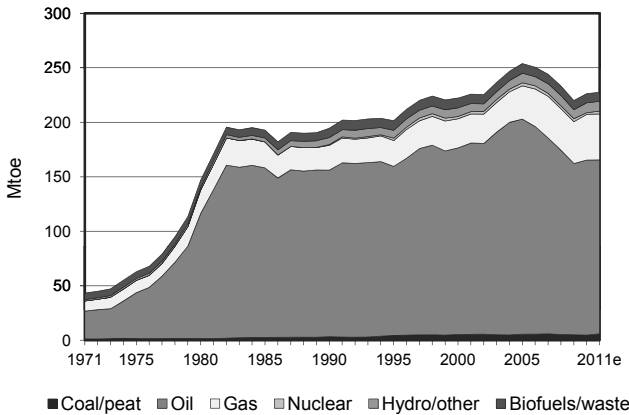
\* Electricity consumption equals domestic supply less losses.

\*\* Production divided by TPES.

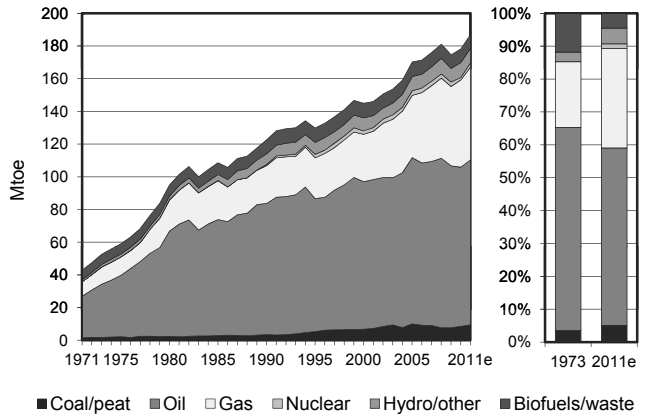
\*\*\* Includes non-energy use.

## Mexico

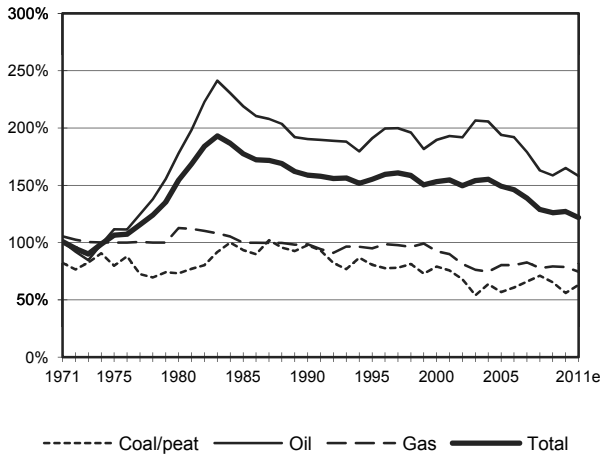
**Figure 1. Energy production**



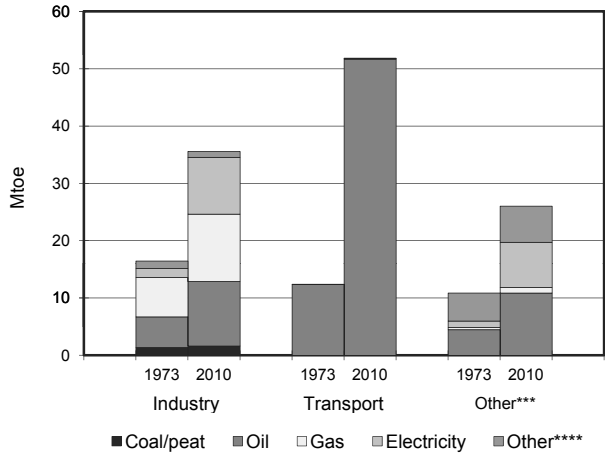
**Figure 2. Total primary energy supply\***



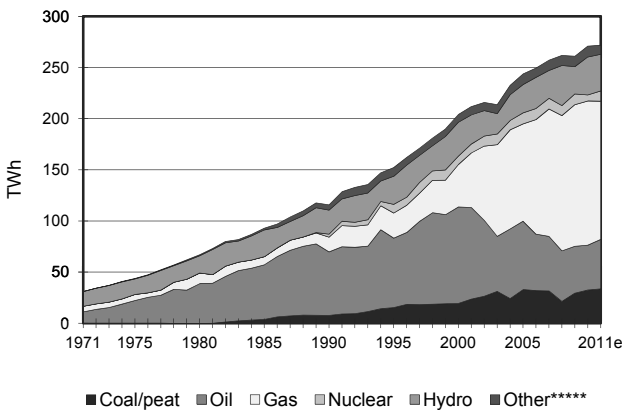
**Figure 3. Energy self-sufficiency**



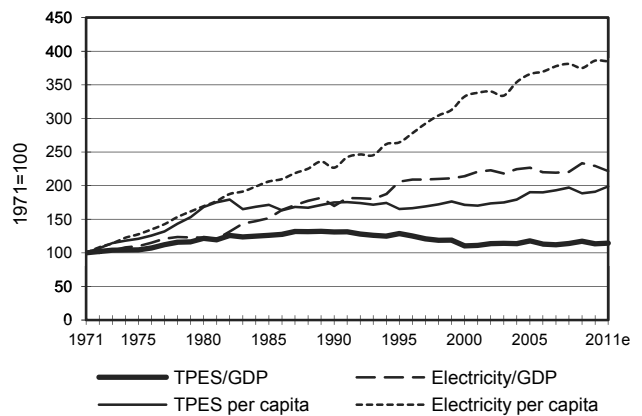
**Figure 4. Breakdown of sectorial final consumption by source in 1973 and 2010\*\***



**Figure 5. Electricity generation by fuel**



**Figure 6. Selected indicators**



\* Excluding electricity trade.

\*\* Includes non-energy use.

\*\*\* Includes residential, commercial and public services, agriculture/forestry, fishing and non-specified.

\*\*\*\* Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.

\*\*\*\*\* Includes geothermal, solar, wind, biofuels and waste, etc.

## Netherlands : 2009

Million tonnes of oil equivalent

<b>SUPPLY AND CONSUMPTION</b>	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	-	2.03	-	56.39	1.10	0.01	0.43	3.09	-	-	63.06
Imports	12.22	61.20	77.35	18.38	-	-	-	0.71	1.33	-	171.19
Exports	-2.92	-2.50	-89.58	-39.84	-	-	-	-0.33	-0.91	-	-136.08
Intl. marine bunkers	-	-	-14.00	-	-	-	-	-	-	-	-14.00
Intl. aviation bunkers	-	-	-3.46	-	-	-	-	-	-	-	-3.46
Stock changes	-1.84	-0.41	-0.30	0.03	-	-	-	-0.01	-	-	-2.53
<b>TPES</b>	<b>7.46</b>	<b>60.32</b>	<b>-29.99</b>	<b>34.96</b>	<b>1.10</b>	<b>0.01</b>	<b>0.43</b>	<b>3.46</b>	<b>0.42</b>	<b>-</b>	<b>78.17</b>
Transfers	-	-0.44	0.50	-	-	-	-	-	-	-	0.06
Statistical differences	-0.00	0.41	-0.67	-	-	-	-	-	-	-	-0.26
Electricity plants	-3.39	-	-	-3.88	-1.10	-0.01	-0.41	-0.84	4.52	-	-5.10
CHP plants	-2.02	-	-0.41	-8.45	-	-	-	-1.47	5.24	2.97	-4.15
Heat plants	-	-	-	-0.25	-	-	-	-0.23	-	0.40	-0.08
Blast furnaces	-1.00 e	-	-	-	-	-	-	-	-	-	-1.00
Gas works	-	-	-0.13	0.12	-	-	-	-0.01	-	-	-0.02
Coke/pat. fuel/BKB plants	-0.14	-	-	-	-	-	-	-	-	-	-0.14
Oil refineries	-	-59.50	58.76	-	-	-	-	-	-	-	-0.74
Petrochemical plants	-	3.53	-3.66	-	-	-	-	-	-	-	-0.13
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-0.00	-	-0.34	-0.35
Energy industry own use	-0.15	-	-2.34	-1.46	-	-	-	-	-0.86	-0.47	-5.28
Losses	-	-	-	-	-	-	-	-	-0.38	-0.51	-0.88
<b>TFC</b>	<b>0.76</b>	<b>4.33</b>	<b>22.05</b>	<b>21.03</b>	<b>-</b>	<b>-</b>	<b>0.03</b>	<b>0.90</b>	<b>8.94</b>	<b>2.06</b>	<b>60.10</b>
<b>INDUSTRY</b>	<b>0.55</b>	<b>1.95</b>	<b>0.29</b>	<b>4.78</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.13</b>	<b>3.12</b>	<b>1.04</b>	<b>11.85</b>
Iron and steel	0.49 e	-	0.01	0.23	-	-	-	-	0.21	0.00	0.93
Chemical and petrochem.	-	1.95	0.13	1.74	-	-	-	0.00	1.06	0.66	5.55
Non-ferrous metals	-	-	0.01	0.07	-	-	-	-	0.33	0.03	0.44
Non-metallic minerals	0.03	-	0.01	0.51	-	-	-	-	0.13	0.00	0.67
Transport equipment	-	-	0.01	0.06	-	-	-	-	0.06	0.00	0.13
Machinery	-	-	0.01	0.34	-	-	-	-	0.30	0.01	0.65
Mining and quarrying	0.00	-	0.00	0.03	-	-	-	-	0.02	0.09	0.14
Food and tobacco	0.03	-	0.00	1.15	-	-	-	0.01	0.53	0.10	1.82
Paper, pulp and printing	-	-	-	0.34	-	-	-	0.00	0.24	0.14	0.72
Wood and wood products	-	-	-	0.02	-	-	-	0.02	0.02	0.00	0.07
Construction	-	-	0.11	0.09	-	-	-	0.00	0.04	-	0.25
Textile and leather	-	-	-	0.07	-	-	-	-	0.03	0.00	0.10
Non-specified	-	-	-	0.12	-	-	-	0.08	0.16	0.01	0.37
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>10.97</b>	<b>0.01</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.37</b>	<b>0.14</b>	<b>-</b>	<b>11.50</b>
Domestic aviation	-	-	0.05	-	-	-	-	-	-	-	0.05
Road	-	-	10.75	0.01	-	-	-	0.37	0.00	-	11.13
Rail	-	-	0.02	-	-	-	-	-	0.14	-	0.16
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	0.15	-	-	-	-	-	-	-	0.15
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>0.01</b>	<b>-</b>	<b>1.04</b>	<b>14.27</b>	<b>-</b>	<b>-</b>	<b>0.03</b>	<b>0.40</b>	<b>5.68</b>	<b>1.02</b>	<b>22.44</b>
Residential	0.00	-	0.06	7.46	-	-	0.02	0.30	2.08	0.27	10.19
Comm. and public services	0.00	-	0.42	4.95	-	-	0.00	0.04	2.90	0.62	8.94
Agriculture/forestry	-	-	0.50	1.86	-	-	0.00	0.06	0.70	0.14	3.25
Fishing	-	-	0.05	-	-	-	-	-	-	-	0.05
Non-specified	-	-	0.01	-	-	-	-	-	-	-	0.01
<b>NON-ENERGY USE</b>	<b>0.20</b>	<b>2.38</b>	<b>9.75</b>	<b>1.98</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>14.31</b>
in industry/transf./energy	0.20	2.38	9.52	1.98	-	-	-	-	-	-	14.08
<i>of which: feedstocks</i>	0.11	2.38	8.07	1.98	-	-	-	-	-	-	12.54
in transport	-	-	0.08	-	-	-	-	-	-	-	0.08
in other	-	-	0.16	-	-	-	-	-	-	-	0.16
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>26.61</b>	<b>-</b>	<b>1.49</b>	<b>68.71</b>	<b>4.23</b>	<b>0.10</b>	<b>4.76</b>	<b>7.62</b>	<b>-</b>	<b>-</b>	<b>113.50</b>
Electricity plants	16.62	-	-	24.18	4.23	0.10	4.76	2.71	-	-	52.59
CHP plants	9.99	-	1.49	44.53	-	-	-	4.91	-	-	60.91
<b>Heat generated - PJ</b>	<b>15.42</b>	<b>-</b>	<b>6.08</b>	<b>108.04</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>11.68</b>	<b>-</b>	<b>-</b>	<b>141.22</b>
CHP plants	15.42	-	6.08	98.03	-	-	-	4.99	-	-	124.52
Heat plants	-	-	-	10.01	-	-	-	6.69	-	-	16.70

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Netherlands : 2010

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	-	1.68	-	63.41	1.03	0.01	0.39	3.23	-	-	69.76
Imports	12.83	63.53	85.29	18.45	-	-	-	0.71	1.34	-	182.15
Exports	-3.60	-2.43	-100.67	-42.65	-	-	-	-0.54	-1.10	-	-150.99
Intl. marine bunkers	-	-	-13.74	-	-	-	-	-	-	-	-13.74
Intl. aviation bunkers	-	-	-3.38	-	-	-	-	-	-	-	-3.38
Stock changes	-1.64	0.07	1.13	-0.01	-	-	-	0.06	-	-	-0.38
<b>TPES</b>	<b>7.60</b>	<b>62.86</b>	<b>-31.37</b>	<b>39.20</b>	<b>1.03</b>	<b>0.01</b>	<b>0.39</b>	<b>3.47</b>	<b>0.24</b>	<b>-</b>	<b>83.43</b>
Transfers	-	-2.06	2.30	-	-	-	-	-	-	-	0.24
Statistical differences	-0.00	-0.22	-0.78	-	-	-	-	0.00	-	-	-1.00
Electricity plants	-3.12	-	-	-4.38	-1.03	-0.01	-0.36	-0.90	4.62	-	-5.19
CHP plants	-2.15	-	-0.37	-8.74	-	-	-	-1.56	5.54	3.11	-4.18
Heat plants	-	-	-	-0.25	-	-	-	-0.25	-	0.40	-0.09
Blast furnaces	-1.20	-	-	-	-	-	-	-	-	-	-1.20
Gas works	-	-	-0.11	0.10	-	-	-	-0.01	-	-	-0.02
Coke/pat. fuel/BKB plants	-0.14	-	-	-	-	-	-	-	-	-	-0.14
Oil refineries	-	-59.97	59.62	-	-	-	-	-	-	-	-0.35
Petrochemical plants	-	3.91	-4.04	-	-	-	-	-	-	-	-0.13
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-0.00	-	-0.39	-0.40
Energy industry own use	-0.18	-	-2.07	-1.73	-	-	-	-	-0.83	-0.48	-5.29
Losses	-	-	-	-	-	-	-	-	-0.38	-0.53	-0.91
<b>TFC</b>	<b>0.81</b>	<b>4.52</b>	<b>23.17</b>	<b>24.20</b>	<b>-</b>	<b>-</b>	<b>0.03</b>	<b>0.75</b>	<b>9.19</b>	<b>2.11</b>	<b>64.77</b>
<b>INDUSTRY</b>	<b>0.53</b>	<b>2.10</b>	<b>0.67</b>	<b>5.26</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.10</b>	<b>3.36</b>	<b>1.11</b>	<b>13.12</b>
Iron and steel	0.46	-	0.00	0.28	-	-	-	-	0.23	0.00	0.98
Chemical and petrochem.	-	2.10	0.25	1.96	-	-	-	0.00	1.16	0.70	6.16
Non-ferrous metals	-	-	-	0.09	-	-	-	-	0.41	0.03	0.53
Non-metallic minerals	0.04	-	0.02	0.54	-	-	-	-	0.13	0.00	0.72
Transport equipment	-	-	0.00	0.07	-	-	-	-	0.06	0.00	0.13
Machinery	-	-	0.01	0.35	-	-	-	-	0.29	0.01	0.66
Mining and quarrying	0.00	-	0.01	0.06	-	-	-	-	0.04	0.10	0.20
Food and tobacco	0.03	-	0.00	1.23	-	-	-	0.02	0.56	0.11	1.94
Paper, pulp and printing	-	-	-	0.37	-	-	-	0.00	0.23	0.14	0.75
Wood and wood products	-	-	-	0.02	-	-	-	0.02	0.02	0.00	0.07
Construction	-	-	0.37	0.10	-	-	-	0.00	0.04	-	0.51
Textile and leather	-	-	0.00	0.08	-	-	-	-	0.03	0.00	0.12
Non-specified	-	-	0.00	0.12	-	-	-	0.06	0.17	0.01	0.35
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>11.14</b>	<b>0.01</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.23</b>	<b>0.15</b>	<b>-</b>	<b>11.53</b>
Domestic aviation	-	-	0.05	-	-	-	-	-	-	-	0.05
Road	-	-	10.90	0.01	-	-	-	0.23	0.00	-	11.14
Rail	-	-	0.03	-	-	-	-	-	0.15	-	0.18
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	0.16	-	-	-	-	-	-	-	0.16
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>0.01</b>	<b>-</b>	<b>0.86</b>	<b>16.64</b>	<b>-</b>	<b>-</b>	<b>0.03</b>	<b>0.42</b>	<b>5.68</b>	<b>1.00</b>	<b>24.64</b>
Residential	0.01	-	0.11	8.64	-	-	0.02	0.30	2.12	0.32	11.52
Comm. and public services	0.00	-	0.39	5.76	-	-	0.00	0.05	2.95	0.54	9.69
Agriculture/forestry	-	-	0.37	2.24	-	-	0.01	0.07	0.61	0.13	3.43
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	<b>0.27</b>	<b>2.42</b>	<b>10.50</b>	<b>2.29</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>15.48</b>
in industry/transf./energy	0.27	2.42	10.35	2.29	-	-	-	-	-	-	15.33
<i>of which: feedstocks</i>	0.11	2.42	9.51	2.29	-	-	-	-	-	-	14.33
in transport	-	-	0.07	-	-	-	-	-	-	-	0.07
in other	-	-	0.08	-	-	-	-	-	-	-	0.08
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>25.80</b>	<b>-</b>	<b>1.25</b>	<b>74.20</b>	<b>3.97</b>	<b>0.11</b>	<b>4.21</b>	<b>8.61</b>	<b>-</b>	<b>-</b>	<b>118.14</b>
Electricity plants	15.24	-	-	26.87	3.97	0.11	4.21	3.31	-	-	53.70
CHP plants	10.56	-	1.25	47.34	-	-	-	5.30	-	-	64.44
<b>Heat generated - PJ</b>	<b>20.07</b>	<b>-</b>	<b>5.34</b>	<b>109.82</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>11.75</b>	<b>-</b>	<b>-</b>	<b>146.99</b>
CHP plants	20.07	-	5.34	99.88	-	-	-	4.76	-	-	130.05
Heat plants	-	-	-	9.94	-	-	-	6.99	-	-	16.93

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Netherlands

## Estimated energy supply balance for 2011

Million tonnes of oil equivalent											
SUPPLY	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	-	1.73	-	57.73	1.08	0.00	0.49	3.48	-	-	64.51
Imports	15.13	59.79	85.10	16.48	-	-	-	0.68	1.77	-	178.96
Exports	-3.40	-2.08	-98.75	-40.02	-	-	-	-0.50	-0.99	-	-145.73
Intl. marine bunkers	-	-	-14.60	-	-	-	-	-	-	-	-14.60
Intl. aviation bunkers	-	-	-3.50	-	-	-	-	-	-	-	-3.50
Stock changes	-4.21	0.98	1.17	-0.00	-	-	-	-0.04	-	-	-2.09
<b>TPES</b>	<b>7.52</b>	<b>60.43</b>	<b>-30.57</b>	<b>34.20</b>	<b>1.08</b>	<b>0.00</b>	<b>0.49</b>	<b>3.61</b>	<b>0.78</b>	<b>-</b>	<b>77.55</b>
Electricity and Heat Output											
Elec. generated - TWh	24.56	-	1.38	68.50	4.14	0.06	5.32	8.77	-	-	112.72
Heat generated - PJ	19.19	-	5.90	100.86	-	-	-	15.34	-	-	141.28

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1960	1971	1980	1990	2000	2009	2010	2011e
Energy production (Mtoe)	10.2	37.3	71.8	60.5	57.6	63.1	69.8	64.5
Net imports (Mtoe)	13.7	24.0	3.4	17.6	34.7	35.1	31.2	33.2
Total primary energy supply (Mtoe)	21.0	50.9	64.4	65.7	73.2	78.2	83.4	77.6
Net oil imports (Mtoe)	12.1	36.0	38.2	31.2	42.3	46.5	45.7	44.1
Oil supply (Mtoe)	10.8	27.5	28.9	23.3	25.9	30.3	31.5	29.9
Electricity consumption (TWh)*	15.6	41.5	61.8	78.0	104.5	114.0	116.5	117.4
GDP (billion 2005 USD)	156.9 e	269.5	351.2	437.8	598.0	673.7	685.1	693.1
GDP PPP (billion 2005 USD)	140.8 e	241.8	315.1	392.9	536.5	604.5	614.7	621.9
Population (millions)	11.48 e	13.19	14.15	14.95	15.92	16.53	16.61	16.74
Industrial production index (2005=100)	27.10	58.00	73.30	77.90	95.20	97.60	104.50	103.70
Total self-sufficiency**	0.4864	0.7341	1.1158	0.9217	0.7862	0.8066	0.8362	0.8319
Coal and peat self-sufficiency**	0.8027	0.6973	-	-	-	-	-	-
Oil self-sufficiency**	0.1821	0.0635	0.0557	0.1748	0.0937	0.0669	0.0535	0.0580
Natural gas self-sufficiency**	1.0000	1.6604	2.2645	1.7726	1.4913	1.6131	1.6179	1.6881
TPES/GDP (toe per thousand 2005 USD)	0.1336 e	0.1887	0.1833	0.1500	0.1225	0.1160	0.1218	0.1119
TPES/GDP PPP (toe per thousand 2005 USD)	0.1489 e	0.2103	0.2042	0.1672	0.1365	0.1293	0.1357	0.1247
TPES/population (toe per capita)	1.8268 e	3.8555	4.5494	4.3945	4.5988	4.7304	5.0220	4.6340
Net oil imports/GDP (toe per thousand 2005 USD)	0.0771 e	0.1337	0.1086	0.0712	0.0708	0.0690	0.0667	0.0636
Oil supply/GDP (toe per thousand 2005 USD)	0.0686 e	0.1021	0.0822	0.0532	0.0433	0.0450	0.0460	0.0431
Oil supply/population (toe per capita)	0.9378 e	2.0859	2.0396	1.5573	1.6261	1.8352	1.8955	1.7846
Elect. cons./GDP (kWh per 2005 USD)	0.0991 e	0.1540	0.1758	0.1782	0.1747	0.1692	0.1700	0.1693
Elect. cons./population (kWh per capita)	1354 e	3147	4365	5220	6561	6898	7011	7013
Industry cons.***/industrial production (2005=100)	74.71	99.19	127.78	99.59	94.11	98.54	101.00	..
Industry oil cons.***/industrial production (2005=100)	95.18	100.66	154.33	83.54	77.31	119.24	122.45	..

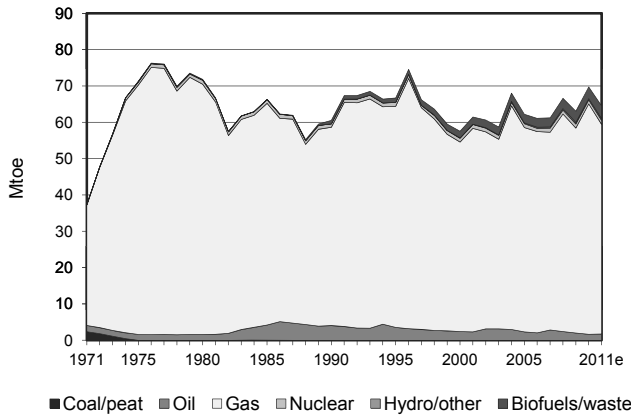
\* Electricity consumption equals domestic supply less losses.

\*\* Production divided by TPES.

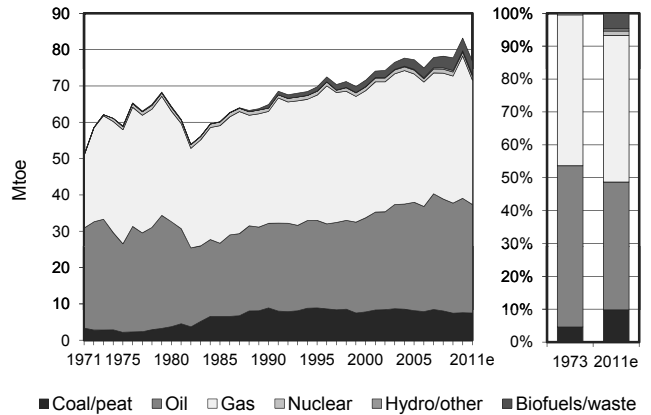
\*\*\* Includes non-energy use.

## Netherlands

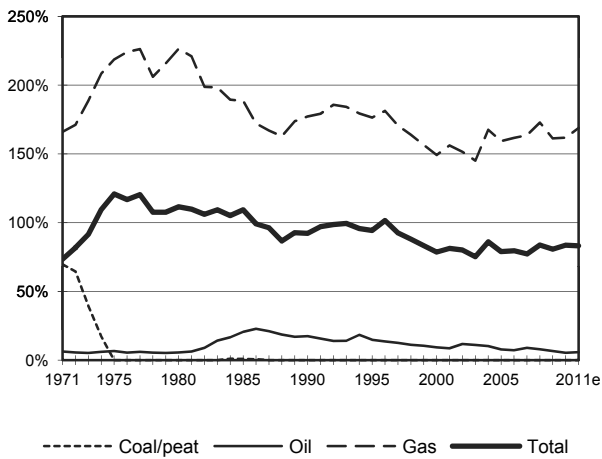
**Figure 1. Energy production**



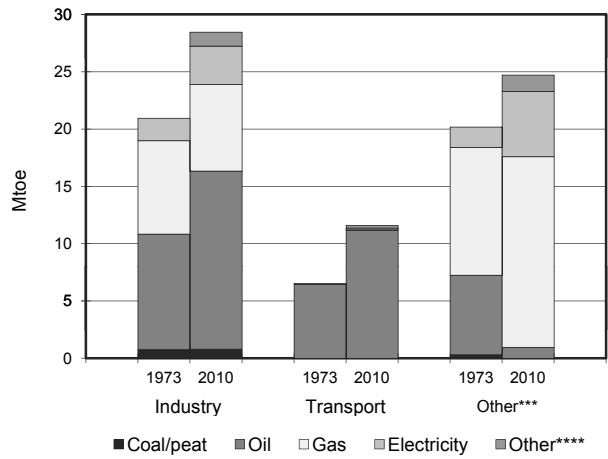
**Figure 2. Total primary energy supply\***



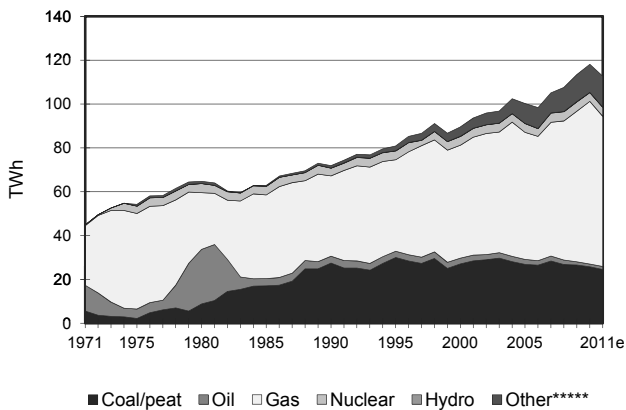
**Figure 3. Energy self-sufficiency**



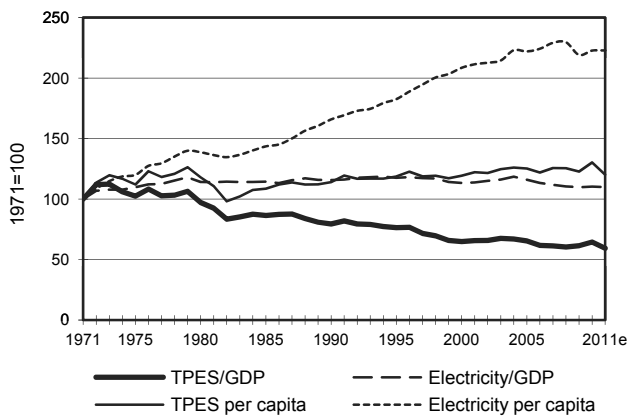
**Figure 4. Breakdown of sectorial final consumption by source in 1973 and 2010\*\***



**Figure 5. Electricity generation by fuel**



**Figure 6. Selected indicators**



\* Excluding electricity trade.

\*\* Includes non-energy use.

\*\*\* Includes residential, commercial and public services, agriculture/forestry, fishing and non-specified.

\*\*\*\* Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.

\*\*\*\*\* Includes geothermal, solar, wind, biofuels and waste, etc.

## New Zealand : 2009

Million tonnes of oil equivalent											
<b>SUPPLY AND CONSUMPTION</b>	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	2.64	2.77	-	3.59	-	2.08	3.10	1.07	-	0.03	15.29
Imports	0.35	4.89	2.22	-	-	-	-	-	-	-	7.47
Exports	-1.48	-2.37	-0.21	-	-	-	-	-	-	-	-4.06
Intl. marine bunkers	-	-	-0.34	-	-	-	-	-	-	-	-0.34
Intl. aviation bunkers	-	-	-0.74	-	-	-	-	-	-	-	-0.74
Stock changes	-0.06	-0.05	0.03	-0.09	-	-	-	-	-	-	-0.17
<b>TPES</b>	<b>1.46</b>	<b>5.24</b>	<b>0.97</b>	<b>3.51</b>	-	<b>2.08</b>	<b>3.10</b>	<b>1.07</b>	-	<b>0.03</b>	<b>17.46</b>
Transfers	-	-0.08	0.08	-	-	-	-	-	-	-	0.00
Statistical differences	0.04	0.06	-0.13	-0.11	-	-	-	0.00	-0.05	-	-0.19
Electricity plants	-0.62	-	-0.00	-1.16	-	-2.08	-2.83	-0.04	3.52	-0.03	-3.24
CHP plants	-0.16	-	-	-0.37	-	-	-0.03	-0.11	0.22	-	-0.46
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-0.14	-	-	-	-	-	-	-	-	-	-0.14
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB plants	0.01	-	-	-0.00	-	-	-	-	-	-	0.01
Oil refineries	-	-5.22	5.25	-	-	-	-	-	-	-	0.03
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-0.05	-	-0.35	-0.18	-	-	-	-	-0.16	-	-0.75
Losses	-0.01	-	-	-0.02	-	-	-	-	-0.26	-	-0.28
<b>TFC</b>	<b>0.54</b>	-	<b>5.81</b>	<b>1.67</b>	-	-	<b>0.24</b>	<b>0.91</b>	<b>3.27</b>	-	<b>12.45</b>
<b>INDUSTRY</b>	<b>0.47</b>	-	<b>0.39</b>	<b>0.78</b>	-	-	<b>0.15</b>	<b>0.76</b>	<b>1.13</b>	-	<b>3.69</b>
Iron and steel	0.04	-	-	0.06	-	-	-	-	0.12	-	0.21
Chemical and petrochem.	-	-	-	0.34	-	-	-	-	0.03	-	0.37
Non-ferrous metals	-	-	-	0.01	-	-	-	-	0.36	-	0.37
Non-metallic minerals	0.06	-	-	0.04	-	-	-	-	0.02	-	0.12
Transport equipment	-	-	-	-	-	-	-	-	0.00	-	0.00
Machinery	0.00	-	-	0.01	-	-	-	-	0.01	-	0.02
Mining and quarrying	0.00	-	0.10	0.00	-	-	-	-	0.03	-	0.14
Food and tobacco	0.25	-	-	0.21	-	-	-	-	0.19	-	0.65
Paper, pulp and printing	-	-	-	0.07	-	-	0.15	-	0.17	-	0.39
Wood and wood products	0.02	-	-	0.04	-	-	-	0.76	0.12	-	0.94
Construction	-	-	0.10	0.00	-	-	-	-	0.02	-	0.12
Textile and leather	0.00	-	-	0.01	-	-	-	-	0.01	-	0.02
Non-specified	0.09	-	0.19	0.01	-	-	-	-	0.05	-	0.33
<b>TRANSPORT</b>	<b>0.00</b>	-	<b>4.56</b>	<b>0.00</b>	-	-	-	<b>0.00</b>	<b>0.01</b>	-	<b>4.57</b>
Domestic aviation	-	-	0.33	-	-	-	-	-	-	-	0.33
Road	-	-	4.09	0.00	-	-	-	0.00	-	-	4.09
Rail	-	-	0.05	-	-	-	-	-	-	-	0.05
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	0.09	-	-	-	-	-	-	-	0.09
Non-specified	0.00	-	-	-	-	-	-	-	0.01	-	0.01
<b>OTHER</b>	<b>0.07</b>	-	<b>0.57</b>	<b>0.34</b>	-	-	<b>0.09</b>	<b>0.15</b>	<b>2.13</b>	-	<b>3.34</b>
Residential	0.02	-	0.06	0.14	-	-	0.01	0.14	1.14	-	1.51
Comm. and public services	0.03	-	0.10	0.16	-	-	0.06	0.01	0.78	-	1.13
Agriculture/forestry	0.02	-	0.30	0.04	-	-	0.02	-	0.15	-	0.53
Fishing	-	-	0.10	-	-	-	-	-	0.01	-	0.11
Non-specified	-	-	-	-	-	-	-	-	0.06	-	0.06
<b>NON-ENERGY USE</b>	-	-	<b>0.29</b>	<b>0.55</b>	-	-	-	-	-	-	<b>0.84</b>
in industry/transf./energy	-	-	0.29	0.55	-	-	-	-	-	-	0.84
<i>of which: feedstocks</i>	-	-	-	0.55	-	-	-	-	-	-	0.55
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>3.30</b>	-	<b>0.01</b>	<b>8.93</b>	-	<b>24.22</b>	<b>6.34</b>	<b>0.60</b>	-	<b>0.06</b>	<b>43.45</b>
Electricity plants	2.71	-	0.01	7.50	-	24.22	6.29	0.16	-	-	40.88
CHP plants	0.59	-	-	1.43	-	-	0.05	0.44	-	0.06	2.58
<b>Heat generated - PJ</b>	-	-	-	-	-	-	-	-	-	<b>1.37</b>	<b>1.37</b>
CHP plants	-	-	-	-	-	-	-	-	-	1.37	1.37
Heat plants	-	-	-	-	-	-	-	-	-	-	-

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.



## New Zealand : 2010

Million tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	3.13	2.75	-	3.85	-	2.13	3.79	1.18	-	0.03	16.86
Imports	0.13	5.23	1.77	-	-	-	-	0.00	-	-	7.14
Exports	-1.71	-2.45	-0.12	-	-	-	-	-	-	-	-4.28
Intl. marine bunkers	-	-	-0.33	-	-	-	-	-	-	-	-0.33
Intl. aviation bunkers	-	-	-0.78	-	-	-	-	-	-	-	-0.78
Stock changes	-0.25	-0.04	0.02	-0.13	-	-	-	-	-	-	-0.40
<b>TPES</b>	<b>1.31</b>	<b>5.48</b>	<b>0.56</b>	<b>3.73</b>	-	<b>2.13</b>	<b>3.79</b>	<b>1.18</b>	-	<b>0.03</b>	<b>18.20</b>
Transfers	-	-0.16	0.17	-	-	-	-	-	-	-	0.00
Statistical differences	-0.01	0.04	0.15	-0.11	-	-	0.00	-	-0.05	-	0.02
Electricity plants	-0.31	-	-	-1.34	-	-2.13	-3.53	-0.04	3.62	-0.03	-3.75
CHP plants	-0.19	-	-	-0.40	-	-	-0.03	-0.11	0.23	-	-0.50
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-0.15	-	-	-	-	-	-	-	-	-	-0.15
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB plants	0.01	-	-	-0.00	-	-	-	-	-	-	0.01
Oil refineries	-	-5.36	5.37	-	-	-	-	-	-	-	0.01
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-0.05	-	-0.35	-0.20	-	-	-	-	-0.17	-	-0.77
Losses	-0.01	-	-	-0.01	-	-	-	-	-0.26	-	-0.28
<b>TFC</b>	<b>0.60</b>	-	<b>5.88</b>	<b>1.66</b>	-	-	<b>0.24</b>	<b>1.02</b>	<b>3.38</b>	-	<b>12.77</b>
<b>INDUSTRY</b>	<b>0.51</b>	-	<b>0.35</b>	<b>0.80</b>	-	-	<b>0.15</b>	<b>0.87</b>	<b>1.22</b>	-	<b>3.90</b>
Iron and steel	0.04	-	-	0.06	-	-	-	-	0.13	-	0.23
Chemical and petrochem.	-	-	-	0.37	-	-	-	-	0.03	-	0.40
Non-ferrous metals	-	-	-	0.00	-	-	-	-	0.45	-	0.46
Non-metallic minerals	0.08	-	-	0.02	-	-	-	-	0.02	-	0.11
Transport equipment	0.00	-	-	-	-	-	-	-	0.00	-	0.00
Machinery	0.00	-	-	0.03	-	-	-	-	0.01	-	0.04
Mining and quarrying	0.00	-	0.08	0.00	-	-	-	-	0.03	-	0.12
Food and tobacco	0.33	-	-	0.21	-	-	-	-	0.19	-	0.72
Paper, pulp and printing	0.00	-	-	0.07	-	-	0.15	-	0.17	-	0.39
Wood and wood products	0.02	-	-	0.03	-	-	-	0.87	0.12	-	1.03
Construction	0.00	-	0.09	0.00	-	-	-	-	0.02	-	0.11
Textile and leather	0.01	-	-	0.01	-	-	-	-	0.01	-	0.02
Non-specified	0.04	-	0.17	0.00	-	-	-	-	0.04	-	0.26
<b>TRANSPORT</b>	<b>0.00</b>	-	<b>4.59</b>	<b>0.00</b>	-	-	-	<b>0.00</b>	<b>0.01</b>	-	<b>4.61</b>
Domestic aviation	-	-	0.35	-	-	-	-	-	-	-	0.35
Road	-	-	4.12	0.00	-	-	-	0.00	-	-	4.12
Rail	-	-	0.05	-	-	-	-	-	-	-	0.05
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	0.08	-	-	-	-	-	-	-	0.08
Non-specified	0.00	-	-	-	-	-	-	-	0.01	-	0.01
<b>OTHER</b>	<b>0.09</b>	-	<b>0.58</b>	<b>0.31</b>	-	-	<b>0.09</b>	<b>0.15</b>	<b>2.15</b>	-	<b>3.36</b>
Residential	0.01	-	0.07	0.13	-	-	0.02	0.14	1.15	-	1.51
Comm. and public services	0.03	-	0.13	0.15	-	-	0.06	0.01	0.78	-	1.15
Agriculture/forestry	0.04	-	0.29	0.03	-	-	0.02	-	0.15	-	0.53
Fishing	-	-	0.10	-	-	-	-	-	0.01	-	0.11
Non-specified	-	-	-	-	-	-	-	-	0.07	-	0.07
<b>NON-ENERGY USE</b>	-	-	<b>0.36</b>	<b>0.55</b>	-	-	-	-	-	-	<b>0.91</b>
in industry/transf./energy	-	-	0.36	0.55	-	-	-	-	-	-	0.91
of which: feedstocks	-	-	-	0.55	-	-	-	-	-	-	0.55
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>2.07</b>	-	<b>0.00</b>	<b>9.85</b>	-	<b>24.71</b>	<b>7.52</b>	<b>0.61</b>	-	<b>0.06</b>	<b>44.82</b>
Electricity plants	1.39	-	0.00	8.35	-	24.71	7.46	0.17	-	-	42.09
CHP plants	0.68	-	-	1.50	-	-	0.05	0.45	-	0.06	2.73
<b>Heat generated - PJ</b>	-	-	-	-	-	-	-	-	-	<b>1.32</b>	<b>1.32</b>
CHP plants	-	-	-	-	-	-	-	-	-	1.32	1.32
Heat plants	-	-	-	-	-	-	-	-	-	-	-

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## New Zealand

## Estimated energy supply balance for 2011

Million tonnes of oil equivalent											
SUPPLY	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	2.88	2.31	-	3.48	-	2.16	3.92	1.18	-	0.04	15.96
Imports	0.09	5.31	1.88	-	-	-	-	-	-	-	7.28
Exports	-1.53	-2.39	-0.06	-	-	-	-	-	-	-	-3.97
Intl. marine bunkers	-	-	-0.30	-	-	-	-	-	-	-	-0.30
Intl. aviation bunkers	-	-	-0.77	-	-	-	-	-	-	-	-0.77
Stock changes	-0.01	0.05	-0.18	-0.07	-	-	-	-	-	-	-0.22
<b>TPES</b>	<b>1.44</b>	<b>5.29</b>	<b>0.58</b>	<b>3.41</b>	<b>-</b>	<b>2.16</b>	<b>3.92</b>	<b>1.18</b>	<b>-</b>	<b>0.04</b>	<b>18.00</b>
Electricity and Heat Output											
Elec. generated - TWh	2.17	-	0.00	8.51	-	25.08	8.07	0.61	-	0.06	44.50
Heat generated - PJ	-	-	-	-	-	-	-	-	-	1.52	1.52

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1960	1971	1980	1990	2000	2009	2010	2011e
Energy production (Mtoe)	2.5	3.4	5.5	11.5	14.3	15.3	16.9	16.0
Net imports (Mtoe)	1.8	4.1	4.2	2.1	3.4	3.4	2.9	3.3
Total primary energy supply (Mtoe)	4.1	6.9	9.0	12.9	17.1	17.5	18.2	18.0
Net oil imports (Mtoe)	1.9	4.1	4.3	2.4	4.5	4.5	4.4	4.8
Oil supply (Mtoe)	1.7	3.5	4.0	3.6	5.7	6.2	6.0	5.9
Electricity consumption (TWh)*	5.8	13.4	19.8	29.9	36.2	40.5	41.8	41.5
GDP (billion 2005 USD)	33.5 e	49.8	57.1	69.8	93.8	118.5	121.3	122.9
GDP PPP (billion 2005 USD)	31.0 e	46.1	52.8	64.6	86.8	109.7	112.2	113.7
Population (millions)	2.38 e	2.86	3.14	3.37	3.87	4.33	4.38	4.42
Industrial production index (2005=100)	..	..	64.90	73.00	88.00	89.00	89.60	90.00
Total self-sufficiency**	0.6055	0.4943	0.6089	0.8953	0.8374	0.8758	0.9263	0.8869
Coal and peat self-sufficiency**	1.0186	1.0160	1.1202	1.2013	1.8687	1.8075	2.3982	2.0016
Oil self-sufficiency**	..	..	0.0922	0.5536	0.3423	0.4463	0.4547	0.3947
Natural gas self-sufficiency**	1.0000	1.0000	1.0033	0.9999	0.9995	1.0250	1.0340	1.0207
TPES/GDP (toe per thousand 2005 USD)	0.1226 e	0.1389	0.1574	0.1845	0.1819	0.1473	0.1500	0.1465
TPES/GDP PPP (toe per thousand 2005 USD)	0.1325 e	0.1501	0.1701	0.1994	0.1966	0.1592	0.1621	0.1583
TPES/population (toe per capita)	1.7278 e	2.4134	2.8578	3.8151	4.4103	4.0298	4.1510	4.0706
Net oil imports/GDP (toe per thousand 2005 USD)	0.0551 e	0.0814	0.0747	0.0337	0.0475	0.0383	0.0365	0.0387
Oil supply/GDP (toe per thousand 2005 USD)	0.0492 e	0.0706	0.0702	0.0509	0.0606	0.0524	0.0498	0.0477
Oil supply/population (toe per capita)	0.6939 e	1.2264	1.2749	1.0526	1.4683	1.4330	1.3773	1.3259
Elect. cons./GDP (kWh per 2005 USD)	0.1739 e	0.2690	0.3460	0.4282	0.3861	0.3413	0.3445	0.3373
Elect. cons./population (kWh per capita)	2452 e	4676	6281	8857	9359	9340	9531	9375
Industry cons.***/industrial production (2005=100)	..	..	87.06	131.58	144.36	109.56	115.42	..
Industry oil cons.***/industrial production (2005=100)	..	..	179.01	115.73	102.60	108.13	110.94	..

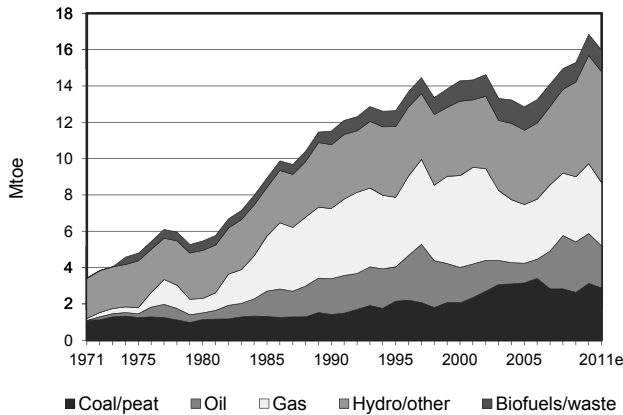
\* Electricity consumption equals domestic supply less losses.

\*\* Production divided by TPES.

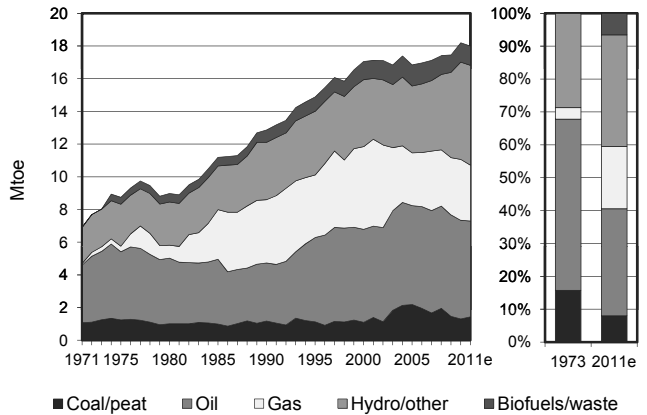
\*\*\* Includes non-energy use.

## New Zealand

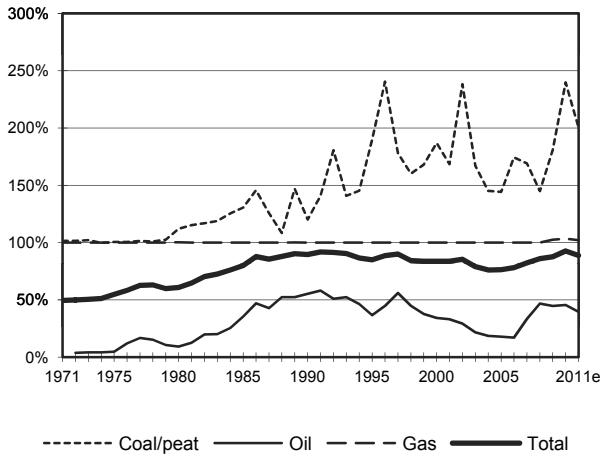
**Figure 1. Energy production**



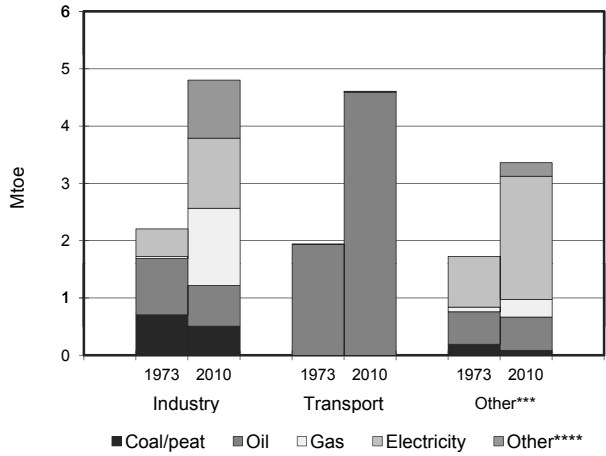
**Figure 2. Total primary energy supply\***



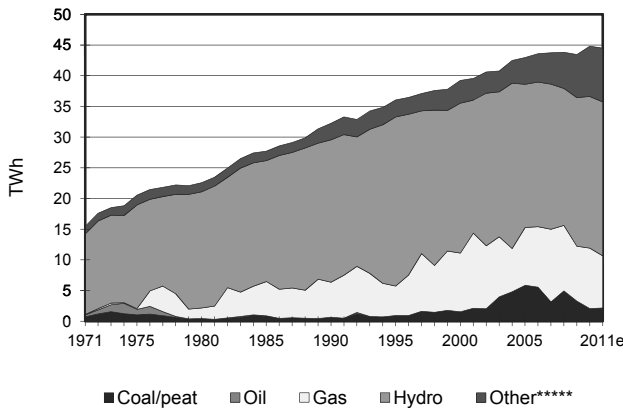
**Figure 3. Energy self-sufficiency**



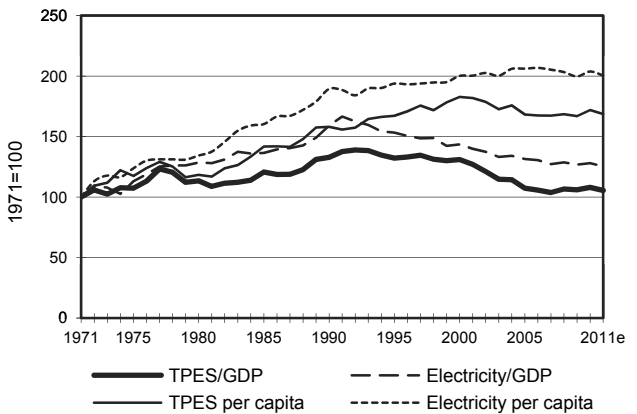
**Figure 4. Breakdown of sectorial final consumption by source in 1973 and 2010\*\***



**Figure 5. Electricity generation by fuel**



**Figure 6. Selected indicators**



\* Excluding electricity trade.  
 \*\* Includes non-energy use.  
 \*\*\* Includes residential, commercial and public services, agriculture/forestry, fishing and non-specified.  
 \*\*\*\* Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.  
 \*\*\*\*\* Includes geothermal, solar, wind, biofuels and waste, etc.

## Norway : 2009

Million tonnes of oil equivalent											
<b>SUPPLY AND CONSUMPTION</b>	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	1.77	108.91	-	90.66	-	10.77	0.08	1.31	-	0.04	213.55
Imports	0.47	1.00	4.76	-	-	-	-	0.12	0.49	-	6.84
Exports	-1.61	-88.14	-16.16	-85.17	-	-	-	-0.00	-1.26	-	-192.35
Intl. marine bunkers	-	-	-0.49	-	-	-	-	-	-	-	-0.49
Intl. aviation bunkers	-	-	-0.36	-	-	-	-	-	-	-	-0.36
Stock changes	-0.08	0.95	0.09	-	-	-	-	-	-	-	0.97
<b>TPES</b>	<b>0.56</b>	<b>22.72</b>	<b>-12.16</b>	<b>5.49</b>	<b>-</b>	<b>10.77</b>	<b>0.08</b>	<b>1.42</b>	<b>-0.77</b>	<b>0.04</b>	<b>28.16</b>
Transfers	-	-7.99	8.50	-	-	-	-	-	-	-	0.52
Statistical differences	-0.01	0.57	-2.51	-0.52	-	-	-	-	-	-	-2.47
Electricity plants	-0.01	-	-0.00	-0.55	-	-10.77	-0.08	-0.02	11.25	-0.03	-0.22
CHP plants	-0.02	-	-	c	-	-	-	-0.08	0.01	0.07	-0.01
Heat plants	-0.00	-	-0.03	-0.02	-	-	-	-0.21	-0.07	0.28	-0.05
Blast furnaces	-0.05	-	-	-	-	-	-	-	-	-	-0.05
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-15.35	15.35	-	-	-	-	-	-	-	-0.00
Petrochemical plants	-	0.05	-0.05	-	-	-	-	-	-	-	-0.01
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-	-	-0.88	-3.71	-	-	-	-	-0.54	-0.01	-5.14
Losses	-0.00	-	-	-	-	-	-	-0.01	-0.65	-0.05	-0.71
<b>TFC</b>	<b>0.47</b>	<b>-</b>	<b>8.21</b>	<b>0.70</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.11</b>	<b>9.23</b>	<b>0.30</b>	<b>20.01</b>
<b>INDUSTRY</b>	<b>0.43</b>	<b>-</b>	<b>0.90</b>	<b>0.21</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.35</b>	<b>3.55</b>	<b>0.03</b>	<b>5.47</b>
Iron and steel	0.20	-	0.01	0.00	-	-	-	0.01	0.31	0.00	0.54
Chemical and petrochem.	0.14	-	0.39	0.10	-	-	-	0.01	0.56	0.01	1.21
Non-ferrous metals	-	-	0.04	0.04	-	-	-	-	1.64	0.00	1.73
Non-metallic minerals	0.09	-	0.03	0.02	-	-	-	0.04	0.06	0.00	0.25
Transport equipment	-	-	0.02	0.00	-	-	-	0.00	0.04	0.00	0.06
Machinery	-	-	0.02	0.00	-	-	-	0.00	0.08	0.00	0.11
Mining and quarrying	-	-	0.05	0.00	-	-	-	0.00	0.04	0.00	0.09
Food and tobacco	-	-	0.08	0.04	-	-	-	0.00	0.22	0.00	0.34
Paper, pulp and printing	-	-	0.09	0.00	-	-	-	0.23	0.41	0.00	0.73
Wood and wood products	-	-	0.01	0.00	-	-	-	0.06	0.05	0.00	0.12
Construction	-	-	0.15	0.00	-	-	-	0.00	0.09	-	0.25
Textile and leather	-	-	0.00	0.00	-	-	-	-	0.01	0.00	0.01
Non-specified	-	-	0.00	0.00	-	-	-	0.00	0.04	0.00	0.04
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>4.45</b>	<b>0.05</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.09</b>	<b>0.06</b>	<b>-</b>	<b>4.65</b>
Domestic aviation	-	-	0.35	-	-	-	-	-	-	-	0.35
Road	-	-	3.30	0.00	-	-	-	0.09	-	-	3.40
Rail	-	-	0.02	-	-	-	-	-	0.05	-	0.06
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	0.78	0.05	-	-	-	-	-	-	0.83
Non-specified	-	-	-	-	-	-	-	-	0.01	-	0.01
<b>OTHER</b>	<b>-</b>	<b>-</b>	<b>1.08</b>	<b>0.04</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.67</b>	<b>5.62</b>	<b>0.27</b>	<b>7.68</b>
Residential	-	-	0.17	0.00	-	-	-	0.64	3.12	0.06	3.99
Comm. and public services	-	-	0.24	0.02	-	-	-	0.03	2.31	0.20	2.80
Agriculture/forestry	-	-	0.15	0.01	-	-	-	0.00	0.17	0.00	0.33
Fishing	-	-	0.45	0.00	-	-	-	-	0.02	-	0.47
Non-specified	-	-	0.08	-	-	-	-	-	-	-	0.08
<b>NON-ENERGY USE</b>	<b>0.04</b>	<b>-</b>	<b>1.77</b>	<b>0.40</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2.21</b>
in industry/transf./energy	0.04	-	1.77	0.40	-	-	-	-	-	-	2.21
of which: feedstocks	-	-	0.94	0.40	-	-	-	-	-	-	1.34
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>0.10</b>	<b>-</b>	<b>0.03</b>	<b>4.23</b>	<b>-</b>	<b>125.28</b>	<b>0.98</b>	<b>0.28</b>	<b>-</b>	<b>0.07</b>	<b>130.98</b>
Electricity plants	0.06	-	0.03	4.23	-	125.28	0.98	0.18	-	0.07	130.84
CHP plants	0.04	-	-	c	-	-	-	0.10	-	-	0.14
<b>Heat generated - PJ</b>	<b>0.25</b>	<b>-</b>	<b>1.22</b>	<b>0.62</b>	<b>-</b>	<b>-</b>	<b>0.05</b>	<b>9.18</b>	<b>2.52</b>	<b>2.12</b>	<b>15.96</b>
CHP plants	0.23	-	-	-	-	-	-	2.52	0.03	0.04	2.82
Heat plants	0.02	-	1.22	0.62	-	-	0.05	6.66	2.49	2.09	13.14

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Norway : 2010

Million tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	1.30	98.92	-	93.53	-	10.11	0.08	1.51	-	0.06	205.51
Imports	0.75	1.49	4.45	-	-	-	-	0.15	1.26	-	8.12
Exports	-1.11	-78.29	-13.10	-87.31	-	-	-	-0.01	-0.61	-	-180.43
Intl. marine bunkers	-	-	-0.39	-	-	-	-	-	-	-	-0.39
Intl. aviation bunkers	-	-	-0.43	-	-	-	-	-	-	-	-0.43
Stock changes	-0.11	-0.15	0.32	-	-	-	-	-	-	-	0.07
<b>TPES</b>	<b>0.84</b>	<b>21.97</b>	<b>-9.14</b>	<b>6.23</b>	<b>-</b>	<b>10.11</b>	<b>0.08</b>	<b>1.66</b>	<b>0.65</b>	<b>0.06</b>	<b>32.45</b>
Transfers	-	-7.02	7.51	-	-	-	-	-	-	-	0.49
Statistical differences	-0.11	-0.59	-3.26	-1.05	-	-	-	-	-	-	-5.01
Electricity plants	-0.02	-	-0.00	-0.72	-	-10.11	-0.08	-0.03	10.65	-0.04	-0.35
CHP plants	-0.02	-	-	c	-	-	-	-0.15	0.02	0.09	-0.05
Heat plants	-0.00	-	-0.08	-0.02	-	-	-	-0.21	-0.07	0.32	-0.07
Blast furnaces	-0.10	-	-	-	-	-	-	-	-	-	-0.10
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-14.41	14.40	-	-	-	-	-	-	-	-0.00
Petrochemical plants	-	0.05	-0.06	-	-	-	-	-	-	-	-0.01
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-	-	-0.83	-3.67	-	-	-	-	-0.62	-	-5.11
Losses	-0.01	-	-	-	-	-	-	-0.01	-0.77	-0.05	-0.84
<b>TFC</b>	<b>0.57</b>	<b>-</b>	<b>8.54</b>	<b>0.77</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.26</b>	<b>9.86</b>	<b>0.38</b>	<b>21.40</b>
<b>INDUSTRY</b>	<b>0.52</b>	<b>-</b>	<b>0.98</b>	<b>0.26</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.39</b>	<b>3.82</b>	<b>0.04</b>	<b>6.02</b>
Iron and steel	0.22	-	0.01	0.00	-	-	-	0.01	0.40	0.00	0.64
Chemical and petrochem.	0.21	-	0.42	0.11	-	-	-	0.01	0.66	0.01	1.42
Non-ferrous metals	-	-	0.05	0.09	-	-	-	0.00	1.61	0.00	1.74
Non-metallic minerals	0.09	-	0.06	0.00	-	-	-	0.04	0.07	0.00	0.27
Transport equipment	-	-	0.02	0.00	-	-	-	-	0.04	0.00	0.06
Machinery	-	-	0.03	0.00	-	-	-	0.00	0.13	0.00	0.16
Mining and quarrying	-	-	0.06	0.00	-	-	-	0.00	0.05	0.00	0.11
Food and tobacco	-	-	0.08	0.04	-	-	-	0.00	0.22	0.01	0.36
Paper, pulp and printing	-	-	0.10	0.00	-	-	-	0.28	0.44	0.00	0.82
Wood and wood products	-	-	0.01	0.00	-	-	-	0.06	0.06	0.01	0.14
Construction	-	-	0.15	0.00	-	-	-	0.00	0.09	-	0.25
Textile and leather	-	-	0.00	0.00	-	-	-	-	0.01	0.00	0.01
Non-specified	-	-	0.00	0.00	-	-	-	0.00	0.04	0.00	0.05
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>4.62</b>	<b>0.05</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.12</b>	<b>0.06</b>	<b>-</b>	<b>4.85</b>
Domestic aviation	-	-	0.35	-	-	-	-	-	-	-	0.35
Road	-	-	3.45	0.00	-	-	-	0.12	-	-	3.57
Rail	-	-	0.01	-	-	-	-	-	0.05	-	0.07
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	0.81	0.05	-	-	-	-	-	-	0.86
Non-specified	-	-	-	-	-	-	-	-	0.01	-	0.01
<b>OTHER</b>	<b>-</b>	<b>-</b>	<b>1.13</b>	<b>0.05</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.75</b>	<b>5.98</b>	<b>0.34</b>	<b>8.25</b>
Residential	-	-	0.20	0.00	-	-	-	0.71	3.32	0.09	4.33
Comm. and public services	-	-	0.24	0.02	-	-	-	0.04	2.47	0.25	3.03
Agriculture/forestry	-	-	0.15	0.02	-	-	-	0.00	0.17	0.00	0.34
Fishing	-	-	0.46	-	-	-	-	-	0.02	-	0.48
Non-specified	-	-	0.08	-	-	-	-	-	-	-	0.08
<b>NON-ENERGY USE</b>	<b>0.05</b>	<b>-</b>	<b>1.81</b>	<b>0.42</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2.28</b>
in industry/transf./energy	0.05	-	1.81	0.42	-	-	-	-	-	-	2.28
of which: feedstocks	-	-	1.01	0.42	-	-	-	-	-	-	1.42
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>0.11</b>	<b>-</b>	<b>0.03</b>	<b>4.89</b>	<b>-</b>	<b>117.54</b>	<b>0.92</b>	<b>0.49</b>	<b>-</b>	<b>0.13</b>	<b>124.10</b>
Electricity plants	0.06	-	0.03	4.89	-	117.54	0.92	0.26	-	0.13	123.83
CHP plants	0.04	-	-	c	-	-	-	0.23	-	-	0.27
<b>Heat generated - PJ</b>	<b>0.27</b>	<b>-</b>	<b>2.98</b>	<b>0.78</b>	<b>-</b>	<b>-</b>	<b>0.26</b>	<b>9.73</b>	<b>2.38</b>	<b>3.25</b>	<b>19.65</b>
CHP plants	0.24	-	-	-	-	-	-	3.56	0.02	0.04	3.86
Heat plants	0.02	-	2.98	0.78	-	-	0.26	6.17	2.37	3.22	15.79

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Norway

## Estimated energy supply balance for 2011

Million tonnes of oil equivalent											
SUPPLY	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	0.93	92.65	-	90.44	-	10.39	0.11	1.47	-	0.06	196.05
Imports	0.79	0.56	4.27	0.00	-	-	-	0.18	0.97	-	6.76
Exports	-1.01	-69.63	-15.63	-84.38	-	-	-	-0.01	-1.23	-	-171.90
Intl. marine bunkers	-	-	-0.38	-	-	-	-	-	-	-	-0.38
Intl. aviation bunkers	-	-	-0.36	-	-	-	-	-	-	-	-0.36
Stock changes	0.13	-0.45	0.02	-	-	-	-	-	-	-	-0.31
<b>TPES</b>	<b>0.83</b>	<b>23.12</b>	<b>-12.08</b>	<b>6.06</b>	<b>-</b>	<b>10.39</b>	<b>0.11</b>	<b>1.64</b>	<b>-0.26</b>	<b>0.06</b>	<b>29.87</b>
Electricity and Heat Output											
Elec. generated - TWh	0.12	-	0.03	4.06	-	120.82	1.32	0.48	-	0.06	126.88
Heat generated - PJ	0.27	-	2.98	0.78	-	-	0.26	9.73	2.38	3.25	19.65

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1960	1971	1980	1990	2000	2009	2010	2011e
Energy production (Mtoe)	3.0	6.0	55.0	119.1	227.2	213.6	205.5	196.1
Net imports (Mtoe)	4.2	7.8	-35.8	-95.4	-199.6	-185.5	-172.3	-165.1
Total primary energy supply (Mtoe)	6.8	13.3	18.3	21.0	26.1	28.2	32.5	29.9
Net oil imports (Mtoe)	3.7	7.5	-14.6	-72.5	-156.4	-98.6	-85.5	-80.4
Oil supply (Mtoe)	3.3	7.2	8.7	8.1	9.0	10.6	12.8	11.0
Electricity consumption (TWh)*	27.5	55.0	76.5	99.1	112.3	115.2	123.1	116.1
GDP (billion 2005 USD)	62.1 e	98.8	147.8	189.6	272.7	314.6	316.7	321.8
GDP PPP (billion 2005 USD)	45.0 e	71.6	107.1	137.3	197.5	227.8	229.3	233.0
Population (millions)	3.58 e	3.90	4.09	4.24	4.49	4.83	4.89	4.95
Industrial production index (2005=100)	16.80	29.70	48.00	74.20	104.50	93.30	88.10	83.70
Total self-sufficiency**	0.4346	0.4534	3.0011	5.6693	8.7080	7.5842	6.3329	6.5625
Coal and peat self-sufficiency**	0.3585	0.3242	0.2005	0.2357	0.4036	3.1584	1.5492	1.1144
Oil self-sufficiency**	..	0.0399	2.7828	10.3253	18.6485	10.3155	7.7128	8.3918
Natural gas self-sufficiency**	..	..	26.2068	12.2201	11.1669	16.5126	15.0204	14.9267
TPES/GDP (toe per thousand 2005 USD)	0.1100 e	0.1346	0.1239	0.1108	0.0957	0.0895	0.1025	0.0929
TPES/GDP PPP (toe per thousand 2005 USD)	0.1519 e	0.1859	0.1711	0.1530	0.1321	0.1236	0.1415	0.1282
TPES/population (toe per capita)	1.9052 e	3.4071	4.4827	4.9523	5.8097	5.8333	6.6377	6.0329
Net oil imports/GDP (toe per thousand 2005 USD)	0.0595 e	0.0755	-0.0989	-0.3825	-0.5735	-0.3133	-0.2698	-0.2500
Oil supply/GDP (toe per thousand 2005 USD)	0.0539 e	0.0726	0.0589	0.0425	0.0328	0.0336	0.0405	0.0343
Oil supply/population (toe per capita)	0.9336 e	1.8371	2.1308	1.9013	1.9932	2.1873	2.6233	2.2294
Elect. cons./GDP (kWh per 2005 USD)	0.4432 e	0.5564	0.5175	0.5226	0.4116	0.3663	0.3887	0.3609
Elect. cons./population (kWh per capita)	7677 e	14085	18724	23357	24994	23868	25177	23446
Industry cons.***/industrial production (2005=100)	208.51	230.12	184.97	117.71	95.79	91.37	104.45	..
Industry oil cons.***/industrial production (2005=100)	252.62	343.56	270.88	136.78	85.34	105.27	116.09	..

\* Electricity consumption equals domestic supply less losses.

\*\* Production divided by TPES.

\*\*\* Includes non-energy use.

Norway

Figure 1. Energy production

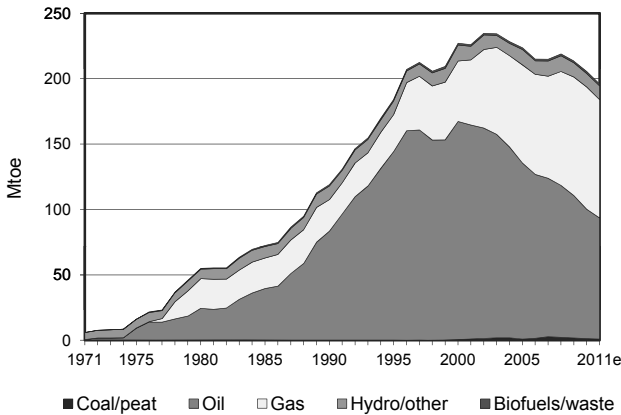


Figure 2. Total primary energy supply\*

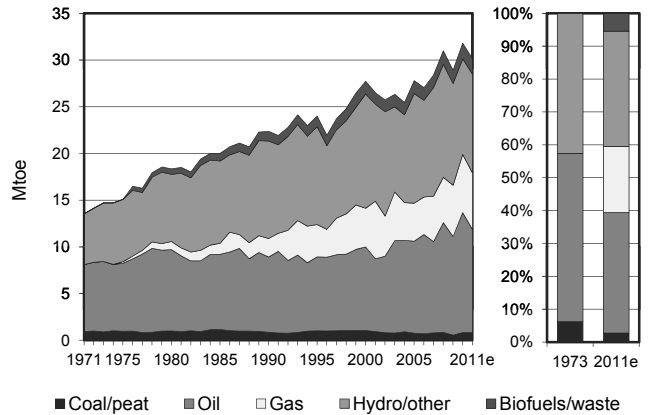


Figure 3. Energy self-sufficiency

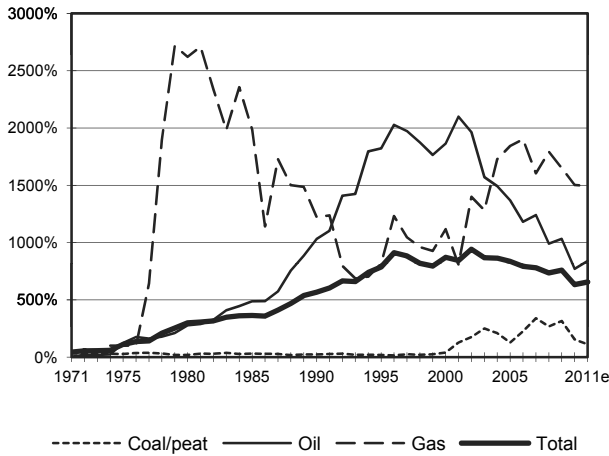


Figure 4. Breakdown of sectorial final consumption by source in 1973 and 2010\*\*

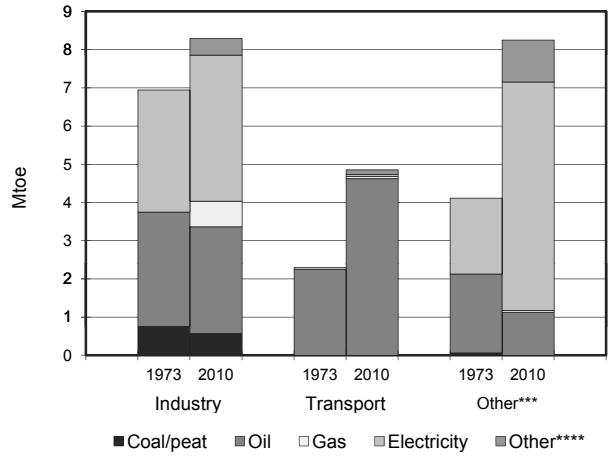


Figure 5. Electricity generation by fuel

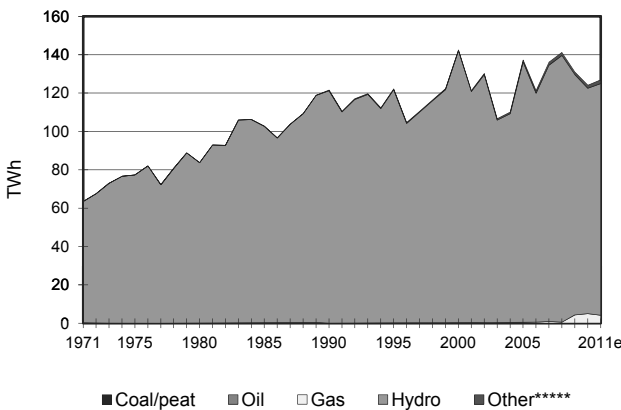
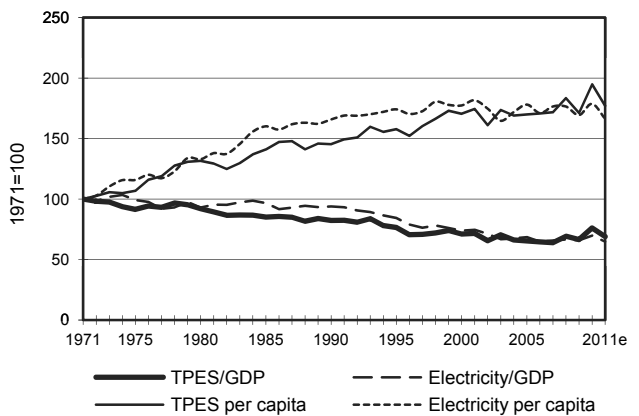


Figure 6. Selected indicators



\* Excluding electricity trade.  
 \*\* Includes non-energy use.  
 \*\*\* Includes residential, commercial and public services, agriculture/forestry, fishing and non-specified.  
 \*\*\*\* Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.  
 \*\*\*\*\* Includes geothermal, solar, wind, biofuels and waste, etc.

## Poland : 2009

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	56.42	0.70	-	3.68	-	0.20	0.11	6.42	-	-	67.52
Imports	6.54	21.79	5.64	8.15	-	-	-	0.24	0.64	-	43.00
Exports	-9.18	-0.23	-2.50	-0.03	-	-	-	-0.01	-0.83	-	-12.77
Intl. marine bunkers	-	-	-0.25	-	-	-	-	-	-	-	-0.25
Intl. aviation bunkers	-	-	-0.49	-	-	-	-	-	-	-	-0.49
Stock changes	-2.64	-0.28	-0.37	0.26	-	-	-	0.00	-	-	-3.03
<b>TPES</b>	<b>51.13</b>	<b>21.98</b>	<b>2.04</b>	<b>12.06</b>	-	<b>0.20</b>	<b>0.11</b>	<b>6.66</b>	<b>-0.19</b>	-	<b>93.99</b>
Transfers	-	0.07	-0.03	-	-	-	-	-	-	-	0.03
Statistical differences	-1.04	0.02	-0.04	-0.00	-	-	-	-	-	-	-1.06
Electricity plants	-	-	-	-	-	-0.20	-0.09	-	0.30	-	-
CHP plants	-33.95	-	-0.50	-0.98	-	-	-	-1.47	12.70	4.71	-19.49
Heat plants	-3.02	-	-0.03	-0.26	-	-	-	-0.05	-	2.74	-0.61
Blast furnaces	-0.63 e	-	-	-	-	-	-	-	-	-	-0.63
Gas works	0.00	-	-0.00	-	-	-	-	-	-	-	-0.00
Coke/pat. fuel/BKB plants	-0.40	-	-	-	-	-	-	-	-	-	-0.40
Oil refineries	-	-22.62	22.42	-	-	-	-	-	-	-	-0.19
Petrochemical plants	-	0.55	-0.58	-	-	-	-	-	-	-	-0.03
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-0.24	-	-	-	-	-	-	-0.24
Energy industry own use	-0.89	-	-1.15	-0.63	-	-	-	-0.00	-2.04	-1.08	-5.79
Losses	-0.02	-	-	-0.13	-	-	-	-	-1.08	-	-1.23
<b>TFC</b>	<b>11.18</b>	-	<b>22.12</b>	<b>9.82</b>	-	-	<b>0.02</b>	<b>5.13</b>	<b>9.69</b>	<b>6.38</b>	<b>64.35</b>
<b>INDUSTRY</b>	<b>3.62</b>	-	<b>1.27</b>	<b>2.93</b>	-	-	-	<b>1.37</b>	<b>3.42</b>	<b>1.42</b>	<b>14.04</b>
Iron and steel	0.56 e	-	0.00	0.40	-	-	-	0.01	0.43	0.11	1.51
Chemical and petrochem.	1.08	-	0.64	0.23	-	-	-	0.21	0.69	0.82	3.67
Non-ferrous metals	0.14	-	0.01	0.14	-	-	-	0.03	0.20	0.06	0.58
Non-metallic minerals	0.71	-	0.17	0.99	-	-	-	0.30	0.36	0.03	2.56
Transport equipment	0.02	-	0.01	0.09	-	-	-	0.00	0.14	0.07	0.34
Machinery	0.05	-	0.03	0.19	-	-	-	0.00	0.28	0.09	0.63
Mining and quarrying	0.01	-	0.06	0.02	-	-	-	-	0.12	0.04	0.26
Food and tobacco	0.63	-	0.13	0.50	-	-	-	0.01	0.43	0.05	1.75
Paper, pulp and printing	0.20	-	0.05	0.12	-	-	-	0.46	0.29	0.09	1.21
Wood and wood products	0.08	-	0.03	0.10	-	-	-	0.31	0.16	0.01	0.68
Construction	0.03	-	0.10	0.04	-	-	-	0.00	0.06	0.02	0.26
Textile and leather	0.02	-	0.01	0.04	-	-	-	-	0.05	0.01	0.13
Non-specified	0.06	-	0.03	0.07	-	-	-	0.05	0.21	0.03	0.45
<b>TRANSPORT</b>	-	-	<b>14.74</b>	<b>0.26</b>	-	-	-	<b>0.66</b>	<b>0.28</b>	-	<b>15.94</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	14.61	-	-	-	-	0.66	-	-	15.28
Rail	-	-	0.12	-	-	-	-	-	0.25	-	0.37
Pipeline transport	-	-	0.00	0.26	-	-	-	-	0.03	-	0.30
Domestic navigation	-	-	0.00	-	-	-	-	-	-	-	0.00
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>7.53</b>	-	<b>3.09</b>	<b>5.07</b>	-	-	<b>0.02</b>	<b>3.09</b>	<b>6.00</b>	<b>4.96</b>	<b>29.76</b>
Residential	5.66	-	0.67	3.22	-	-	0.01	2.45	2.37	4.24	18.62
Comm. and public services	0.80	-	0.60	1.81	-	-	0.01	0.19	3.49	0.69	7.59
Agriculture/forestry	1.07	-	1.81	0.04	-	-	-	0.45	0.14	0.02	3.54
Fishing	-	-	-	-	-	-	-	-	0.00	0.00	0.00
Non-specified	-	-	0.00	-	-	-	-	-	-	-	0.00
<b>NON-ENERGY USE</b>	<b>0.03</b>	-	<b>3.02</b>	<b>1.57</b>	-	-	-	-	-	-	<b>4.61</b>
in industry/transf./energy	0.03	-	2.72	1.57	-	-	-	-	-	-	4.31
of which: feedstocks	-	-	1.20	1.57	-	-	-	-	-	-	2.76
in transport	-	-	0.16	-	-	-	-	-	-	-	0.16
in other	-	-	0.14	-	-	-	-	-	-	-	0.14
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>134.70</b>	-	<b>2.72</b>	<b>4.79</b>	-	<b>2.38</b>	<b>1.08</b>	<b>5.46</b>	-	-	<b>151.12</b>
Electricity plants	x	-	-	-	-	2.38	1.08	-	-	-	3.45
CHP plants	134.70	-	2.72	4.79	-	-	-	5.46	-	-	147.67
<b>Heat generated - PJ</b>	<b>274.96</b>	-	<b>4.32</b>	<b>19.76</b>	-	-	-	<b>13.18</b>	-	-	<b>312.21</b>
CHP plants	171.81	-	3.20	10.82	-	-	-	11.53	-	-	197.37
Heat plants	103.15	-	1.12	8.94	-	-	-	1.64	-	-	114.84

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.



## Poland : 2010

Million tonnes of oil equivalent

<b>SUPPLY AND CONSUMPTION</b>	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	55.38	0.74	-	3.69	-	0.25	0.16	7.16	-	-	67.39
Imports	8.27	23.69	5.44	8.91	-	-	-	0.45	0.54	-	47.29
Exports	-11.01	-0.21	-3.27	-0.04	-	-	-	-0.01	-0.66	-	-15.20
Intl. marine bunkers	-	-	-0.21	-	-	-	-	-	-	-	-0.21
Intl. aviation bunkers	-	-	-0.51	-	-	-	-	-	-	-	-0.51
Stock changes	2.76	-0.33	0.04	0.24	-	-	-	-0.00	-	-	2.70
<b>TPES</b>	<b>55.40</b>	<b>23.89</b>	<b>1.48</b>	<b>12.80</b>	-	<b>0.25</b>	<b>0.16</b>	<b>7.59</b>	<b>-0.12</b>	-	<b>101.45</b>
Transfers	-	0.05	-0.03	-	-	-	-	-	-	-	0.02
Statistical differences	-1.27	0.01	0.03	0.16	-	-	-	0.00	-	-	-1.07
Electricity plants	-	-	-	-	-	-0.25	-0.14	-	0.39	-	-
CHP plants	-34.78	-	-0.55	-0.97	-	-	-	-1.76	13.12	5.01	-19.95
Heat plants	-3.52	-	-0.04	-0.28	-	-	-	-0.05	-	3.21	-0.68
Blast furnaces	-0.71	-	-	-	-	-	-	-	-	-	-0.71
Gas works	0.00	-	-0.00	-	-	-	-	-	-	-	-0.00
Coke/pat. fuel/BKB plants	-0.81	-	-	-	-	-	-	-	-	-	-0.81
Oil refineries	-	-24.39	23.80	-	-	-	-	-	-	-	-0.59
Petrochemical plants	-	0.45	-0.47	-	-	-	-	-	-	-	-0.02
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-0.31	-	-	-	-	-	-	-0.31
Energy industry own use	-1.01	-	-1.33	-0.66	-	-	-	-0.01	-2.18	-1.25	-6.44
Losses	-0.04	-	-	-0.15	-	-	-	-	-1.02	-	-1.21
<b>TFC</b>	<b>13.26</b>	-	<b>22.89</b>	<b>10.59</b>	-	-	<b>0.02</b>	<b>5.78</b>	<b>10.19</b>	<b>6.97</b>	<b>69.69</b>
<b>INDUSTRY</b>	<b>3.91</b>	-	<b>1.13</b>	<b>3.11</b>	-	-	-	<b>1.48</b>	<b>3.60</b>	<b>1.41</b>	<b>14.64</b>
Iron and steel	0.63	-	0.00	0.40	-	-	-	0.00	0.51	0.14	1.69
Chemical and petrochem.	1.22	-	0.53	0.29	-	-	-	0.20	0.65	0.72	3.60
Non-ferrous metals	0.14	-	0.02	0.14	-	-	-	0.02	0.15	0.06	0.53
Non-metallic minerals	0.77	-	0.14	1.02	-	-	-	0.37	0.38	0.04	2.72
Transport equipment	0.02	-	0.01	0.10	-	-	-	0.00	0.15	0.07	0.36
Machinery	0.06	-	0.03	0.20	-	-	-	0.00	0.31	0.10	0.70
Mining and quarrying	0.01	-	0.07	0.04	-	-	-	-	0.18	0.07	0.37
Food and tobacco	0.63	-	0.12	0.52	-	-	-	0.01	0.44	0.06	1.78
Paper, pulp and printing	0.24	-	0.05	0.12	-	-	-	0.46	0.31	0.08	1.26
Wood and wood products	0.09	-	0.03	0.10	-	-	-	0.36	0.16	0.01	0.75
Construction	0.01	-	0.10	0.04	-	-	-	0.00	0.07	0.01	0.24
Textile and leather	0.02	-	0.01	0.05	-	-	-	-	0.05	0.01	0.14
Non-specified	0.06	-	0.03	0.09	-	-	-	0.05	0.24	0.03	0.50
<b>TRANSPORT</b>	-	-	<b>15.55</b>	<b>0.22</b>	-	-	-	<b>0.89</b>	<b>0.27</b>	-	<b>16.93</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	15.44	-	-	-	-	0.89	-	-	16.33
Rail	-	-	0.11	-	-	-	-	-	0.24	-	0.36
Pipeline transport	-	-	0.00	0.22	-	-	-	-	0.03	-	0.25
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>9.28</b>	-	<b>3.14</b>	<b>5.61</b>	-	-	<b>0.02</b>	<b>3.41</b>	<b>6.32</b>	<b>5.56</b>	<b>33.34</b>
Residential	7.05	-	0.59	3.54	-	-	0.01	2.69	2.46	4.66	21.00
Comm. and public services	0.96	-	0.75	2.03	-	-	0.01	0.21	3.72	0.88	8.55
Agriculture/forestry	1.27	-	1.80	0.04	-	-	-	0.50	0.14	0.03	3.78
Fishing	-	-	0.00	-	-	-	-	-	-	-	0.00
Non-specified	-	-	0.00	-	-	-	-	-	-	-	0.00
<b>NON-ENERGY USE</b>	<b>0.07</b>	-	<b>3.05</b>	<b>1.65</b>	-	-	-	-	-	-	<b>4.77</b>
in industry/transf./energy	0.07	-	2.82	1.65	-	-	-	-	-	-	4.54
of which: feedstocks	-	-	1.30	1.65	-	-	-	-	-	-	2.95
in transport	-	-	0.12	-	-	-	-	-	-	-	0.12
in other	-	-	0.11	-	-	-	-	-	-	-	0.11
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>138.27</b>	-	<b>2.89</b>	<b>4.80</b>	-	<b>2.92</b>	<b>1.66</b>	<b>6.55</b>	-	-	<b>157.09</b>
Electricity plants	x	-	-	-	-	2.92	1.66	-	-	-	4.58
CHP plants	138.27	-	2.89	4.80	-	-	-	6.55	-	-	152.51
<b>Heat generated - PJ</b>	<b>301.17</b>	-	<b>6.57</b>	<b>21.56</b>	-	-	-	<b>14.71</b>	-	-	<b>344.00</b>
CHP plants	179.57	-	5.23	11.87	-	-	-	13.02	-	-	209.69
Heat plants	121.59	-	1.34	9.69	-	-	-	1.69	-	-	134.31

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Poland

## Estimated energy supply balance for 2011

Million tonnes of oil equivalent											
SUPPLY	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	56.46	0.68	-	3.85	-	0.20	0.25	7.79	-	-	69.22
Imports	8.74	24.74	5.70	9.66	-	-	-	0.54	0.58	-	49.97
Exports	-9.11	-0.30	-4.24	-0.02	-	-	-	-0.03	-1.03	-	-14.74
Intl. marine bunkers	-	-	-0.14	-	-	-	-	-	-	-	-0.14
Intl. aviation bunkers	-	-	-0.48	-	-	-	-	-	-	-	-0.48
Stock changes	-0.70	0.06	0.09	-0.65	-	-	-	-0.00	-	-	-1.21
<b>TPES</b>	<b>55.39</b>	<b>25.18</b>	<b>0.93</b>	<b>12.83</b>	<b>-</b>	<b>0.20</b>	<b>0.25</b>	<b>8.30</b>	<b>-0.45</b>	<b>-</b>	<b>102.62</b>
Electricity and Heat Output											
Elec. generated - TWh	141.40	-	2.47	5.81	-	2.33	2.69	7.91	-	-	162.61
Heat generated - PJ	263.98	-	5.56	18.18	-	-	-	16.59	-	-	304.30

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1960	1971	1980	1990	2000	2009	2010	2011e
Energy production (Mtoe)	64.8	99.3	126.6	103.9	79.6	67.5	67.4	69.2
Net imports (Mtoe)	-10.8	-10.7	1.5	0.9	9.6	30.2	32.1	35.2
Total primary energy supply (Mtoe)	54.2	86.1	126.6	103.1	89.1	94.0	101.5	102.6
Net oil imports (Mtoe)	2.0	8.8	17.7	14.3	19.8	24.7	25.6	25.9
Oil supply (Mtoe)	2.1	8.3	16.7	13.0	19.2	24.0	25.4	26.1
Electricity consumption (TWh)*	26.8	64.1	109.4	124.7	124.6	137.0	144.5	146.0
GDP (billion 2005 USD)	83.4 e	136.0 e	181.4 e	180.1	261.1	368.2	382.8	399.4
GDP PPP (billion 2005 USD)	144.4 e	235.4 e	314.0 e	311.8	452.0	637.4	662.6	691.4
Population (millions)	29.56 e	32.80	35.58	38.03	38.26	38.15	38.19	38.15
Industrial production index (2005=100)	..	..	..	47.30	76.80	121.00	134.40	143.60
Total self-sufficiency**	1.1962	1.1524	1.0002	1.0074	0.8930	0.7184	0.6642	0.6746
Coal and peat self-sufficiency**	1.2524	1.3142	1.2058	1.2548	1.2664	1.1034	0.9997	1.0194
Oil self-sufficiency**	0.0934	0.0475	0.0202	0.0134	0.0374	0.0290	0.0293	0.0261
Natural gas self-sufficiency**	0.7051	0.7939	0.5179	0.2661	0.3327	0.3049	0.2884	0.2999
TPES/GDP (toe per thousand 2005 USD)	0.6494 e	0.6334 e	0.6981 e	0.5724	0.3413	0.2552	0.2651	0.2569
TPES/GDP PPP (toe per thousand 2005 USD)	0.3751 e	0.3659 e	0.4033 e	0.3306	0.1972	0.1474	0.1531	0.1484
TPES/population (toe per capita)	1.8327 e	2.6257	3.5589	2.7111	2.3295	2.4634	2.6568	2.6899
Net oil imports/GDP (toe per thousand 2005 USD)	0.0240 e	0.0644 e	0.0978 e	0.0794	0.0759	0.0671	0.0670	0.0649
Oil supply/GDP (toe per thousand 2005 USD)	0.0250 e	0.0613 e	0.0918 e	0.0724	0.0734	0.0652	0.0663	0.0654
Oil supply/population (toe per capita)	0.0705 e	0.2541	0.4680	0.3428	0.5007	0.6295	0.6643	0.6845
Elect. cons./GDP (kWh per 2005 USD)	0.3213 e	0.4716 e	0.6034 e	0.6923	0.4771	0.3720	0.3774	0.3654
Elect. cons./population (kWh per capita)	907 e	1955	3076	3279	3256	3591	3783	3826
Industry cons.***/industrial production (2005=100)	..	..	..	286.86	139.55	75.80	71.33	..
Industry oil cons.***/industrial production (2005=100)	..	..	..	169.25	134.83	88.67	79.00	..

\* Electricity consumption equals domestic supply less losses.

\*\* Production divided by TPES.

\*\*\* Includes non-energy use.

Poland

Figure 1. Energy production

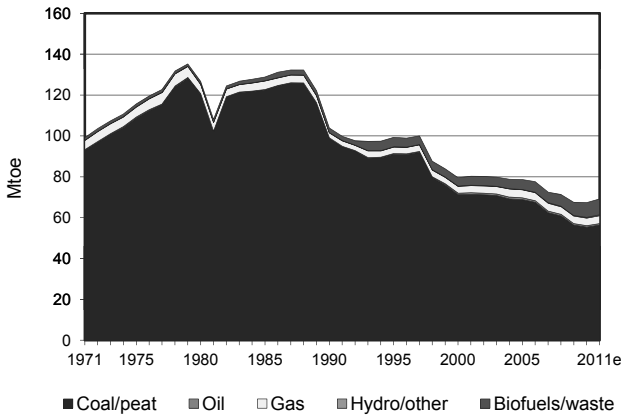


Figure 2. Total primary energy supply\*

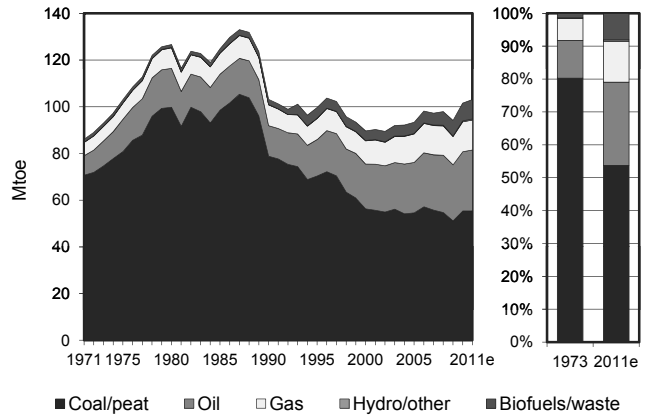


Figure 3. Energy self-sufficiency

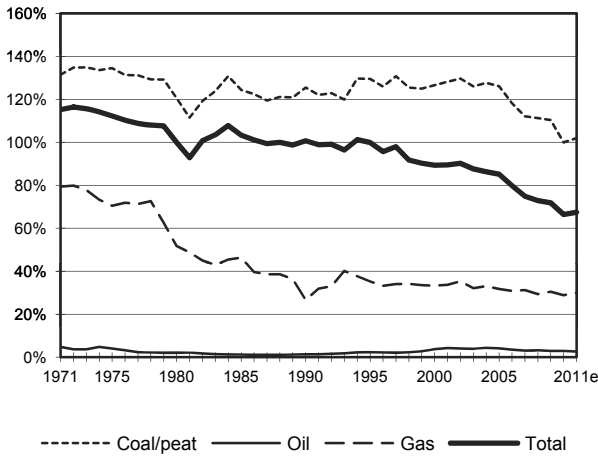


Figure 4. Breakdown of sectorial final consumption by source in 1973 and 2010\*\*

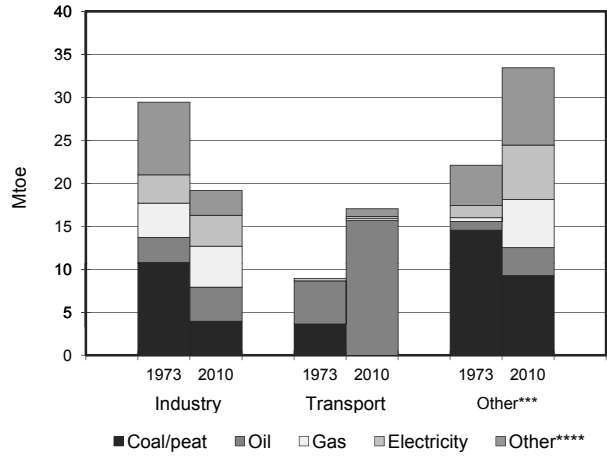


Figure 5. Electricity generation by fuel

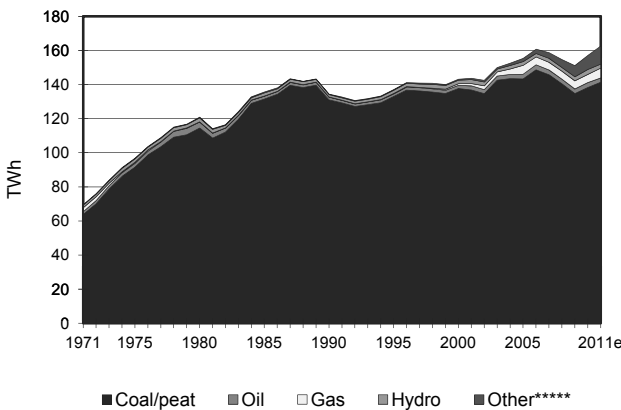
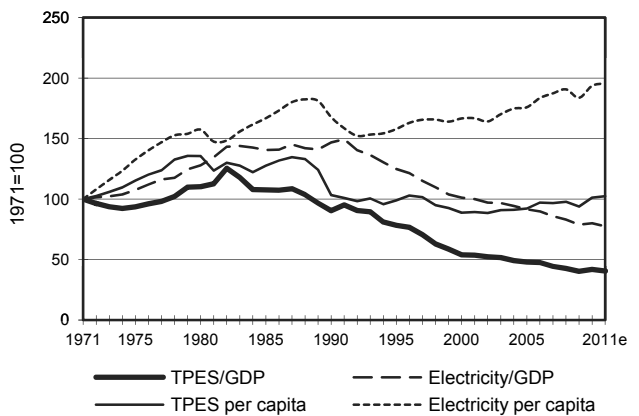


Figure 6. Selected indicators



\* Excluding electricity trade.  
 \*\* Includes non-energy use.  
 \*\*\* Includes residential, commercial and public services, agriculture/forestry, fishing and non-specified.  
 \*\*\*\* Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.  
 \*\*\*\*\* Includes geothermal, solar, wind, biofuels and waste, etc.

## Portugal : 2009

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	-	-	-	-	-	0.71	0.88	3.35	-	-	4.94
Imports	3.10	10.98	4.27	4.27	-	-	-	0.01	0.65	-	23.27
Exports	-0.04	-	-2.33	-	-	-	-	-0.00	-0.24	-	-2.61
Intl. marine bunkers	-	-	-0.47	-	-	-	-	-	-	-	-0.47
Intl. aviation bunkers	-	-	-0.82	-	-	-	-	-	-	-	-0.82
Stock changes	-0.19	0.08	0.02	-0.05	-	-	-	-0.02	-	-	-0.16
<b>TPES</b>	<b>2.86</b>	<b>11.06</b>	<b>0.67</b>	<b>4.22</b>	-	<b>0.71</b>	<b>0.88</b>	<b>3.34</b>	<b>0.41</b>	-	<b>24.15</b>
Transfers	-	0.04	-0.04	-	-	-	-	-	-	-	0.00
Statistical differences	-0.01	0.01	0.06	-0.08	-	-	-	0.00	-	-	-0.02
Electricity plants	-2.83	-	-0.34	-1.82	-	-0.71	-0.83	-0.34	3.73	-	-3.15
CHP plants	-	-	-0.42	-0.75	-	-	-	-0.20	0.53	0.38	-0.45
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-11.10	10.96	-	-	-	-	-	-	-	-0.14
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-	-	-0.71	-0.09	-	-	-	-	-0.22	-0.07	-1.10
Losses	-	-	-0.00	-0.03	-	-	-	-	-0.33	-	-0.36
<b>TFC</b>	<b>0.02</b>	-	<b>10.19</b>	<b>1.44</b>	-	-	<b>0.05</b>	<b>2.80</b>	<b>4.12</b>	<b>0.31</b>	<b>18.93</b>
<b>INDUSTRY</b>	<b>0.02</b>	-	<b>1.15</b>	<b>0.95</b>	-	-	-	<b>1.42</b>	<b>1.39</b>	<b>0.30</b>	<b>5.24</b>
Iron and steel	0.00	-	0.00	0.04	-	-	-	-	0.09	-	0.14
Chemical and petrochem.	0.01	-	0.07	0.13	-	-	-	0.04	0.19	0.12	0.55
Non-ferrous metals	-	-	0.00	0.01	-	-	-	0.01	0.01	-	0.03
Non-metallic minerals	0.01	-	0.52	0.41	-	-	-	0.39	0.18	0.01	1.51
Transport equipment	-	-	0.01	0.01	-	-	-	-	0.04	-	0.06
Machinery	-	-	0.02	0.04	-	-	-	0.00	0.11	-	0.17
Mining and quarrying	-	-	0.05	0.01	-	-	-	-	0.04	0.03	0.14
Food and tobacco	-	-	0.15	0.09	-	-	-	0.10	0.16	0.04	0.53
Paper, pulp and printing	-	-	0.04	0.08	-	-	-	0.80	0.23	0.06	1.21
Wood and wood products	-	-	0.03	0.01	-	-	-	0.03	0.05	0.01	0.12
Construction	-	-	0.17	0.01	-	-	-	-	0.06	-	0.24
Textile and leather	-	-	0.06	0.11	-	-	-	0.06	0.11	0.04	0.39
Non-specified	-	-	0.02	0.01	-	-	-	0.00	0.13	-	0.16
<b>TRANSPORT</b>	-	-	<b>6.21</b>	<b>0.01</b>	-	-	-	<b>0.22</b>	<b>0.04</b>	-	<b>6.49</b>
Domestic aviation	-	-	0.14	-	-	-	-	-	-	-	0.14
Road	-	-	5.85	0.01	-	-	-	0.22 e	-	-	6.09
Rail	-	-	0.02	-	-	-	-	-	0.04	-	0.06
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	0.20	-	-	-	-	-	-	-	0.20
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	-	-	<b>1.30</b>	<b>0.47</b>	-	-	<b>0.05</b>	<b>1.16</b>	<b>2.68</b>	<b>0.01</b>	<b>5.68</b>
Residential	-	-	0.53	0.26	-	-	0.02	1.16	1.22	0.00	3.20
Comm. and public services	-	-	0.44	0.20	-	-	0.03	-	1.37	0.01	2.05
Agriculture/forestry	-	-	0.26	0.01	-	-	-	-	0.08	0.00	0.35
Fishing	-	-	0.07	0.00	-	-	-	-	0.00	-	0.08
Non-specified	-	-	-	-	-	-	-	0.00	-	-	0.00
<b>NON-ENERGY USE</b>	-	-	<b>1.52</b>	-	-	-	-	-	-	-	<b>1.52</b>
in industry/transf./energy	-	-	1.47	-	-	-	-	-	-	-	1.47
of which: feedstocks	-	-	1.02	-	-	-	-	-	-	-	1.02
in transport	-	-	0.04	-	-	-	-	-	-	-	0.04
in other	-	-	0.01	-	-	-	-	-	-	-	0.01
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>12.90</b>	-	<b>3.29</b>	<b>14.71</b>	-	<b>8.28</b>	<b>7.92</b>	<b>2.39</b>	-	-	<b>49.48</b>
Electricity plants	12.90	-	1.46	11.78	-	8.28	7.92	1.00	-	-	43.35
CHP plants	-	-	1.82	2.93	-	-	-	1.38	-	-	6.14
<b>Heat generated - PJ</b>	-	-	<b>4.75</b>	<b>11.31</b>	-	-	-	-	-	-	<b>16.06</b>
CHP plants	-	-	4.75	11.31	-	-	-	-	-	-	16.06
Heat plants	-	-	-	-	-	-	-	-	-	-	-

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Portugal : 2010

Million tonnes of oil equivalent											
<b>SUPPLY AND CONSUMPTION</b>	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	-	-	-	-	-	1.39	1.06	3.14	-	0.00	5.58
Imports	1.70	12.00	3.54	4.50	-	-	-	0.05	0.50	-	22.29
Exports	-0.07	-	-2.86	-	-	-	-	-0.25	-0.27	-	-3.46
Intl. marine bunkers	-	-	-0.46	-	-	-	-	-	-	-	-0.46
Intl. aviation bunkers	-	-	-0.89	-	-	-	-	-	-	-	-0.89
Stock changes	0.03	0.09	0.12	-0.02	-	-	-	0.25	-	-	0.47
<b>TPES</b>	<b>1.66</b>	<b>12.09</b>	<b>-0.54</b>	<b>4.49</b>	<b>-</b>	<b>1.39</b>	<b>1.06</b>	<b>3.18</b>	<b>0.23</b>	<b>0.00</b>	<b>23.54</b>
Transfers	-	0.05	-0.04	-	-	-	-	-	-	-	0.00
Statistical differences	-0.01	-	0.02	0.00	-	-	-	-0.00	-	-	0.01
Electricity plants	-1.60	-	-0.28	-1.73	-	-1.39	-0.99	-0.46	4.00	-0.00	-2.45
CHP plants	-	-	-0.32	-1.04	-	-	-	-0.20	0.62	0.50	-0.44
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-12.14	11.97	-	-	-	-	-	-	-	-0.16
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-	-	-0.68	-0.12	-	-	-	-	-0.18	-0.17	-1.15
Losses	-	-	-	-0.01	-	-	-	-	-0.37	-	-0.38
<b>TFC</b>	<b>0.05</b>	<b>-</b>	<b>10.12</b>	<b>1.58</b>	<b>-</b>	<b>-</b>	<b>0.07</b>	<b>2.52</b>	<b>4.29</b>	<b>0.34</b>	<b>18.96</b>
<b>INDUSTRY</b>	<b>0.05</b>	<b>-</b>	<b>1.06</b>	<b>1.02</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.48</b>	<b>1.50</b>	<b>0.32</b>	<b>5.42</b>
Iron and steel	0.00	-	0.00	0.04	-	-	-	-	0.09	-	0.14
Chemical and petrochem.	0.01	-	0.07	0.13	-	-	-	0.04	0.21	0.11	0.58
Non-ferrous metals	-	-	0.00	0.01	-	-	-	0.01	0.01	-	0.03
Non-metallic minerals	0.03	-	0.48	0.46	-	-	-	0.42	0.19	0.01	1.59
Transport equipment	-	-	0.02	0.01	-	-	-	-	0.04	-	0.07
Machinery	-	-	0.01	0.03	-	-	-	0.00	0.12	-	0.16
Mining and quarrying	-	-	0.04	0.01	-	-	-	-	0.05	0.02	0.13
Food and tobacco	-	-	0.16	0.08	-	-	-	0.11	0.16	0.04	0.55
Paper, pulp and printing	-	-	0.02	0.08	-	-	-	0.82	0.26	0.08	1.27
Wood and wood products	-	-	0.01	0.02	-	-	-	0.02	0.05	0.01	0.10
Construction	-	-	0.19	0.01	-	-	-	-	0.05	-	0.25
Textile and leather	-	-	0.03	0.12	-	-	-	0.06	0.13	0.04	0.37
Non-specified	-	-	0.02	0.03	-	-	-	0.00	0.14	-	0.19
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>6.06</b>	<b>0.01</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.32</b>	<b>0.04</b>	<b>-</b>	<b>6.44</b>
Domestic aviation	-	-	0.16	-	-	-	-	-	-	-	0.16
Road	-	-	5.77	0.01	-	-	-	0.32	-	-	6.10
Rail	-	-	0.02	-	-	-	-	-	0.04	-	0.06
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	0.12	-	-	-	-	-	-	-	0.12
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>-</b>	<b>-</b>	<b>1.29</b>	<b>0.55</b>	<b>-</b>	<b>-</b>	<b>0.07</b>	<b>0.72</b>	<b>2.75</b>	<b>0.02</b>	<b>5.39</b>
Residential	-	-	0.57	0.30	-	-	0.03	0.71	1.25	0.01	2.87
Comm. and public services	-	-	0.36	0.25	-	-	0.03	-	1.41	0.01	2.06
Agriculture/forestry	-	-	0.26	0.00	-	-	-	-	0.08	0.00	0.34
Fishing	-	-	0.11	0.00	-	-	-	-	0.01	-	0.12
Non-specified	-	-	-	-	-	-	-	0.00	-	-	0.00
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>1.71</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.71</b>
in industry/transf./energy	-	-	1.66	-	-	-	-	-	-	-	1.66
of which: feedstocks	-	-	1.32	-	-	-	-	-	-	-	1.32
in transport	-	-	0.04	-	-	-	-	-	-	-	0.04
in other	-	-	0.01	-	-	-	-	-	-	-	0.01
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>7.10</b>	<b>-</b>	<b>3.01</b>	<b>14.90</b>	<b>-</b>	<b>16.15</b>	<b>9.59</b>	<b>2.94</b>	<b>-</b>	<b>0.00</b>	<b>53.69</b>
Electricity plants	7.10	-	1.30	11.02	-	16.15	9.59	1.37	-	-	46.53
CHP plants	-	-	1.71	3.88	-	-	-	1.58	-	0.00	7.17
<b>Heat generated - PJ</b>	<b>-</b>	<b>-</b>	<b>2.86</b>	<b>18.21</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.03</b>	<b>21.11</b>
CHP plants	-	-	2.86	18.21	-	-	-	-	-	0.03	21.11
Heat plants	-	-	-	-	-	-	-	-	-	-	-

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Portugal

## Estimated energy supply balance for 2011

Million tonnes of oil equivalent											
SUPPLY	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	-	-	-	-	-	0.99	1.04	3.24	-	-	5.28
Imports	2.30	11.28	3.78	4.53	-	-	-	0.02	0.58	-	22.50
Exports	-0.10	-	-2.88	-	-	-	-	-0.25	-0.34	-	-3.57
Intl. marine bunkers	-	-	-0.57	-	-	-	-	-	-	-	-0.57
Intl. aviation bunkers	-	-	-0.91	-	-	-	-	-	-	-	-0.91
Stock changes	0.06	-0.04	0.26	-0.07	-	-	-	0.20	-	-	0.41
<b>TPES</b>	<b>2.26</b>	<b>11.24</b>	<b>-0.32</b>	<b>4.46</b>	<b>-</b>	<b>0.99</b>	<b>1.04</b>	<b>3.22</b>	<b>0.24</b>	<b>-</b>	<b>23.15</b>
Electricity and Heat Output											
Elec. generated - TWh	9.85	-	2.72	14.85	-	11.55	9.56	3.24	-	-	51.76
Heat generated - PJ	-	-	2.50	17.73	-	-	-	-	-	-	20.23

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1960	1971	1980	1990	2000	2009	2010	2011e
Energy production (Mtoe)	1.3	1.4	1.5	3.4	3.9	4.9	5.6	5.3
Net imports (Mtoe)	2.0	5.7	9.9	14.9	22.1	20.7	18.8	18.9
Total primary energy supply (Mtoe)	3.0	6.3	10.0	16.7	24.7	24.2	23.5	23.2
Net oil imports (Mtoe)	1.8	5.4	9.4	11.9	16.0	12.9	12.7	12.2
Oil supply (Mtoe)	1.5	4.5	8.0	10.7	14.9	11.7	11.6	10.9
Electricity consumption (TWh)*	2.8	7.2	15.2	25.4	41.1	51.2	52.4	50.9
GDP (billion 2005 USD)	33.9 e	67.0	99.8	137.4	184.1	193.4	196.1	193.0
GDP PPP (billion 2005 USD)	39.8 e	78.7	117.3	161.5	216.3	227.3	230.5	226.8
Population (millions)	9.23 e	8.73	9.86	10.00	10.23	10.63	10.64	10.66
Industrial production index (2005=100)	19.20	33.60	58.60	93.30	107.10	90.60	92.10	90.20
Total self-sufficiency**	0.4243	0.2206	0.1483	0.2027	0.1559	0.2046	0.2371	0.2280
Coal and peat self-sufficiency**	0.5277	0.2608	0.1707	0.0418	-	-	-	-
Oil self-sufficiency**	..	..	-	-	-	-	-	-
Natural gas self-sufficiency**	..	..	-	-	-	-	-	-
TPES/GDP (toe per thousand 2005 USD)	0.0880 e	0.0937	0.1001	0.1218	0.1340	0.1249	0.1200	0.1199
TPES/GDP PPP (toe per thousand 2005 USD)	0.0749 e	0.0797	0.0851	0.1036	0.1141	0.1063	0.1021	0.1021
TPES/population (toe per capita)	0.3235 e	0.7190	1.0125	1.6748	2.4128	2.2716	2.2131	2.1722
Net oil imports/GDP (toe per thousand 2005 USD)	0.0521 e	0.0807	0.0945	0.0867	0.0870	0.0668	0.0647	0.0631
Oil supply/GDP (toe per thousand 2005 USD)	0.0430 e	0.0664	0.0801	0.0779	0.0810	0.0606	0.0589	0.0566
Oil supply/population (toe per capita)	0.1579 e	0.5094	0.8107	1.0706	1.4579	1.1030	1.0856	1.0247
Elect. cons./GDP (kWh per 2005 USD)	0.0837 e	0.1078	0.1525	0.1846	0.2230	0.2647	0.2673	0.2636
Elect. cons./population (kWh per capita)	307 e	827	1543	2539	4014	4815	4929	4774
Industry cons.***/industrial production (2005=100)	69.55	86.87	80.25	88.99	97.95	92.47	96.02	..
Industry oil cons.***/industrial production (2005=100)	47.78	106.98	111.87	105.23	109.64	74.73	76.17	..

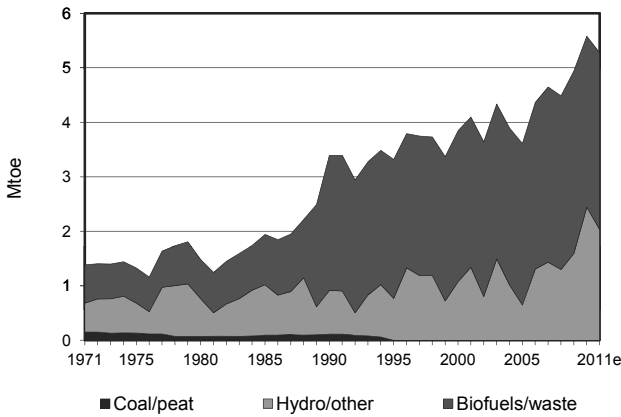
\* Electricity consumption equals domestic supply less losses.

\*\* Production divided by TPES.

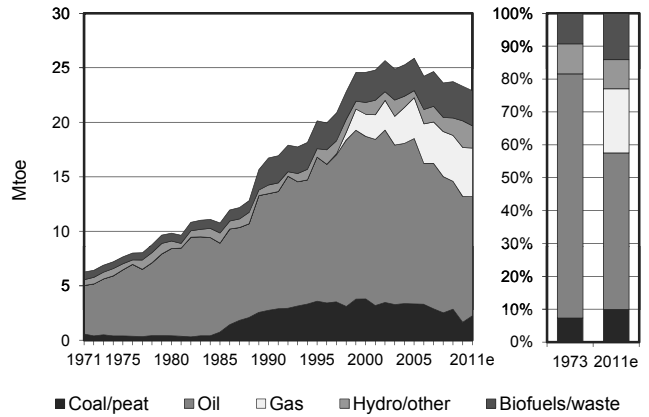
\*\*\* Includes non-energy use.

## Portugal

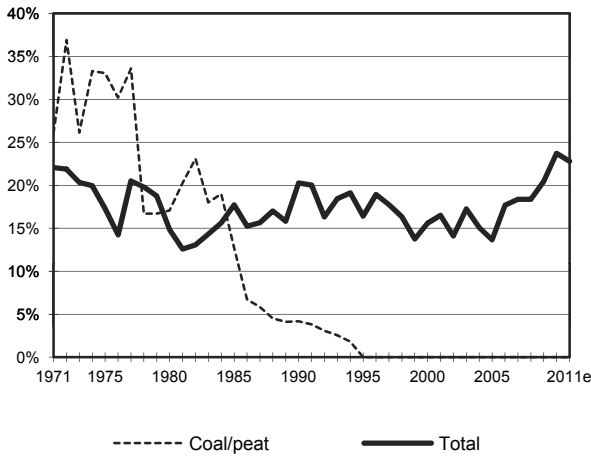
**Figure 1. Energy production**



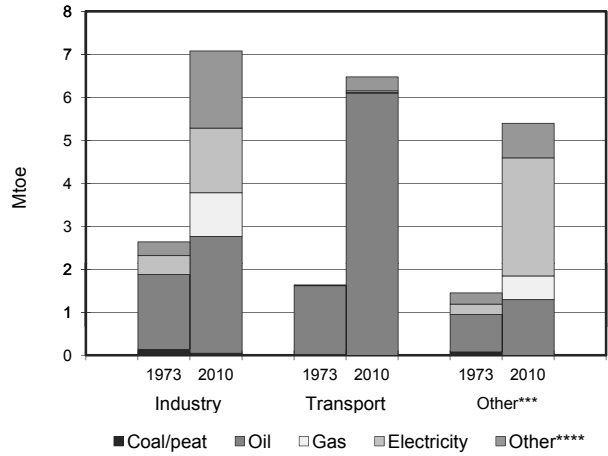
**Figure 2. Total primary energy supply\***



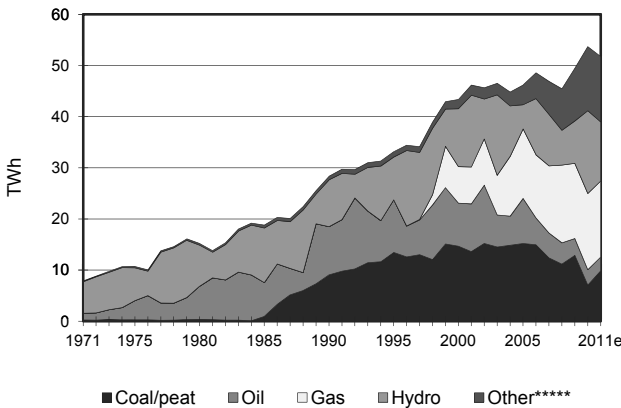
**Figure 3. Energy self-sufficiency**



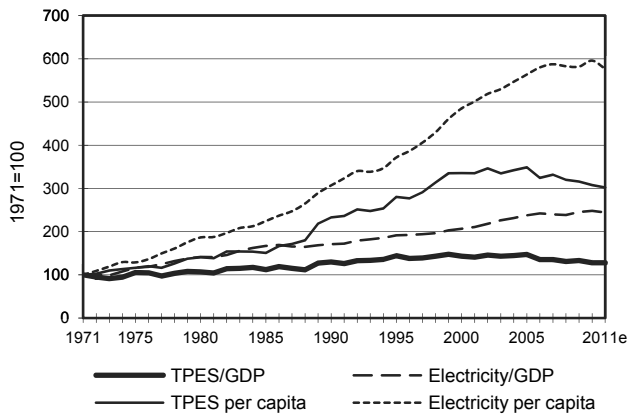
**Figure 4. Breakdown of sectorial final consumption by source in 1973 and 2010\*\***



**Figure 5. Electricity generation by fuel**



**Figure 6. Selected indicators**



\* Excluding electricity trade.  
 \*\* Includes non-energy use.  
 \*\*\* Includes residential, commercial and public services, agriculture/forestry, fishing and non-specified.  
 \*\*\*\* Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.  
 \*\*\*\*\* Includes geothermal, solar, wind, biofuels and waste, etc.

## Slovak Republic : 2009

Million tonnes of oil equivalent											
<b>SUPPLY AND CONSUMPTION</b>	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	0.65	0.20	-	0.09	3.72	0.38	0.01	0.88	-	-	5.94
Imports	3.37	5.73	1.28	4.82	-	-	-	0.05	0.77	-	16.02
Exports	-0.16	-0.02	-3.88	-0.01	-	-	-	-0.05	-0.66	-	-4.78
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-0.05	-	-	-	-	-	-	-	-0.05
Stock changes	0.00	-0.00	0.06	-0.47	-	-	-	-0.01	-	-	-0.42
<b>TPES</b>	<b>3.87</b>	<b>5.91</b>	<b>-2.58</b>	<b>4.42</b>	<b>3.72</b>	<b>0.38</b>	<b>0.01</b>	<b>0.88</b>	<b>0.11</b>	<b>-</b>	<b>16.72</b>
Transfers	-	0.15	-0.15	-	-	-	-	-	-	-	0.01
Statistical differences	-0.04	-0.00	-	-	-	-	-	0.00	-	-0.00	-0.04
Electricity plants	-0.22	-	-0.00	-0.08	-1.11	-0.38	-0.00	-0.00	0.84	-	-0.94
CHP plants	-1.06	-	-0.26	-0.40	-2.61	-	-	-0.18	1.39	0.60	-2.52
Heat plants	-0.01	-	-	-0.40	-	-	-0.01	-0.05	-0.00	0.41	-0.05
Blast furnaces	-0.76	-	-	-	-	-	-	-	-	-	-0.76
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB plants	-0.03	-	-	-	-	-	-	-	-	-	-0.03
Oil refineries	-	-6.42	6.54	-	-	-	-	-	-	-	0.11
Petrochemical plants	-	0.22	-0.23	-	-	-	-	-	-	-	-0.00
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	0.14	-	-0.16	-	-	-	-	-	-	-0.03
Energy industry own use	-0.32	-	-0.52	-0.15	-	-	-	-	-0.29	-0.11	-1.40
Losses	-0.04	-	-0.00	..	-	-	-	-0.00	-0.07	-0.13	-0.24
<b>TFC</b>	<b>1.39</b>	<b>-</b>	<b>2.80</b>	<b>3.24</b>	<b>-</b>	<b>-</b>	<b>0.00</b>	<b>0.65</b>	<b>1.99</b>	<b>0.77</b>	<b>10.83</b>
<b>INDUSTRY</b>	<b>0.81</b>	<b>-</b>	<b>0.14</b>	<b>0.76</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.41</b>	<b>0.93</b>	<b>0.08</b>	<b>3.12</b>
Iron and steel	0.57	-	-	0.13	-	-	-	0.00	0.16	-	0.86
Chemical and petrochem.	-	-	0.05	0.11	-	-	-	0.02	0.12	0.05	0.35
Non-ferrous metals	0.00	-	-	0.03	-	-	-	-	0.19	-	0.22
Non-metallic minerals	0.14	-	0.05	0.13	-	-	-	0.00	0.06	0.01	0.37
Transport equipment	-	-	0.00	0.06	-	-	-	-	0.05	0.00	0.12
Machinery	0.00	-	0.00	0.05	-	-	-	0.01	0.08	-	0.15
Mining and quarrying	-	-	0.00	0.00	-	-	-	0.00	0.00	-	0.01
Food and tobacco	0.00	-	-	0.09	-	-	-	0.00	0.04	0.00	0.14
Paper, pulp and printing	0.09	-	0.01	0.08	-	-	-	0.33	0.10	0.02	0.63
Wood and wood products	-	-	-	0.01	-	-	-	0.04	0.02	0.00	0.07
Construction	-	-	0.01	0.02	-	-	-	0.00	0.02	0.00	0.05
Textile and leather	-	-	-	0.02	-	-	-	0.00	0.01	0.00	0.03
Non-specified	0.00	-	0.01	0.03	-	-	-	0.01	0.06	-	0.12
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>1.67</b>	<b>0.41</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.17</b>	<b>0.04</b>	<b>-</b>	<b>2.29</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	1.67	-	-	-	-	0.17	-	-	1.83
Rail	-	-	-	-	-	-	-	-	0.04	-	0.04
Pipeline transport	-	-	-	0.41	-	-	-	-	-	-	0.41
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	0.00	0.01	-	-	-	-	0.01	-	0.02
<b>OTHER</b>	<b>0.54</b>	<b>-</b>	<b>0.10</b>	<b>1.81</b>	<b>-</b>	<b>-</b>	<b>0.00</b>	<b>0.07</b>	<b>1.02</b>	<b>0.69</b>	<b>4.22</b>
Residential	0.05	-	0.02	1.21	-	-	-	0.04	0.38	0.46	2.15
Comm. and public services	0.49	-	0.02	0.57	-	-	0.00	0.02	0.61	0.22	1.94
Agriculture/forestry	0.00	-	0.07	0.03	-	-	0.00	0.00	0.03	0.00	0.13
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	<b>0.04</b>	<b>-</b>	<b>0.89</b>	<b>0.26</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.20</b>
in industry/transf./energy	0.04	-	0.86	0.26	-	-	-	-	-	-	1.17
<i>of which: feedstocks</i>	-	-	0.67	0.26	-	-	-	-	-	-	0.94
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	0.03	-	-	-	-	-	-	-	0.03
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>4.28</b>	<b>-</b>	<b>0.63</b>	<b>1.97</b>	<b>14.08</b>	<b>4.37</b>	<b>0.05</b>	<b>0.55</b>	<b>-</b>	<b>-</b>	<b>25.92</b>
Electricity plants	0.76	-	0.01	0.38	4.26	4.37	0.01	0.00	-	-	9.78
CHP plants	3.52	-	0.62	1.59	9.82	-	0.04	0.55	-	-	16.14
<b>Heat generated - PJ</b>	<b>9.50</b>	<b>-</b>	<b>5.22</b>	<b>22.24</b>	<b>2.27</b>	<b>-</b>	<b>0.23</b>	<b>2.74</b>	<b>0.00</b>	<b>0.00</b>	<b>42.21</b>
CHP plants	9.34	-	5.21	7.11	2.27	-	-	1.26	-	-	25.19
Heat plants	0.16	-	0.01	15.14	-	-	0.23	1.48	0.00	0.00	17.02

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.



## Slovak Republic : 2010

Million tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	0.61	0.21	-	0.09	3.86	0.45	0.01 e	0.97	-	-	6.20
Imports	3.22	5.48	1.36	5.00	-	-	-	0.04	0.63	-	15.73
Exports	-0.26	-0.01	-3.49	-	-	-	-	-0.05	-0.54	-	-4.36
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-0.04	-	-	-	-	-	-	-	-0.04
Stock changes	0.33	-0.01	0.05	-0.08	-	-	-	0.00	-	-	0.29
<b>TPES</b>	<b>3.90</b>	<b>5.67</b>	<b>-2.13</b>	<b>5.01</b>	<b>3.86</b>	<b>0.45</b>	<b>0.01 e</b>	<b>0.96</b>	<b>0.09</b>	-	<b>17.81</b>
Transfers	-	0.14	-0.13	-	-	-	-	-	-	-	0.01
Statistical differences	-0.05	-0.00	-	-	-	-	-	0.00	-	-0.00	-0.04
Electricity plants	-	-	-0.00	-0.14	-1.17	-0.45	-0.00 e	-0.00	0.89	-	-0.88
CHP plants	-1.27	-	-0.29	-0.42	-2.69	-	-	-0.26	1.47	0.73	-2.74
Heat plants	-0.01	-	-	-0.42	-	-	-0.01	-0.07	-0.00	0.43	-0.06
Blast furnaces	-0.91	-	-	-	-	-	-	-	-	-	-0.91
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB plants	-0.05	-	-	-	-	-	-	-	-	-	-0.05
Oil refineries	-	-6.16	6.25	-	-	-	-	-	-	-	0.09
Petrochemical plants	-	0.21	-0.22	-	-	-	-	-	-	-	-0.00
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	0.13	-	-0.16	-	-	-	-	-	-	-0.03
Energy industry own use	-0.36	-	-0.48	-0.16	-	-	-	-	-0.30	-0.17	-1.48
Losses	-0.07	-	-0.00	..	-	-	-	-0.00	-0.07	-0.14	-0.29
<b>TFC</b>	<b>1.18</b>	-	<b>2.99</b>	<b>3.70</b>	-	-	<b>0.00</b>	<b>0.62</b>	<b>2.08</b>	<b>0.85</b>	<b>11.42</b>
<b>INDUSTRY</b>	<b>0.79</b>	-	<b>0.11</b>	<b>0.89</b>	-	-	-	<b>0.39</b>	<b>0.94</b>	<b>0.11</b>	<b>3.23</b>
Iron and steel	0.66	-	-	0.15	-	-	-	0.00	0.20	-	1.01
Chemical and petrochem.	0.00	-	0.07	0.12	-	-	-	0.01	0.07	0.07	0.34
Non-ferrous metals	0.00	-	-	0.03	-	-	-	-	0.21	-	0.25
Non-metallic minerals	0.12	-	0.02	0.16	-	-	-	0.00	0.06	0.01	0.37
Transport equipment	-	-	0.00	0.06	-	-	-	-	0.06	0.00	0.13
Machinery	0.00	-	0.00	0.07	-	-	-	0.01	0.09	-	0.18
Mining and quarrying	-	-	0.01	0.00	-	-	-	0.00	0.00	0.00	0.01
Food and tobacco	0.00	-	-	0.08	-	-	-	0.00	0.04	0.00	0.12
Paper, pulp and printing	0.01	-	-	0.09	-	-	-	0.32	0.09	0.02	0.53
Wood and wood products	-	-	-	0.01	-	-	-	0.04	0.01	0.00	0.06
Construction	-	-	0.01	0.03	-	-	-	0.00	0.01	0.00	0.05
Textile and leather	-	-	-	0.03	-	-	-	0.00	0.01	0.00	0.04
Non-specified	0.00	-	-	0.05	-	-	-	0.01	0.07	-	0.13
<b>TRANSPORT</b>	-	-	<b>1.97</b>	<b>0.40</b>	-	-	-	<b>0.16</b>	<b>0.05</b>	-	<b>2.58</b>
Domestic aviation	-	-	-	-	-	-	-	-	-	-	-
Road	-	-	1.97	-	-	-	-	0.16	-	-	2.13
Rail	-	-	-	-	-	-	-	-	0.04	-	0.04
Pipeline transport	-	-	-	0.39	-	-	-	-	-	-	0.39
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	0.00	0.01	-	-	-	-	0.01	-	0.02
<b>OTHER</b>	<b>0.33</b>	-	<b>0.10</b>	<b>2.21</b>	-	-	<b>0.00</b>	<b>0.07</b>	<b>1.09</b>	<b>0.74</b>	<b>4.55</b>
Residential	0.05	-	0.01	1.33	-	-	-	0.04	0.38 e	0.49	2.31
Comm. and public services	0.28	-	0.02	0.84	-	-	0.00	0.02	0.69 e	0.25	2.10
Agriculture/forestry	0.00	-	0.07	0.03	-	-	0.00	0.00	0.02	0.00	0.13
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>NON-ENERGY USE</b>	<b>0.05</b>	-	<b>0.82</b>	<b>0.21</b>	-	-	-	-	-	-	<b>1.08</b>
in industry/transf./energy	0.05	-	0.78	0.21	-	-	-	-	-	-	1.04
of which: feedstocks	-	-	0.60	0.21	-	-	-	-	-	-	0.81
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	0.04	-	-	-	-	-	-	-	0.04
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>4.08</b>	-	<b>0.60</b>	<b>2.21</b>	<b>14.57</b>	<b>5.26</b>	<b>0.06 e</b>	<b>0.69</b>	-	-	<b>27.46</b>
Electricity plants	-	-	0.01	0.59	4.47	5.26	0.02 e	0.00	-	-	10.34
CHP plants	4.08	-	0.60	1.62	10.10	-	0.04	0.68	-	-	17.12
<b>Heat generated - PJ</b>	<b>11.77</b>	-	<b>6.38</b>	<b>23.42</b>	<b>2.50</b>	-	<b>0.21</b>	<b>4.30</b>	<b>0.00</b>	<b>0.00</b>	<b>48.58</b>
CHP plants	11.58	-	6.37	7.42	2.50	-	-	2.52	-	-	30.38
Heat plants	0.19	-	0.01	16.00	-	-	0.21	1.78	0.00	0.00	18.20

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Slovak Republic

## Estimated energy supply balance for 2011

Million tonnes of oil equivalent											
SUPPLY	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	0.61	0.18	-	0.10	3.81	0.32	0.01	0.97	-	-0.00	6.00
Imports	3.25	6.03	1.20	4.85	-	-	-	0.04	0.97	-	16.34
Exports	-0.17	-0.02	-3.93	-0.00	-	-	-	-0.03	-0.90	-	-5.05
Intl. marine bunkers	-	-	-	-	-	-	-	-	-	-	-
Intl. aviation bunkers	-	-	-0.05	-	-	-	-	-	-	-	-0.05
Stock changes	0.08	-0.03	-0.02	-0.32	-	-	-	-0.00	-	-	-0.29
<b>TPES</b>	<b>3.78</b>	<b>6.17</b>	<b>-2.80</b>	<b>4.62</b>	<b>3.81</b>	<b>0.32</b>	<b>0.01</b>	<b>0.97</b>	<b>0.06</b>	<b>-0.00</b>	<b>16.94</b>
Electricity and Heat Output											
Elec. generated - TWh	4.08	-	0.60	2.20	14.39	3.68	0.06	0.69	-	-	25.70
Heat generated - PJ	12.32	-	6.68	24.53	2.62	-	0.22	4.50	0.00	0.00	50.87

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1960	1971	1980	1990	2000	2009	2010	2011e
Energy production (Mtoe)	..	2.7	3.5	5.3	6.3	5.9	6.2	6.0
Net imports (Mtoe)	..	11.6	16.2	16.4	11.5	11.3	11.4	11.3
Total primary energy supply (Mtoe)	..	14.3	19.9	21.3	17.7	16.7	17.8	16.9
Net oil imports (Mtoe)	..	4.2	7.5	4.5	2.6	3.1	3.3	3.3
Oil supply (Mtoe)	..	4.4	7.5	4.5	2.8	3.3	3.5	3.4
Electricity consumption (TWh)*	..	12.3	21.7	29.4 e	26.7 e	26.7	28.0	25.9
GDP (billion 2005 USD)	..	23.8 e	30.2 e	34.9 e	37.7	57.7	60.1	62.1
GDP PPP (billion 2005 USD)	..	43.2 e	54.9 e	63.6 e	68.6	104.9	109.3	112.9
Population (millions)	..	4.56	4.98	5.30	5.40	5.42	5.43	5.45
Industrial production index (2005=100)	..	..	..	86.60	77.20	119.10	143.20	153.10
Total self-sufficiency**	..	0.1887	0.1746	0.2478	0.3565	0.3550	0.3482	0.3540
Coal and peat self-sufficiency**	..	0.2114	0.2070	0.1783	0.2384	0.1687	0.1574	0.1622
Oil self-sufficiency**	..	0.0373	0.0059	0.0172	0.0208	0.0611	0.0593	0.0540
Natural gas self-sufficiency**	..	0.3785	0.0738	0.0665	0.0230	0.0198	0.0176	0.0210
TPES/GDP (toe per thousand 2005 USD)	..	0.6002	0.6579 e	0.6104 e	0.4707	0.2901	0.2966	0.2729
TPES/GDP PPP (toe per thousand 2005 USD)	..	0.3299	0.3616 e	0.3355 e	0.2587	0.1595	0.1630	0.1500
TPES/population (toe per capita)	..	3.1275	3.9825	4.0256	3.2851	3.0865	3.2805	3.1109
Net oil imports/GDP (toe per thousand 2005 USD)	..	0.1764	0.2477 e	0.1288 e	0.0699	0.0540	0.0555	0.0529
Oil supply/GDP (toe per thousand 2005 USD)	..	0.1838	0.2484 e	0.1285 e	0.0748	0.0577	0.0590	0.0543
Oil supply/population (toe per capita)	..	0.9579	1.5036	0.8476	0.5222	0.6143	0.6524	0.6187
Elect. cons./GDP (kWh per 2005 USD)	..	0.5174	0.7194 e	0.8406 e	0.7084 e	0.4629	0.4669	0.4180
Elect. cons./population (kWh per capita)	..	2696	4355	5543 e	4945 e	4925	5165	4764
Industry cons.***/industrial production (2005=100)	..	..	..	181.92	131.67	74.32	61.39	..
Industry oil cons.***/industrial production (2005=100)	..	..	..	301.40	173.05	75.70	55.77	..

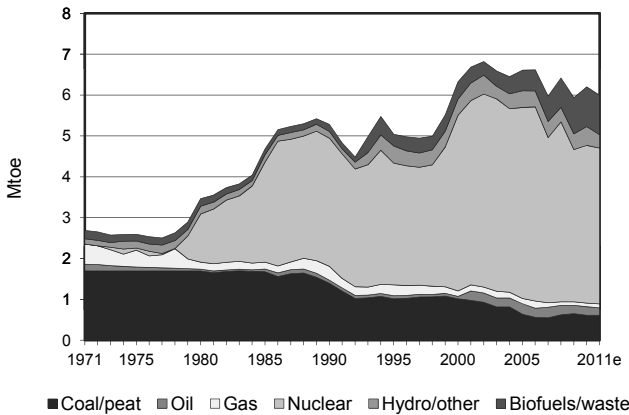
\* Electricity consumption equals domestic supply less losses.

\*\* Production divided by TPES.

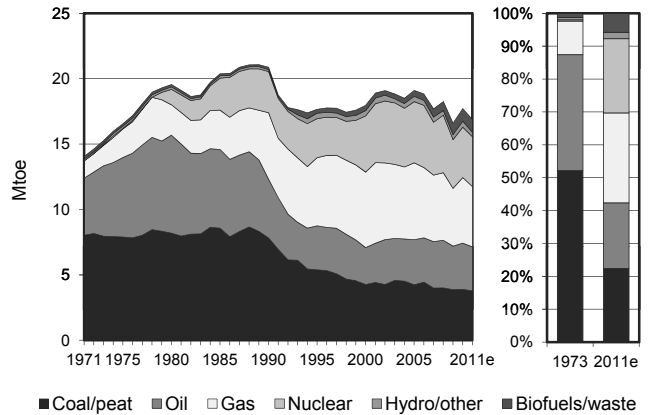
\*\*\* Includes non-energy use.

### Slovak Republic

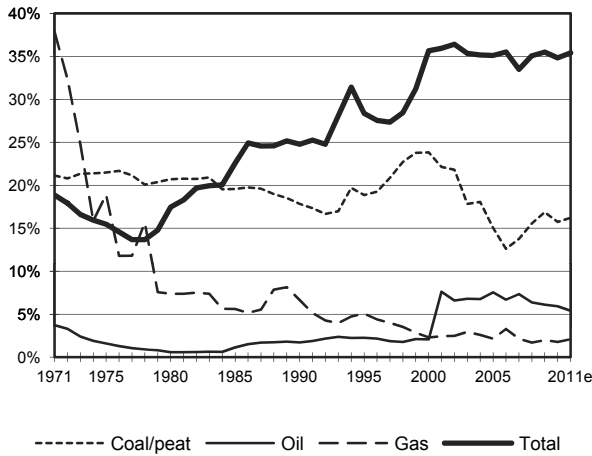
**Figure 1. Energy production**



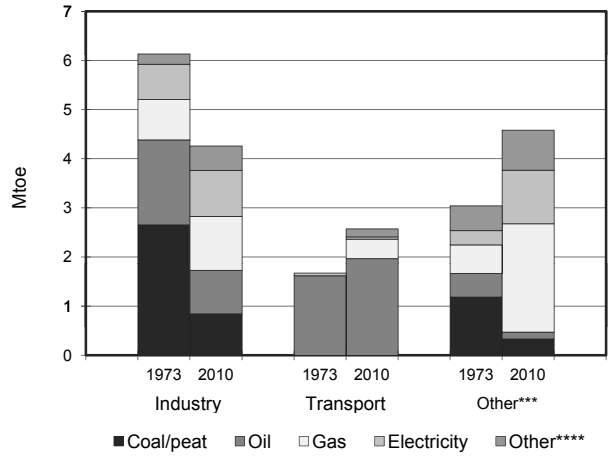
**Figure 2. Total primary energy supply\***



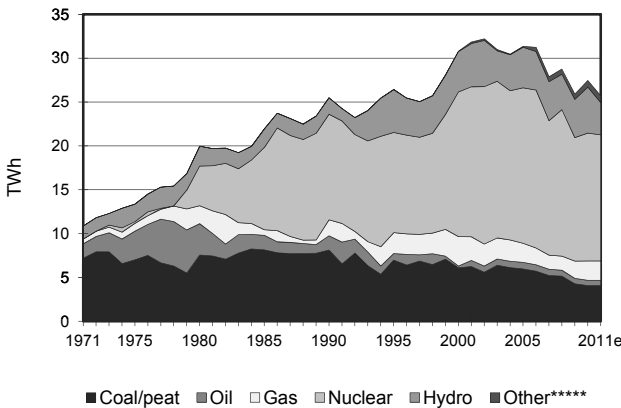
**Figure 3. Energy self-sufficiency**



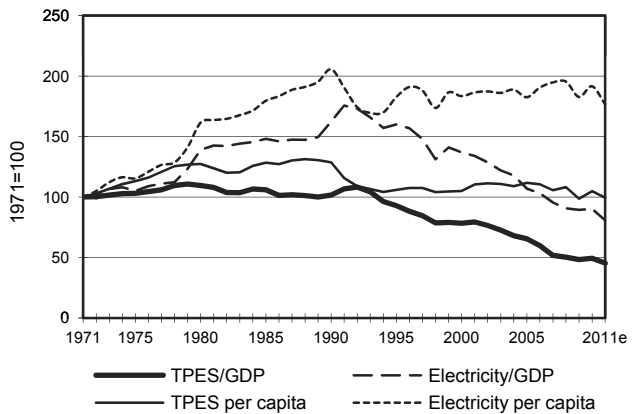
**Figure 4. Breakdown of sectorial final consumption by source in 1973 and 2010\*\***



**Figure 5. Electricity generation by fuel**



**Figure 6. Selected indicators**



\* Excluding electricity trade.

\*\* Includes non-energy use.

\*\*\* Includes residential, commercial and public services, agriculture/forestry, fishing and non-specified.

\*\*\*\* Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.

\*\*\*\*\* Includes geothermal, solar, wind, biofuels and waste, etc.

## Slovenia : 2009

Million tonnes of oil equivalent											
<b>SUPPLY AND CONSUMPTION</b>	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	1.16	-	-	0.00	1.50	0.41	0.01	0.59	-	-	3.66
Imports	0.26	-	3.08	0.83	-	-	-	0.02	0.53	-	4.72
Exports	-0.00	-	-0.49	-	-	-	-	-	-0.79	-	-1.28
Intl. marine bunkers	-	-	-0.03	-	-	-	-	-	-	-	-0.03
Intl. aviation bunkers	-	-	-0.03	-	-	-	-	-	-	-	-0.03
Stock changes	0.01	-	0.05	-	-	-	-	-	-	-	0.05
<b>TPES</b>	<b>1.42</b>	<b>-</b>	<b>2.58</b>	<b>0.83</b>	<b>1.50</b>	<b>0.41</b>	<b>0.01</b>	<b>0.61</b>	<b>-0.26</b>	<b>-</b>	<b>7.09</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-0.02	-	-	-	-	-	-	-	-	-	-0.02
Electricity plants	-0.17	-	-0.00	-0.00	-1.50	-0.41	-0.00	-0.00	0.96	-	-1.12
CHP plants	-1.17	-	-0.00	-0.12	-	-	-	-0.05	0.45	0.17	-0.74
Heat plants	-	-	-0.01	-0.04	-	-	-	-0.01	-	0.05	-0.00
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	-	-	-	-	-	-	-
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-	-	-	-0.00	-	-	-	-	-0.10	-0.01	-0.11
Losses	-	-	-	-	-	-	-	-	-0.08	-0.03	-0.11
<b>TFC</b>	<b>0.06</b>	<b>-</b>	<b>2.56</b>	<b>0.66</b>	<b>-</b>	<b>-</b>	<b>0.01</b>	<b>0.54</b>	<b>0.97</b>	<b>0.18</b>	<b>4.99</b>
<b>INDUSTRY</b>	<b>0.05</b>	<b>-</b>	<b>0.15</b>	<b>0.45</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.08</b>	<b>0.43</b>	<b>0.06</b>	<b>1.22</b>
Iron and steel	0.00	-	0.00	0.06	-	-	-	-	0.05	0.00	0.12
Chemical and petrochem.	-	-	0.01	0.06	-	-	-	0.01	0.05	0.03	0.16
Non-ferrous metals	0.00	-	0.01	0.03	-	-	-	-	0.06	0.00	0.10
Non-metallic minerals	0.03	-	0.04	0.07	-	-	-	0.02	0.03	0.00	0.19
Transport equipment	-	-	0.00	0.02	-	-	-	-	0.02	0.00	0.03
Machinery	-	-	0.02	0.03	-	-	-	0.00	0.07	0.01	0.12
Mining and quarrying	-	-	0.01	0.00	-	-	-	-	0.01	-	0.02
Food and tobacco	-	-	0.01	0.03	-	-	-	0.00	0.02	0.00	0.07
Paper, pulp and printing	0.02	-	0.01	0.10	-	-	-	0.01	0.06	0.00	0.19
Wood and wood products	-	-	0.00	0.00	-	-	-	0.03	0.01	0.00	0.05
Construction	-	-	0.04	0.00	-	-	-	0.00	0.01	0.00	0.05
Textile and leather	-	-	0.00	0.01	-	-	-	0.00	0.01	0.00	0.03
Non-specified	-	-	0.00	0.03	-	-	-	0.01	0.03	0.01	0.08
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>1.69</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.03</b>	<b>0.01</b>	<b>-</b>	<b>1.74</b>
Domestic aviation	-	-	0.00	-	-	-	-	-	-	-	0.00
Road	-	-	1.68	-	-	-	-	0.03	-	-	1.71
Rail	-	-	0.01	-	-	-	-	-	0.01	-	0.02
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	0.00	-	-	0.00
<b>OTHER</b>	<b>-</b>	<b>-</b>	<b>0.58</b>	<b>0.12</b>	<b>-</b>	<b>-</b>	<b>0.01</b>	<b>0.43</b>	<b>0.53</b>	<b>0.12</b>	<b>1.81</b>
Residential	-	-	0.30	0.11	-	-	0.01	0.43	0.27	0.10	1.21
Comm. and public services	-	-	0.19	0.02	-	-	-	0.00	0.26	0.03	0.50
Agriculture/forestry	-	-	0.08	-	-	-	-	-	-	-	0.08
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	0.02	-	-	-	-	-	-	-	0.02
<b>NON-ENERGY USE</b>	<b>0.00</b>	<b>-</b>	<b>0.14</b>	<b>0.09</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.23</b>
in industry/transf./energy	0.00	-	0.11	0.09	-	-	-	-	-	-	0.21
of which: feedstocks	-	-	0.00	0.09	-	-	-	-	-	-	0.09
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	0.02	-	-	-	-	-	-	-	0.02
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>5.13</b>	<b>-</b>	<b>0.03</b>	<b>0.59</b>	<b>5.74</b>	<b>4.71</b>	<b>0.00</b>	<b>0.19</b>	<b>-</b>	<b>-</b>	<b>16.40</b>
Electricity plants	0.71	-	0.01	0.00	5.74	4.71	0.00	0.02	-	-	11.20
CHP plants	4.42	-	0.02	0.59	-	-	-	0.18	-	-	5.21
<b>Heat generated - PJ</b>	<b>5.53</b>	<b>-</b>	<b>0.26</b>	<b>2.51</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.78</b>	<b>-</b>	<b>-</b>	<b>9.09</b>
CHP plants	5.53	-	0.03	0.94	-	-	-	0.60	-	-	7.10
Heat plants	-	-	0.23	1.57	-	-	-	0.19	-	-	1.99

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Slovenia : 2010

Million tonnes of oil equivalent											
<b>SUPPLY AND CONSUMPTION</b>	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	1.16	-	-	0.01	1.47	0.39	0.03	0.64	-	-	3.71
Imports	0.28	-	3.28	0.86	-	-	-	0.04	0.69	-	5.15
Exports	-	-	-0.69	-	-	-	-	-0.01	-0.87	-	-1.57
Intl. marine bunkers	-	-	-0.02	-	-	-	-	-	-	-	-0.02
Intl. aviation bunkers	-	-	-0.03	-	-	-	-	-	-	-	-0.03
Stock changes	-0.02	-	-0.01	-	-	-	-	-	-	-	-0.03
<b>TPES</b>	<b>1.42</b>	-	<b>2.54</b>	<b>0.86</b>	<b>1.47</b>	<b>0.39</b>	<b>0.03</b>	<b>0.67</b>	<b>-0.18</b>	-	<b>7.21</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	0.02	-	-	-	-	-	-	-	-	-	0.02
Electricity plants	-0.14	-	-0.00	-0.00	-1.47	-0.39	-0.00	-0.00	0.93	-	-1.08
CHP plants	-1.24	-	-0.00	-0.11	-	-	-	-0.06	0.47	0.18	-0.76
Heat plants	-	-	-0.00	-0.04	-	-	-0.00	-0.01	-	0.05	-0.01
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	-	-	-	-	-	-	-
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-	-	-	-0.01	-	-	-	-	-0.10	-0.01	-0.12
Losses	-	-	-	-	-	-	-	-	-0.08	-0.03	-0.12
<b>TFC</b>	<b>0.06</b>	-	<b>2.53</b>	<b>0.70</b>	-	-	<b>0.03</b>	<b>0.60</b>	<b>1.03</b>	<b>0.19</b>	<b>5.14</b>
<b>INDUSTRY</b>	<b>0.05</b>	-	<b>0.13</b>	<b>0.48</b>	-	-	-	<b>0.09</b>	<b>0.47</b>	<b>0.05</b>	<b>1.28</b>
Iron and steel	0.01	-	0.00	0.07	-	-	-	-	0.06	0.00	0.15
Chemical and petrochem.	-	-	0.01	0.06	-	-	-	0.02	0.06	0.02	0.17
Non-ferrous metals	0.00	-	0.01	0.02	-	-	-	-	0.06	0.00	0.09
Non-metallic minerals	0.01	-	0.03	0.09	-	-	-	0.02	0.04	0.00	0.19
Transport equipment	-	-	0.00	0.02	-	-	-	-	0.02	0.00	0.04
Machinery	0.01	-	0.02	0.04	-	-	-	0.00	0.08	0.01	0.16
Mining and quarrying	-	-	0.01	0.00	-	-	-	-	0.01	0.00	0.02
Food and tobacco	-	-	0.01	0.03	-	-	-	-	0.02	0.00	0.07
Paper, pulp and printing	0.03	-	0.00	0.09	-	-	-	0.01	0.06	0.00	0.18
Wood and wood products	-	-	0.00	0.00	-	-	-	0.03	0.01	0.00	0.06
Construction	-	-	0.03	0.01	-	-	-	0.00	0.00	0.00	0.04
Textile and leather	-	-	0.00	0.01	-	-	-	0.00	0.01	0.00	0.03
Non-specified	-	-	0.00	0.03	-	-	-	0.01	0.04	0.01	0.09
<b>TRANSPORT</b>	-	-	<b>1.70</b>	-	-	-	-	<b>0.05</b>	<b>0.01</b>	-	<b>1.76</b>
Domestic aviation	-	-	0.00	-	-	-	-	-	-	-	0.00
Road	-	-	1.69	-	-	-	-	0.05	-	-	1.73
Rail	-	-	0.01	-	-	-	-	-	0.01	-	0.03
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	0.00	-	0.00
<b>OTHER</b>	-	-	<b>0.58</b>	<b>0.14</b>	-	-	<b>0.03</b>	<b>0.46</b>	<b>0.54</b>	<b>0.14</b>	<b>1.90</b>
Residential	-	-	0.31	0.11	-	-	0.01	0.46	0.28	0.10	1.27
Comm. and public services	-	-	0.17	0.02	-	-	0.01	0.00	0.27	0.04	0.51
Agriculture/forestry	-	-	0.08	-	-	-	0.01	-	-	-	0.08
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	0.03	-	-	-	-	-	-	-	0.03
<b>NON-ENERGY USE</b>	<b>0.01</b>	-	<b>0.12</b>	<b>0.08</b>	-	-	-	-	-	-	<b>0.21</b>
in industry/transf./energy	0.01	-	0.11	0.08	-	-	-	-	-	-	0.19
<i>of which: feedstocks</i>	-	-	0.01	0.08	-	-	-	-	-	-	0.08
in transport	-	-	-	-	-	-	-	-	-	-	-
in other	-	-	0.01	-	-	-	-	-	-	-	0.01
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>5.29</b>	-	<b>0.01</b>	<b>0.55</b>	<b>5.66</b>	<b>4.51</b>	<b>0.01</b>	<b>0.22</b>	-	-	<b>16.25</b>
Electricity plants	0.57	-	0.00	0.00	5.66	4.51	0.01	0.01	-	-	10.77
CHP plants	4.72	-	0.00	0.54	-	-	-	0.22	-	-	5.48
<b>Heat generated - PJ</b>	<b>6.03</b>	-	<b>0.19</b>	<b>2.60</b>	-	-	<b>0.05</b>	<b>0.94</b>	-	-	<b>9.81</b>
CHP plants	6.03	-	0.01	0.89	-	-	-	0.73	-	-	7.66
Heat plants	-	-	0.18	1.71	-	-	0.05	0.21	-	-	2.14

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Slovenia

## Estimated energy supply balance for 2011

Million tonnes of oil equivalent											
SUPPLY	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	1.18	-	-	0.00	1.62	0.31	0.04	0.63	-	-	3.78
Imports	0.26	-	3.35	0.74	-	-	-	0.03	0.60	-	4.98
Exports	-0.00	-	-0.73	-	-	-	-	-0.00	-0.71	-	-1.44
Intl. marine bunkers	-	-	-0.03	-	-	-	-	-	-	-	-0.03
Intl. aviation bunkers	-	-	-0.02	-	-	-	-	-	-	-	-0.02
Stock changes	-0.01	-	-0.01	-	-	-	-	-	-	-	-0.01
<b>TPES</b>	<b>1.43</b>	<b>-</b>	<b>2.56</b>	<b>0.74</b>	<b>1.62</b>	<b>0.31</b>	<b>0.04</b>	<b>0.66</b>	<b>-0.11</b>	<b>-</b>	<b>7.24</b>
Electricity and Heat Output											
Elec. generated - TWh	5.31	-	0.02	0.49	6.22	3.56	0.07	0.26	-	-	15.91
Heat generated - PJ	5.61	-	0.15	2.85	-	-	0.05	1.10	-	-	9.75

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1960	1971	1980	1990	2000	2009	2010	2011e
Energy production (Mtoe)	..	..	..	3.1	3.1	3.7	3.7	3.8
Net imports (Mtoe)	..	..	..	2.6	3.4	3.4	3.6	3.5
Total primary energy supply (Mtoe)	..	..	..	5.7	6.4	7.1	7.2	7.2
Net oil imports (Mtoe)	..	..	..	1.8	2.4	2.6	2.6	2.6
Oil supply (Mtoe)	..	..	..	1.7	2.4	2.6	2.5	2.6
Electricity consumption (TWh)*	..	..	..	10.7	11.5	12.5	13.4	13.8
GDP (billion 2005 USD)	..	..	..	24.9	29.9	38.5	39.0	39.0
GDP PPP (billion 2005 USD)	..	..	..	32.7	39.3	50.6	51.3	51.2
Population (millions)	..	..	..	2.00	1.99	2.04	2.05	2.06
Industrial production index (2005=100)	..	..	..	..	86.20	96.00	101.90	104.50
Total self-sufficiency**	..	..	..	0.5374	0.4830	0.5161	0.5138	0.5214
Coal and peat self-sufficiency**	..	..	..	0.8573	0.8132	0.8143	0.8150	0.8238
Oil self-sufficiency**	..	..	..	0.0018	0.0004	-	-	-
Natural gas self-sufficiency**	..	..	..	0.0265	0.0073	0.0031	0.0070	0.0023
TPES/GDP (toe per thousand 2005 USD)	..	..	..	0.2294	0.2145	0.1842	0.1847	0.1858
TPES/GDP PPP (toe per thousand 2005 USD)	..	..	..	0.1744	0.1631	0.1401	0.1405	0.1413
TPES/population (toe per capita)	..	..	..	2.8592	3.2243	3.4723	3.5194	3.5220
Net oil imports/GDP (toe per thousand 2005 USD)	..	..	..	0.0727	0.0812	0.0673	0.0665	0.0673
Oil supply/GDP (toe per thousand 2005 USD)	..	..	..	0.0696	0.0792	0.0669	0.0651	0.0657
Oil supply/population (toe per capita)	..	..	..	0.8673	1.1899	1.2622	1.2397	1.2449
Elect. cons./GDP (kWh per 2005 USD)	..	..	..	0.4282	0.3843	0.3233	0.3422	0.3550
Elect. cons./population (kWh per capita)	..	..	..	5338	5778	6097	6520	6729
Industry cons.***/industrial production (2005=100)	..	..	..	..	99.88	76.95	74.92	..
Industry oil cons.***/industrial production (2005=100)	..	..	..	..	127.96	78.25	65.76	..

\* Electricity consumption equals domestic supply less losses.

\*\* Production divided by TPES.

\*\*\* Includes non-energy use.

Slovenia

Figure 1. Energy production

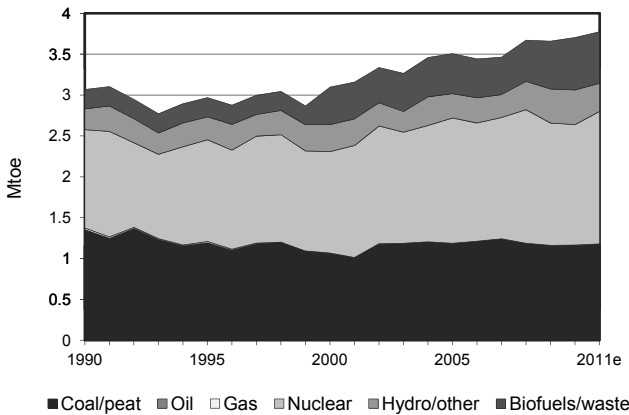


Figure 2. Total primary energy supply\*

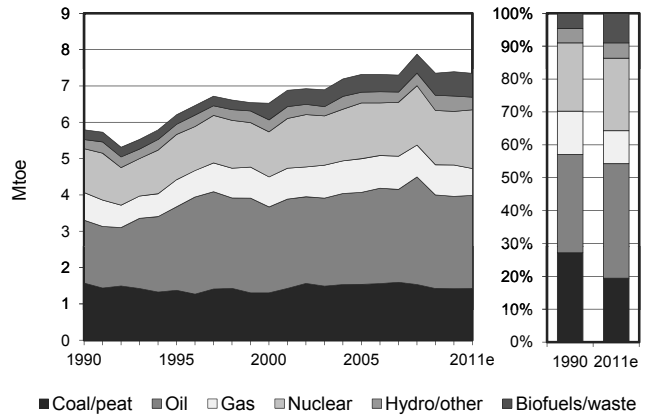


Figure 3. Energy self-sufficiency

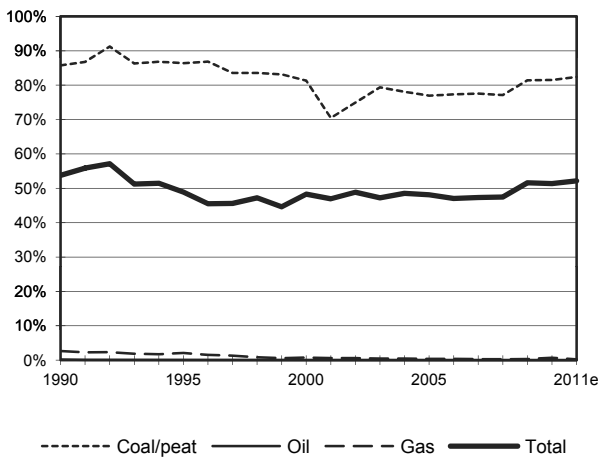


Figure 4. Breakdown of sectorial final consumption by source in 1990 and 2010\*\*

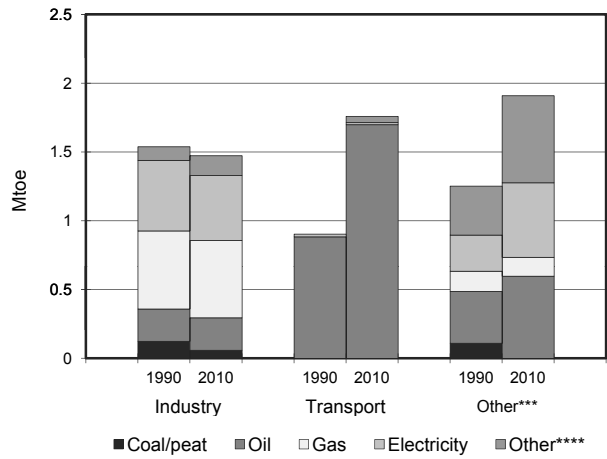


Figure 5. Electricity generation by fuel

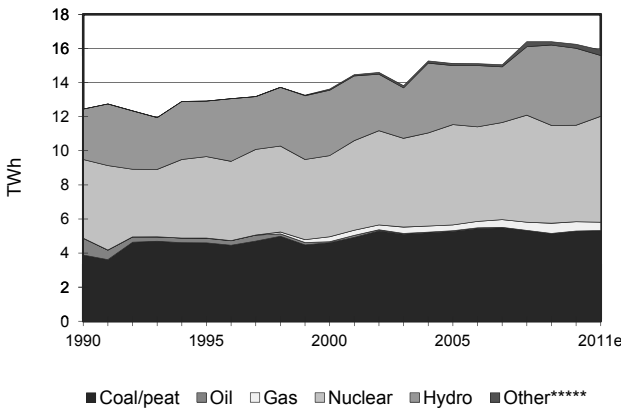
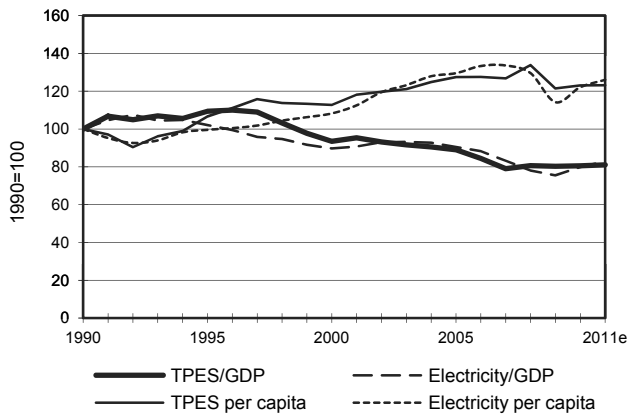


Figure 6. Selected indicators



\* Excluding electricity trade.  
 \*\* Includes non-energy use.  
 \*\*\* Includes residential, commercial and public services, agriculture/forestry, fishing and non-specified.  
 \*\*\*\* Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.  
 \*\*\*\*\* Includes geothermal, solar, wind, biofuels and waste, etc.

## Spain : 2009

Million tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	3.63	0.11	-	0.01	13.75	2.26	4.00	6.21	-	-	29.97
Imports	9.90	56.98	25.45	31.76	-	-	-	0.45	0.58	-	125.12
Exports	-0.93	-	-11.07	-0.89	-	-	-	-0.27	-1.28	-	-14.43
Intl. marine bunkers	-	-	-8.64	-	-	-	-	-	-	-	-8.64
Intl. aviation bunkers	-	-	-3.17	-	-	-	-	-	-	-	-3.17
Stock changes	-2.45	0.82	-0.09	0.33	-	-	-	0.00	-	-	-1.39
<b>TPES</b>	<b>10.15</b>	<b>57.90</b>	<b>2.47</b>	<b>31.22</b>	<b>13.75</b>	<b>2.26</b>	<b>4.00</b>	<b>6.40</b>	<b>-0.70</b>	-	<b>127.46</b>
Transfers	-	0.83	-0.83	-	-	-	-	-	-	-	-0.01
Statistical differences	0.14	-	-0.27	-0.04	-	-	-	-	0.03	-	-0.14
Electricity plants	-8.47	-	-3.26	-13.09	-13.75	-2.26	-3.83	-0.95	22.35	-	-23.27
CHP plants	-0.05	-	-0.67	-3.20	-	-	-	-0.41	2.74	-	-1.58
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-0.52 e	-	-	-	-	-	-	-	-	-	-0.52
Gas works	0.04	-	-0.06	-	-	-	-	-	-	-	-0.02
Coke/pat. fuel/BKB plants	0.08	-	-	-	-	-	-	-	-	-	0.08
Oil refineries	-	-58.80	57.76	-	-	-	-	-	-	-	-1.05
Petrochemical plants	-	0.09	-0.09	-	-	-	-	-	-	-	-0.00
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-0.49	-	-4.05	-1.40	-	-	-0.00	-0.18	-1.71	-	-7.83
Losses	-0.01	-	-	-0.11	-	-	-	-	-0.96	-	-1.09
<b>TFC</b>	<b>0.88</b>	<b>0.01</b>	<b>51.00</b>	<b>13.38</b>	-	-	<b>0.17</b>	<b>4.85</b>	<b>21.76</b>	-	<b>92.04</b>
<b>INDUSTRY</b>	<b>0.65</b>	<b>0.01</b>	<b>4.71</b>	<b>7.53</b>	-	-	<b>0.00</b>	<b>1.57</b>	<b>6.97</b>	-	<b>21.44</b>
Iron and steel	0.39 e	-	0.32	0.32	-	-	-	0.00	1.11	-	2.15
Chemical and petrochem.	0.13	0.01	0.55	1.59	-	-	0.00	0.01	0.80	-	3.09
Non-ferrous metals	0.03	-	0.11	0.27	-	-	0.00	-	0.86	-	1.27
Non-metallic minerals	0.02	-	2.32	1.33	-	-	0.00	0.14	0.71	-	4.52
Transport equipment	-	-	0.13	0.16	-	-	0.00	0.00	0.29	-	0.57
Machinery	-	-	0.19	0.52	-	-	0.00	0.00	0.47	-	1.18
Mining and quarrying	-	-	0.10	0.08	-	-	-	0.00	0.10	-	0.28
Food and tobacco	0.02	-	0.39	0.62	-	-	0.00	0.34	0.92	-	2.30
Paper, pulp and printing	-	-	0.22	0.69	-	-	0.00	0.57	0.59	-	2.08
Wood and wood products	-	-	0.03	0.05	-	-	-	0.40	0.13	-	0.61
Construction	0.06	-	0.11	0.24	-	-	0.00	0.01	0.27	-	0.68
Textile and leather	-	-	0.11	0.23	-	-	0.00	0.01	0.19	-	0.53
Non-specified	-	-	0.14	1.43	-	-	0.00	0.09	0.52	-	2.18
<b>TRANSPORT</b>	-	-	<b>33.05</b>	<b>0.08</b>	-	-	-	<b>1.07</b>	<b>0.27</b>	-	<b>34.47</b>
Domestic aviation	-	-	2.11	-	-	-	-	-	-	-	2.11
Road	-	-	29.23	0.05	-	-	-	1.07	-	-	30.35
Rail	-	-	0.61	-	-	-	-	-	0.26	-	0.87
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	1.09	-	-	-	-	-	-	-	1.09
Non-specified	-	-	-	0.03	-	-	-	-	0.01	-	0.05
<b>OTHER</b>	<b>0.23</b>	-	<b>6.47</b>	<b>5.39</b>	-	-	<b>0.17</b>	<b>2.21</b>	<b>14.52</b>	-	<b>28.98</b>
Residential	0.17	-	3.32	3.66	-	-	0.13	2.07	6.48	-	15.84
Comm. and public services	0.02	-	1.42	0.90	-	-	0.03	0.09	7.35	-	9.81
Agriculture/forestry	-	-	1.72	0.09	-	-	0.01	0.04	0.50	-	2.35
Fishing	-	-	-	-	-	-	0.00	-	-	-	0.00
Non-specified	0.04	-	-	0.73	-	-	0.00	0.01	0.19	-	0.97
<b>NON-ENERGY USE</b>	-	-	<b>6.77</b>	<b>0.38</b>	-	-	-	-	-	-	<b>7.15</b>
in industry/transf./energy	-	-	6.54	0.38	-	-	-	-	-	-	6.91
of which: feedstocks	-	-	3.84	0.38	-	-	-	-	-	-	4.22
in transport	-	-	0.21	-	-	-	-	-	-	-	0.21
in other	-	-	0.02	-	-	-	-	-	-	-	0.02
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>36.94</b>	-	<b>19.24</b>	<b>107.75</b>	<b>52.76</b>	<b>26.33</b>	<b>44.52</b>	<b>4.25</b>	-	-	<b>291.79</b>
Electricity plants	36.58	-	14.54	82.89	52.76	26.33	44.18	2.63	-	-	259.92
CHP plants	0.36	-	4.70	24.85	-	-	0.34	1.62	-	-	31.87
<b>Heat generated - PJ</b>	-	-	-	-	-	-	-	-	-	-	-
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.



## Spain : 2010

Million tonnes of oil equivalent											
<b>SUPPLY AND CONSUMPTION</b>	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	3.03	0.13	-	0.05	16.15	3.64	4.83	6.40	-	-	34.24
Imports	7.85	57.26	23.74	31.95	-	-	-	0.82	0.45	-	122.06
Exports	-1.12	-	-11.53	-1.00	-	-	-	-0.40	-1.16	-	-15.22
Intl. marine bunkers	-	-	-8.34	-	-	-	-	-	-	-	-8.34
Intl. aviation bunkers	-	-	-3.04	-	-	-	-	-	-	-	-3.04
Stock changes	-2.09	0.07	-0.12	0.19	-	-	-	-0.01	-	-	-1.96
<b>TPES</b>	<b>7.68</b>	<b>57.45</b>	<b>0.71</b>	<b>31.18</b>	<b>16.15</b>	<b>3.64</b>	<b>4.83</b>	<b>6.82</b>	<b>-0.72</b>	<b>-</b>	<b>127.74</b>
Transfers	-	1.69	-1.58	-	-	-	-	-	-	-	0.11
Statistical differences	0.55	-	0.51	-0.01	-	-	-	0.00	0.04	-	1.09
Electricity plants	-6.01	-	-2.93	-11.37	-16.15	-3.64	-4.63	-0.72	23.07	-	-22.38
CHP plants	-0.07	-	-0.54	-3.42	-	-	-	-0.50	2.72	-	-1.81
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-0.60 e	-	-	-	-	-	-	-	-	-	-0.60
Gas works	0.03	-	-0.06	-	-	-	-	-	-	-	-0.02
Coke/pat. fuel/BKB plants	0.01	-	-	-	-	-	-	-	-	-	0.01
Oil refineries	-	-59.22	58.12	-	-	-	-	-	-	-	-1.10
Petrochemical plants	-	0.09	-0.09	-	-	-	-	-	-	-	-0.00
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-0.55	-	-4.16	-1.54	-	-	-0.00	-0.20	-1.74	-	-8.20
Losses	-0.06	-	-	-0.11	-	-	-	-	-0.96	-	-1.13
<b>TFC</b>	<b>0.98</b>	<b>0.01</b>	<b>49.97</b>	<b>14.74</b>	<b>-</b>	<b>-</b>	<b>0.20</b>	<b>5.39</b>	<b>22.41</b>	<b>-</b>	<b>93.70</b>
<b>INDUSTRY</b>	<b>0.77</b>	<b>0.01</b>	<b>4.90</b>	<b>8.26</b>	<b>-</b>	<b>-</b>	<b>0.00</b>	<b>1.71</b>	<b>7.18</b>	<b>-</b>	<b>22.83</b>
Iron and steel	0.54 e	-	0.42	0.35	-	-	-	0.00	1.15	-	2.46
Chemical and petrochem.	0.14	0.01	0.52	1.74	-	-	0.00	0.02	0.83	-	3.25
Non-ferrous metals	0.05	-	0.10	0.30	-	-	0.00	0.00	0.89	-	1.34
Non-metallic minerals	0.02	-	2.42	1.46	-	-	0.00	0.14	0.73	-	4.77
Transport equipment	-	-	0.12	0.17	-	-	0.00	0.00	0.30	-	0.59
Machinery	-	-	0.23	0.57	-	-	0.00	0.00	0.48	-	1.29
Mining and quarrying	-	-	0.09	0.09	-	-	-	0.00	0.10	-	0.29
Food and tobacco	0.02	-	0.40	0.68	-	-	0.00	0.38	0.95	-	2.43
Paper, pulp and printing	-	-	0.18	0.75	-	-	0.00	0.67	0.61	-	2.22
Wood and wood products	-	-	0.03	0.05	-	-	-	0.40	0.14	-	0.63
Construction	-	-	0.10	0.26	-	-	0.00	0.01	0.28	-	0.65
Textile and leather	-	-	0.10	0.25	-	-	0.00	0.01	0.19	-	0.55
Non-specified	-	-	0.17	1.57	-	-	0.00	0.09	0.53	-	2.36
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>32.08</b>	<b>0.09</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.44</b>	<b>0.28</b>	<b>-</b>	<b>33.89</b>
Domestic aviation	-	-	2.35	-	-	-	-	-	-	-	2.35
Road	-	-	28.05	0.06	-	-	-	1.44	-	-	29.54
Rail	-	-	0.63	-	-	-	-	-	0.27	-	0.90
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	1.05	-	-	-	-	-	-	-	1.05
Non-specified	-	-	-	0.04	-	-	-	-	0.01	-	0.05
<b>OTHER</b>	<b>0.21</b>	<b>-</b>	<b>6.43</b>	<b>5.91</b>	<b>-</b>	<b>-</b>	<b>0.20</b>	<b>2.24</b>	<b>14.95</b>	<b>-</b>	<b>29.95</b>
Residential	0.14	-	3.35	4.02	-	-	0.16	2.09	6.67	-	16.44
Comm. and public services	0.03	-	1.41	0.98	-	-	0.03	0.10	7.57	-	10.13
Agriculture/forestry	-	-	1.67	0.10	-	-	0.01	0.05	0.51	-	2.33
Fishing	-	-	-	-	-	-	0.00	-	-	-	0.00
Non-specified	0.04	-	-	0.81	-	-	0.00	0.01	0.19	-	1.05
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>6.56</b>	<b>0.47</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>7.03</b>
in industry/transf./energy	-	-	6.31	0.47	-	-	-	-	-	-	6.78
of which: feedstocks	-	-	3.66	0.47	-	-	-	-	-	-	4.13
in transport	-	-	0.23	-	-	-	-	-	-	-	0.23
in other	-	-	0.03	-	-	-	-	-	-	-	0.03
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>26.32</b>	<b>-</b>	<b>16.56</b>	<b>96.62</b>	<b>61.99</b>	<b>42.28</b>	<b>51.44</b>	<b>4.68</b>	<b>-</b>	<b>-</b>	<b>299.88</b>
Electricity plants	25.92	-	13.10	71.06	61.99	42.28	51.27	2.69	-	-	268.31
CHP plants	0.40	-	3.46	25.56	-	-	0.17	1.98	-	-	31.57
<b>Heat generated - PJ</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	-	-	-	-	-	-	-	-	-	-	-

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Spain

## Estimated energy supply balance for 2011

Million tonnes of oil equivalent											
SUPPLY	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	2.29	0.10	-	0.05	15.02	2.63	4.57	6.46	-	-	31.12
Imports	9.70	57.48	22.35	30.87	-	-	-	1.37	0.68	-	122.45
Exports	-0.95	-	-12.98	-1.48	-	-	-	-0.50	-1.21	-	-17.11
Intl. marine bunkers	-	-	-8.46	-	-	-	-	-	-	-	-8.46
Intl. aviation bunkers	-	-	-2.50	-	-	-	-	-	-	-	-2.50
Stock changes	0.87	-0.57	0.60	-0.51	-	-	-	0.01	-	-	0.41
<b>TPES</b>	<b>11.92</b>	<b>57.01</b>	<b>-1.01</b>	<b>28.93</b>	<b>15.02</b>	<b>2.63</b>	<b>4.57</b>	<b>7.34</b>	<b>-0.52</b>	<b>-</b>	<b>125.90</b>
Electricity and Heat Output											
Elec. generated - TWh	44.93	-	15.17	84.52	57.65	30.59	51.67	5.22	-	-	289.74
Heat generated - PJ	-	-	-	-	-	-	-	-	-	-	-

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1960	1971	1980	1990	2000	2009	2010	2011e
Energy production (Mtoe)	9.8	10.5	15.8	34.6	31.7	30.0	34.2	31.1
Net imports (Mtoe)	6.6	35.5	55.3	60.4	100.2	110.7	106.8	105.3
Total primary energy supply (Mtoe)	16.2	42.6	67.7	90.1	122.0	127.5	127.7	125.9
Net oil imports (Mtoe)	6.4	33.6	49.9	49.7	71.5	71.4	69.5	66.8
Oil supply (Mtoe)	6.0	30.1	49.8	45.5	62.1	60.4	58.2	56.0
Electricity consumption (TWh)*	15.1	52.5	99.1	137.5	209.7	275.3	283.6	274.8
GDP (billion 2005 USD)	187.7 e	401.2	547.3	730.9	963.1	1182.7	1181.9	1190.3
GDP PPP (billion 2005 USD)	197.3 e	421.7	575.4	768.3	1012.5	1243.3	1242.5	1251.3
Population (millions)	30.40 e	34.33	37.67	39.01	40.26	45.93	46.07	46.04
Industrial production index (2005=100)	..	43.10	65.60	79.10	97.80	82.80	83.50	82.30
Total self-sufficiency**	0.6090	0.2453	0.2330	0.3839	0.2597	0.2352	0.2680	0.2472
Coal and peat self-sufficiency**	0.9555	0.7731	0.7906	0.6091	0.3804	0.3573	0.3953	0.1924
Oil self-sufficiency**	0.0109	0.0042	0.0360	0.0257	0.0037	0.0018	0.0022	0.0018
Natural gas self-sufficiency**	..	0.0040	-	0.2562	0.0097	0.0004	0.0016	0.0016
TPES/GDP (toe per thousand 2005 USD)	0.0861 e	0.1062	0.1237	0.1233	0.1266	0.1078	0.1081	0.1058
TPES/GDP PPP (toe per thousand 2005 USD)	0.0819 e	0.1010	0.1177	0.1172	0.1205	0.1025	0.1028	0.1006
TPES/population (toe per capita)	0.5316 e	1.2409	1.7971	2.3090	3.0292	2.7751	2.7725	2.7348
Net oil imports/GDP (toe per thousand 2005 USD)	0.0342 e	0.0837	0.0912	0.0679	0.0742	0.0603	0.0588	0.0562
Oil supply/GDP (toe per thousand 2005 USD)	0.0320 e	0.0751	0.0909	0.0622	0.0645	0.0510	0.0492	0.0471
Oil supply/population (toe per capita)	0.1975 e	0.8770	1.3214	1.1655	1.5424	1.3144	1.2624	1.2166
Elect. cons./GDP (kWh per 2005 USD)	0.0803 e	0.1310	0.1811	0.1881	0.2177	0.2328	0.2399	0.2308
Elect. cons./population (kWh per capita)	496 e	1530	2632	3524	5207	5994	6155	5968
Industry cons.***/industrial production (2005=100)	..	105.81	93.08	81.77	89.84	89.29	92.46	..
Industry oil cons.***/industrial production (2005=100)	..	202.60	185.52	106.27	112.38	104.54	103.31	..

\* Electricity consumption equals domestic supply less losses.

\*\* Production divided by TPES.

\*\*\* Includes non-energy use.

Spain

Figure 1. Energy production

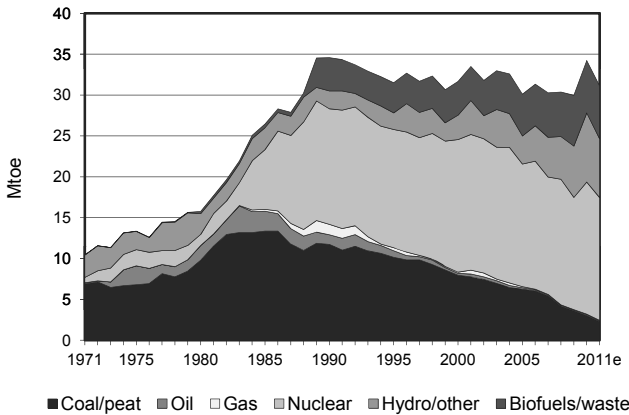


Figure 2. Total primary energy supply\*

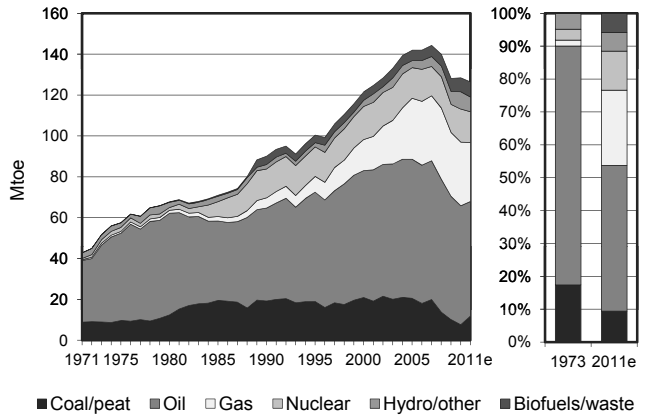


Figure 3. Energy self-sufficiency

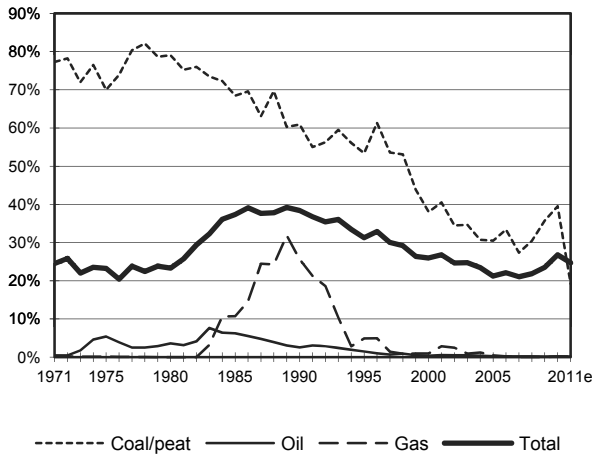


Figure 4. Breakdown of sectorial final consumption by source in 1973 and 2010\*\*

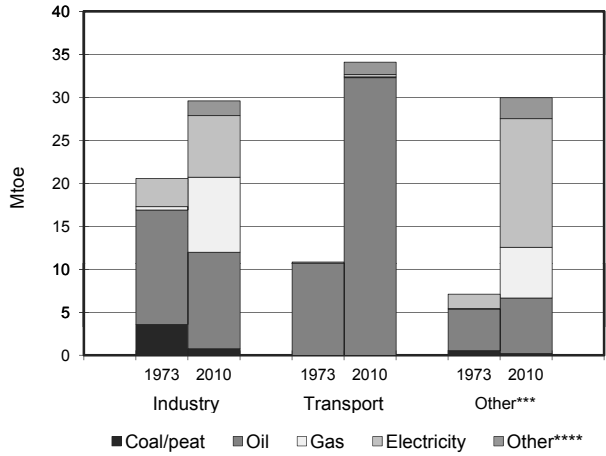


Figure 5. Electricity generation by fuel

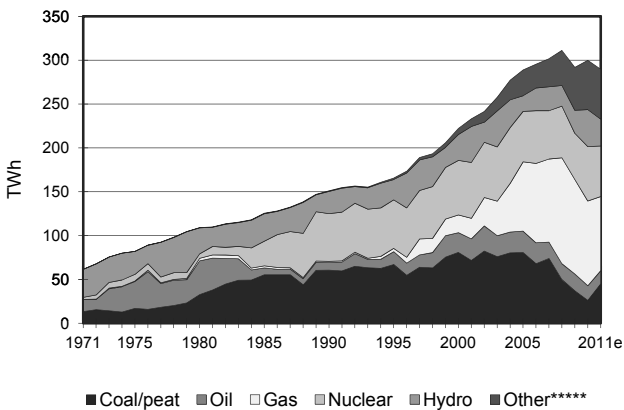
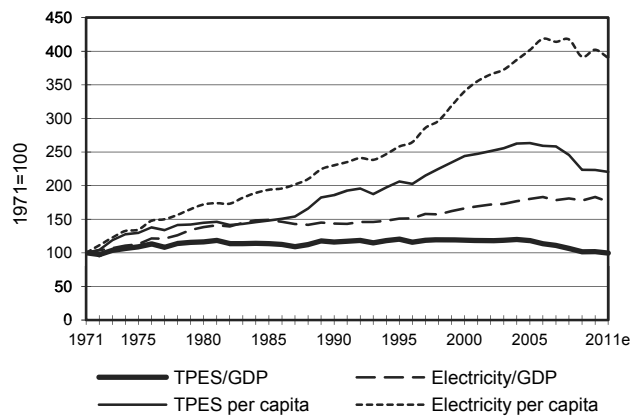


Figure 6. Selected indicators



\* Excluding electricity trade.  
 \*\* Includes non-energy use.  
 \*\*\* Includes residential, commercial and public services, agriculture/forestry, fishing and non-specified.  
 \*\*\*\* Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.  
 \*\*\*\*\* Includes geothermal, solar, wind, biofuels and waste, etc.

## Sweden : 2009

Million tonnes of oil equivalent

<b>SUPPLY AND CONSUMPTION</b>	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	0.21	-	-	-	13.60	5.66	0.22	10.38	-	0.27	30.35
Imports	1.54	19.59	7.37	1.09	-	-	-	-	1.18	-	30.78
Exports	-0.19	-0.38	-11.69	-	-	-	-	-	-0.78	-	-13.04
Intl. marine bunkers	-	-	-2.09	-	-	-	-	-	-	-	-2.09
Intl. aviation bunkers	-	-	-0.71	-	-	-	-	-	-	-	-0.71
Stock changes	0.36	0.32	-0.56	-	-	-	-	-	-	-	0.13
<b>TPES</b>	<b>1.93</b>	<b>19.54</b>	<b>-7.69</b>	<b>1.09</b>	<b>13.60</b>	<b>5.66</b>	<b>0.22</b>	<b>10.38</b>	<b>0.40</b>	<b>0.27</b>	<b>45.41</b>
Transfers	-	1.05	-0.96	-	-	-	-	-	-	-	0.09
Statistical differences	0.06	0.27	-0.02	-0.07	-	-	-	-	-	-	0.23
Electricity plants	-	-	-0.03	-	-13.60	-5.66	-0.21	-	10.38	-	-9.13
CHP plants	-0.66	-	-0.19	-0.54	-	-	-	-3.77	1.37	2.81	-0.97
Heat plants	-0.05	-	-0.09	-0.01	-	-	-	-1.16	-0.14	1.39	-0.07
Blast furnaces	-0.41	-	-	-	-	-	-	-	-	-	-0.41
Gas works	0.02	-	-0.01	-0.00	-	-	-	-	-	-	0.00
Coke/pat. fuel/BKB plants	-0.29	-	-0.01	-	-	-	-	-	-	-	-0.29
Oil refineries	-	-20.85	20.46	-	-	-	-	-	-	-	-0.39
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-0.09	-	-0.84	-0.00	-	-	-	-	-0.55	-	-1.48
Losses	-0.04	-	-	-	-	-	-	-	-0.85	-0.21	-1.10
<b>TFC</b>	<b>0.47</b>	<b>-</b>	<b>10.61</b>	<b>0.46</b>	<b>-</b>	<b>-</b>	<b>0.01</b>	<b>5.45</b>	<b>10.61</b>	<b>4.26</b>	<b>31.88</b>
<b>INDUSTRY</b>	<b>0.44</b>	<b>-</b>	<b>1.07</b>	<b>0.20</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>4.03</b>	<b>4.42</b>	<b>0.38</b>	<b>10.54</b>
Iron and steel	0.17	-	0.21	0.03	-	-	-	-	0.31	-	0.72
Chemical and petrochem.	0.01	-	0.05	-	-	-	-	0.01	0.38	-	0.45
Non-ferrous metals	0.04	-	0.03	0.01	-	-	-	-	0.20	-	0.27
Non-metallic minerals	0.15	-	0.11	0.04	-	-	-	-	0.08	-	0.38
Transport equipment	0.01	-	0.02	0.01	-	-	-	-	0.15	-	0.18
Machinery	-	-	0.08	0.01	-	-	-	-	0.18	-	0.26
Mining and quarrying	0.06	-	0.06	-	-	-	-	-	0.21	-	0.33
Food and tobacco	0.00	-	0.08	0.09	-	-	-	0.02	0.21	-	0.40
Paper, pulp and printing	0.01	-	0.33	0.01	-	-	-	3.64	1.92	-	5.91
Wood and wood products	0.00	-	0.02	0.00	-	-	-	0.34	0.18	-	0.54
Construction	-	-	-	0.00	-	-	-	-	0.09	-	0.09
Textile and leather	-	-	0.01	0.00	-	-	-	-	0.01	-	0.03
Non-specified	0.00	-	0.08	0.00	-	-	-	0.02	0.50	0.38	0.98
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>7.06</b>	<b>0.02</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.38</b>	<b>0.21</b>	<b>-</b>	<b>7.67</b>
Domestic aviation	-	-	0.14	-	-	-	-	-	-	-	0.14
Road	-	-	6.79	0.02	-	-	-	0.38	-	-	7.19
Rail	-	-	0.00	-	-	-	-	-	0.21	-	0.21
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	0.13	-	-	-	-	-	-	-	0.13
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>0.01</b>	<b>-</b>	<b>0.84</b>	<b>0.14</b>	<b>-</b>	<b>-</b>	<b>0.01</b>	<b>1.05</b>	<b>5.98</b>	<b>3.88</b>	<b>11.91</b>
Residential	0.01	-	0.08	0.07	-	-	0.01	0.68	3.52	2.58	6.95
Comm. and public services	0.01	-	0.55	0.05	-	-	-	0.05	2.30	1.29	4.23
Agriculture/forestry	-	-	0.18	0.02	-	-	-	0.32	0.16	0.01	0.68
Fishing	-	-	0.03	-	-	-	-	-	-	-	0.03
Non-specified	-	-	0.01	-	-	-	-	-	-	-	0.01
<b>NON-ENERGY USE</b>	<b>0.01</b>	<b>-</b>	<b>1.64</b>	<b>0.10</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.76</b>
in industry/transf./energy	0.01	-	1.59	0.10	-	-	-	-	-	-	1.70
of which: feedstocks	-	-	1.08	0.10	-	-	-	-	-	-	1.18
in transport	-	-	0.06	-	-	-	-	-	-	-	0.06
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>1.60</b>	<b>-</b>	<b>0.73</b>	<b>1.55</b>	<b>52.17</b>	<b>65.85</b>	<b>2.49</b>	<b>12.21</b>	<b>-</b>	<b>-</b>	<b>136.60</b>
Electricity plants	-	-	0.16	-	52.17	65.85	2.49	-	-	-	120.68
CHP plants	1.60	-	0.57	1.55	-	-	-	12.21	-	-	15.93
<b>Heat generated - PJ</b>	<b>17.90</b>	<b>-</b>	<b>6.12</b>	<b>16.38</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>126.60</b>	<b>0.63</b>	<b>19.52</b>	<b>187.15</b>
CHP plants	16.17	-	2.55	15.94	-	-	-	83.05	0.29	5.44	123.44
Heat plants	1.73	-	3.57	0.44	-	-	-	43.55	0.34	14.09	63.71

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Sweden : 2010

Million tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	0.24	-	-	-	15.07	5.71	0.31	11.90	-	0.27	33.50
Imports	2.57	20.37	7.88	1.46	-	-	-	-	1.28	-	33.57
Exports	-0.02	-0.85	-11.91	-	-	-	-	-	-1.11	-	-13.89
Intl. marine bunkers	-	-	-1.94	-	-	-	-	-	-	-	-1.94
Intl. aviation bunkers	-	-	-0.69	-	-	-	-	-	-	-	-0.69
Stock changes	-0.29	0.22	0.80	-	-	-	-	-	-	-	0.73
<b>TPES</b>	<b>2.49</b>	<b>19.75</b>	<b>-5.85</b>	<b>1.46</b>	<b>15.07</b>	<b>5.71</b>	<b>0.31</b>	<b>11.90</b>	<b>0.18</b>	<b>0.27</b>	<b>51.28</b>
Transfers	-	1.69	-1.54	-	-	-	-	-	-	-	0.15
Statistical differences	0.27	-0.01	-0.86	-0.09	-	-	-	-	-	-	-0.69
Electricity plants	-	-	-0.07	-	-15.07	-5.71	-0.30	-	11.01	-	-10.14
CHP plants	-0.85	-	-0.36	-0.70	-	-	-	-4.49	1.76	3.51	-1.13
Heat plants	-0.05	-	-0.19	-0.03	-	-	-	-1.32	-0.14	1.57	-0.16
Blast furnaces	-0.53 e	-	-	-	-	-	-	-	-	-	-0.53
Gas works	0.02	-	-0.01	-0.00	-	-	-	-	-	-	0.00
Coke/pat. fuel/BKB plants	-0.34	-	-0.02	-	-	-	-	-	-	-	-0.36
Oil refineries	-	-21.43	20.89	-	-	-	-	-	-	-	-0.54
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-0.10	-	-0.75	-0.00	-	-	-	-	-0.62	-	-1.47
Losses	-0.07	-	-	-	-	-	-	-	-0.91	-0.21	-1.19
<b>TFC</b>	<b>0.85</b>	<b>-</b>	<b>11.23</b>	<b>0.64</b>	<b>-</b>	<b>-</b>	<b>0.01</b>	<b>6.09</b>	<b>11.28</b>	<b>5.14</b>	<b>35.23</b>
<b>INDUSTRY</b>	<b>0.82</b>	<b>-</b>	<b>1.16</b>	<b>0.33</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>4.64</b>	<b>4.68</b>	<b>0.45</b>	<b>12.08</b>
Iron and steel	0.52 e	-	0.27	0.03	-	-	-	-	0.22	-	1.04
Chemical and petrochem.	0.01	-	0.04	0.09	-	-	-	0.01	0.42	-	0.57
Non-ferrous metals	0.03	-	0.03	0.01	-	-	-	-	0.21	-	0.27
Non-metallic minerals	0.16	-	0.12	0.04	-	-	-	-	0.09	-	0.42
Transport equipment	0.01	-	0.02	0.01	-	-	-	-	0.16	-	0.20
Machinery	-	-	0.08	0.00	-	-	-	-	0.34	-	0.43
Mining and quarrying	0.09	-	0.07	-	-	-	-	-	0.26	-	0.42
Food and tobacco	0.00	-	0.08	0.09	-	-	-	0.02	0.22	-	0.41
Paper, pulp and printing	0.01	-	0.32	0.01	-	-	-	4.24	2.14	-	6.72
Wood and wood products	0.00	-	0.03	0.00	-	-	-	0.36	0.19	-	0.59
Construction	-	-	-	0.00	-	-	-	-	0.14	-	0.14
Textile and leather	-	-	0.01	0.00	-	-	-	-	0.02	-	0.03
Non-specified	-	-	0.07	0.05	-	-	-	0.02	0.26	0.45	0.84
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>7.18</b>	<b>0.03</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.40</b>	<b>0.21</b>	<b>-</b>	<b>7.81</b>
Domestic aviation	-	-	0.15	-	-	-	-	-	-	-	0.15
Road	-	-	6.84	0.03	-	-	-	0.40	-	-	7.26
Rail	-	-	0.00	-	-	-	-	-	0.21	-	0.21
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	0.19	-	-	-	-	-	-	-	0.19
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>0.01</b>	<b>-</b>	<b>0.91</b>	<b>0.16</b>	<b>-</b>	<b>-</b>	<b>0.01</b>	<b>1.05</b>	<b>6.40</b>	<b>4.69</b>	<b>13.23</b>
Residential	0.01	-	0.07	0.08	-	-	0.01	0.68	3.48	3.23	7.56
Comm. and public services	0.00	-	0.60	0.06	-	-	-	0.05	2.82	1.45	4.98
Agriculture/forestry	-	-	0.19	0.02	-	-	-	0.32	0.11	0.01	0.65
Fishing	-	-	0.04	-	-	-	-	-	-	-	0.04
Non-specified	-	-	0.01	-	-	-	-	-	-	-	0.01
<b>NON-ENERGY USE</b>	<b>0.02</b>	<b>-</b>	<b>1.98</b>	<b>0.12</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2.11</b>
in industry/transf./energy	0.02	-	1.92	0.12	-	-	-	-	-	-	2.05
of which: feedstocks	-	-	1.45	0.12	-	-	-	-	-	-	1.57
in transport	-	-	0.06	-	-	-	-	-	-	-	0.06
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>2.72</b>	<b>-</b>	<b>1.77</b>	<b>2.88</b>	<b>57.83</b>	<b>66.40</b>	<b>3.51</b>	<b>13.40</b>	<b>-</b>	<b>-</b>	<b>148.51</b>
Electricity plants	-	-	0.25	-	57.83	66.40	3.51	-	-	-	127.99
CHP plants	2.72	-	1.52	2.88	-	-	-	13.40	-	-	20.52
<b>Heat generated - PJ</b>	<b>19.95</b>	<b>-</b>	<b>14.98</b>	<b>18.79</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>150.35</b>	<b>0.35</b>	<b>19.64</b>	<b>224.05</b>
CHP plants	18.17	-	8.08	17.84	-	-	-	103.00	0.19	4.72	152.01
Heat plants	1.77	-	6.90	0.95	-	-	-	47.35	0.16	14.92	72.04

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Sweden

## Estimated energy supply balance for 2011

Million tonnes of oil equivalent											
SUPPLY	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	0.17	-	-	-	15.65	5.70	0.54	10.84	-	0.26	33.14
Imports	2.37	19.48	8.00	1.15	-	-	-	-	1.07	-	32.08
Exports	-0.02	-0.60	-10.92	-	-	-	-	-	-1.69	-	-13.23
Intl. marine bunkers	-	-	-1.66	-	-	-	-	-	-	-	-1.66
Intl. aviation bunkers	-	-	-0.79	-	-	-	-	-	-	-	-0.79
Stock changes	-0.08	-0.05	-0.01	-	-	-	-	-	-	-	-0.14
<b>TPES</b>	<b>2.44</b>	<b>18.83</b>	<b>-5.38</b>	<b>1.15</b>	<b>15.65</b>	<b>5.70</b>	<b>0.54</b>	<b>10.84</b>	<b>-0.62</b>	<b>0.26</b>	<b>49.40</b>
Electricity and Heat Output											
Elec. generated - TWh	3.63	-	1.46	3.50	60.05	66.26	6.10	11.88	-	-	152.88
Heat generated - PJ	14.11	-	7.37	8.22	-	-	-	136.95	0.43	18.92	185.99

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1960	1971	1980	1990	2000	2009	2010	2011e
Energy production (Mtoe)	5.5	7.4	16.1	29.7	30.5	30.4	33.5	33.1
Net imports (Mtoe)	15.9	31.1	27.6	18.3	19.3	17.7	19.7	18.9
Total primary energy supply (Mtoe)	20.2	36.0	40.5	47.2	47.6	45.4	51.3	49.4
Net oil imports (Mtoe)	13.5	29.2	25.9	15.3	15.7	14.9	15.5	16.0
Oil supply (Mtoe)	12.2	26.8	22.6	14.3	13.6	11.9	13.9	13.5
Electricity consumption (TWh)*	30.0	62.2	89.0	135.5	139.1	131.5	140.1	135.1
GDP (billion 2005 USD)	111.1 e	176.6	212.4	263.9	324.5	376.9	400.0	415.8
GDP PPP (billion 2005 USD)	88.6 e	140.7	169.2	210.3	258.6	300.3	318.8	331.3
Population (millions)	7.48 e	8.10	8.31	8.56	8.87	9.30	9.38	9.41
Industrial production index (2005=100)	25.50	46.70	50.90	64.30	92.30	85.90	93.30	98.60
Total self-sufficiency**	0.2714	0.2049	0.3984	0.6289	0.6418	0.6683	0.6533	0.6709
Coal and peat self-sufficiency**	0.0585	..	0.0042	0.0565	0.0660	0.1088	0.0956	0.0681
Oil self-sufficiency**	0.0081	..	0.0011	0.0002	-	-	-	-
Natural gas self-sufficiency**	..	..	-	-	-	-	-	-
TPES/GDP (toe per thousand 2005 USD)	0.1817 e	0.2041	0.1906	0.1789	0.1465	0.1205	0.1282	0.1188
TPES/GDP PPP (toe per thousand 2005 USD)	0.2281 e	0.2562	0.2393	0.2245	0.1839	0.1512	0.1609	0.1491
TPES/population (toe per capita)	2.7005 e	4.4506	4.8719	5.5144	5.3602	4.8829	5.4683	5.2498
Net oil imports/GDP (toe per thousand 2005 USD)	0.1210 e	0.1655	0.1220	0.0579	0.0485	0.0395	0.0387	0.0384
Oil supply/GDP (toe per thousand 2005 USD)	0.1100 e	0.1517	0.1066	0.0542	0.0418	0.0314	0.0347	0.0324
Oil supply/population (toe per capita)	1.6338 e	3.3082	2.7243	1.6711	1.5295	1.2744	1.4815	1.4297
Elect. cons./GDP (kWh per 2005 USD)	0.2695 e	0.3520	0.4189	0.5136	0.4287	0.3489	0.3502	0.3250
Elect. cons./population (kWh per capita)	4005 e	7675	10704	15836	15682	14142	14939	14360
Industry cons.***/industrial production (2005=100)	262.50	214.88	187.61	151.69	117.37	101.39	107.77	..
Industry oil cons.***/industrial production (2005=100)	438.31	432.78	304.87	157.66	127.49	78.90	84.26	..

\* Electricity consumption equals domestic supply less losses.

\*\* Production divided by TPES.

\*\*\* Includes non-energy use.

Sweden

Figure 1. Energy production

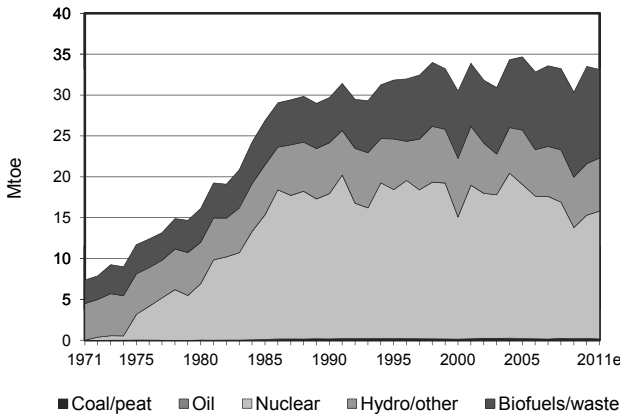


Figure 2. Total primary energy supply\*

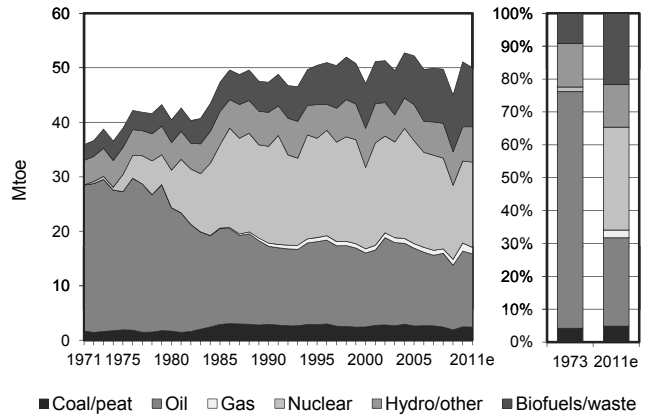


Figure 3. Energy self-sufficiency

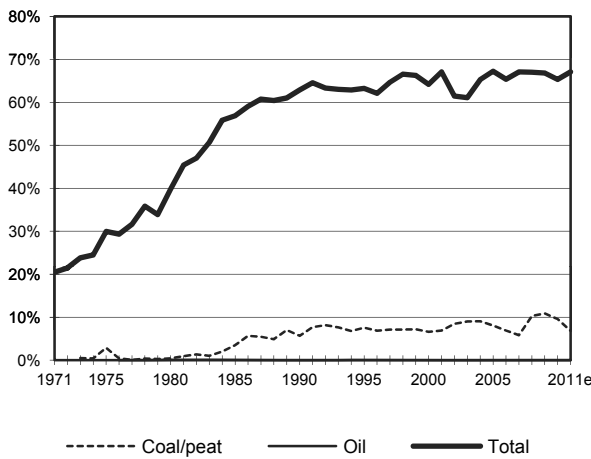


Figure 4. Breakdown of sectorial final consumption by source in 1973 and 2010\*\*

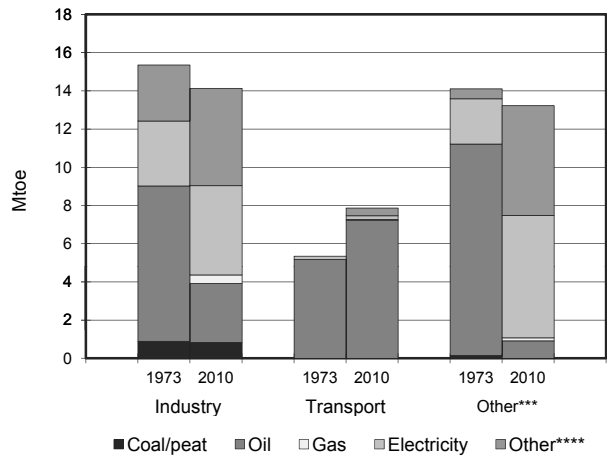


Figure 5. Electricity generation by fuel

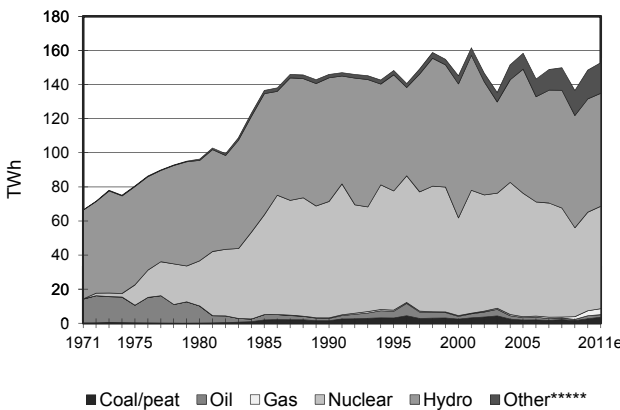
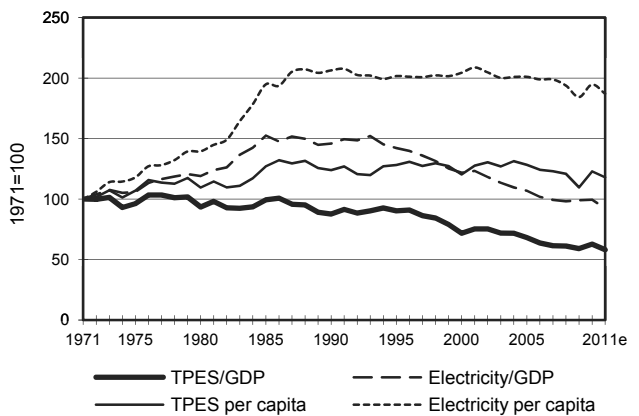


Figure 6. Selected indicators



\* Excluding electricity trade.  
 \*\* Includes non-energy use.  
 \*\*\* Includes residential, commercial and public services, agriculture/forestry, fishing and non-specified.  
 \*\*\*\* Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.  
 \*\*\*\*\* Includes geothermal, solar, wind, biofuels and waste, etc.

## Switzerland : 2009

Million tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	-	-	-	-	7.25	3.07	0.26	2.21	-	0.00	12.79
Imports	0.17	4.98	8.47	2.69	-	-	-	0.03	2.70	-	19.04
Exports	-	-	-0.50	-	-	-	-	-0.01	-2.88	-	-3.40
Intl. marine bunkers	-	-	-0.01	-	-	-	-	-	-	-	-0.01
Intl. aviation bunkers	-	-	-1.34	-	-	-	-	-	-	-	-1.34
Stock changes	-0.02	0.03	-0.12	-	-	-	-	-0.00	-	-	-0.10
<b>TPES</b>	<b>0.15</b>	<b>5.01</b>	<b>6.50</b>	<b>2.69</b>	<b>7.25</b>	<b>3.07</b>	<b>0.26</b>	<b>2.23</b>	<b>-0.19</b>	<b>0.00</b>	<b>26.97</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-	0.00	-0.33	-	-	-	-	0.00	-	-	-0.33
Electricity plants	-	-	-0.00	-	-7.22	-3.07	-0.01	-0.04	5.47	-	-4.87
CHP plants	-	-	-0.01	-0.10	-0.03	-	-	-1.00	0.26	0.32	-0.56
Heat plants	-	-	-0.00	-0.09	-	-	-	-0.00	-0.00	0.08	-0.01
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	0.00	-	-	-	-0.00	-	-	-0.00
Coke/pat. fuel/BKB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-5.02	4.96	-	-	-	-	-	-	-	-0.05
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-	-	-0.35	-0.00	-	-	-	-	-0.24	-	-0.59
Losses	-	-	-	-0.02	-	-	-	-	-0.36	-0.02	-0.40
<b>TFC</b>	<b>0.15</b>	<b>-</b>	<b>10.77</b>	<b>2.49</b>	<b>-</b>	<b>-</b>	<b>0.25</b>	<b>1.19</b>	<b>4.94</b>	<b>0.38</b>	<b>20.17</b>
<b>INDUSTRY</b>	<b>0.14</b>	<b>-</b>	<b>0.70</b>	<b>0.82</b>	<b>-</b>	<b>-</b>	<b>0.02</b>	<b>0.40</b>	<b>1.57</b>	<b>0.15</b>	<b>3.80</b>
Iron and steel	0.01	-	0.01	0.06	-	-	-	0.00	0.10	0.00	0.18
Chemical and petrochem.	-	-	0.08	0.23	-	-	-	0.07	0.31	0.03	0.71
Non-ferrous metals	-	-	0.01	0.02	-	-	-	-	0.03	0.00	0.05
Non-metallic minerals	0.13	-	0.07	0.07	-	-	-	0.10	0.10	-	0.48
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	0.18	0.08	-	-	-	0.00	0.33	0.01	0.61
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	0.00	-	0.11	0.19	-	-	-	0.00	0.20	0.00	0.50
Paper, pulp and printing	-	-	0.06	0.09	-	-	-	0.04	0.20	0.07	0.46
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	0.10	0.01	-	-	-	0.06	0.06	0.00	0.23
Textile and leather	-	-	0.02	0.01	-	-	-	0.00	0.02	0.00	0.06
Non-specified	-	-	0.08	0.05	-	-	0.02	0.11	0.23	0.04	0.52
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>5.76</b>	<b>0.01</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.01</b>	<b>0.26</b>	<b>-</b>	<b>6.04</b>
Domestic aviation	-	-	0.05	-	-	-	-	-	-	-	0.05
Road	-	-	5.68	0.01	-	-	-	0.01	-	-	5.70
Rail	-	-	0.01	-	-	-	-	-	0.26	-	0.28
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	0.01	-	-	-	-	-	-	-	0.01
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>0.01</b>	<b>-</b>	<b>3.81</b>	<b>1.65</b>	<b>-</b>	<b>-</b>	<b>0.23</b>	<b>0.78</b>	<b>3.11</b>	<b>0.23</b>	<b>9.83</b>
Residential	0.01	-	2.65	1.00	-	-	0.19	0.43	1.54	0.14	5.97
Comm. and public services	-	-	1.02	0.50	-	-	0.03	0.33	1.49	0.09	3.45
Agriculture/forestry	-	-	-	0.16	-	-	0.01	0.02	0.09	-	0.27
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	0.14	-	-	-	-	-	-	-	0.14
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>0.50</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.50</b>
in industry/transf./energy	-	-	0.48	-	-	-	-	-	-	-	0.48
<i>of which: feedstocks</i>	-	-	0.10	-	-	-	-	-	-	-	0.10
in transport	-	-	0.03	-	-	-	-	-	-	-	0.03
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>-</b>	<b>-</b>	<b>0.10</b>	<b>0.71</b>	<b>27.69</b>	<b>35.72</b>	<b>0.07</b>	<b>2.37</b>	<b>-</b>	<b>-</b>	<b>66.67</b>
Electricity plants	-	-	0.02	-	27.69	35.72	0.07	0.14	-	-	63.64
CHP plants	-	-	0.09	0.71	-	-	-	2.24	-	-	3.04
<b>Heat generated - PJ</b>	<b>-</b>	<b>-</b>	<b>0.13</b>	<b>4.14</b>	<b>1.30</b>	<b>-</b>	<b>-</b>	<b>11.32</b>	<b>-</b>	<b>0.10</b>	<b>16.99</b>
CHP plants	-	-	0.07	0.90	1.30	-	-	11.32	-	-	13.58
Heat plants	-	-	0.05	3.25	-	-	-	0.01	-	0.10	3.41

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.



## Switzerland : 2010

Million tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	-	-	-	-	6.90	3.10	0.31	2.32	-	0.00	12.64
Imports	0.13	4.69	7.45	3.01	-	-	-	0.03	2.87	-	18.19
Exports	-	-	-0.40	-	-	-	-	-0.01	-2.83	-	-3.24
Intl. marine bunkers	-	-	-0.01	-	-	-	-	-	-	-	-0.01
Intl. aviation bunkers	-	-	-1.40	-	-	-	-	-	-	-	-1.40
Stock changes	0.02	0.00	0.02	-	-	-	-	-0.00	-	-	0.04
<b>TPES</b>	<b>0.15</b>	<b>4.69</b>	<b>5.66</b>	<b>3.01</b>	<b>6.90</b>	<b>3.10</b>	<b>0.31</b>	<b>2.34</b>	<b>0.04</b>	<b>0.00</b>	<b>26.21</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-	0.00	1.06	-	-	-	-	-	-	-	1.06
Electricity plants	-	-	-0.00	-	-6.86	-3.10	-0.01	-0.04	5.39	-	-4.63
CHP plants	-	-	-0.01	-0.14	-0.03	-	-	-1.03	0.29	0.37	-0.55
Heat plants	-	-	-0.00	-0.09	-	-	-	-0.00	-0.00	0.08	-0.01
Blast furnaces	-	-	-	-	-	-	-	-	-	-	-
Gas works	-	-	-	0.00	-	-	-	-0.00	-	-	-0.00
Coke/pat. fuel/BKB plants	-	-	-	-	-	-	-	-	-	-	-
Oil refineries	-	-4.69	4.65	-	-	-	-	-	-	-	-0.04
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-	-	-0.34	-0.00	-	-	-	-	-0.21	-	-0.55
Losses	-	-	-	-0.02	-	-	-	-	-0.38	-0.04	-0.43
<b>TFC</b>	<b>0.15</b>	<b>-</b>	<b>11.01</b>	<b>2.76</b>	<b>-</b>	<b>-</b>	<b>0.30</b>	<b>1.27</b>	<b>5.14</b>	<b>0.41</b>	<b>21.05</b>
<b>INDUSTRY</b>	<b>0.14</b>	<b>-</b>	<b>0.68</b>	<b>0.85</b>	<b>-</b>	<b>-</b>	<b>0.02</b>	<b>0.44</b>	<b>1.66</b>	<b>0.15</b>	<b>3.94</b>
Iron and steel	0.01	-	0.01	0.07	-	-	-	0.00	0.12	-	0.22
Chemical and petrochem.	-	-	0.06	0.22	-	-	-	0.08	0.31	0.05	0.72
Non-ferrous metals	-	-	0.00	0.02	-	-	-	-	0.03	0.00	0.06
Non-metallic minerals	0.13	-	0.09	0.05	-	-	-	0.10	0.11	-	0.49
Transport equipment	-	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	0.16	0.10	-	-	-	0.00	0.36	0.01	0.64
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	0.00	-	0.11	0.19	-	-	-	0.00	0.20	0.00	0.51
Paper, pulp and printing	-	-	0.03	0.12	-	-	-	0.05	0.21	0.07	0.49
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	0.09	0.01	-	-	-	0.07	0.05	0.00	0.23
Textile and leather	-	-	0.02	0.01	-	-	-	0.00	0.02	0.00	0.06
Non-specified	-	-	0.09	0.04	-	-	0.02	0.12	0.24	0.01	0.53
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>5.73</b>	<b>0.02</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.01</b>	<b>0.27</b>	<b>-</b>	<b>6.03</b>
Domestic aviation	-	-	0.06	-	-	-	-	-	-	-	0.06
Road	-	-	5.65	0.02	-	-	-	0.01	-	-	5.68
Rail	-	-	0.01	-	-	-	-	-	0.27	-	0.28
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	0.01	-	-	-	-	-	-	-	0.01
Non-specified	-	-	-	-	-	-	-	-	-	-	-
<b>OTHER</b>	<b>0.01</b>	<b>-</b>	<b>4.06</b>	<b>1.89</b>	<b>-</b>	<b>-</b>	<b>0.28</b>	<b>0.82</b>	<b>3.21</b>	<b>0.26</b>	<b>10.54</b>
Residential	0.01	-	2.82	1.16	-	-	0.24	0.47	1.60	0.17	6.46
Comm. and public services	-	-	1.09	0.58	-	-	0.04	0.34	1.52	0.10	3.66
Agriculture/forestry	-	-	-	0.16	-	-	0.01	0.02	0.09	-	0.27
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	0.14	-	-	-	-	-	-	-	0.14
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>0.54</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.54</b>
in industry/transf./energy	-	-	0.52	-	-	-	-	-	-	-	0.52
of which: feedstocks	-	-	0.11	-	-	-	-	-	-	-	0.11
in transport	-	-	0.03	-	-	-	-	-	-	-	0.03
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>-</b>	<b>-</b>	<b>0.07</b>	<b>1.04</b>	<b>26.34</b>	<b>36.06</b>	<b>0.12</b>	<b>2.43</b>	<b>-</b>	<b>-</b>	<b>66.06</b>
Electricity plants	-	-	0.01	-	26.34	36.06	0.12	0.12	-	-	62.65
CHP plants	-	-	0.06	1.04	-	-	-	2.31	-	-	3.41
<b>Heat generated - PJ</b>	<b>-</b>	<b>-</b>	<b>0.15</b>	<b>4.46</b>	<b>1.30</b>	<b>-</b>	<b>-</b>	<b>12.85</b>	<b>-</b>	<b>0.14</b>	<b>18.90</b>
CHP plants	-	-	0.09	1.11	1.30	-	-	12.85	-	-	15.34
Heat plants	-	-	0.06	3.35	-	-	-	0.00	-	0.14	3.56

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Switzerland

## Estimated energy supply balance for 2011

Million tonnes of oil equivalent											
SUPPLY	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	-	-	-	-	6.99	2.76	0.38	2.26	-	0.00	12.40
Imports	0.11	4.59	7.21	2.67	-	-	-	0.05	2.99	-	17.62
Exports	-	-	-0.41	-	-	-	-	-0.01	-2.77	-	-3.19
Intl. marine bunkers	-	-	-0.01	-	-	-	-	-	-	-	-0.01
Intl. aviation bunkers	-	-	-1.50	-	-	-	-	-	-	-	-1.50
Stock changes	0.04	-0.01	0.16	-	-	-	-	-	-	-	0.20
<b>TPES</b>	<b>0.16</b>	<b>4.58</b>	<b>5.45</b>	<b>2.67</b>	<b>6.99</b>	<b>2.76</b>	<b>0.38</b>	<b>2.30</b>	<b>0.22</b>	<b>0.00</b>	<b>25.52</b>
Electricity and Heat Output											
Elec. generated - TWh	-	-	0.07	1.06	26.71	32.14	0.12	2.45	-	-	62.55
Heat generated - PJ	-	-	0.14	4.26	1.29	-	-	12.28	-	0.13	18.10

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1960	1971	1980	1990	2000	2009	2010	2011e
Energy production (Mtoe)	2.1	2.9	7.0	10.3	12.0	12.8	12.6	12.4
Net imports (Mtoe)	5.7	14.1	14.1	15.0	14.1	15.6	15.0	14.4
Total primary energy supply (Mtoe)	7.5	16.4	20.0	24.3	25.0	27.0	26.2	25.5
Net oil imports (Mtoe)	4.2	13.7	13.4	13.2	12.1	13.0	11.7	11.4
Oil supply (Mtoe)	3.8	13.1	12.5	12.3	11.0	11.5	10.4	10.0
Electricity consumption (TWh)*	16.4	28.7	37.9	50.4	56.4	62.1	64.0	62.8
GDP (billion 2005 USD)	140.9 e	231.7	252.0	313.9	349.1	400.8	411.7	419.3
GDP PPP (billion 2005 USD)	100.7 e	165.6	180.1	224.3	249.4	286.4	294.1	299.6
Population (millions)	5.40 e	6.34	6.39	6.80	7.21	7.80	7.79	7.77
Industrial production index (2005=100)	34.20	58.90	64.20	78.30	99.00	110.10	117.10	..
Total self-sufficiency**	0.2833	0.1772	0.3508	0.4215	0.4808	0.4741	0.4822	0.4860
Coal and peat self-sufficiency**	..	..	-	-	-	-	-	-
Oil self-sufficiency**	..	..	-	-	-	-	-	-
Natural gas self-sufficiency**	..	..	-	0.0018	-	-	-	-
TPES/GDP (toe per thousand 2005 USD)	0.0529 e	0.0707	0.0795	0.0775	0.0717	0.0673	0.0637	0.0609
TPES/GDP PPP (toe per thousand 2005 USD)	0.0740 e	0.0990	0.1113	0.1084	0.1003	0.0942	0.0891	0.0852
TPES/population (toe per capita)	1.3795 e	2.5838	3.1380	3.5785	3.4695	3.4577	3.3660	3.2836
Net oil imports/GDP (toe per thousand 2005 USD)	0.0297 e	0.0593	0.0532	0.0420	0.0347	0.0323	0.0285	0.0272
Oil supply/GDP (toe per thousand 2005 USD)	0.0270 e	0.0564	0.0496	0.0390	0.0316	0.0287	0.0251	0.0239
Oil supply/population (toe per capita)	0.7038 e	2.0614	1.9594	1.8033	1.5293	1.4760	1.3288	1.2905
Elect. cons./GDP (kWh per 2005 USD)	0.1163 e	0.1238	0.1503	0.1605	0.1615	0.1550	0.1554	0.1497
Elect. cons./population (kWh per capita)	3033 e	4521	5931	7415	7819	7962	8216	8075
Industry cons.***/industrial production (2005=100)	167.01	163.37	152.72	107.81	97.96	85.34	83.71	..
Industry oil cons.***/industrial production (2005=100)	286.71	415.04	309.77	117.94	105.72	78.55	75.19	..

\* Electricity consumption equals domestic supply less losses.

\*\* Production divided by TPES.

\*\*\* Includes non-energy use.

Switzerland

Figure 1. Energy production

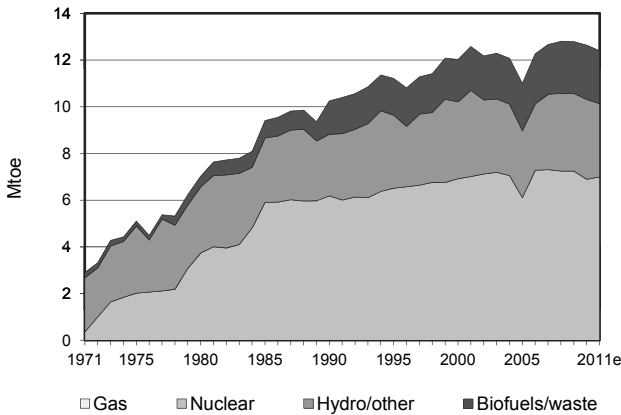


Figure 2. Total primary energy supply\*

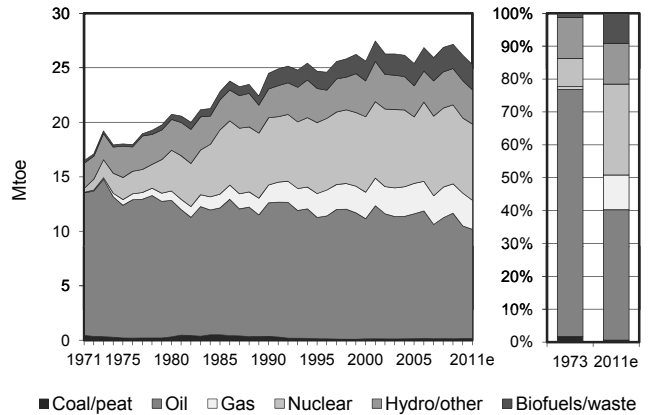


Figure 3. Energy self-sufficiency

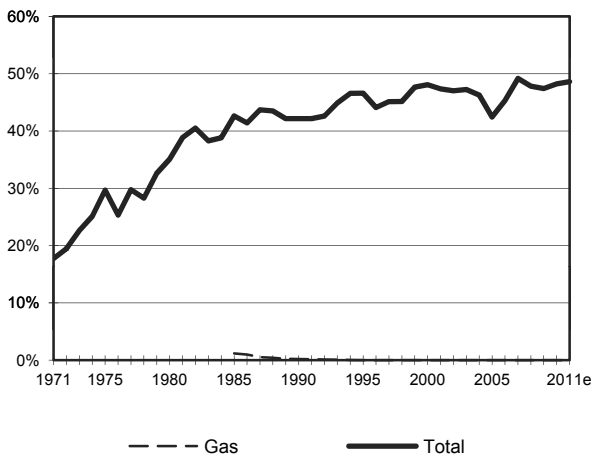


Figure 4. Breakdown of sectorial final consumption by source in 1973 and 2010\*\*

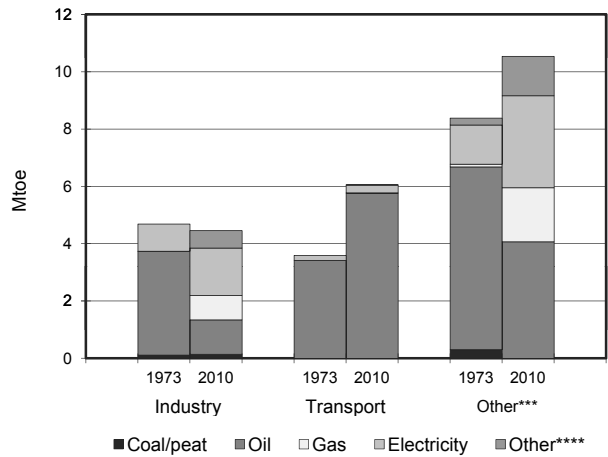


Figure 5. Electricity generation by fuel

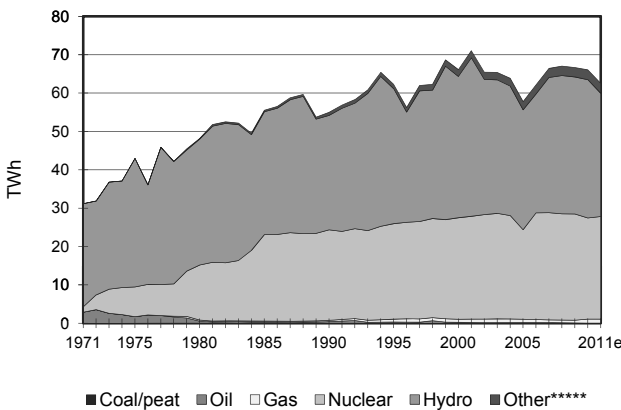
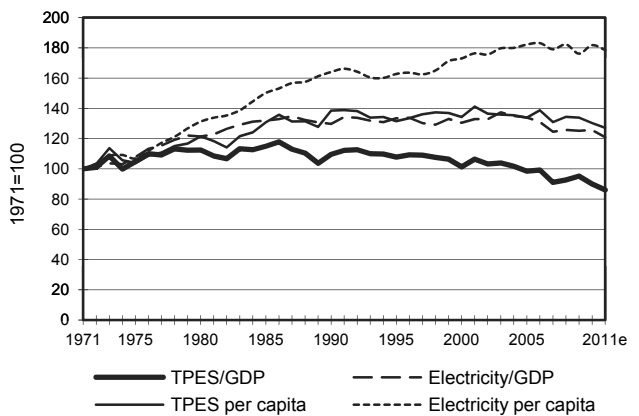


Figure 6. Selected indicators



\* Excluding electricity trade.  
 \*\* Includes non-energy use.  
 \*\*\* Includes residential, commercial and public services, agriculture/forestry, fishing and non-specified.  
 \*\*\*\* Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.  
 \*\*\*\*\* Includes geothermal, solar, wind, biofuels and waste, etc.

## Turkey : 2009

Million tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	17.40	2.37	-	0.56	-	3.09	2.18	4.67	-	-	30.28
Imports	13.34	14.12	18.73	29.52	-	-	-	-	0.07	-	75.77
Exports	-	-	-4.81	-0.58	-	-	-	-	-0.13	-	-5.52
Intl. marine bunkers	-	-	-0.27	-	-	-	-	-	-	-	-0.27
Intl. aviation bunkers	-	-	-1.42	-	-	-	-	-	-	-	-1.42
Stock changes	-0.98	-0.07	0.46	-0.59	-	-	-	-	-	-	-1.17
<b>TPES</b>	<b>29.76</b>	<b>16.42</b>	<b>12.69</b>	<b>28.91</b>	-	<b>3.09</b>	<b>2.18</b>	<b>4.67</b>	<b>-0.06</b>	-	<b>97.66</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-1.02	2.08	-	-	-	-	-	-0.00	-	-	1.05
Electricity plants	-13.32	-	-1.08	-14.47	-	-3.09	-0.50	-0.08	16.12	-	-16.42
CHP plants	-0.18	-	-0.14	-1.90	-	-	-	-0.01	0.63	1.06	-0.53
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-1.24 e	-	-	-	-	-	-	-	-	-	-1.24
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB plants	-0.53	-	-	-	-	-	-	-	-	-	-0.53
Oil refineries	-	-18.64	19.00	-	-	-	-	-	-	-	0.36
Petrochemical plants	-	0.14	-0.14	-	-	-	-	-	-	-	-0.00
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-0.09	-	-	-	-	-	-	-	-0.09
Energy industry own use	-0.57	-	-1.63	-1.29	-	-	-0.13	-	-0.88	-	-4.50
Losses	-0.09	-	-	-0.00	-	-	-	-	-2.49	-	-2.59
<b>TFC</b>	<b>12.81</b>	-	<b>28.60</b>	<b>11.25</b>	-	-	<b>1.55</b>	<b>4.58</b>	<b>13.31</b>	<b>1.06</b>	<b>73.16</b>
<b>INDUSTRY</b>	<b>5.94</b>	-	<b>1.33</b>	<b>4.39</b>	-	-	-	-	<b>5.88</b>	<b>1.06</b>	<b>18.60</b>
Iron and steel	1.05 e	-	0.06	0.48	-	-	-	-	1.38	-	2.97
Chemical and petrochem.	0.16	-	0.33	0.45	-	-	-	-	0.28	-	1.21
Non-ferrous metals	0.06	-	0.02	0.39	-	-	-	-	0.17	-	0.64
Non-metallic minerals	0.05	-	0.32	0.93	-	-	-	-	0.77	-	2.07
Transport equipment	-	-	-	0.06	-	-	-	-	-	-	0.06
Machinery	0.00	-	-	0.03	-	-	-	-	0.34	-	0.38
Mining and quarrying	-	-	-	0.00	-	-	-	-	0.11	-	0.12
Food and tobacco	0.11	-	0.28	0.29	-	-	-	-	0.42	-	1.10
Paper, pulp and printing	0.02	-	0.04	0.15	-	-	-	-	0.16	-	0.36
Wood and wood products	0.26	-	-	0.07	-	-	-	-	0.14	-	0.47
Construction	2.14	-	-	0.01	-	-	-	-	0.17	-	2.31
Textile and leather	0.09	-	-	0.35	-	-	-	-	1.03	-	1.47
Non-specified	2.01	-	0.29	1.18	-	-	-	-	0.92	1.06	5.45
<b>TRANSPORT</b>	-	-	<b>14.69</b>	<b>0.19</b>	-	-	-	<b>0.01</b>	<b>0.06</b>	-	<b>14.94</b>
Domestic aviation	-	-	0.73	-	-	-	-	-	-	-	0.73
Road	-	-	13.23	0.03	-	-	-	0.01	-	-	13.27
Rail	-	-	0.14	-	-	-	-	-	0.02	-	0.16
Pipeline transport	-	-	-	0.15	-	-	-	-	0.03	-	0.18
Domestic navigation	-	-	0.59	-	-	-	-	-	-	-	0.59
Non-specified	-	-	-	-	-	-	-	-	0.01	-	0.01
<b>OTHER</b>	<b>6.87</b>	-	<b>5.91</b>	<b>6.49</b>	-	-	<b>1.55</b>	<b>4.58</b>	<b>7.38</b>	-	<b>32.77</b>
Residential	5.90	-	1.62	4.40	-	-	1.55	4.58	3.37	-	21.40
Comm. and public services	0.83	-	-	2.07	-	-	-	-	3.59	-	6.49
Agriculture/forestry	0.00	-	4.29	0.03	-	-	-	-	0.41	-	4.73
Fishing	-	-	-	0.00	-	-	-	-	0.01	-	0.01
Non-specified	0.13	-	-	-	-	-	-	-	-	-	0.13
<b>NON-ENERGY USE</b>	-	-	<b>6.68</b>	<b>0.18</b>	-	-	-	-	-	-	<b>6.85</b>
in industry/transf./energy	-	-	6.04	0.18	-	-	-	-	-	-	6.22
of which: feedstocks	-	-	2.66	0.18	-	-	-	-	-	-	2.83
in transport	-	-	0.63	-	-	-	-	-	-	-	0.63
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>55.68</b>	-	<b>4.81</b>	<b>96.10</b>	-	<b>35.96</b>	<b>1.93</b>	<b>0.34</b>	-	-	<b>194.81</b>
Electricity plants	55.07	-	4.27	89.91	-	35.96	1.93	0.32	-	-	187.46
CHP plants	0.61	-	0.53	6.19	-	-	-	0.02	-	-	7.36
<b>Heat generated - PJ</b>	<b>0.56</b>	-	<b>0.91</b>	<b>42.75</b>	-	-	-	-	-	-	<b>44.22</b>
CHP plants	0.56	-	0.91	42.75	-	-	-	-	-	-	44.22
Heat plants	-	-	-	-	-	-	-	-	-	-	-

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Turkey : 2010

Million tonnes of oil equivalent											
SUPPLY AND CONSUMPTION	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	17.52	2.48	-	0.56	-	4.45	2.65	4.56	-	-	32.23
Imports	13.85	16.83	18.93	31.31	-	-	-	-	0.10	-	81.02
Exports	-	-	-6.41	-0.53	-	-	-	-	-0.16	-	-7.11
Intl. marine bunkers	-	-	-0.37	-	-	-	-	-	-	-	-0.37
Intl. aviation bunkers	-	-	-1.22	-	-	-	-	-	-	-	-1.22
Stock changes	0.66	0.15	-0.28	0.05	-	-	-	-	-	-	0.59
<b>TPES</b>	<b>32.03</b>	<b>19.47</b>	<b>10.65</b>	<b>31.39</b>	<b>-</b>	<b>4.45</b>	<b>2.65</b>	<b>4.56</b>	<b>-0.07</b>	<b>-</b>	<b>105.13</b>
Transfers	-	-	-	-	-	-	-	-	-	-	-
Statistical differences	-1.75	-0.13	-	-	-	-	-	-	-	-	-1.88
Electricity plants	-13.65	-	-0.46	-14.88	-	-4.45	-0.83	-0.11	17.48	-	-16.90
CHP plants	-0.21	-	-0.10	-2.16	-	-	-	-0.01	0.68	1.22	-0.57
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-1.39 e	-	-	-	-	-	-	-	-	-	-1.39
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB plants	-0.28	-	-	-	-	-	-	-	-	-	-0.28
Oil refineries	-	-19.94	20.23	-	-	-	-	-	-	-	0.29
Petrochemical plants	-	0.60	-0.63	-	-	-	-	-	-	-	-0.02
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-0.08	-	-	-	-	-	-	-	-0.08
Energy industry own use	-0.64	-	-1.24	-1.20	-	-	-0.13	-	-0.89	-	-4.09
Losses	-0.01	-	-	-0.00	-	-	-	-	-2.60	-	-2.61
<b>TFC</b>	<b>14.12</b>	<b>-</b>	<b>28.39</b>	<b>13.13</b>	<b>-</b>	<b>-</b>	<b>1.69</b>	<b>4.44</b>	<b>14.61</b>	<b>1.22</b>	<b>77.60</b>
<b>INDUSTRY</b>	<b>7.29</b>	<b>-</b>	<b>1.12</b>	<b>6.31</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>6.64</b>	<b>1.22</b>	<b>22.58</b>
Iron and steel	1.90 e	-	0.14	0.45	-	-	-	-	1.43	-	3.92
Chemical and petrochem.	0.24	-	0.18	0.63	-	-	-	-	0.37	-	1.43
Non-ferrous metals	0.08	-	0.00	0.43	-	-	-	-	0.20	-	0.71
Non-metallic minerals	0.06	-	0.33	0.97	-	-	-	-	0.86	-	2.21
Transport equipment	-	-	-	0.04	-	-	-	-	-	-	0.04
Machinery	-	-	-	0.07	-	-	-	-	0.41	-	0.48
Mining and quarrying	-	-	-	0.06	-	-	-	-	0.16	-	0.22
Food and tobacco	0.19	-	0.31	0.53	-	-	-	-	0.44	-	1.48
Paper, pulp and printing	0.01	-	0.00	0.15	-	-	-	-	0.19	-	0.35
Wood and wood products	0.26	-	-	0.05	-	-	-	-	0.16	-	0.47
Construction	2.29	-	-	0.12	-	-	-	-	0.19	-	2.60
Textile and leather	0.09	-	-	0.44	-	-	-	-	1.19	-	1.72
Non-specified	2.16	-	0.17	2.38	-	-	-	-	1.02	1.22	6.95
<b>TRANSPORT</b>	<b>-</b>	<b>-</b>	<b>14.35</b>	<b>0.22</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.01</b>	<b>0.05</b>	<b>-</b>	<b>14.63</b>
Domestic aviation	-	-	0.41	-	-	-	-	-	-	-	0.41
Road	-	-	13.19	0.06	-	-	-	0.01	-	-	13.26
Rail	-	-	0.15	-	-	-	-	-	0.02	-	0.17
Pipeline transport	-	-	-	0.16	-	-	-	-	0.02	-	0.18
Domestic navigation	-	-	0.60	-	-	-	-	-	-	-	0.60
Non-specified	-	-	-	-	-	-	-	-	0.01	-	0.01
<b>OTHER</b>	<b>6.83</b>	<b>-</b>	<b>5.91</b>	<b>6.41</b>	<b>-</b>	<b>-</b>	<b>1.69</b>	<b>4.43</b>	<b>7.92</b>	<b>-</b>	<b>33.20</b>
Residential	6.46	-	1.45	4.85	-	-	1.69	4.43	3.56	-	22.45
Comm. and public services	0.27	-	-	1.54	-	-	-	-	3.88	-	5.69
Agriculture/forestry	0.00	-	4.45	0.02	-	-	-	-	0.47	-	4.94
Fishing	-	-	-	0.00	-	-	-	-	0.01	-	0.02
Non-specified	0.09	-	-	-	-	-	-	-	-	-	0.09
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>7.00</b>	<b>0.20</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>7.20</b>
in industry/transf./energy	-	-	6.30	0.20	-	-	-	-	-	-	6.50
of which: feedstocks	-	-	2.30	0.20	-	-	-	-	-	-	2.50
in transport	-	-	0.70	-	-	-	-	-	-	-	0.70
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>55.05</b>	<b>-</b>	<b>2.18</b>	<b>98.14</b>	<b>-</b>	<b>51.80</b>	<b>3.58</b>	<b>0.46</b>	<b>-</b>	<b>-</b>	<b>211.21</b>
Electricity plants	54.34	-	1.86	91.25	-	51.80	3.58	0.43	-	-	203.27
CHP plants	0.70	-	0.32	6.89	-	-	-	0.02	-	-	7.94
<b>Heat generated - PJ</b>	<b>0.86</b>	<b>-</b>	<b>0.94</b>	<b>49.32</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>51.12</b>
CHP plants	0.86	-	0.94	49.32	-	-	-	-	-	-	51.12
Heat plants	-	-	-	-	-	-	-	-	-	-	-

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Turkey

## Estimated energy supply balance for 2011

Million tonnes of oil equivalent											
SUPPLY	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	18.56	2.34	-	0.63	-	4.48	2.70	4.56	-	-	33.26
Imports	15.41	17.96	19.39	36.14	-	-	-	-	0.41	-	89.30
Exports	-	-	-6.86	-0.59	-	-	-	-	-0.33	-	-7.78
Intl. marine bunkers	-	-	-0.41	-	-	-	-	-	-	-	-0.41
Intl. aviation bunkers	-	-	-1.19	-	-	-	-	-	-	-	-1.19
Stock changes	-	0.32	0.06	0.63	-	-	-	-	-	-	1.00
<b>TPES</b>	<b>33.97</b>	<b>20.61</b>	<b>10.98</b>	<b>36.80</b>	-	<b>4.48</b>	<b>2.70</b>	<b>4.56</b>	<b>0.08</b>	-	<b>114.18</b>
Electricity and Heat Output											
Elec. generated - TWh	64.98	-	3.36	102.13	-	52.07	5.43	0.45	-	-	228.41
Heat generated - PJ	0.91	-	1.07	48.54	-	-	-	0.67	-	-	51.18

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1960	1971	1980	1990	2000	2009	2010	2011e
Energy production (Mtoe)	9.4	13.8	17.1	25.8	25.9	30.3	32.2	33.3
Net imports (Mtoe)	1.1	6.1	14.4	28.1	50.9	70.3	73.9	81.5
Total primary energy supply (Mtoe)	10.7	19.5	31.4	52.8	76.4	97.7	105.1	114.2
Net oil imports (Mtoe)	1.2	6.1	13.7	21.2	29.3	28.0	29.4	30.5
Oil supply (Mtoe)	1.5	9.2	15.6	23.4	30.4	29.1	30.1	31.6
Electricity consumption (TWh)*	2.5	8.8	21.8	50.1	104.5	165.1	180.2	199.1
GDP (billion 2005 USD)	64.5 e	115.0	162.3	269.7	386.6	517.7	564.3	612.2
GDP PPP (billion 2005 USD)	104.4 e	186.0	262.5	436.2	625.3	837.4	912.8	990.3
Population (millions)	27.53 e	36.22	44.44	55.12	64.26	71.90	72.85	73.87
Industrial production index (2005=100)	..	..	..	57.00	80.80	102.90	116.40	126.80
Total self-sufficiency**	0.8766	0.7066	0.5450	0.4893	0.3387	0.3101	0.3065	0.2913
Coal and peat self-sufficiency**	0.9488	0.9782	0.8805	0.7317	0.5451	0.5848	0.5471	0.5463
Oil self-sufficiency**	0.2427	0.3849	0.1452	0.1544	0.0898	0.0815	0.0823	0.0741
Natural gas self-sufficiency**	..	..	-	0.0611	0.0416	0.0195	0.0179	0.0170
TPES/GDP (toe per thousand 2005 USD)	0.1657 e	0.1699	0.1938	0.1956	0.1975	0.1886	0.1863	0.1865
TPES/GDP PPP (toe per thousand 2005 USD)	0.1024 e	0.1051	0.1198	0.1209	0.1221	0.1166	0.1152	0.1153
TPES/population (toe per capita)	0.3882 e	0.5397	0.7076	0.9571	1.1881	1.3583	1.4432	1.5458
Net oil imports/GDP (toe per thousand 2005 USD)	0.0179 e	0.0532	0.0847	0.0788	0.0757	0.0542	0.0520	0.0498
Oil supply/GDP (toe per thousand 2005 USD)	0.0236 e	0.0797	0.0963	0.0868	0.0786	0.0562	0.0534	0.0516
Oil supply/population (toe per capita)	0.0554 e	0.2532	0.3516	0.4246	0.4731	0.4050	0.4134	0.4277
Elect. cons./GDP (kWh per 2005 USD)	0.0393 e	0.0765	0.1343	0.1859	0.2704	0.3189	0.3193	0.3252
Elect. cons./population (kWh per capita)	92 e	243	490	910	1627	2296	2474	2695
Industry cons.***/industrial production (2005=100)	..	..	..	94.34	112.68	95.56	98.95	..
Industry oil cons.***/industrial production (2005=100)	..	..	..	139.59	129.53	94.38	84.00	..

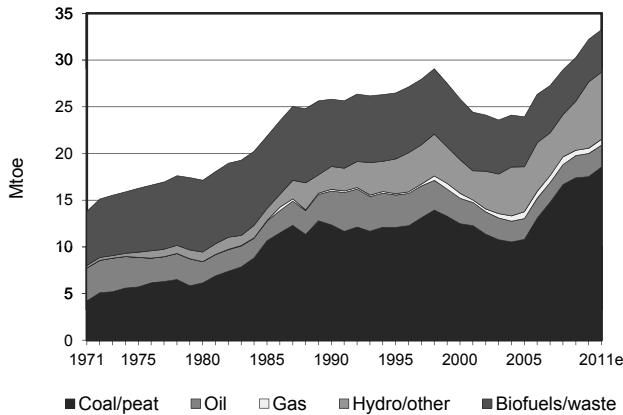
\* Electricity consumption equals domestic supply less losses.

\*\* Production divided by TPES.

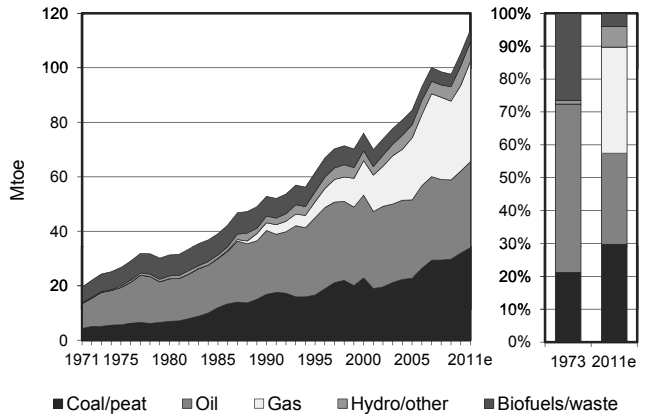
\*\*\* Includes non-energy use.

## Turkey

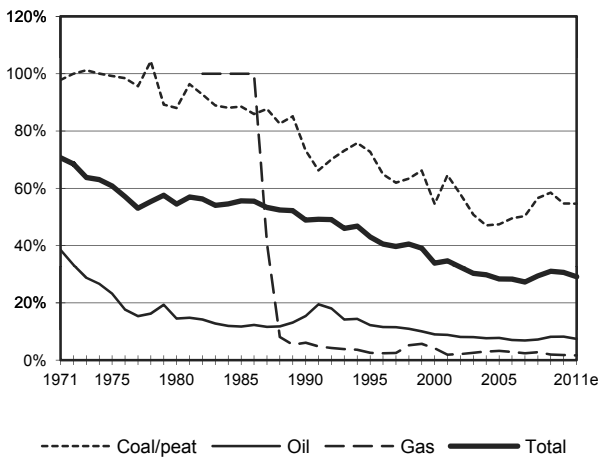
**Figure 1. Energy production**



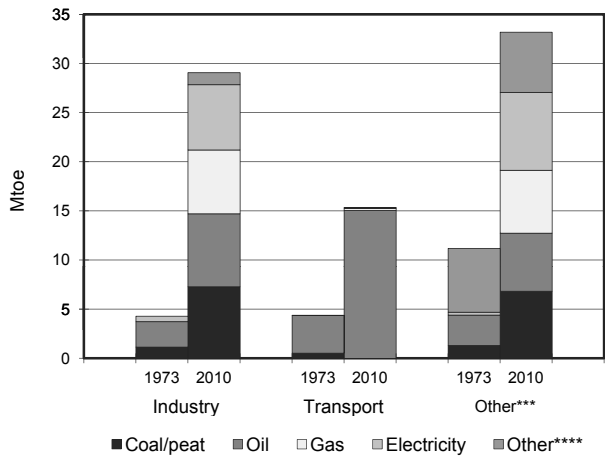
**Figure 2. Total primary energy supply\***



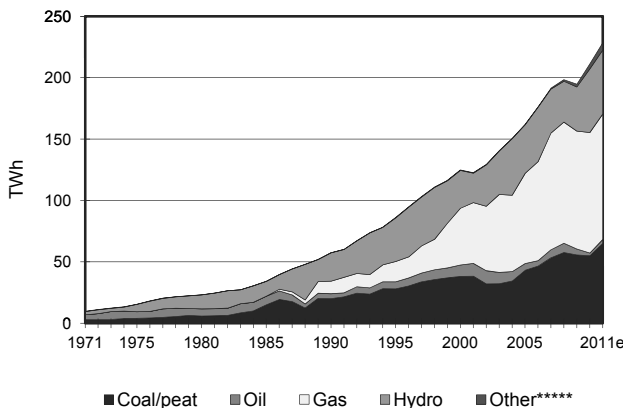
**Figure 3. Energy self-sufficiency**



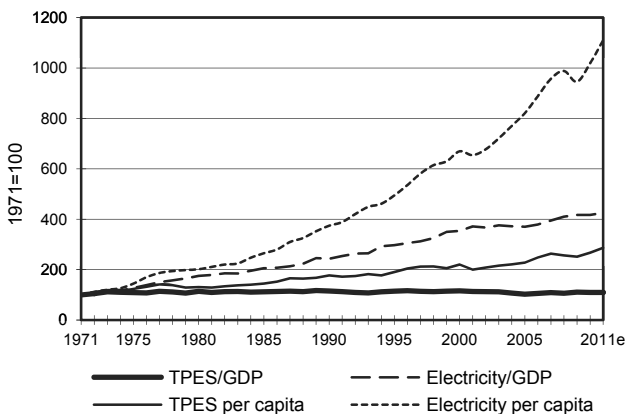
**Figure 4. Breakdown of sectorial final consumption by source in 1973 and 2010\*\***



**Figure 5. Electricity generation by fuel**



**Figure 6. Selected indicators**



\* Excluding electricity trade.  
 \*\* Includes non-energy use.  
 \*\*\* Includes residential, commercial and public services, agriculture/forestry, fishing and non-specified.  
 \*\*\*\* Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.  
 \*\*\*\*\* Includes geothermal, solar, wind, biofuels and waste, etc.

## United Kingdom : 2009

Million tonnes of oil equivalent

<b>SUPPLY AND CONSUMPTION</b>	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	10.70	70.90	-	53.73	18.01	0.45	0.87	4.27	-	-	158.94
Imports	23.55	56.23	22.72	35.26	-	-	-	1.11	0.57	-	139.45
Exports	-0.59	-46.86	-26.01	-10.61	-	-	-	-0.00	-0.32	-	-84.40
Intl. marine bunkers	-	-	-2.42	-	-	-	-	-	-	-	-2.42
Intl. aviation bunkers	-	-	-11.13	-	-	-	-	-	-	-	-11.13
Stock changes	-3.83	0.68	0.08	-0.29	-	-	-	0.00	-	-	-3.35
<b>TPES</b>	<b>29.83</b>	<b>80.95</b>	<b>-16.76</b>	<b>78.10</b>	<b>18.01</b>	<b>0.45</b>	<b>0.87</b>	<b>5.38</b>	<b>0.25</b>	-	<b>197.07</b>
Transfers	-	-2.83	2.96	-	-	-	-	-	-	-	0.12
Statistical differences	0.10	-0.52	0.19	-0.08	-	-	-	-0.00	-0.00	-	-0.31
Electricity plants	-24.13	-	-1.03	-24.48	-18.01	-0.45	-0.80	-3.12	29.93	-	-42.09
CHP plants	-0.22	-	-0.43	-3.32	-	-	-	-0.37	2.15	-	-2.19
Heat plants	-0.33	-	-0.06	-1.76	-	-	-	-	-	1.30	-0.85
Blast furnaces	-1.32 e	-	-0.13	-	-	-	-	-	-	-	-1.44
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB plants	-0.38	-	-	-	-	-	-	-	-	-	-0.38
Oil refineries	-	-77.90	76.39	-	-	-	-	-	-	-	-1.51
Petrochemical plants	-	0.31	-0.34	-	-	-	-	-	-	-	-0.04
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	0.03	-	-	-0.03	-	-	-	-	-	-	-0.00
Energy industry own use	-0.66	-	-4.92	-5.34	-	-	-	-	-2.23	-0.09	-13.26
Losses	-0.07	-	-	-1.27	-	-	-	-	-2.35	-	-3.68
<b>TFC</b>	<b>2.85</b>	-	<b>55.87</b>	<b>41.83</b>	-	-	<b>0.07</b>	<b>1.89</b>	<b>27.75</b>	<b>1.21</b>	<b>131.46</b>
<b>INDUSTRY</b>	<b>2.18</b>	-	<b>4.66</b>	<b>9.01</b>	-	-	-	<b>0.38</b>	<b>8.67</b>	<b>0.76</b>	<b>25.67</b>
Iron and steel	0.92 e	-	0.08	0.39	-	-	-	-	0.31	-	1.70
Chemical and petrochem.	0.05	-	0.13	1.98	-	-	-	-	1.52	0.35	4.04
Non-ferrous metals	0.02	-	0.04	0.19	-	-	-	-	0.55	-	0.80
Non-metallic minerals	0.67	-	0.16	1.17	-	-	-	-	0.60	-	2.61
Transport equipment	0.03	-	0.08	0.56	-	-	-	-	0.43	-	1.10
Machinery	0.01	-	0.10	0.75	-	-	-	-	1.22	-	2.07
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	0.03	-	0.23	1.62	-	-	-	-	0.92	0.00	2.80
Paper, pulp and printing	0.08	-	0.06	1.11	-	-	-	-	0.95	-	2.20
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	0.00	-	0.13	0.16	-	-	-	-	0.14	-	0.43
Textile and leather	0.04	-	0.08	0.40	-	-	-	-	0.26	-	0.79
Non-specified	0.33	-	3.58	0.65	-	-	-	0.38	1.77	0.41	7.13
<b>TRANSPORT</b>	<b>0.01</b>	-	<b>39.89</b>	-	-	-	-	<b>0.97</b>	<b>0.34</b>	-	<b>41.20</b>
Domestic aviation	-	-	0.73	-	-	-	-	-	-	-	0.73
Road	-	-	37.09	-	-	-	-	0.97	-	-	38.06
Rail	0.01	-	0.60	-	-	-	-	-	0.33	-	0.95
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	1.46	-	-	-	-	-	-	-	1.46
Non-specified	-	-	-	-	-	-	-	-	0.00	-	0.00
<b>OTHER</b>	<b>0.65</b>	-	<b>3.97</b>	<b>32.20</b>	-	-	<b>0.07</b>	<b>0.53</b>	<b>18.75</b>	<b>0.44</b>	<b>56.62</b>
Residential	0.61	-	2.81	25.72	-	-	-	0.33	10.19	0.05	39.71
Comm. and public services	0.04	-	0.68	5.14	-	-	-	0.09	8.22	0.39	14.57
Agriculture/forestry	-	-	0.27	0.14	-	-	-	0.11	0.33	-	0.85
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	0.00	-	0.22	1.20	-	-	0.07	-	-	-	1.49
<b>NON-ENERGY USE</b>	-	-	<b>7.35</b>	<b>0.62</b>	-	-	-	-	-	-	<b>7.97</b>
in industry/transf./energy	-	-	7.11	0.62	-	-	-	-	-	-	7.72
of which: feedstocks	-	-	4.57	0.62	-	-	-	-	-	-	5.19
in transport	-	-	0.15	-	-	-	-	-	-	-	0.15
in other	-	-	0.09	-	-	-	-	-	-	-	0.09
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>104.45</b>	-	<b>6.04</b>	<b>166.49</b>	<b>69.10</b>	<b>5.26</b>	<b>9.32</b>	<b>12.39</b>	-	-	<b>373.06</b>
Electricity plants	103.43	-	4.06	146.37	69.10	5.26	9.32	10.53	-	-	348.07
CHP plants	1.02	-	1.99	20.12	-	-	-	1.86	-	-	24.98
<b>Heat generated - PJ</b>	<b>8.32</b>	-	<b>1.55</b>	<b>44.58</b>	-	-	-	-	-	-	<b>54.46</b>
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	8.32	-	1.55	44.58	-	-	-	-	-	-	54.46

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.



## United Kingdom : 2010

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	11.03	64.37	-	51.45	16.19	0.31	0.97	4.44	-	-	148.77
Imports	16.60	56.31	24.58	45.61	-	-	-	1.48	0.61	-	145.18
Exports	-0.88	-43.26	-26.37	-13.65	-	-	-	-0.02	-0.39	-	-84.56
Intl. marine bunkers	-	-	-2.09	-	-	-	-	-	-	-	-2.09
Intl. aviation bunkers	-	-	-10.73	-	-	-	-	-	-	-	-10.73
Stock changes	4.00	-0.04	0.61	1.38	-	-	-	0.00	-	-	5.94
<b>TPES</b>	<b>30.75</b>	<b>77.37</b>	<b>-14.01</b>	<b>84.79</b>	<b>16.19</b>	<b>0.31</b>	<b>0.97</b>	<b>5.90</b>	<b>0.23</b>	<b>-</b>	<b>202.51</b>
Transfers	-	-1.75	2.36	-	-	-	-	-	-	-	0.61
Statistical differences	0.40	-0.29	0.15	-0.25	-	-	-	-0.00	0.00	-	0.01
Electricity plants	-25.07	-	-0.61	-25.55	-16.19	-0.31	-0.88	-3.40	30.39	-	-41.62
CHP plants	-0.22	-	-0.52	-3.21	-	-	-	-0.36	2.12	-	-2.19
Heat plants	-0.32	-	-0.06	-1.85	-	-	-	-	-	1.38	-0.85
Blast furnaces	-1.35 e	-	-0.12	-	-	-	-	-	-	-	-1.47
Gas works	-	-	-	-	-	-	-	-	-	-	-
Coke/pat. fuel/BKB plants	-0.60	-	-	-	-	-	-	-	-	-	-0.60
Oil refineries	-	-75.58	74.41	-	-	-	-	-	-	-	-1.17
Petrochemical plants	-	0.25	-0.28	-	-	-	-	-	-	-	-0.03
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	0.02	-	-	-0.02	-	-	-	-	-	-	-0.00
Energy industry own use	-0.65	-	-5.07	-5.37	-	-	-	-	-2.19	-0.09	-13.37
Losses	-0.16	-	-	-1.45	-	-	-	-	-2.31	-	-3.92
<b>TFC</b>	<b>2.80</b>	<b>-</b>	<b>56.27</b>	<b>47.09</b>	<b>-</b>	<b>-</b>	<b>0.09</b>	<b>2.14</b>	<b>28.24</b>	<b>1.29</b>	<b>137.91</b>
<b>INDUSTRY</b>	<b>2.11</b>	<b>-</b>	<b>4.67</b>	<b>9.44</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.41</b>	<b>8.99</b>	<b>0.84</b>	<b>26.45</b>
Iron and steel	0.87 e	-	0.07	0.45	-	-	-	-	0.30	-	1.69
Chemical and petrochem.	0.05	-	0.12	2.04	-	-	-	-	1.56	0.42	4.20
Non-ferrous metals	0.01	-	0.03	0.20	-	-	-	-	0.58	-	0.83
Non-metallic minerals	0.66	-	0.15	1.22	-	-	-	-	0.63	-	2.66
Transport equipment	0.03	-	0.07	0.59	-	-	-	-	0.45	-	1.14
Machinery	0.01	-	0.09	0.77	-	-	-	-	1.24	-	2.10
Mining and quarrying	-	-	-	-	-	-	-	-	-	-	-
Food and tobacco	0.03	-	0.22	1.75	-	-	-	-	0.99	0.00	2.99
Paper, pulp and printing	0.08	-	0.05	1.15	-	-	-	-	0.98	0.00	2.26
Wood and wood products	-	-	-	-	-	-	-	-	-	-	-
Construction	0.00	-	0.12	0.17	-	-	-	-	0.14	-	0.43
Textile and leather	0.04	-	0.08	0.41	-	-	-	-	0.26	-	0.79
Non-specified	0.32	-	3.66	0.68	-	-	-	0.41	1.85	0.41	7.35
<b>TRANSPORT</b>	<b>0.01</b>	<b>-</b>	<b>39.79</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.13</b>	<b>0.34</b>	<b>-</b>	<b>41.26</b>
Domestic aviation	-	-	0.71	-	-	-	-	-	-	-	0.71
Road	-	-	37.11	-	-	-	-	1.13	-	-	38.23
Rail	0.01	-	0.61	-	-	-	-	-	0.33	-	0.95
Pipeline transport	-	-	-	-	-	-	-	-	-	-	-
Domestic navigation	-	-	1.37	-	-	-	-	-	-	-	1.37
Non-specified	-	-	-	-	-	-	-	-	0.00	-	0.00
<b>OTHER</b>	<b>0.68</b>	<b>-</b>	<b>4.37</b>	<b>37.00</b>	<b>-</b>	<b>-</b>	<b>0.09</b>	<b>0.60</b>	<b>18.91</b>	<b>0.44</b>	<b>62.09</b>
Residential	0.66	-	3.19	30.14	-	-	-	0.34	10.21	0.05	44.59
Comm. and public services	0.02	-	0.65	5.43	-	-	-	0.12	8.36	0.39	14.96
Agriculture/forestry	0.00	-	0.29	0.15	-	-	-	0.15	0.35	-	0.94
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	0.00	-	0.24	1.28	-	-	0.09	-	-	-	1.61
<b>NON-ENERGY USE</b>	<b>-</b>	<b>-</b>	<b>7.44</b>	<b>0.66</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>8.09</b>
in industry/transf./energy	-	-	7.14	0.66	-	-	-	-	-	-	7.80
of which: feedstocks	-	-	4.25	0.66	-	-	-	-	-	-	4.91
in transport	-	-	0.17	-	-	-	-	-	-	-	0.17
in other	-	-	0.12	-	-	-	-	-	-	-	0.12
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>108.80</b>	<b>-</b>	<b>4.86</b>	<b>175.00</b>	<b>62.14</b>	<b>3.60</b>	<b>10.22</b>	<b>13.36</b>	<b>-</b>	<b>-</b>	<b>377.98</b>
Electricity plants	107.82	-	2.38	155.56	62.14	3.60	10.22	11.66	-	-	353.38
CHP plants	0.98	-	2.48	19.44	-	-	-	1.70	-	-	24.60
<b>Heat generated - PJ</b>	<b>8.37</b>	<b>-</b>	<b>1.61</b>	<b>47.74</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>57.71</b>
CHP plants	-	-	-	-	-	-	-	-	-	-	-
Heat plants	8.37	-	1.61	47.74	-	-	-	-	-	-	57.71

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## United Kingdom

## Estimated energy supply balance for 2011

Million tonnes of oil equivalent											
SUPPLY	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	10.99	53.28	-	40.70	17.99	0.49	1.45	4.91	-	-	129.80
Imports	20.14	59.47	24.00	45.21	-	-	-	1.40	0.75	-	150.97
Exports	-0.70	-33.97	-28.07	-14.21	-	-	-	-0.02	-0.21	-	-77.19
Intl. marine bunkers	-	-	-2.22	-	-	-	-	-	-	-	-2.22
Intl. aviation bunkers	-	-	-10.88	-	-	-	-	-	-	-	-10.88
Stock changes	0.08	0.45	-0.40	-1.57	-	-	-	-0.02	-	-	-1.47
<b>TPES</b>	<b>30.51</b>	<b>79.22</b>	<b>-17.58</b>	<b>70.13</b>	<b>17.99</b>	<b>0.49</b>	<b>1.45</b>	<b>6.26</b>	<b>0.54</b>	<b>-</b>	<b>189.00</b>
Electricity and Heat Output											
Elec. generated - TWh	108.78	-	2.87	145.37	69.03	5.69	15.78	14.85	-	-	362.38
Heat generated - PJ	8.37	-	1.61	47.74	-	-	-	-	-	-	57.71

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1960	1971	1980	1990	2000	2009	2010	2011e
Energy production (Mtoe)	114.8	109.8	197.9	208.0	272.5	158.9	148.8	129.8
Net imports (Mtoe)	47.4	112.6	12.3	4.7	-40.4	55.1	60.6	73.8
Total primary energy supply (Mtoe)	158.9	208.7	198.4	205.9	222.9	197.1	202.5	189.0
Net oil imports (Mtoe)	51.2	111.0	1.9	-11.0	-46.7	6.1	11.3	21.4
Oil supply (Mtoe)	43.7	100.8	79.3	76.4	73.2	64.2	63.4	61.6
Electricity consumption (TWh)*	126.4	237.8	263.8	306.7	360.1	352.3	357.0	344.7
GDP (billion 2005 USD)	707.0 e	954.2	1132.2	1485.1	1979.3	2289.7	2337.6	2352.9
GDP PPP (billion 2005 USD)	611.2 e	825.0	978.8	1284.0	1711.2	1979.5	2020.9	2034.2
Population (millions)	52.37 e	55.93	56.33	57.24	58.89	61.79	62.18	62.40
Industrial production index (2005=100)	54.90	69.60	76.00	89.20	103.40	88.90	90.50	89.30
Total self-sufficiency**	0.7225	0.5262	0.9971	1.0101	1.2222	0.8065	0.7346	0.6867
Coal and peat self-sufficiency**	0.9951	1.0289	1.0750	0.8496	0.5112	0.3588	0.3588	0.3601
Oil self-sufficiency**	0.0035	0.0024	1.0410	1.2471	1.7982	1.1046	1.0158	0.8644
Natural gas self-sufficiency**	0.9645	0.9541	0.7768	0.8670	1.1162	0.6880	0.6068	0.5803
TPES/GDP (toe per thousand 2005 USD)	0.2248 e	0.2187	0.1753	0.1387	0.1126	0.0861	0.0866	0.0803
TPES/GDP PPP (toe per thousand 2005 USD)	0.2600 e	0.2529	0.2027	0.1604	0.1303	0.0996	0.1002	0.0929
TPES/population (toe per capita)	3.0344 e	3.7312	3.5227	3.5977	3.7859	3.1893	3.2567	3.0287
Net oil imports/GDP (toe per thousand 2005 USD)	0.0725 e	0.1164	0.0017	-0.0074	-0.0236	0.0027	0.0048	0.0091
Oil supply/GDP (toe per thousand 2005 USD)	0.0618 e	0.1056	0.0701	0.0514	0.0370	0.0280	0.0271	0.0262
Oil supply/population (toe per capita)	0.8343 e	1.8018	1.4085	1.3344	1.2435	1.0387	1.0190	0.9878
Elect. cons./GDP (kWh per 2005 USD)	0.1788 e	0.2492	0.2330	0.2065	0.1819	0.1539	0.1527	0.1465
Elect. cons./population (kWh per capita)	2413 e	4252	4683	5358	6115	5702	5741	5523
Industry cons.***/industrial production (2005=100)	185.79	207.10	145.58	114.15	104.42	90.44	91.14	..
Industry oil cons.***/industrial production (2005=100)	129.47	279.85	155.31	106.66	96.11	82.83	81.67	..

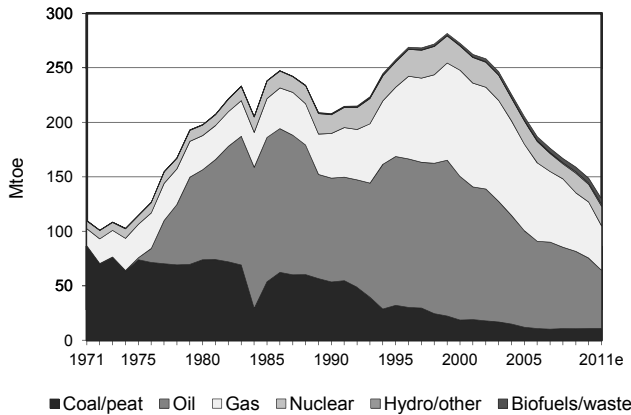
\* Electricity consumption equals domestic supply less losses.

\*\* Production divided by TPES.

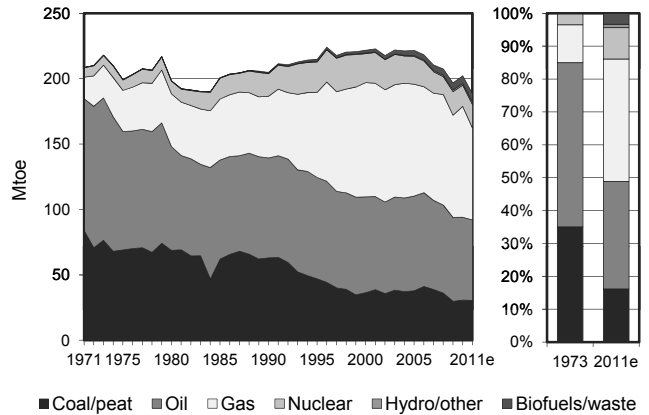
\*\*\* Includes non-energy use.

## United Kingdom

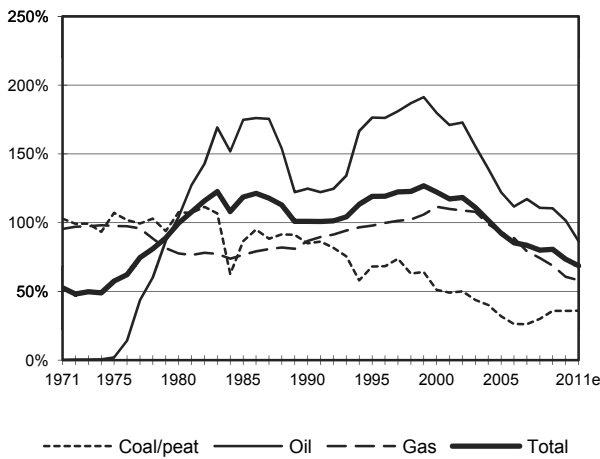
**Figure 1. Energy production**



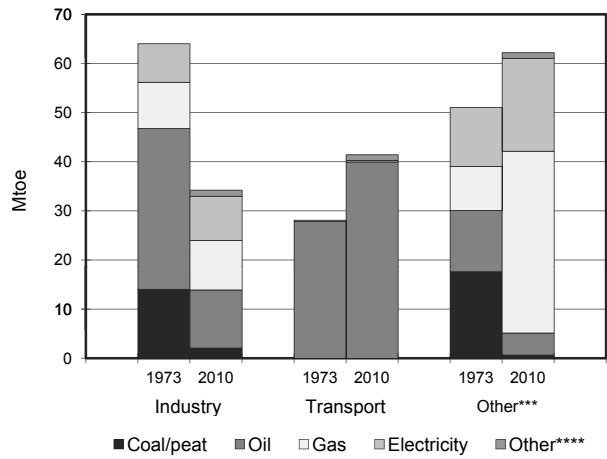
**Figure 2. Total primary energy supply\***



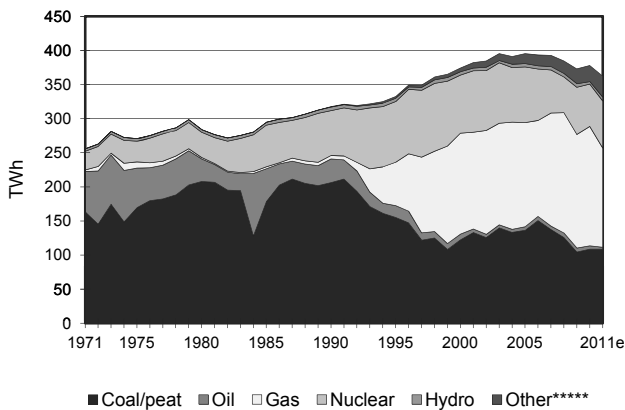
**Figure 3. Energy self-sufficiency**



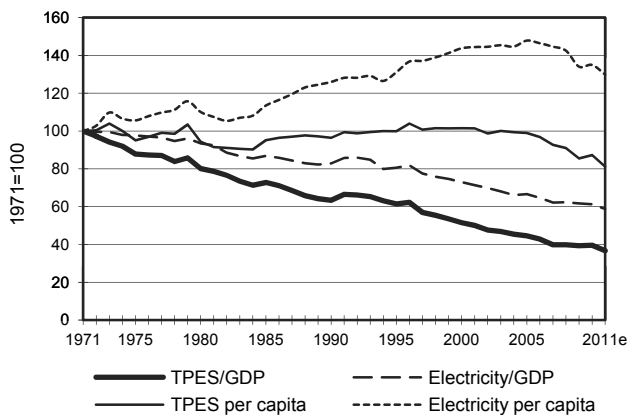
**Figure 4. Breakdown of sectorial final consumption by source in 1973 and 2010\*\***



**Figure 5. Electricity generation by fuel**



**Figure 6. Selected indicators**



\* Excluding electricity trade.

\*\* Includes non-energy use.

\*\*\* Includes residential, commercial and public services, agriculture/forestry, fishing and non-specified.

\*\*\*\* Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.

\*\*\*\*\* Includes geothermal, solar, wind, biofuels and waste, etc.

## United States : 2009

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	530.13	335.50	-	479.59	216.36	23.70	16.24 e	84.33	-	-	1685.85
Imports	12.76	536.27	81.57	87.01	-	-	-	0.63	4.49	-	722.73
Exports	-34.87	-8.42	-91.65	-24.63	-	-	-	-0.87	-1.56	-	-161.99
Intl. marine bunkers	-	-	-24.08	-	-	-	-	-	-	-	-24.08
Intl. aviation bunkers	-	-	-21.31	-	-	-	-	-	-	-	-21.31
Stock changes	-23.05	-2.36	-3.80	-6.75	-	-	-	-0.29	-	-	-36.23
<b>TPES</b>	<b>484.98</b>	<b>861.00</b>	<b>-59.26</b>	<b>535.23</b>	<b>216.36</b>	<b>23.70</b>	<b>16.24 e</b>	<b>83.80</b>	<b>2.93</b>	<b>-</b>	<b>2164.97</b>
Transfers	-	-39.51	41.19	-	-	-	-	-	-	-	1.68
Statistical differences	-13.74	-11.96	-0.05	-5.56	-	-	-	0.09	-	-	-31.22
Electricity plants	-427.26	-	-8.35	-134.09	-216.36	-23.70	-14.65 e	-11.80	331.87 e	-	-504.33
CHP plants	-12.47	-	-2.98	-38.55	-	-	-	-7.37	26.36	12.43	-22.58
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-3.11 e	-	-	-	-	-	-	-	-	-	-3.11
Gas works	-1.94	-	-	1.18	-	-	-	-	-	-	-0.77
Coke/pat. fuel/BKB plants	-1.75	-	-	-	-	-	-	-	-	-	-1.75
Oil refineries	-	-806.59	809.08	-	-	-	-	-	-	-	2.49
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-1.17	-	-45.77	-46.22	-	-	-	-	-25.50	-4.15 e	-122.82
Losses	-	-	-	-	-	-	-	-	-22.42	-1.49 e	-23.91
<b>TFC</b>	<b>23.54</b>	<b>2.93</b>	<b>733.86</b>	<b>311.99</b>	<b>-</b>	<b>-</b>	<b>1.59</b>	<b>64.73</b>	<b>313.23</b>	<b>6.79</b>	<b>1458.67</b>
<b>INDUSTRY</b>	<b>21.95</b>	<b>0.05</b>	<b>27.63</b>	<b>105.69</b>	<b>-</b>	<b>-</b>	<b>0.11</b>	<b>29.65</b>	<b>68.72</b>	<b>5.37</b>	<b>259.16</b>
Iron and steel	3.14 e	0.00	0.81	7.36	-	-	-	-	5.99	0.20 e	17.49
Chemical and petrochem.	4.19	-	7.30	32.30	-	-	-	0.17	18.92	3.29 e	66.17
Non-ferrous metals	-	0.00	0.42	5.17	-	-	-	-	6.12	0.11 e	11.81
Non-metallic minerals	4.72	0.01	4.09	11.18	-	-	-	0.43	3.16	0.00 e	23.59
Transport equipment	0.08	0.01	0.56	5.56	-	-	-	0.00	3.47	0.13 e	9.81
Machinery	0.09	0.01	0.96	9.17	-	-	-	-	8.59	0.10 e	18.92
Mining and quarrying	-	-	-	..	-	-	-	-	1.91	-	1.91
Food and tobacco	3.40	0.00	2.66	15.11	-	-	-	0.56	6.33	0.59 e	28.67
Paper, pulp and printing	3.89	0.01	2.94	11.44	-	-	-	20.94	9.15	0.50 e	48.87
Wood and wood products	0.03	0.00	2.89	1.94	-	-	-	4.80	2.18	0.27 e	12.11
Construction	-	-	1.32	..	-	-	-	-	-	-	1.32
Textile and leather	0.10	0.00	0.20	2.68	-	-	-	-	2.14	0.16 e	5.28
Non-specified	2.32	0.01	3.48	3.76	-	-	0.11	2.75	0.76	0.02 e	13.21
<b>TRANSPORT</b>	<b>-</b>	<b>0.03</b>	<b>537.62</b>	<b>14.58</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>22.17</b>	<b>0.67</b>	<b>-</b>	<b>575.07</b>
Domestic aviation	-	-	48.05	-	-	-	-	-	-	-	48.05
Road	-	0.03	476.08	0.68	-	-	-	22.17	-	-	498.95
Rail	-	-	8.11	-	-	-	-	0.01	0.67	-	8.79
Pipeline transport	-	-	-	13.90	-	-	-	-	-	-	13.90
Domestic navigation	-	-	4.61	-	-	-	-	-	-	-	4.61
Non-specified	-	-	0.78	-	-	-	-	0.00	-	-	0.78
<b>OTHER</b>	<b>1.59</b>	<b>0.60</b>	<b>51.77</b>	<b>182.74</b>	<b>-</b>	<b>-</b>	<b>1.49</b>	<b>12.90</b>	<b>243.84</b>	<b>1.43</b>	<b>496.35</b>
Residential	-	0.45	21.99	111.06	-	-	1.41	10.29	117.15	-	262.35
Comm. and public services	1.59	0.08	15.75	71.69	-	-	0.08	2.26	113.81	1.43 e	206.69
Agriculture/forestry	-	0.07	14.03	-	-	-	-	0.34	-	-	14.44
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	12.87 e	-	12.87
<b>NON-ENERGY USE</b>	<b>-</b>	<b>2.26</b>	<b>116.85</b>	<b>8.98</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>128.08</b>
in industry/transf./energy	-	2.26	116.68	8.98	-	-	-	-	-	-	127.92
of which: feedstocks	-	2.26	75.03	7.94	-	-	-	-	-	-	85.23
in transport	-	-	0.16	-	-	-	-	-	-	-	0.16
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>1892.66</b>	<b>-</b>	<b>50.45</b>	<b>949.78</b>	<b>830.21</b>	<b>275.59</b>	<b>94.42 e</b>	<b>72.29</b>	<b>-</b>	<b>-</b>	<b>4165.39</b>
Electricity plants	1842.16 e	-	34.85	747.49	830.21	275.59	94.05 e	34.57	-	-	3858.92
CHP plants	50.50 e	-	15.60	202.29	-	-	0.37	37.72	-	-	306.47
<b>Heat generated - PJ</b>	<b>104.04</b>	<b>-</b>	<b>39.33</b>	<b>329.76</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>47.39</b>	<b>-</b>	<b>-</b>	<b>520.52</b>
CHP plants	104.04 e	-	39.33	329.76	-	-	-	47.39	-	-	520.52
Heat plants	-	-	-	-	-	-	-	-	-	-	-

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## United States : 2010

Million tonnes of oil equivalent

SUPPLY AND CONSUMPTION	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	531.85	346.48	-	495.04	218.63	22.55	18.44 e	91.52	-	-	1724.51
Imports	11.44	539.98	83.35	86.89	-	-	-	0.10	3.88	-	725.64
Exports	-48.24	-9.31	-105.62	-26.15	-	-	-	-1.11	-1.64	-	-192.06
Intl. marine bunkers	-	-	-26.01	-	-	-	-	-	-	-	-26.01
Intl. aviation bunkers	-	-	-21.81	-	-	-	-	-	-	-	-21.81
Stock changes	7.60	-1.46	-0.65	0.69	-	-	-	-0.10	-	-	6.06
<b>TPES</b>	<b>502.64</b>	<b>875.69</b>	<b>-70.75</b>	<b>556.48</b>	<b>218.63</b>	<b>22.55</b>	<b>18.44 e</b>	<b>90.41</b>	<b>2.23</b>	<b>-</b>	<b>2216.32</b>
Transfers	-	-40.16	42.07	-	-	-	-	-	-	-	1.91
Statistical differences	-2.82	-11.56	4.21	-6.30	-	-	-	0.00	-	-	-16.46
Electricity plants	-449.35	-	-8.58	-144.99	-218.63	-22.55	-16.82 e	-12.57	346.98 e	-	-526.51
CHP plants	-13.43	-	-2.27	-40.04	-	-	-	-7.67	27.49	12.14	-23.78
Heat plants	-	-	-	-	-	-	-	-	-	-	-
Blast furnaces	-4.21 e	-	-	-	-	-	-	-	-	-	-4.21
Gas works	-1.92	-	-	1.21	-	-	-	-	-	-	-0.71
Coke/pat. fuel/BKB plants	-2.50	-	-	-	-	-	-	-	-	-	-2.50
Oil refineries	-	-820.41	826.43	-	-	-	-	-	-	-	6.02
Petrochemical plants	-	-	-	-	-	-	-	-	-	-	-
Liquefaction plants	-	-	-	-	-	-	-	-	-	-	-
Other transformation	-	-	-	-	-	-	-	-	-	-	-
Energy industry own use	-1.57	-	-45.79	-47.28	-	-	-	-	-27.30	-4.04 e	-125.99
Losses	-	-	-	-	-	-	-	-	-22.45	-1.46 e	-23.90
<b>TFC</b>	<b>26.85</b>	<b>3.56</b>	<b>745.32</b>	<b>319.07</b>	<b>-</b>	<b>-</b>	<b>1.61</b>	<b>70.17</b>	<b>326.97</b>	<b>6.64</b>	<b>1500.18</b>
<b>INDUSTRY</b>	<b>25.34</b>	<b>0.06</b>	<b>30.09</b>	<b>111.31</b>	<b>-</b>	<b>-</b>	<b>0.11</b>	<b>32.17</b>	<b>75.63</b>	<b>5.24</b>	<b>279.95</b>
Iron and steel	4.91 e	0.00	0.89	7.75	-	-	-	-	6.59	0.19 e	20.34
Chemical and petrochem.	4.28	-	8.10	34.02	-	-	-	0.20	20.82	3.21 e	70.63
Non-ferrous metals	-	0.00	0.46	5.45	-	-	-	-	6.73	0.10 e	12.74
Non-metallic minerals	5.12	0.01	4.53	11.78	-	-	-	0.52	3.48	0.00 e	25.43
Transport equipment	0.07	0.01	0.62	5.86	-	-	-	0.00	3.82	0.13 e	10.50
Machinery	0.08	0.01	1.05	9.66	-	-	-	-	9.46	0.10 e	20.36
Mining and quarrying	-	-	-	..	-	-	-	-	2.11	-	2.11
Food and tobacco	3.99	0.01	2.95	15.92	-	-	-	0.65	6.97	0.58 e	31.06
Paper, pulp and printing	4.05	0.01	3.26	12.05	-	-	-	22.63	10.07	0.49 e	52.56
Wood and wood products	0.03	0.01	3.20	2.04	-	-	-	5.35	2.39	0.27 e	13.29
Construction	-	-	1.28	..	-	-	-	-	-	-	1.28
Textile and leather	0.10	0.00	0.22	2.83	-	-	-	-	2.35	0.15 e	5.65
Non-specified	2.71	0.01	3.53	3.96	-	-	0.11	2.83	0.83	0.02 e	14.00
<b>TRANSPORT</b>	<b>-</b>	<b>0.03</b>	<b>541.14</b>	<b>16.23</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>25.38</b>	<b>0.66</b>	<b>-</b>	<b>583.44</b>
Domestic aviation	-	-	49.19	-	-	-	-	-	-	-	49.19
Road	-	0.03	479.06	0.71	-	-	-	25.36	-	-	505.17
Rail	-	-	8.53	-	-	-	-	0.02	0.66	-	9.21
Pipeline transport	-	-	-	15.51	-	-	-	-	-	-	15.51
Domestic navigation	-	-	3.53	-	-	-	-	-	-	-	3.53
Non-specified	-	-	0.82	-	-	-	-	0.00	-	-	0.82
<b>OTHER</b>	<b>1.51</b>	<b>0.73</b>	<b>51.65</b>	<b>182.08</b>	<b>-</b>	<b>-</b>	<b>1.50</b>	<b>12.62</b>	<b>250.67</b>	<b>1.39</b>	<b>502.15</b>
Residential	-	0.55	20.88	111.04	-	-	1.42	10.05	124.33	-	268.28
Comm. and public services	1.51	0.10	15.23	71.03	-	-	0.08	2.19	114.39	1.39 e	205.92
Agriculture/forestry	-	0.08	15.54	-	-	-	-	0.37	-	-	15.99
Fishing	-	-	-	-	-	-	-	-	-	-	-
Non-specified	-	-	-	-	-	-	-	-	11.96 e	-	11.96
<b>NON-ENERGY USE</b>	<b>-</b>	<b>2.74</b>	<b>122.44</b>	<b>9.46</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>134.64</b>
in industry/transf./energy	-	2.74	122.25	9.46	-	-	-	-	-	-	134.45
of which: feedstocks	-	2.74	79.70	8.36	-	-	-	-	-	-	90.81
in transport	-	-	0.18	-	-	-	-	-	-	-	0.18
in other	-	-	-	-	-	-	-	-	-	-	-
<b>Electricity and Heat Output</b>											
<b>Elec. generated - TWh</b>	<b>1994.19</b>	<b>-</b>	<b>48.09</b>	<b>1017.87</b>	<b>838.93</b>	<b>262.27</b>	<b>117.58 e</b>	<b>75.43</b>	<b>-</b>	<b>-</b>	<b>4354.36</b>
Electricity plants	1939.24 e	-	35.47	805.55	838.93	262.27	116.98 e	36.23	-	-	4034.67
CHP plants	54.96 e	-	12.62	212.32	-	-	0.60	39.20	-	-	319.69
<b>Heat generated - PJ</b>	<b>102.69</b>	<b>-</b>	<b>36.38</b>	<b>325.22</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>44.01</b>	<b>-</b>	<b>-</b>	<b>508.29</b>
CHP plants	102.69 e	-	36.38	325.22	-	-	-	44.01	-	-	508.29
Heat plants	-	-	-	-	-	-	-	-	-	-	-

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## United States

## Estimated energy supply balance for 2011

Million tonnes of oil equivalent											
SUPPLY	Coal & peat	Crude oil*	Oil products	Natural gas	Nuclear	Hydro	Geotherm. solar etc.	Biofuels & waste	Electricity	Heat	Total
Production	539.70	361.23	-	534.55	214.06	28.18	21.19	93.27	-	-	1792.19
Imports	8.21	523.67	76.33	80.24	-	-	-	0.74	4.50	-	693.68
Exports	-63.39	-10.84	-122.16	-34.65	-	-	-	-5.05	-1.29	-	-237.38
Intl. marine bunkers	-	-	-26.87	-	-	-	-	-	-	-	-26.87
Intl. aviation bunkers	-	-	-21.82	-	-	-	-	-	-	-	-21.82
Stock changes	3.60	4.57	3.17	-8.23	-	-	-	-0.19	-	-	2.92
<b>TPES</b>	<b>488.13</b>	<b>878.62</b>	<b>-91.35</b>	<b>571.91</b>	<b>214.06</b>	<b>28.18</b>	<b>21.19</b>	<b>88.77</b>	<b>3.20</b>	<b>-</b>	<b>2202.72</b>
Electricity and Heat Output											
Elec. generated - TWh	1873.76	-	38.66	1046.53	821.39	327.71	143.21	69.59	-	-	4320.85
Heat generated - PJ	103.37	-	38.80	348.75	-	-	-	39.99	-	-	530.91

\* Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.

## Key indicators

	1960	1971	1980	1990	2000	2009	2010	2011e
Energy production (Mtoe)	964.9	1436.4	1553.3	1652.5	1667.3	1685.9	1724.5	1792.2
Net imports (Mtoe)	65.8	176.4	307.0	341.9	606.4	560.7	533.6	456.3
Total primary energy supply (Mtoe)	1019.3	1587.5	1804.7	1915.0	2273.3	2165.0	2216.3	2202.7
Net oil imports (Mtoe)	83.3	189.6	340.1	374.4	549.5	517.8	508.4	467.0
Oil supply (Mtoe)	467.1	722.0	796.9	756.8	871.2	801.7	804.9	787.3
Electricity consumption (TWh)*	731.7	1561.1	2241.0	2923.9	3857.5 e	3961.6	4143.4	4120.0
GDP (billion 2005 USD)	2891.0 e	4359.1	5796.4	7962.6	11158.1	12635.2	13017.0	13243.0
GDP PPP (billion 2005 USD)	2891.0 e	4359.1	5796.4	7962.6	11158.1	12635.2	13017.0	13243.0
Population (millions)	180.70 e	207.69	227.73	250.18	282.42	307.48	310.11	313.16
Industrial production index (2005=100)	24.40	39.80	52.60	65.20	96.70	89.50	94.30	98.10
Total self-sufficiency**	0.9466	0.9048	0.8607	0.8629	0.7334	0.7787	0.7781	0.8136
Coal and peat self-sufficiency**	1.0932	1.1219	1.1905	1.1784	1.0061	1.0931	1.0581	1.1057
Oil self-sufficiency**	0.8404	0.7610	0.6253	0.5715	0.4197	0.4185	0.4304	0.4588
Natural gas self-sufficiency**	0.9989	0.9764	0.9534	0.9540	0.8160	0.8961	0.8896	0.9347
TPES/GDP (toe per thousand 2005 USD)	0.3526 e	0.3642	0.3113	0.2405	0.2037	0.1713	0.1703	0.1663
TPES/GDP PPP (toe per thousand 2005 USD)	0.3526 e	0.3642	0.3113	0.2405	0.2037	0.1713	0.1703	0.1663
TPES/population (toe per capita)	5.6407 e	7.6434	7.9248	7.6544	8.0495	7.0409	7.1470	7.0339
Net oil imports/GDP (toe per thousand 2005 USD)	0.0288 e	0.0435	0.0587	0.0470	0.0493	0.0410	0.0391	0.0353
Oil supply/GDP (toe per thousand 2005 USD)	0.1616 e	0.1656	0.1375	0.0950	0.0781	0.0635	0.0618	0.0594
Oil supply/population (toe per capita)	2.5849 e	3.4764	3.4995	3.0252	3.0846	2.6074	2.5957	2.5140
Elect. cons./GDP (kWh per 2005 USD)	0.2531 e	0.3581	0.3866	0.3672	0.3457 e	0.3135	0.3183	0.3111
Elect. cons./population (kWh per capita)	4049 e	7516	9841	11687	13659 e	12884	13361	13156
Industry cons.***/industrial production (2005=100)	291.68	248.14	207.45	137.23	111.72	97.25	98.82	..
Industry oil cons.***/industrial production (2005=100)	254.29	191.05	197.43	122.84	89.65	90.78	91.17	..

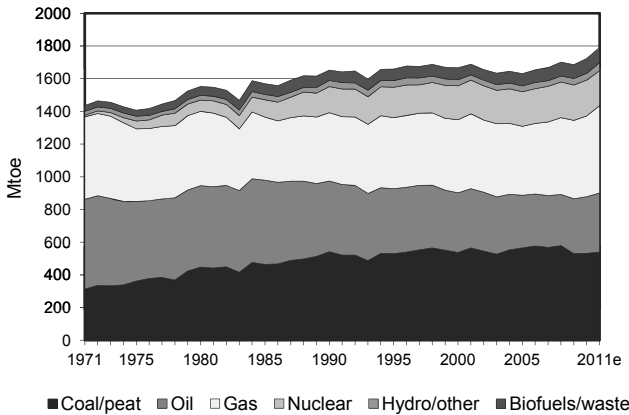
\* Electricity consumption equals domestic supply less losses.

\*\* Production divided by TPES.

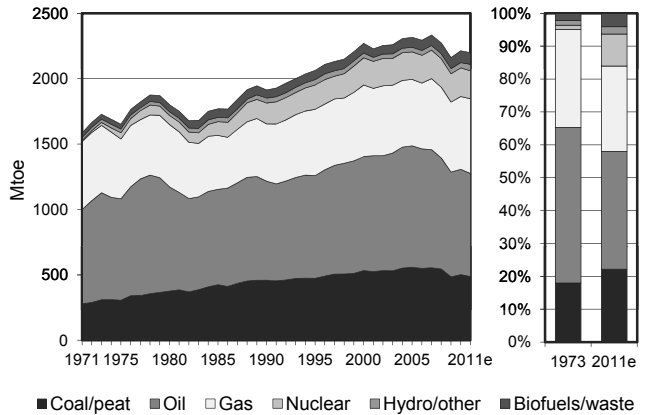
\*\*\* Includes non-energy use.

## United States

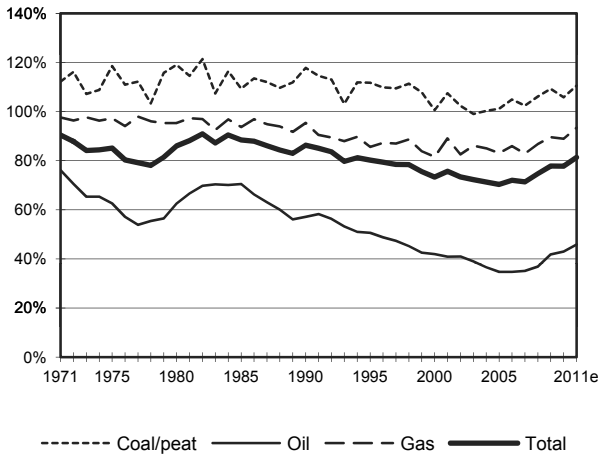
**Figure 1. Energy production**



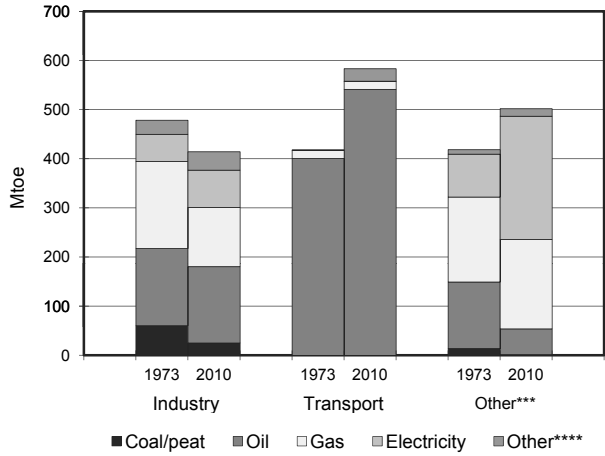
**Figure 2. Total primary energy supply\***



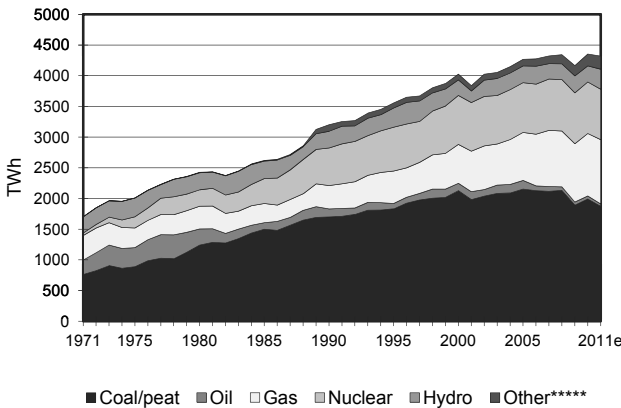
**Figure 3. Energy self-sufficiency**



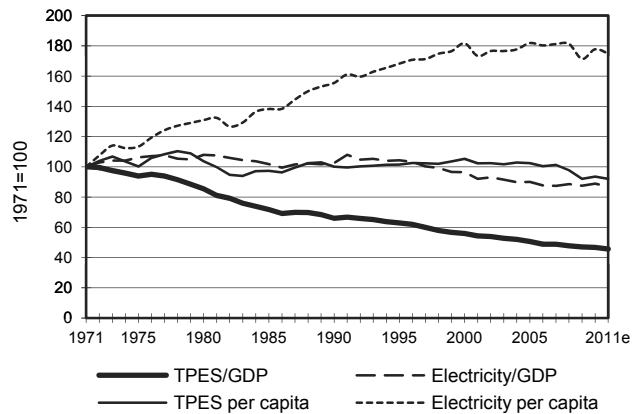
**Figure 4. Breakdown of sectorial final consumption by source in 1973 and 2010\*\***



**Figure 5. Electricity generation by fuel**



**Figure 6. Selected indicators**



\* Excluding electricity trade.  
 \*\* Includes non-energy use.  
 \*\*\* Includes residential, commercial and public services, agriculture/forestry, fishing and non-specified.  
 \*\*\*\* Includes biofuels and waste, direct use of geothermal/solar thermal and heat produced in CHP/heat plants.  
 \*\*\*\*\* Includes geothermal, solar, wind, biofuels and waste, etc.





# SUMMARY TABLES

**Production of coal and peat (Mtoe)***Production de charbon et de tourbe (Mtep)**Kohle- und Torferzeugung (Mtoe)**Produzione di carbone e torba (Mtep)*

石炭及び泥炭の生産量（石油換算百万トン）

*Producción de carbón y turba (Mtep)**Производство угля и торфа (млн.тон нефтяного эквивалента (Мтнэ))*

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	16.87	32.68	40.25	51.90	106.10	164.58 e	225.71	237.34	230.89
Austria	1.84	1.04	1.02	0.84	0.64	0.29	0.00	0.00	0.00
Belgium	13.93	6.80	6.42	4.71	1.18	0.21	-	-	-
Canada	5.73	9.46	11.70	20.51	37.93	34.41	30.69	33.76	33.61
Chile	..	1.13	0.96	0.78	1.45	0.24	0.24	0.25	0.27
Czech Republic	..	39.42 e	38.01 e	40.45	36.31	25.05	20.85	20.73	20.41
Denmark	0.99	-	-	-	-	-	-	-	-
Estonia	..	..	..	..	5.23	2.67	3.29	3.94	4.11
Finland	0.03	0.03	0.06	0.73	1.81	1.09	2.19	1.81	1.61
France	37.23	22.96	18.04	13.38	8.24	2.48	0.09	0.16	0.09
Germany	117.85	150.05	141.40	143.14	121.77	60.63	45.70	45.12	46.14
Greece	0.28	1.41	1.69	2.95	7.12	8.22	8.18	7.32	7.61
Hungary	..	6.19	6.05	6.34	4.22	2.89	1.56	1.59	1.67
Iceland	-	-	-	-	-	-	-	-	-
Ireland	1.30	1.38	1.06	1.08	1.43	1.00	0.63	1.04	0.78
Israel	..	-	-	-	0.02	0.03	0.03	0.03	0.03
Italy	0.71	0.51	0.30	0.32	0.28	0.00	0.05	0.06	0.06
Japan	40.80	23.46	17.90	10.90	4.47	1.54	-	-	-
Korea	..	6.26 e	6.65 e	8.20	7.58	3.64	1.16	0.96	0.96
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	..	1.24	1.52	1.73	3.39	5.41	5.06	4.84	5.99
Netherlands	7.96	2.36	1.14	-	-	-	-	-	-
New Zealand	1.60	1.10	1.29	1.14	1.42	2.07	2.64	3.13	2.88
Norway	0.28	0.30	0.29	0.20	0.20	0.42	1.77	1.30	0.93
Poland	63.22	92.91	100.73	120.35	98.97	71.30	56.42	55.38	56.46
Portugal	0.29	0.15	0.13	0.07	0.12	-	-	-	-
Slovak Republic	..	1.70	1.70	1.70	1.40	1.02	0.65	0.61	0.61
Slovenia	..	..	..	..	1.35	1.06	1.16	1.16	1.18
Spain	8.43	6.92	6.48	9.82	11.75	7.97	3.63	3.03	2.29
Sweden	0.17	-	0.01	0.01	0.17	0.16	0.21	0.24	0.17
Switzerland	-	-	-	-	-	-	-	-	-
Turkey	3.04	4.22	5.21	6.15	12.37	12.49	17.40	17.52	18.56
United Kingdom	113.75	86.46	75.89	73.96	53.61	18.66	10.70	11.03	10.99
United States	243.64	313.42	333.36	447.92	542.32	536.86	530.13	531.85	539.70
<b>OECD TOTAL*</b>	..	<b>813.56</b>	<b>819.25</b>	<b>969.28</b>	<b>1 072.83</b>	<b>966.38</b>	<b>970.15</b>	<b>984.22</b>	<b>988.00</b>
<b>OECD AMERICAS</b>	..	325.25	347.53	470.94	585.08	576.92	566.12	570.70	579.58
<b>OECD ASIA OCEANIA</b>	..	63.51	66.09	72.14	119.59	171.85	229.54	241.46	234.76
<b>OECD EUROPE*</b>	..	424.79	405.62	426.20	368.16	217.60	174.49	172.06	173.66
<b>IEA</b>	..	811.18	816.78	966.77	1 061.40	956.96	960.37	973.99	976.43

\* Excludes Estonia and Slovenia prior to 1990.

**Production of crude oil and NGL (Mtoe)***Production de pétrole brut et LGN (Mtep)**Erzeugung von Rohöl und Kondensaten (Mtoe)**Produzione di petrolio grezzo e LGN (Mtep)**原油及びNGLの生産量(石油換算百万トン)**Producción de petróleo crudo y líquidos de gas natural (Mtep)**Производство сырой нефти и газовых конденсатов (Мтнэ)*

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	-	14.83	19.85	21.30	29.03	33.91	25.02	23.75	20.46
Austria	2.50	2.63	2.64	1.52	1.21	1.09	1.06	1.03	0.97
Belgium	-	-	-	-	-	-	0.62	0.73	0.24
Canada	26.59	72.41	96.53	83.64	94.15	128.43	156.30	165.02	172.74
Chile	..	1.77	1.79	1.83	1.17	0.43	0.72	0.61	0.59
Czech Republic	..	0.03	0.04	0.24	0.22	0.38	0.31	0.27	0.33
Denmark	-	-	0.07	0.30	6.11	18.26	13.25	12.49	11.53
Estonia	..	..	..	..	-	-	-	-	-
Finland	-	-	-	-	-	0.06	0.06	0.04	0.04
France	2.02	2.50	2.07	2.26	3.47	1.81	1.11	1.08	1.09
Germany	5.64	7.72	6.85	5.66	4.71	3.94	3.85	3.32	3.46
Greece	-	-	-	-	0.84	0.26	0.07	0.10	0.09
Hungary	..	1.99	2.02	2.52	2.27	1.68	1.21	1.09	0.96
Iceland	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Israel	..	5.83	6.10	0.02	0.01	0.00	0.00	0.00	0.00
Italy	2.10	1.25	1.05	1.73	4.47	4.69	4.92	5.56	5.62
Japan	0.51	0.85	0.81	0.56	0.70	0.78	0.75	0.69	0.67
Korea	..	-	-	-	-	0.67	0.69	0.70	0.69
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	..	25.65	27.49	114.64	152.76	171.12	157.15	160.62	159.53
Netherlands	1.96	1.75	1.59	1.61	4.07	2.42	2.03	1.68	1.73
New Zealand	-	-	0.18	0.37	1.97	1.94	2.77	2.75	2.31
Norway	-	0.29	1.50	24.23	83.26	166.93	108.91	98.92	92.65
Poland	0.19	0.40	0.39	0.34	0.18	0.72	0.70	0.74	0.68
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	..	0.16	0.13	0.04	0.08	0.06	0.20	0.21	0.18
Slovenia	..	..	..	..	0.00	0.00	-	-	-
Spain	0.07	0.13	0.67	1.79	1.17	0.23	0.11	0.13	0.10
Sweden	0.10	-	-	0.03	0.00	-	-	-	-
Switzerland	-	-	-	-	-	-	-	-	-
Turkey	0.37	3.53	3.59	2.27	3.61	2.73	2.37	2.48	2.34
United Kingdom	0.15	0.24	0.55	82.59	95.25	131.67	70.90	64.37	53.28
United States	392.57	549.44	534.59	498.35	432.54	365.61	335.50	346.48	361.23
<b>OECD TOTAL*</b>	..	<b>693.39</b>	<b>710.51</b>	<b>847.84</b>	<b>923.22</b>	<b>1 039.82</b>	<b>890.56</b>	<b>894.85</b>	<b>893.51</b>
<b>OECD AMERICAS</b>	..	649.26	660.41	698.45	680.61	665.58	649.67	672.73	694.09
<b>OECD ASIA OCEANIA</b>	..	21.51	26.94	22.25	31.70	37.31	29.23	27.89	24.14
<b>OECD EUROPE*</b>	..	22.62	23.17	127.13	210.91	336.94	211.66	194.23	175.28
<b>IEA</b>	..	660.14	675.13	731.35	769.28	868.27	732.69	733.62	733.39

\* Excludes Estonia and Slovenia prior to 1990.

**Production of oil products (Mtoe)***Production de produits pétroliers (Mtep)**Erzeugung von Ölprodukten (Mtoe)**Produzione di prodotti petroliferi (Mtep)*

石油製品の生産量(石油換算百万トン)

*Producción de productos petrolíferos (Mtep)**Производство нефтепродуктов (Мтиэ)*

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	12.94	22.63	26.15	30.26	32.06	38.26	32.76	31.43	..
Austria	1.89	7.37	8.80	10.24	9.07	8.92	8.74	8.13	..
Belgium	6.54	28.46	35.46	33.60	29.60	38.24	33.40	33.94	..
Canada	37.95	70.61	84.42	95.39	86.65	96.31	100.38	102.07	..
Chile	..	4.77	4.75	4.99	6.28	9.74	10.35	8.87	..
Czech Republic	..	6.04	7.47	9.60	8.00	6.18	7.78	8.31	..
Denmark	0.14	10.22	9.76	6.67	7.96	8.41	7.71	7.15	..
Estonia	..	..	..	..	-	-	-	-	..
Finland	1.08	8.66	9.11	12.61	10.60	12.89	15.23	14.26	..
France	31.00	106.94	134.20	116.73	79.67	90.19	79.85	73.35	..
Germany	28.86	124.35	140.16	138.14	107.99	118.45	109.99	103.63	..
Greece	1.69	5.31	12.35	14.09	16.56	22.39	21.48	22.45	..
Hungary	..	6.48	7.95	10.28	8.46	7.59	7.64	8.56	..
Iceland	-	-	-	-	-	-	-	-	..
Ireland	1.35	2.80	2.68	2.02	1.74	3.31	2.76	2.91	..
Israel	..	5.21	6.13	6.33	8.18	10.83	12.26	12.89	..
Italy	30.44	118.23	129.92	98.07	91.55	95.86	87.72	91.30	..
Japan	26.38	183.80	228.28	206.63	182.82	213.83	185.78	184.67	..
Korea	..	11.76	15.35	26.22	43.54	125.63	120.04	123.46	..
Luxembourg	-	-	-	-	-	-	-	-	..
Mexico	..	22.47	26.17	51.09	65.21	65.08	71.42	67.30	..
Netherlands	18.45	60.78	73.12	57.92	69.54	82.36	58.76	59.62	..
New Zealand	-	3.02	3.38	3.02	4.97	5.27	5.25	5.37	..
Norway	0.14	5.67	6.11	7.86	13.40	15.61	15.35	14.40	..
Poland	0.86	8.33	10.78	15.45	12.89	18.80	22.42	23.80	..
Portugal	1.20	4.04	4.23	7.57	11.53	12.41	10.96	11.97	..
Slovak Republic	..	5.30	6.00	8.03	7.06	5.97	6.54	6.25	..
Slovenia	..	..	..	..	0.56	0.17	-	-	..
Spain	6.17	34.38	42.23	48.21	53.24	60.31	57.76	58.12	..
Sweden	2.71	11.37	10.44	17.50	18.10	22.78	20.46	20.89	..
Switzerland	-	5.30	6.16	4.64	3.11	4.75	4.96	4.65	..
Turkey	0.28	8.57	12.52	12.68	22.96	23.82	19.00	20.23	..
United Kingdom	44.11	104.31	113.23	86.10	89.68	88.07	76.39	74.41	..
United States	439.72	622.64	691.12	744.65	753.82	843.82	809.08	826.43	..
<b>OECD TOTAL*</b>	..	<b>1 619.81</b>	<b>1 868.42</b>	<b>1 886.61</b>	<b>1 856.82</b>	<b>2 156.26</b>	<b>2 022.21</b>	<b>2 030.82</b>	..
<b>OECD AMERICAS</b>	..	720.50	806.47	896.12	911.96	1 014.96	991.23	1 004.67	..
<b>OECD ASIA OCEANIA</b>	..	226.42	279.28	272.46	271.58	393.81	356.09	357.82	..
<b>OECD EUROPE*</b>	..	672.90	782.67	718.03	673.28	747.49	674.89	668.34	..
<b>IEA</b>	..	1 587.36	1 831.37	1 824.20	1 776.59	2 070.44	1 928.19	1 941.76	..

\* Excludes Estonia and Slovenia prior to 1990.

2011 data for the production of oil products will be released in the 2013 edition.

**Production of natural gas (Mtoe)***Production de gaz naturel (Mtep)**Erzeugung von Erdgas (Mtoe)**Produzione di gas naturale (Mtep)*

天然ガスの生産量(石油換算百万トン)

*Producción de gas natural (Mtep)**Производство природного газа (Мтнз)*

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	-	1.79	3.38	7.46	17.13	28.53	39.32	42.52	49.50
Austria	1.27	1.64	1.96	1.67	1.10	1.53	1.43	1.49	1.46
Belgium	0.05	0.04	0.04	0.03	0.01	0.00	-	-	-
Canada	11.53	51.27	61.36	63.62	88.55	148.32	135.34	132.31	132.80
Chile	..	0.64	0.53	0.72	1.41	1.60	1.55	1.55	1.25
Czech Republic	..	0.39	0.36	0.32	0.20	0.17	0.15	0.17	0.15
Denmark	-	-	0.00	0.00	2.77	7.41	7.52	7.34	6.32
Estonia	..	..	..	..	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	2.50	6.05	6.29	6.33	2.52	1.50	0.76	0.65	0.51
Germany	0.74	12.12	16.44	16.26	13.53	15.80	11.11	9.69	9.00
Greece	-	-	-	-	0.14	0.04	0.01	0.01	0.01
Hungary	..	3.09	4.03	5.09	3.81	2.47	2.29	2.23	2.11
Iceland	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	0.74	1.87	0.96	0.32	0.32	0.28
Israel	..	0.10	0.05	0.13	0.03	0.01	2.17	2.67	3.52
Italy	5.28	11.02	12.61	10.26	14.03	13.62	6.56	6.88	6.92
Japan	0.64	2.15	2.29	1.94	1.92	2.29	3.43	3.21	3.20
Korea	..	-	-	-	-	-	0.45	0.49	0.41
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	..	9.26	10.54	21.55	22.75	26.72	38.40	41.90	42.19
Netherlands	0.28	33.13	53.75	68.89	54.60	52.17	56.39	63.41	57.73
New Zealand	0.06	0.11	0.28	0.79	3.87	5.05	3.59	3.85	3.48
Norway	-	-	-	22.77	24.14	46.27	90.66	93.53	90.44
Poland	0.47	4.54	4.87	4.54	2.38	3.31	3.68	3.69	3.85
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	..	0.50	0.39	0.17	0.34	0.13	0.09	0.09	0.10
Slovenia	..	..	..	..	0.02	0.01	0.00	0.01	0.00
Spain	-	0.00	0.00	-	1.27	0.15	0.01	0.05	0.05
Sweden	-	-	-	-	-	-	-	-	-
Switzerland	-	-	-	-	0.00	-	-	-	-
Turkey	-	-	-	-	0.17	0.53	0.56	0.56	0.63
United Kingdom	0.06	15.65	24.44	31.31	40.91	97.53	53.73	51.45	40.70
United States	283.43	504.71	502.61	454.56	418.09	446.82	479.59	495.04	534.55
<b>OECD TOTAL*</b>	..	<b>658.18</b>	<b>706.22</b>	<b>719.16</b>	<b>717.56</b>	<b>902.94</b>	<b>939.10</b>	<b>965.11</b>	<b>991.11</b>
<b>OECD AMERICAS</b>	..	565.87	575.05	540.46	530.80	623.46	654.87	670.80	710.78
<b>OECD ASIA OCEANIA</b>	..	4.15	6.00	10.33	22.95	35.88	48.95	52.74	60.10
<b>OECD EUROPE*</b>	..	88.16	125.17	168.38	163.80	243.60	235.28	241.57	220.23
<b>IEA</b>	..	648.18	695.10	696.76	693.35	874.61	896.99	918.99	944.15

\* Excludes Estonia and Slovenia prior to 1990.

**Production of nuclear energy (Mtoe)***Production d'énergie nucléaire (Mtep)**Erzeugung von Kernenergie (Mtoe)**Produzione di energia nucleare (Mtep)**原子力の生産量（石油換算百万トン）**Producción de energía nuclear (Mtep)**Производство атомной энергии (Мтпэ)*

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	-	-	-	-	-	-	-	-	-
Austria	-	-	-	-	-	-	-	-	-
Belgium	-	-	0.02	3.27	11.13	12.55	12.31	12.49	12.57
Canada	-	1.11	4.07	10.40	19.40	18.97	23.48	23.63	23.70
Chile	..	-	-	-	-	-	-	-	-
Czech Republic	..	-	-	-	3.28	3.54	7.11	7.32	7.39
Denmark	-	-	-	-	-	-	-	-	-
Estonia	..	..	..	..	-	-	-	-	-
Finland	-	-	-	1.83	5.01	5.86	6.13	5.94	6.04
France	0.04	2.43	3.84	15.96	81.85	108.19	106.78	111.68	115.29
Germany	-	1.62	3.15	14.50	39.84	44.20	35.16	36.63	28.14
Greece	-	-	-	-	-	-	-	-	-
Hungary	..	-	-	-	3.58	3.71	4.03	4.12	4.10
Iceland	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Israel	..	-	-	-	-	-	-	-	-
Italy	-	0.88	0.82	0.58	-	-	-	-	-
Japan	-	2.08	2.53	21.52	52.71	83.93	72.90	75.11	26.52
Korea	..	-	-	0.91	13.78	28.40	38.51	38.73	39.13
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	..	-	-	-	0.77	2.14	2.74	1.53	2.63
Netherlands	-	0.11	0.29	1.09	0.91	1.02	1.10	1.03	1.08
New Zealand	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	..	-	0.06	1.18	3.14	4.30	3.72	3.86	3.81
Slovenia	..	..	..	..	1.20	1.24	1.50	1.47	1.62
Spain	-	0.66	1.71	1.35	14.14	16.21	13.75	16.15	15.02
Sweden	-	0.02	0.55	6.90	17.77	14.94	13.60	15.07	15.65
Switzerland	-	0.36	1.64	3.74	6.18	6.92	7.25	6.90	6.99
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	0.58	7.18	7.30	9.65	17.13	22.17	18.01	16.19	17.99
United States	0.14	10.57	23.24	69.37	159.38	207.89	216.36	218.63	214.06
<b>OECD TOTAL*</b>	..	<b>27.02</b>	<b>49.22</b>	<b>162.25</b>	<b>451.21</b>	<b>586.18</b>	<b>584.44</b>	<b>596.49</b>	<b>541.74</b>
<b>OECD AMERICAS</b>	..	11.68	27.31	79.77	179.55	229.00	242.57	243.79	240.39
<b>OECD ASIA OCEANIA</b>	..	2.08	2.53	22.43	66.50	112.32	111.41	113.84	65.65
<b>OECD EUROPE*</b>	..	13.26	19.38	60.05	205.17	244.85	230.45	238.86	235.70
<b>IEA</b>	..	27.02	49.22	162.25	449.24	582.80	580.20	593.49	537.49

\* Excludes Estonia and Slovenia prior to 1990.

**Production of hydro energy (Mtoe)**  
*Production d'énergie hydraulique (Mtep)*  
*Erzeugung von Wasserkraft (Mtoe)*  
*Produzione di energia idroelettrica (Mtep)*  
*水力の生産量(石油換算百万トン)*  
*Producción de energía hidráulica (Mtep)*  
*Производство гидроэнергии (Мтпэ)*

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	0.34	1.00	0.98	1.11	1.22	1.41	0.94	1.07	1.27
Austria	0.98	1.39	1.61	2.47	2.71	3.60	3.52	3.30	2.90
Belgium	0.01	0.01	0.01	0.02	0.02	0.04	0.03	0.03	0.02
Canada	9.18	13.97	16.74	21.60	25.52	30.83	31.70	30.23	32.37
Chile	..	0.41	0.48	0.68	0.77	1.59	2.18	1.87	1.81
Czech Republic	..	0.10	0.09	0.21	0.10	0.15	0.21	0.24	0.18
Denmark	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Estonia	..	..	..	..	-	0.00	0.00	0.00	0.00
Finland	0.45	0.91	0.90	0.88	0.93	1.26	1.09	1.11	1.07
France	3.52	4.20	4.10	5.98	4.63	5.77	4.92	5.33	3.88
Germany	1.03	1.16	1.31	1.64	1.50	1.87	1.60	1.76	1.58
Greece	0.04	0.23	0.19	0.29	0.15	0.32	0.46	0.64	0.33
Hungary	..	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02
Iceland	0.05	0.13	0.19	0.27	0.36	0.55	1.06	1.08	1.08
Ireland	0.08	0.04	0.06	0.07	0.06	0.07	0.08	0.05	0.06
Israel	..	-	-	-	0.00	0.00	0.00	0.00	0.00
Italy	3.94	3.36	3.23	3.89	2.72	3.80	4.23	4.40	3.99
Japan	5.03	7.24	5.74	7.59	7.68	7.50	6.61	7.07	7.17
Korea	..	0.11	0.11	0.17	0.55	0.34	0.24	0.32	0.41
Luxembourg	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01
Mexico	..	1.24	1.39	1.45	2.02	2.85	2.30	3.19	3.08
Netherlands	-	-	-	-	0.01	0.01	0.01	0.01	0.00
New Zealand	0.48	1.13	1.23	1.63	1.99	2.10	2.08	2.13	2.16
Norway	2.69	5.44	6.27	7.19	10.42	12.20	10.77	10.11	10.39
Poland	0.05	0.13	0.13	0.20	0.12	0.18	0.20	0.25	0.20
Portugal	0.27	0.53	0.63	0.69	0.79	0.97	0.71	1.39	0.99
Slovak Republic	..	0.13	0.11	0.19	0.16	0.40	0.38	0.45	0.32
Slovenia	..	..	..	..	0.25	0.33	0.41	0.39	0.31
Spain	1.34	2.74	2.49	2.54	2.19	2.54 e	2.26	3.64	2.63
Sweden	2.67	4.47	5.15	5.06	6.24	6.76	5.66	5.71	5.70
Switzerland	1.76	2.31	2.40	2.82	2.56	3.17	3.07	3.10	2.76
Turkey	0.09	0.22	0.22	0.98	1.99	2.66	3.09	4.45	4.48
United Kingdom	0.27	0.29	0.33	0.33	0.45	0.44	0.45	0.31	0.49
United States	12.68	22.66	22.82	23.98	23.49	21.78	23.70	22.55	28.18
<b>OECD TOTAL*</b>	..	<b>75.59</b>	<b>78.94</b>	<b>93.96</b>	<b>101.62</b>	<b>115.52</b>	<b>114.01</b>	<b>116.21</b>	<b>119.83</b>
<b>OECD AMERICAS</b>	..	38.28	41.44	47.70	51.80	57.05	59.88	57.84	65.44
<b>OECD ASIA OCEANIA</b>	..	9.48	8.07	10.50	11.44	11.36	9.88	10.59	11.01
<b>OECD EUROPE*</b>	..	27.83	29.44	35.75	38.38	47.11	44.25	47.78	43.39
<b>IEA</b>	..	73.80	76.88	91.56	98.21	110.20	108.07	109.67	113.56

\* Excludes Estonia and Slovenia prior to 1990.

Excludes hydro pumped storage.

**Production of geothermal energy (Mtoe)***Production d'énergie géothermique (Mtep)**Erzeugung von geothermischer Energie (Mtoe)**Produzione di energia geotermica (Mtep)**地熱エネルギーの生産量(石油換算百万トン)**Producción de energía geotérmica (Mtep)**Производство геотермальной энергии (Мтпэ)*

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	-	-	-	-	-	-	-	-	-
Austria	-	-	-	-	0.00	0.02	0.03	0.03	0.04
Belgium	-	-	-	-	0.00	0.00	0.00	0.00	0.00
Canada	-	-	-	-	-	-	-	-	-
Chile	..	-	-	-	-	-	-	-	-
Czech Republic	..	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	0.00 e	0.00 e	0.01	0.01	0.01
Estonia	..	..	..	..	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	-	0.00	0.00	0.01	0.11	0.13	0.09	0.09	0.09
Germany	-	-	-	-	0.01 e	0.12	0.46	0.53	0.59
Greece	-	-	-	-	0.00	0.00	0.02	0.03	0.03
Hungary	..	-	-	-	0.09	0.09	0.10	0.10	0.10
Iceland	0.11	0.29	0.35	0.64	1.04	1.76	3.34	3.34	3.76
Ireland	-	-	-	-	-	-	-	-	-
Israel	..	-	-	-	-	-	-	-	-
Italy	1.81	2.29	2.13	2.30	2.97	4.26 e	4.81	4.77	5.02
Japan	-	-	0.23	0.77	1.58	3.10	2.68	2.46	2.44
Korea	..	-	-	-	-	-	0.02	0.03	0.05
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	..	-	0.14	0.79	4.41	5.07	5.79	5.69	5.59
Netherlands	-	-	-	-	-	-	0.00	0.01	0.01
New Zealand	0.35	1.08	1.07	1.02	1.48	1.95	2.96	3.64	3.74
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	-	-	0.00	0.01	0.01	0.01
Portugal	-	-	-	0.00	0.00	0.07	0.18	0.19	0.17
Slovak Republic	..	-	-	-	-	-	0.01	0.01	0.01
Slovenia	..	..	..	..	-	-	0.01	0.03	0.03
Spain	-	-	-	-	0.00	0.01	0.01	0.02	0.02
Sweden	-	-	-	-	-	-	-	-	-
Switzerland	-	-	-	-	0.07	0.10	0.21	0.26	0.32
Turkey	-	0.04	0.05	0.06	0.43	0.68	1.62	1.97	1.99
United Kingdom	-	-	-	-	0.00	0.00	0.00	0.00	0.00
United States	0.03	0.50	2.11	4.60	14.10	13.09	8.16 e	8.41 e	8.93
<b>OECD TOTAL*</b>	..	<b>4.20</b>	<b>6.08</b>	<b>10.19</b>	<b>26.29</b>	<b>30.46</b>	<b>30.55</b>	<b>31.64</b>	<b>32.95</b>
<b>OECD AMERICAS</b>	..	0.50	2.25	5.39	18.51	18.16	13.95	14.10	14.53
<b>OECD ASIA OCEANIA</b>	..	1.08	1.30	1.79	3.05	5.05	5.67	6.14	6.23
<b>OECD EUROPE*</b>	..	2.62	2.53	3.01	4.73	7.25	10.93	11.40	12.19
<b>IEA</b>	..	3.91	5.59	8.76	20.85	23.63	21.41	22.58	23.56

\* Excludes Estonia and Slovenia prior to 1990.



**Production of energy from solar, wind, tide, etc. (Mtoe)***Production d'énergie d'origine solaire, éolienne, marémotrice, etc. (Mtep)**Erzeugung von Solarenergie, Windenergie, Gezeitenenergie usw. (Mtoe)**Produzione di energia solare, eolica, dalle maree, etc. (Mtep)**太陽光、風力、潮力、その他エネルギーの生産量（石油換算百万トン）**Producción de energía solar, eólica, maremotriz, etc. (Mtep)**Производство солнечной энергии, энергии ветра, приливов, и т.д. (Мтнэ)*

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	-	-	-	0.02	0.08	0.09	0.54	0.68	0.83
Austria	-	-	-	-	0.01	0.07	0.30	0.35	0.37
Belgium	-	-	-	-	0.00	0.00	0.11	0.17	0.34
Canada	-	-	-	-	0.00	0.03 e	0.58	0.84	1.73
Chile	..	-	-	-	-	-	0.01	0.03	0.03
Czech Republic	..	-	-	-	-	-	0.04	0.09	0.23
Denmark	-	-	-	0.00	0.05	0.37	0.59	0.69	0.86
Estonia	..	..	..	..	-	-	0.02	0.02	0.03
Finland	-	-	-	-	0.00	0.01	0.03	0.03	0.04
France	-	0.04	0.05	0.05	0.07	0.07	0.79	1.01	1.33
Germany	-	-	-	-	0.02	0.92	4.30	4.70	6.12
Greece	-	-	-	-	0.06	0.14	0.41	0.43	0.52
Hungary	..	-	-	-	-	-	0.03	0.05	0.06
Iceland	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	0.00	0.02	0.26	0.25	0.38
Israel	..	-	-	-	0.36	0.60	1.04	1.13	1.12
Italy	-	-	-	-	0.01	0.06 e	0.71	1.08	1.95
Japan	-	-	-	-	1.17	0.85	0.99	1.08	1.08
Korea	..	-	-	-	0.01	0.04 e	0.15	0.18	0.19
Luxembourg	-	-	-	-	-	0.00	0.01	0.01	0.01
Mexico	..	-	-	-	0.02	0.05	0.21	0.23	0.26
Netherlands	-	-	-	-	0.01	0.10	0.43	0.39	0.48
New Zealand	-	-	-	-	-	0.01	0.14	0.15	0.18
Norway	-	-	-	-	-	0.00	0.08	0.08	0.11
Poland	-	-	-	-	-	0.00	0.09	0.15	0.23
Portugal	-	-	-	-	0.01	0.03	0.70	0.87	0.87
Slovak Republic	..	-	-	-	-	-	0.00	0.00 e	0.00
Slovenia	..	..	..	..	-	-	0.00	0.01	0.01
Spain	-	-	-	-	0.00	0.44	3.99	4.82	4.55
Sweden	-	-	-	-	0.00	0.04	0.22	0.31	0.54
Switzerland	-	-	-	-	0.01	0.02	0.05	0.05	0.06
Turkey	-	-	-	-	0.03	0.26	0.56	0.68	0.71
United Kingdom	-	-	-	-	0.01	0.09	0.87	0.97	1.44
United States	-	-	-	-	0.32	2.07 e	8.08 e	10.03 e	12.26
<b>OECD TOTAL*</b>	..	<b>0.04</b>	<b>0.05</b>	<b>0.07</b>	<b>2.25</b>	<b>6.40</b>	<b>26.32</b>	<b>31.53</b>	<b>38.94</b>
<b>OECD AMERICAS</b>	..	-	-	-	0.34	2.15	8.89	11.12	14.28
<b>OECD ASIA OCEANIA</b>	..	-	-	0.02	1.62	1.59	2.85	3.22	3.40
<b>OECD EUROPE*</b>	..	0.04	0.05	0.05	0.29	2.67	14.58	17.20	21.26
<b>IEA</b>	..	0.04	0.05	0.07	1.87	5.76	25.04	30.12	37.49

\* Excludes Estonia and Slovenia prior to 1990.

**Production of biofuels and waste (Mtoe)***Production de biocarburants et de déchets (Mtep)**Erzeugung von Biokraftstoffen und Abfällen (Mtoe)**Produzione di biocarburanti e da rifiuti (Mtep)*

可燃性再生可能エネルギー及び廃棄物の生産量 (石油換算百万トン)

*Producción de biocombustibles y desechos (Mtep)**Производство биотоплива и отходов (Мтиэ)*

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	4.09	3.56	3.53	3.61	3.96	5.03 e	5.56	5.25	5.38
Austria	0.77	0.66	0.70	1.13	2.45	3.17	5.11	5.56	5.01
Belgium	-	-	0.01	0.06	0.75	0.93	2.23	2.54	2.54
Canada	4.06	7.62	7.81	7.65 e	8.17 e	11.72 e	12.06 e	12.06	11.92
Chile	..	1.40	1.32	1.79	3.13	4.73	5.51	4.90	5.09
Czech Republic	..	-	-	-	0.81	1.36	2.54	2.77	2.99
Denmark	..	0.33 e	0.35	0.64	1.14	1.69	2.58	2.80	2.74
Estonia	..	..	..	..	0.19	0.51	0.84	0.96	0.87
Finland	4.81	4.04	3.92	3.48	4.33	6.54	6.90	8.29	8.05
France	..	9.42	9.79	8.64	10.99	10.84	14.32	15.57	13.93
Germany	..	2.54	2.50	4.42 e	4.80 e	7.86 e	24.95	29.60	30.48
Greece	..	0.45	0.45	0.45	0.89	1.01	0.93 e	0.92 e	0.89
Hungary	..	0.57	0.59	0.53	0.70	0.76	1.77	1.84	1.82
Iceland	-	-	-	-	-	0.00	0.00	0.00	0.00
Ireland	-	-	-	-	0.11	0.14	0.31	0.33	0.32
Israel	..	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.01
Italy	..	0.22 e	0.24 e	0.82 e	0.85 e	1.74 e	5.73	7.03	7.52
Japan	-	-	-	-	5.00	5.86	6.60	7.16	6.46
Korea	..	-	-	-	0.71	1.35	3.02	3.43	3.47
Luxembourg	..	..	..	0.02	0.02	0.05	0.09	0.11	0.10
Mexico	..	5.97	6.21	6.88	8.55	8.94	8.38	8.36	8.43
Netherlands	..	..	..	0.23	0.95	1.83	3.09	3.23	3.48
New Zealand	..	..	..	0.52 e	0.75	1.11	1.07	1.18	1.18
Norway	..	..	..	0.58	1.03	1.36	1.31	1.51	1.47
Poland	0.87	1.27	1.29	1.22	2.23	4.07	6.42	7.16	7.79
Portugal	0.71	0.70	0.64	0.72	2.48	2.77	3.35	3.14	3.24
Slovak Republic	..	0.21	0.18	0.18	0.17	0.42 e	0.88	0.97	0.97
Slovenia	..	..	..	..	0.24	0.46	0.59	0.64	0.63
Spain	-	0.01	0.01	0.27	4.07 e	4.13 e	6.21	6.40	6.46
Sweden	2.55	2.89	3.54	4.13	5.51	8.26	10.38	11.90	10.84
Switzerland	0.35	0.23	0.24	0.47	1.43	1.81	2.21	2.32	2.26
Turkey	5.88	5.80	6.45	7.68	7.21	6.51 e	4.67	4.56	4.56
United Kingdom	-	-	-	-	0.63	1.92	4.27	4.44	4.91
United States	32.36	35.12	37.50	54.49	62.26 e	73.17	84.33	91.52	93.27
<b>OECD TOTAL*</b>	..	..	..	<b>110.60</b>	<b>146.49</b>	<b>182.08</b>	<b>238.23</b>	<b>258.50</b>	<b>259.07</b>
<b>OECD AMERICAS</b>	..	..	..	70.81	82.11	98.56	110.28	116.84	118.72
<b>OECD ASIA OCEANIA</b>	..	..	..	4.13	10.42	13.37	16.27	17.04	16.50
<b>OECD EUROPE*</b>	..	..	..	35.66	53.96	70.15	111.69	124.62	123.85
<b>IEA</b>	..	..	..	101.92	134.38	167.44	222.88	243.61	244.04

\* Excludes Estonia and Slovenia prior to 1990.

**Total production of energy (Mtoe)***Production totale d'énergie (Mtep)**Gesamte Energieerzeugung (Mtoe)**Produzione totale di energia (Mtep)**エネルギー総生産量(石油換算百万トン)**Producción total de energía (Mtep)**Общее производство топлива и энергии (Мтнэ)*

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	21.31	53.85	67.99	85.41	157.52	233.55	297.08	310.62	308.33
Austria	7.36	7.37	7.92	7.63	8.12	9.78	11.45	11.76	10.75
Belgium	14.00	6.84	6.51	8.09	13.10	13.73	15.32	16.04	15.78
Canada	57.09	155.84	198.22	207.42	273.72	372.71	390.15	397.83	408.87
Chile	..	5.34	5.08	5.80	7.93	8.59	10.20	9.21	9.03
Czech Republic	..	39.95	38.51	41.21	40.92	30.66	31.23	31.62	31.71
Denmark	1.00	0.33	0.43	0.95	10.08	27.73	23.95	23.33	21.46
Estonia	..	..	..	..	5.41	3.18	4.16	4.93	5.01
Finland	5.29	4.98	4.88	6.91	12.08	14.89	16.49	17.31	16.96
France	45.30	47.61	44.17	52.60	111.87	130.80	128.86	135.57	136.21
Germany	125.26	175.21	171.66	185.62	186.17	135.34	127.15	131.35	125.49
Greece	0.32	2.08	2.33	3.70	9.20	9.99	10.08	9.45	9.47
Hungary	..	11.85	12.70	14.49	14.69	11.62	11.00	11.05	10.83
Iceland	0.15	0.42	0.54	0.90	1.40	2.31	4.40	4.43	4.84
Ireland	1.38	1.42	1.12	1.89	3.47	2.19	1.59	1.98	1.83
Israel	..	5.94	6.15	0.15	0.42	0.64	3.27	3.85	4.68
Italy	13.84	19.53	20.38	19.90	25.31	28.17	26.99	29.79	31.07
Japan	46.98	35.79	29.51	43.29	75.21	105.84	93.96	96.79	47.54
Korea	..	6.38	6.76	9.27	22.62	34.44	44.31	44.92	45.45
Luxembourg	0.00	0.00	0.00	0.03	0.03	0.06	0.11	0.13	0.11
Mexico	..	43.36	47.28	147.03	194.65	222.30	220.03	226.36	227.70
Netherlands	10.20	37.34	56.76	71.82	60.54	57.57	63.06	69.76	64.51
New Zealand	2.49	3.42	4.05	5.47	11.52	14.28	15.29	16.86	15.96
Norway	2.97	6.03	8.06	54.97	119.07	227.20	213.55	205.51	196.05
Poland	64.81	99.25	107.41	126.64	103.87	79.58	67.52	67.39	69.22
Portugal	1.27	1.38	1.40	1.48	3.39	3.85	4.94	5.58	5.28
Slovak Republic	..	2.69	2.57	3.47	5.28	6.33	5.94	6.20	6.00
Slovenia	..	..	..	..	3.07	3.10	3.66	3.71	3.78
Spain	9.84	10.45	11.35	15.77	34.59	31.67	29.97	34.24	31.12
Sweden	5.48	7.39	9.25	16.13	29.68	30.52	30.35	33.50	33.14
Switzerland	2.11	2.90	4.28	7.03	10.25	12.03	12.79	12.64	12.40
Turkey	9.37	13.81	15.52	17.14	25.81	25.86	30.28	32.23	33.26
United Kingdom	114.81	109.81	108.52	197.85	208.00	272.47	158.94	148.77	129.80
United States	964.86	1 436.42	1 456.23	1 553.26	1 652.50	1 667.28	1 685.85	1 724.51	1 792.19
<b>OECD TOTAL*</b>	..	<b>2 354.99</b>	<b>2 457.55</b>	<b>2 913.34</b>	<b>3 441.53</b>	<b>3 830.27</b>	<b>3 793.93</b>	<b>3 879.21</b>	<b>3 865.84</b>
<b>OECD AMERICAS</b>	..	1 640.96	1 706.82	1 913.51	2 128.80	2 270.88	2 306.23	2 357.91	2 437.79
<b>OECD ASIA OCEANIA</b>	..	105.37	114.45	143.60	267.30	388.77	453.92	473.04	421.97
<b>OECD EUROPE*</b>	..	608.65	636.28	856.23	1 045.42	1 170.63	1 033.78	1 048.26	1 006.08
<b>IEA</b>	..	2 299.92	2 398.49	2 759.45	3 228.64	3 590.16	3 548.21	3 626.72	3 610.80

\* Excludes Estonia and Slovenia prior to 1990.

**Net imports of coal and peat (Mtoe)***Importations nettes de charbon et de tourbe (Mtep)**Nettoimport von Kohle und Torf (Mtoe)**Importazioni nette di carbone e torba (Mtep)*

石炭及び泥炭の純輸入量(石油換算百万トン)

*Importaciones netas de carbón y turba (Mtep)**Чистый импорт угля и торфа (Мтнэ)*

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	- 0.75	- 12.93	- 17.65	- 27.81	- 67.25	- 121.43	- 169.04	- 190.14	- 184.02
Austria	3.37	2.82	3.01	2.80	3.17	3.02	2.76	2.99	3.20
Belgium	0.50	3.48	4.55	7.18	9.61	7.18	2.44	3.14	2.74
Canada	7.15	6.40	2.83	0.35	- 11.91	- 4.23	- 9.63	- 12.09	- 14.15
Chile	..	0.18	0.20	0.63	1.13	2.92	3.34	3.81	4.95
Czech Republic	..	- 2.11 e	- 2.41 e	- 6.78	- 5.69	- 4.74	- 3.46	- 3.00	- 2.75
Denmark	3.43	1.43	1.87	6.05	6.22	3.78	3.92	2.64	3.60
Estonia	..	..	..	..	0.68	0.27	- 0.01	- 0.02	- 0.02
Finland	2.01	2.34	2.43	3.79	4.39	3.54	3.86	3.98	4.61
France	9.50	10.01	9.49	20.23	13.01	13.00	10.27	12.15	10.17
Germany	- 12.95	- 3.33	- 3.07	- 1.34	3.34	21.66	25.89	31.83	28.40
Greece	0.10	0.26	0.45	0.38	0.92	0.77	0.17	0.40	0.29
Hungary	..	2.01	1.63	2.20	1.63	1.08	0.95	1.13	1.00
Iceland	0.02	0.00	0.00	0.02	0.06	0.10	0.09	0.09	0.09
Ireland	1.15	0.70	0.50	0.81	2.01	1.70	1.37	1.04	1.52
Israel	..	0.01	0.00	0.00	2.43	6.04	7.11	7.38	7.38
Italy	7.23	8.33	7.73	11.65	13.74	13.14	12.42	14.30	15.30
Japan	6.09	32.02	40.89	47.55	72.07	95.44	100.87	114.86	108.31
Korea	..	- 0.11 e	0.34 e	3.47 e	15.73 e	39.14 e	62.92	72.95	79.46
Luxembourg	3.09	2.51	2.44	1.84	1.13	0.13	0.08	0.08	0.07
Mexico	..	0.24	0.27	0.59	0.23	1.70	2.96	3.96	3.88
Netherlands	1.56	1.26	1.54	3.72	9.46	8.00	9.30	9.24	11.73
New Zealand	- 0.01	- 0.00	- 0.02	- 0.05	- 0.24	- 1.11	- 1.12	- 1.58	- 1.43
Norway	0.54	0.63	0.58	0.79	0.67	0.60	- 1.13	- 0.35	- 0.22
Poland	- 13.02	- 20.67	- 26.17	- 20.56	- 20.12	- 16.31	- 2.64	- 2.74	- 0.38
Portugal	0.24	0.30	0.27	0.35	2.99	3.91	3.05	1.63	2.20
Slovak Republic	..	6.34	6.26	6.28	6.12	3.43	3.22	2.95	3.09
Slovenia	..	..	..	..	0.14	0.25	0.26	0.28	0.26
Spain	0.21	1.73	2.13	4.11	7.07	12.84	8.97	6.73	8.75
Sweden	2.52	1.77	1.68	1.68	2.64	2.41	1.35	2.55	2.35
Switzerland	1.75	0.40	0.22	0.51	0.34	0.19	0.17	0.13	0.11
Turkey	- 0.02	- 0.01	0.01	0.53	4.21	9.31	13.34	13.85	15.41
United Kingdom	- 3.83	0.75	- 0.87	1.40	8.53	14.45	22.96	15.72	19.45
United States	- 21.36	- 33.41	- 30.32	- 57.01	- 65.87	- 28.30	- 22.11	- 36.80	- 55.18
<b>OECD TOTAL*</b>	..	<b>13.36</b>	<b>10.82</b>	<b>15.36</b>	<b>22.60</b>	<b>93.86</b>	<b>94.88</b>	<b>83.10</b>	<b>80.16</b>
<b>OECD AMERICAS</b>	..	- 26.60	- 27.01	- 55.44	- 76.41	- 27.91	- 25.44	- 41.12	- 60.51
<b>OECD ASIA OCEANIA</b>	..	18.99	23.55	23.16	22.74	18.08	0.74	3.47	9.69
<b>OECD EUROPE*</b>	..	20.97	14.28	47.63	76.27	103.69	119.58	120.75	130.98
<b>IEA</b>	..	12.94	10.35	14.11	17.91	82.59	81.13	67.60	63.62

\* Excludes Estonia and Slovenia prior to 1990.

A negative number shows net exports.

**Net imports of oil (Mtoe)**  
*Importations nettes de pétrole (Mtep)*  
*Netto-Ölimport (Mtoe)*  
*Importazioni nette di petrolio (Mtep)*  
 石油の純輸入量(石油換算百万トン)  
*Importaciones netas de petróleo (Mtep)*  
 Чистый импорт нефти и нефтепродуктов (Мтиэ)

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	12.73	11.25	9.21	11.25	5.10	3.55	18.99	20.54	22.12
Austria	0.56	7.80	9.67	11.00	9.68	10.96	11.52	11.60	11.47
Belgium	7.74	28.80	31.46	26.41	22.60	30.13	31.81	33.73	30.96
Canada	16.15	1.79	- 14.49	8.44	- 14.86	- 39.04	- 70.27	- 75.00	- 89.73
Chile	..	3.84	3.50	3.40	5.89	11.05	16.04	15.37	15.57
Czech Republic	..	7.35	8.85	10.89	8.58	7.52	9.21	8.97	8.69
Denmark	5.18	18.68	18.57	13.24	2.75	- 8.49	- 4.91	- 3.97	- 4.52
Estonia	..	..	..	..	3.28	0.79	0.81	0.74	0.77
Finland	2.67	11.85	13.61	13.67	10.34	10.39	10.04	9.36	9.57
France	29.01	103.93	128.66	112.32	85.91	89.84	85.25	82.87	82.82
Germany	29.01	141.34	160.84	148.86	122.12	126.89	110.63	112.67	107.93
Greece	2.63	7.44	11.58	13.22	14.34	19.32	18.62	17.02	14.84
Hungary	..	5.12	6.47	8.31	6.43	5.21	5.61	5.78	5.42
Iceland	0.38	0.55	0.69	0.58	0.73	0.94	1.08	1.00	1.00
Ireland	1.43	5.11	5.45	5.83	5.06	8.02	7.78	7.53	7.17
Israel	..	0.40	2.44	8.47	9.01	12.25	11.35	11.41	13.06
Italy	23.76	87.88	98.34	92.76	85.14	87.96	67.06	66.80	61.68
Japan	29.47	219.84	273.08	251.70	263.30	270.04	205.74	211.58	215.95
Korea	..	10.73	13.22	27.28	51.72	109.50	104.95	108.80	105.42
Luxembourg	0.23	1.41	1.65	1.10	1.62	2.34	2.74	2.85	2.94
Mexico	..	0.55	5.72	- 47.58	- 70.35	- 75.58	- 55.42	- 59.28	- 55.28
Netherlands	12.10	36.02	41.73	38.15	31.17	42.31	46.47	45.72	44.07
New Zealand	1.85	4.05	4.56	4.26	2.35	4.46	4.54	4.43	4.75
Norway	3.69	7.46	6.56	- 14.62	- 72.50	- 156.39	- 98.55	- 85.45	- 80.43
Poland	2.00	8.76	11.76	17.74	14.31	19.83	24.71	25.64	25.91
Portugal	1.77	5.40	6.19	9.44	11.92	16.03	12.92	12.68	12.18
Slovak Republic	..	4.19	5.27	7.47	4.50	2.63	3.12	3.33	3.29
Slovenia	..	..	..	..	1.81	2.43	2.59	2.60	2.62
Spain	6.42	33.59	41.01	49.92	49.66	71.50	71.36	69.47	66.84
Sweden	13.45	29.23	28.60	25.91	15.28	15.73	14.89	15.50	15.96
Switzerland	4.18	13.74	15.01	13.40	13.19	12.11	12.95	11.74	11.39
Turkey	1.16	6.12	8.84	13.74	21.24	29.25	28.04	29.35	30.48
United Kingdom	51.23	111.03	115.95	1.93	- 11.00	- 46.72	6.08	11.26	21.42
United States	83.33	189.57	303.36	340.08	374.40	549.54	517.77	508.39	466.99
<b>OECD TOTAL*</b>	..	<b>1 124.84</b>	<b>1 377.38</b>	<b>1 228.59</b>	<b>1 084.73</b>	<b>1 246.30</b>	<b>1 235.53</b>	<b>1 245.04</b>	<b>1 193.30</b>
<b>OECD AMERICAS</b>	..	195.75	298.09	304.33	295.08	445.98	408.13	389.49	337.55
<b>OECD ASIA OCEANIA</b>	..	246.28	302.52	302.97	331.48	399.81	345.57	356.76	361.29
<b>OECD EUROPE*</b>	..	682.80	776.76	621.29	458.17	400.51	481.84	498.79	494.46
<b>IEA</b>	..	1 119.50	1 365.03	1 263.72	1 134.37	1 294.42	1 259.07	1 273.20	1 215.57

\* Excludes Estonia and Slovenia prior to 1990.

A negative number shows net exports.

**Net imports of natural gas (Mtoe)**  
*Importations nettes de gaz naturel (Mtep)*  
*Nettoimport von Erdgas (Mtoe)*  
*Importazioni nette di gas naturale (Mtep)*  
 ガスの純輸入量 (石油換算百万トン)  
*Importaciones netas de gas natural (Mtep)*  
*Чистый импорт природного газа (Мтнэ)*

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	-	-	-	-	- 2.35	- 9.26	- 12.46	- 16.04	- 17.72
Austria	-	1.23	1.34	2.66	4.44	5.25	6.41	6.11	8.03
Belgium	-	4.71	7.11	8.89	8.21	13.27	14.96	16.79	14.22
Canada	- 2.43	- 20.16	- 22.77	- 18.37	- 32.51	- 81.33	- 61.59	- 60.40	- 51.78
Chile	..	-	-	-	-	3.67	1.22	3.01	3.47
Czech Republic	..	0.50	0.72	2.41	4.78	7.48	7.02	6.84	7.50
Denmark	-	-	-	-	- 0.93	- 2.88	- 3.58	- 3.02	- 2.47
Estonia	..	..	..	..	1.22	0.66	0.52	0.56	0.51
Finland	-	-	-	0.77	2.18	3.42	3.48	3.84	3.36
France	-	3.99	7.56	16.17	24.36	35.77	38.78	39.54	36.53
Germany	-	4.72	12.30	35.31	41.74	56.85	67.27	60.10	56.69
Greece	-	-	-	-	-	1.69	2.96	3.23	3.80
Hungary	..	0.17	0.15	3.19	5.17	7.28	7.83	7.72	6.13
Iceland	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	2.48	3.96	4.38	3.83
Israel	..	-	-	-	-	-	1.25	1.73	0.58
Italy	-	0.03	1.64	11.76	25.30	46.99	56.60	61.58	57.51
Japan	-	1.17	2.78	19.53	42.33	63.49	77.76	82.79	97.60
Korea	..	-	-	-	2.68	17.07	30.20	39.28	41.98
Luxembourg	-	0.02	0.22	0.42	0.43	0.67	1.11	1.20	1.03
Mexico	..	- 0.48	- 0.05	- 2.42	0.37	2.20	10.19	11.70	14.66
Netherlands	-	- 13.18	- 25.25	- 38.47	- 23.79	- 17.19	- 21.46	- 24.20	- 23.53
New Zealand	-	-	-	-	-	-	-	-	-
Norway	-	-	-	- 21.90	- 22.17	- 42.13	- 85.17	- 87.31	- 84.38
Poland	0.20	1.18	1.39	4.30	6.77	6.61	8.12	8.87	9.64
Portugal	-	-	-	-	-	2.04	4.27	4.50	4.53
Slovak Republic	..	0.81	1.17	2.21	5.35	5.71	4.80	5.00	4.85
Slovenia	..	..	..	..	0.72	0.82	0.83	0.86	0.74
Spain	-	0.37	0.93	1.41	3.69	15.46	30.87	30.94	29.39
Sweden	-	-	-	-	0.58	0.78	1.09	1.46	1.15
Switzerland	-	0.04	0.15	0.87	1.63	2.43	2.69	3.01	2.67
Turkey	-	-	-	-	2.68	12.05	28.93	30.78	35.55
United Kingdom	0.00	0.75	0.67	9.00	6.18	- 9.31	24.66	31.96	31.00
United States	3.39	19.97	22.11	21.68	33.18	82.18	62.38	60.75	45.60
<b>OECD TOTAL*</b>	..	<b>5.83</b>	<b>12.17</b>	<b>59.43</b>	<b>142.27</b>	<b>234.22</b>	<b>315.92</b>	<b>337.56</b>	<b>342.68</b>
<b>OECD AMERICAS</b>	..	- 0.68	- 0.71	0.89	1.04	6.73	12.20	15.05	11.95
<b>OECD ASIA OCEANIA</b>	..	1.17	2.78	19.53	42.67	71.29	96.76	107.77	122.44
<b>OECD EUROPE*</b>	..	5.33	10.10	39.01	98.56	156.20	206.96	214.74	208.29
<b>IEA</b>	..	6.31	12.22	61.85	139.95	226.87	301.90	319.70	322.72

\* Excludes Estonia and Slovenia prior to 1990.

A negative number shows net exports.

**Net imports of electricity (Mtoe)**  
*Importations nettes d'électricité (Mtep)*  
*Nettoimport von Elektrizität (Mtoe)*  
*Importazioni nette di energia elettrica (Mtep)*  
 電力の純輸入量 (石油換算百万トン)  
*Importaciones netas de electricidad (Mtep)*  
*Чистый импорт электроэнергии (Мтнэ)*

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	-	-	-	-	-	-	-	-	-
Austria	- 0.16	- 0.22	- 0.13	- 0.34	- 0.04	- 0.12	0.07	0.20	0.71
Belgium	0.00	- 0.04	- 0.06	- 0.23	- 0.32	0.37	- 0.16	0.05	0.22
Canada	- 0.44	- 0.31	- 1.21	- 2.34	- 0.03	- 3.07	- 2.89	- 2.21	- 3.22
Chile	..	0.00	0.00	-	-	0.10	0.12	0.08	0.06
Czech Republic	..	- 0.02	- 0.19	- 0.13	- 0.06	- 0.86	- 1.17	- 1.29	- 1.47
Denmark	0.01	- 0.17	- 0.02	- 0.11	0.61	0.06	0.03	- 0.10	0.11
Estonia	..	..	..	..	- 0.60	- 0.08	0.01	- 0.28	- 0.31
Finland	0.04	0.22	0.37	0.10	0.92	1.02	1.04	0.90	1.19
France	- 0.01	- 0.12	- 0.25	0.28	- 3.91	- 5.98	- 2.23	- 2.64	- 4.85
Germany	0.36	0.60	0.99	0.61	0.08	0.26	- 1.06	- 1.29	- 0.32
Greece	0.00	- 0.00	0.00	0.05	0.06	- 0.00	0.38	0.49	0.28
Hungary	..	0.37	0.40	0.64	0.96	0.30	0.47	0.45	0.57
Iceland	-	-	-	-	-	-	-	-	-
Ireland	-	- 0.00	0.00	-	-	0.01	0.07	0.04	0.04
Israel	..	- 0.00	- 0.00	- 0.01	- 0.04	- 0.13	- 0.33	- 0.34	- 0.36
Italy	- 0.01	0.14	0.08	0.52	2.98	3.81	3.87	3.80	3.92
Japan	-	-	-	-	-	-	-	-	-
Korea	..	-	-	-	-	-	-	-	-
Luxembourg	0.00	0.15	0.18	0.24	0.34	0.49	0.29	0.35	0.39
Mexico	..	0.01	0.03	0.05	- 0.12	0.08	- 0.08	- 0.08	- 0.06
Netherlands	0.01	- 0.09	- 0.12	- 0.03	0.79	1.63	0.42	0.24	0.78
New Zealand	-	-	-	-	-	-	-	-	-
Norway	0.01	- 0.25	- 0.45	- 0.04	- 1.37	- 1.64	- 0.77	0.65	- 0.26
Poland	0.03	- 0.01	- 0.15	- 0.02	- 0.09	- 0.55	- 0.19	- 0.12	- 0.45
Portugal	0.00	0.02	- 0.00	0.16	0.00	0.08	0.41	0.23	0.24
Slovak Republic	..	0.20	0.24	0.29	0.45	- 0.23	0.11	0.09	0.06
Slovenia	..	..	..	..	- 0.08	- 0.11	- 0.26	- 0.18	- 0.11
Spain	- 0.01	- 0.21	- 0.17	- 0.12	- 0.04	0.38	- 0.70	- 0.72	- 0.52
Sweden	- 0.07	0.14	0.06	0.05	- 0.15	0.40	0.40	0.18	- 0.62
Switzerland	- 0.22	- 0.09	- 0.30	- 0.70	- 0.18	- 0.61	- 0.19	0.04	0.22
Turkey	-	-	-	0.12	- 0.06	0.29	- 0.06	- 0.07	0.08
United Kingdom	- 0.00	0.01	0.01	0.00	1.03	1.22	0.25	0.23	0.54
United States	0.39	0.30	1.23	2.30	0.17	2.92	2.93	2.23	3.20
<b>OECD TOTAL*</b>	..	<b>0.64</b>	<b>0.54</b>	<b>1.34</b>	<b>1.29</b>	<b>0.05</b>	<b>0.77</b>	<b>0.94</b>	<b>0.06</b>
<b>OECD AMERICAS</b>	..	0.01	0.05	0.01	0.02	0.03	0.08	0.02	- 0.01
<b>OECD ASIA OCEANIA</b>	..	- 0.00	- 0.00	- 0.01	- 0.04	- 0.13	- 0.33	- 0.34	- 0.36
<b>OECD EUROPE*</b>	..	0.64	0.49	1.35	1.30	0.15	1.02	1.26	0.44
<b>IEA</b>	..	0.63	0.51	1.30	2.13	0.19	1.32	1.74	0.84

\* Excludes Estonia and Slovenia prior to 1990.

A negative number shows net exports.

**Total net imports of energy (Mtoe)***Importations nettes totales d'énergie (Mtep)**Gesamter Nettoimport von Energie (Mtoe)**Importazioni nette totali di energia (Mtep)**エネルギー純輸入量(石油換算百万トン)**Importaciones netas totales de energía (Mtep)**Общий чистый импорт топлива и энергии (Мтнэ)*

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	11.99	- 1.68	- 8.44	- 16.55	- 64.50	- 127.13	- 162.52	- 185.63	- 179.62
Austria	3.76	11.63	13.90	16.12	17.32	19.08	21.21	21.37	23.85
Belgium	8.24	36.96	43.06	42.25	40.11	51.05	49.59	54.27	48.69
Canada	20.44	- 12.28	- 35.64	- 11.93	- 59.32	- 127.69	- 144.55	- 149.72	- 158.70
Chile	..	4.02	3.70	4.03	7.03	17.74	20.72	22.27	24.06
Czech Republic	..	5.72	6.97	6.39	7.61	9.39	11.43	11.41	11.90
Denmark	8.62	19.94	20.42	19.19	8.65	- 7.47	- 4.03	- 3.65	- 2.40
Estonia	..	..	..	..	4.58	1.64	1.20	0.85	0.81
Finland	4.72	14.41	16.42	18.33	17.83	18.37	18.52	18.03	18.76
France	38.50	117.81	145.45	149.00	119.38	132.64	132.23	132.09	125.04
Germany	16.43	143.33	171.06	183.38	167.27	205.66	202.55	203.11	192.66
Greece	2.74	7.69	12.04	13.65	15.32	21.78	22.18	21.30	19.36
Hungary	..	7.67	8.65	14.34	14.16	13.87	14.86	15.11	13.16
Iceland	0.40	0.55	0.69	0.60	0.79	1.03	1.17	1.09	1.09
Ireland	2.58	5.81	5.96	6.64	7.07	12.21	13.21	13.04	12.61
Israel	..	0.40	2.44	8.46	11.40	18.17	19.40	20.18	20.65
Italy	30.98	96.38	107.79	116.80	127.26	152.43	141.21	148.21	140.35
Japan	35.56	253.03	316.76	318.78	377.70	428.97	384.38	409.22	421.85
Korea	..	10.63	13.56	30.75	70.15	165.73	198.10	221.05	226.86
Luxembourg	3.32	4.09	4.49	3.62	3.52	3.63	4.26	4.51	4.47
Mexico	..	0.32	5.97	- 49.35	- 69.87	- 71.61	- 42.34	- 43.70	- 36.81
Netherlands	13.67	24.02	17.90	3.37	17.63	34.65	35.11	31.16	33.23
New Zealand	1.84	4.05	4.54	4.22	2.12	3.35	3.41	2.85	3.32
Norway	4.24	7.84	6.70	- 35.76	- 95.36	- 199.55	- 185.51	- 172.31	- 165.13
Poland	- 10.80	- 10.74	- 13.18	1.47	0.87	9.58	30.23	32.09	35.23
Portugal	2.00	5.72	6.46	9.94	14.91	22.06	20.66	18.83	18.93
Slovak Republic	..	11.56	12.96	16.24	16.41	11.53	11.25	11.36	11.29
Slovenia	..	..	..	..	2.62	3.38	3.43	3.58	3.54
Spain	6.62	35.47	43.90	55.33	60.38	100.18	110.69	106.84	105.34
Sweden	15.90	31.13	30.34	27.64	18.34	19.32	17.74	19.68	18.85
Switzerland	5.72	14.09	15.08	14.08	14.98	14.12	15.64	14.95	14.43
Turkey	1.14	6.11	8.85	14.38	28.07	50.90	70.25	73.91	81.52
United Kingdom	47.41	112.55	115.75	12.33	4.73	- 40.36	55.05	60.63	73.78
United States	65.75	176.43	296.38	307.04	341.89	606.35	560.74	533.57	456.30
<b>OECD TOTAL*</b>	..	<b>1 144.68</b>	<b>1 400.93</b>	<b>1 304.76</b>	<b>1 251.06</b>	<b>1 574.99</b>	<b>1 651.46</b>	<b>1 671.58</b>	<b>1 619.26</b>
<b>OECD AMERICAS</b>	..	168.49	270.41	249.78	219.72	424.80	394.56	362.43	284.86
<b>OECD ASIA OCEANIA</b>	..	266.44	328.86	345.65	396.87	489.08	442.77	467.68	493.05
<b>OECD EUROPE*</b>	..	709.76	801.66	709.33	634.47	661.10	814.13	841.47	841.34
<b>IEA</b>	..	1 139.39	1 388.13	1 341.03	1 294.51	1 604.63	1 647.88	1 667.30	1 605.92

\* Excludes Estonia and Slovenia prior to 1990.

A negative number shows net exports.



**Primary supply of coal and peat (Mtoe)***Approvisionnement primaire en charbon et en tourbe (Mtep)**Primärenergieaufkommen von Kohle und Torf (Mtoe)**Disponibilità primaria di carbone e torba (Mtep)**石炭及び泥炭の一次供給量(石油換算百万トン)**Suministro primario de carbón y turba (Mtep)**Первичная поставка угля и торфа (Мтпэ)*

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	15.89	21.12	22.58	27.32	34.98	48.16	52.33	51.37	41.56
Austria	5.06	4.08	3.87	3.65	4.10	3.59	2.87	3.41	3.55
Belgium	15.94	10.15	11.18	11.40	10.57	7.88	2.98	3.19	2.68
Canada	12.57	15.87	15.26	21.23	24.25	31.65	22.22	22.29	19.43
Chile	..	1.32	1.20	1.22	2.50	3.07	3.52	4.56	5.22
Czech Republic	..	37.30	35.58	33.45	31.47	21.58	17.59	18.52	17.67
Denmark	4.11	1.45	1.93	5.88	6.09	3.99	4.00	3.81	3.24
Estonia	..	..	..	..	6.14	2.97	3.00	3.92	4.10
Finland	1.93	2.08	2.55	4.95	5.32	5.13	5.27	6.89	5.78
France	44.72	33.54	29.30	32.89	20.21	15.04	11.20	12.04	10.28
Germany	109.44	141.75	139.40	141.02	128.56	84.83	71.62	77.12	74.55
Greece	0.40	1.62	2.10	3.26	8.07	9.04	8.43	7.86	7.97
Hungary	..	7.85	7.91	8.43	6.20	3.85	2.56	2.70	2.74
Iceland	0.02	0.00	0.00	0.02	0.06	0.10	0.09	0.09	0.09
Ireland	2.46	2.07	1.59	1.91	3.47	2.66	2.21	2.09	2.16
Israel	..	0.01	0.00	0.00	2.29	6.47	7.15	7.41	7.59
Italy	7.96	8.55	8.10	11.68	14.63	12.56	12.75	14.17	15.15
Japan	47.52	56.04	57.86	59.56	76.62	96.86	101.15	114.95	108.22
Korea	..	6.27	8.13	13.49	25.56	41.95	64.84	73.43	79.80
Luxembourg	3.08	2.52	2.44	1.82	1.13	0.13	0.08	0.08	0.07
Mexico	..	1.51	1.84	2.37	3.47	6.85	7.75	8.63	9.49
Netherlands	9.91	3.38	2.87	3.79	8.93	7.85	7.46	7.60	7.52
New Zealand	1.57	1.09	1.26	1.02	1.18	1.11	1.46	1.31	1.44
Norway	0.78	0.94	0.91	1.01	0.86	1.05	0.56	0.84	0.83
Poland	50.48	70.70	74.70	99.80	78.87	56.30	51.13	55.40	55.39
Portugal	0.55	0.58	0.51	0.43	2.76	3.81	2.86	1.66	2.26
Slovak Republic	..	8.04	7.96	8.20	7.83	4.27	3.87	3.90	3.78
Slovenia	..	..	..	..	1.58	1.31	1.42	1.42	1.43
Spain	8.83	8.95	9.00	12.43	19.28	20.94	10.15	7.68	11.92
Sweden	2.83	1.72	1.63	1.70	2.96	2.45	1.93	2.49	2.44
Switzerland	1.75	0.46	0.33	0.33	0.36	0.14	0.15	0.15	0.16
Turkey	3.20	4.31	5.15	6.99	16.91	22.91	29.76	32.03	33.97
United Kingdom	114.31	84.03	76.43	68.80	63.11	36.50	29.83	30.75	30.51
United States	222.86	279.38	311.05	376.23	460.20	533.63	484.98	502.64	488.13
<b>OECD TOTAL*</b>	..	<b>818.67</b>	<b>844.60</b>	<b>966.25</b>	<b>1 080.50</b>	<b>1 100.61</b>	<b>1 029.17</b>	<b>1 086.37</b>	<b>1 061.10</b>
<b>OECD AMERICAS</b>	..	298.08	329.35	401.05	490.42	575.19	518.46	538.13	522.27
<b>OECD ASIA OCEANIA</b>	..	84.53	89.84	101.38	140.62	194.55	226.94	248.46	238.60
<b>OECD EUROPE*</b>	..	436.06	425.41	463.82	449.46	330.86	283.77	299.79	300.23
<b>IEA</b>	..	815.84	841.56	962.65	1 064.48	1 079.84	1 006.24	1 060.34	1 033.18

\* Excludes Estonia and Slovenia prior to 1990.

### Primary supply of oil (Mtoe)

*Approvisionnement primaire en pétrole (Mtep)*

*Primärenergieaufkommen von Öl (Mtoe)*

*Disponibilità primaria di petrolio (Mtep)*

*石油の一次供給量(石油換算百万トン)*

*Suministro primario de petróleo (Mtep)*

*Первичная поставка нефти и нефтепродуктов (Мтнэ)*

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	11.15	24.15	26.58	30.07	31.20	34.15	39.75	39.87	38.98
Austria	2.99	10.04	12.11	12.08	10.37	11.73	11.93	12.30	11.84
Belgium	7.04	24.82	27.69	23.34	17.96	23.26	23.95	24.80	22.68
Canada	41.98	71.91	79.39	88.52	76.51	87.10	85.39	86.43	82.25
Chile	..	4.94	4.97	5.07	6.47	10.48	15.37	15.01	15.48
Czech Republic	..	7.15	8.66	10.84	8.73	7.72	9.17	8.96	8.75
Denmark	4.68	16.90	16.72	12.72	7.65	8.02	6.73	6.83	5.96
Estonia	..	..	..	..	2.97	0.65	0.50	0.52	0.48
Finland	2.50	10.90	13.26	12.60	9.46	8.91	9.12	9.37	8.59
France	28.55	99.32	119.81	106.32	83.92	82.03	79.02	76.52	75.83
Germany	30.61	140.57	158.70	143.86	121.39	124.69	103.69	105.14	102.01
Greece	1.97	6.39	9.06	10.92	12.07	14.88	15.79	13.85	12.55
Hungary	..	7.00	8.15	10.79	8.35	6.63	6.73	6.54	6.27
Iceland	0.37	0.48	0.58	0.58	0.62	0.70	0.90	0.85	0.81
Ireland	1.19	4.61	5.26	5.52	4.47	7.39	7.18	6.91	6.38
Israel	..	5.63	7.72	7.70	8.84	11.29	10.22	10.29	11.87
Italy	20.92	79.11	90.30	88.23	83.32	86.85	67.61	65.24	61.96
Japan	27.65	198.85	248.93	233.68	250.42	255.21	200.50	203.01	206.33
Korea	..	10.59	13.31	26.65	49.73	99.04	90.60	95.11	92.78
Luxembourg	0.23	1.37	1.60	1.04	1.48	1.97	2.32	2.44	2.51
Mexico	..	25.47	32.47	64.45	80.26	90.23	99.03	97.30	100.93
Netherlands	10.77	27.52	30.46	28.86	23.28	25.89	30.33	31.49	29.87
New Zealand	1.65	3.51	4.17	4.01	3.55	5.68	6.21	6.04	5.86
Norway	3.34	7.17	7.53	8.71	8.06	8.95	10.56	12.83	11.04
Poland	2.08	8.33	10.68	16.65	13.04	19.16	24.02	25.37	26.11
Portugal	1.46	4.45	5.12	8.00	10.70	14.91	11.73	11.55	10.92
Slovak Republic	..	4.37	5.39	7.49	4.49	2.82	3.33	3.54	3.37
Slovenia	..	..	..	..	1.73	2.37	2.58	2.54	2.56
Spain	6.00	30.11	37.60	49.77	45.47	62.10	60.37	58.16	56.01
Sweden	12.22	26.79	27.91	22.64	14.30	13.57	11.85	13.89	13.45
Switzerland	3.80	13.08	14.45	12.51	12.26	11.02	11.51	10.35	10.03
Turkey	1.52	9.17	12.48	15.62	23.40	30.40	29.12	30.12	31.59
United Kingdom	43.69	100.77	108.90	79.34	76.37	73.22	64.18	63.36	61.64
United States	467.10	722.01	817.49	796.93	756.84	871.15	801.73	804.93	787.27
<b>OECD TOTAL*</b>	<b>..</b>	<b>1 707.49</b>	<b>1 967.44</b>	<b>1 945.51</b>	<b>1 869.69</b>	<b>2 114.18</b>	<b>1 953.00</b>	<b>1 961.46</b>	<b>1 924.97</b>
<b>OECD AMERICAS</b>	<b>..</b>	<b>824.33</b>	<b>934.32</b>	<b>954.97</b>	<b>920.09</b>	<b>1 058.95</b>	<b>1 001.53</b>	<b>1 003.67</b>	<b>985.92</b>
<b>OECD ASIA OCEANIA</b>	<b>..</b>	<b>242.72</b>	<b>300.71</b>	<b>302.12</b>	<b>343.74</b>	<b>405.37</b>	<b>347.28</b>	<b>354.32</b>	<b>355.82</b>
<b>OECD EUROPE*</b>	<b>..</b>	<b>640.44</b>	<b>732.41</b>	<b>688.42</b>	<b>605.86</b>	<b>649.86</b>	<b>604.20</b>	<b>603.47</b>	<b>583.23</b>
<b>IEA</b>	<b>..</b>	<b>1 670.98</b>	<b>1 921.71</b>	<b>1 867.71</b>	<b>1 768.79</b>	<b>1 998.48</b>	<b>1 824.41</b>	<b>1 834.96</b>	<b>1 792.85</b>

\* Excludes Estonia and Slovenia prior to 1990.

**Primary supply of natural gas (Mtoe)***Approvisionnement primaire en gaz naturel (Mtep)**Primärenergieaufkommen von Erdgas (Mtoe)**Disponibilità primaria di gas naturale (Mtep)**ガスの一次供給量(石油換算百万トン)**Suministro primario de gas natural (Mtep)**Первичная поставка газа (Мтпэ)*

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	-	1.79	3.38	7.46	14.79	19.27	26.86	26.48	31.77
Austria	1.27	2.84	3.30	4.15	5.18	6.52	7.47	8.21	7.77
Belgium	0.05	4.71	7.14	8.91	8.17	13.36	15.11	16.96	14.28
Canada	8.80	31.17	37.27	45.55	54.73	74.24	78.37	78.59	87.71
Chile	..	0.64	0.53	0.72	1.14	5.21	2.79	4.47	4.72
Czech Republic	..	0.86	1.02	2.59	5.25	7.50	6.72	7.58	7.21
Denmark	-	-	0.00	0.00	1.82	4.45	3.89	4.42	3.71
Estonia	..	..	..	..	1.22	0.66	0.52	0.56	0.51
Finland	-	-	-	0.77	2.18	3.42	3.48	3.84	3.36
France	2.40	9.73	13.50	21.64	26.02	35.76	38.45	42.53	35.30
Germany	0.74	16.80	28.64	51.19	54.96	71.83	76.56	73.38	64.06
Greece	-	-	-	-	0.14	1.70	2.97	3.23	3.81
Hungary	..	3.25	4.17	7.97	8.91	9.65	9.15	9.81	9.35
Iceland	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	0.74	1.87	3.43	4.28	4.69	4.12
Israel	..	0.10	0.05	0.13	0.03	0.01	3.42	4.41	4.10
Italy	5.28	10.85	14.22	22.72	38.99	57.92	63.88	68.04	63.80
Japan	0.64	3.31	5.07	21.40	44.16	65.65	80.66	86.01	99.94
Korea	..	-	-	-	2.72	17.01	31.70	38.67	41.62
Luxembourg	-	0.02	0.22	0.42	0.43	0.67	1.11	1.20	1.03
Mexico	..	8.77	10.49	19.13	23.12	28.92	48.51	53.26	56.62
Netherlands	0.28	19.95	28.50	30.42	30.80	34.98	34.96	39.20	34.20
New Zealand	0.06	0.11	0.28	0.79	3.87	5.06	3.51	3.73	3.41
Norway	-	-	-	0.87	1.98	4.14	5.49	6.23	6.06
Poland	0.66	5.72	6.25	8.77	8.94	9.96	12.06	12.80	12.83
Portugal	-	-	-	-	-	2.03	4.22	4.49	4.46
Slovak Republic	..	1.31	1.56	2.32	5.09	5.77	4.42	5.01	4.62
Slovenia	..	..	..	..	0.76	0.83	0.83	0.86	0.74
Spain	-	0.36	0.94	1.45	4.97	15.21	31.22	31.18	28.93
Sweden	-	-	-	-	0.58	0.78	1.09	1.46	1.15
Switzerland	-	0.04	0.15	0.87	1.63	2.43	2.69	3.01	2.67
Turkey	-	-	-	-	2.85	12.63	28.91	31.39	36.80
United Kingdom	0.06	16.40	25.11	40.31	47.19	87.37	78.10	84.79	70.13
United States	283.73	516.93	514.51	476.78	438.23	547.58	535.23	556.48	571.91
<b>OECD TOTAL*</b>	..	<b>655.67</b>	<b>706.32</b>	<b>778.08</b>	<b>842.72</b>	<b>1 155.97</b>	<b>1 248.64</b>	<b>1 316.96</b>	<b>1 322.71</b>
<b>OECD AMERICAS</b>	..	557.51	562.81	542.19	517.22	655.94	664.89	692.81	720.96
<b>OECD ASIA OCEANIA</b>	..	5.32	8.78	29.78	65.57	106.99	146.14	159.30	180.85
<b>OECD EUROPE*</b>	..	92.84	134.73	206.11	259.93	393.04	437.60	464.85	420.90
<b>IEA</b>	..	646.15	695.26	758.10	816.45	1 120.35	1 192.57	1 253.40	1 256.03

\* Excludes Estonia and Slovenia prior to 1990.

**Total primary energy supply (TPES) (Mtoe)***Approvisionnement totaux en énergie primaire (ATEP) (Mtep)**Gesamtaufkommen von Primärenergie (TPES) (Mtoe)**Disponibilità totale di energia primaria (DTEP) (Mtep)**一次エネルギー総供給量(石油換算百万トン)**Suministro total de energía primaria (TPES) (Mtep)**Общая первичная поставка топлива и энергии (ОППТЭ) (Мтнэ)*

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	31.48	51.61	57.06	69.60	86.23	108.11	125.98	124.73	119.80
Austria	10.90	18.82	21.48	23.15	24.84	28.56	31.76	33.84	32.62
Belgium	23.06	39.66	45.99	46.77	48.28	58.51	57.10	60.86	55.95
Canada	76.14	141.35	159.35	192.61	208.54	251.44	250.75	251.84	256.08
Chile	..	8.70	8.50	9.48	14.01	25.17	29.48	30.92	32.41
Czech Republic	..	45.38	45.16	46.95	49.57	40.99	42.07	44.11	42.90
Denmark	8.81	18.51	18.99	19.14	17.36	18.63	18.35	19.25	17.51
Estonia	..	..	..	..	9.91	4.71	4.75	5.57	5.55
Finland	9.73	18.17	21.03	24.60	28.38	32.23	33.25	36.40	34.25
France	79.22	158.57	180.14	191.77	223.89	251.87	253.49	262.29	251.45
Germany	142.17	305.05	334.70	357.18	351.15	336.58	317.10	327.37	307.16
Greece	2.41	8.69	11.81	14.98	21.44	27.09	29.44	27.62	26.54
Hungary	..	19.03	21.28	28.35	28.76	25.00	24.86	25.67	25.07
Iceland	0.54	0.90	1.12	1.50	2.09	3.10	5.38	5.37	5.74
Ireland	3.73	6.72	6.91	8.24	9.99	13.73	14.40	14.40	13.51
Israel	..	5.74	7.76	7.82	11.48	18.25	21.53	22.91	24.33
Italy	39.90	105.40	119.12	130.84	146.56	171.52	164.86	170.24	165.14
Japan	80.84	267.53	320.37	344.52	439.33	518.96	472.10	496.85	458.15
Korea	..	16.97	21.54	41.21	93.09	188.16	229.18	250.01	257.59
Luxembourg	3.30	4.06	4.43	3.56	3.41	3.32	3.95	4.23	4.15
Mexico	..	42.98	52.57	95.12	122.49	145.12	174.64	178.11	186.97
Netherlands	20.97	50.87	62.00	64.36	65.69	73.22	78.17	83.43	77.55
New Zealand	4.11	6.91	8.02	8.98	12.87	17.06	17.46	18.20	18.00
Norway	6.83	13.30	14.26	18.32	21.00	26.09	28.16	32.45	29.87
Poland	54.18	86.12	92.88	126.62	103.10	89.12	93.99	101.45	102.62
Portugal	2.98	6.28	6.90	9.99	16.74	24.67	24.15	23.54	23.15
Slovak Republic	..	14.26	15.52	19.85	21.33	17.74	16.72	17.81	16.94
Slovenia	..	..	..	..	5.71	6.41	7.09	7.21	7.24
Spain	16.16	42.61	51.57	67.69	90.08	121.97	127.46	127.74	125.90
Sweden	20.20	36.04	38.84	40.49	47.20	47.56	45.41	51.28	49.40
Switzerland	7.45	16.39	18.91	20.04	24.32	25.01	26.97	26.21	25.52
Turkey	10.69	19.54	24.35	31.44	52.76	76.35	97.66	105.13	114.18
United Kingdom	158.92	208.68	218.07	198.43	205.92	222.94	197.07	202.51	189.00
United States	1 019.30	1 587.47	1 729.94	1 804.68	1 915.00	2 273.33	2 164.97	2 216.32	2 202.72
<b>OECD TOTAL*</b>	<b>..</b>	<b>3 372.31</b>	<b>3 740.55</b>	<b>4 068.27</b>	<b>4 522.50</b>	<b>5 292.54</b>	<b>5 229.70</b>	<b>5 405.87</b>	<b>5 304.95</b>
<b>OECD AMERICAS</b>	<b>..</b>	<b>1 780.51</b>	<b>1 950.36</b>	<b>2 101.88</b>	<b>2 260.04</b>	<b>2 695.07</b>	<b>2 619.84</b>	<b>2 677.20</b>	<b>2 678.17</b>
<b>OECD ASIA OCEANIA</b>	<b>..</b>	<b>348.76</b>	<b>414.75</b>	<b>472.14</b>	<b>642.98</b>	<b>850.54</b>	<b>866.24</b>	<b>912.70</b>	<b>877.86</b>
<b>OECD EUROPE*</b>	<b>..</b>	<b>1 243.04</b>	<b>1 375.44</b>	<b>1 494.24</b>	<b>1 619.47</b>	<b>1 746.93</b>	<b>1 743.62</b>	<b>1 815.98</b>	<b>1 748.92</b>
<b>IEA</b>	<b>..</b>	<b>3 313.98</b>	<b>3 670.60</b>	<b>3 954.36</b>	<b>4 356.81</b>	<b>5 089.77</b>	<b>4 986.83</b>	<b>5 155.78</b>	<b>5 042.72</b>

\* Excludes Estonia and Slovenia prior to 1990.

**Primary energy supply of renewables (Mtoe)***Approvisionnement primaire en énergies renouvelables (Mtep)**Primärenergieaufkommen von Erneuerbare (Mtoe)**Disponibilità primaria da fonti rinnovabili (Mtep)**再生可能エネルギーの一次供給量(石油換算百万トン)**Suministro de energía primaria a partir de renovables (Mtep)**Первичная поставка возобновляемой энергии (Мтиэ)*

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	4.44	4.55	4.51	4.75	5.07	6.35	6.91	6.87	7.34
Austria	1.75	2.07	2.33	3.61	5.04	6.57	8.86	9.07	8.09
Belgium	0.01	0.01	0.02	0.08	0.48	0.64	2.19	2.55	2.70
Canada	13.24	21.60	24.55	29.25	33.61	42.43 e	44.03	42.94	46.02
Chile	..	1.81	1.81	2.47	3.90	6.31	7.69	6.80	6.93
Czech Republic	..	0.10	0.09	0.21	0.91	1.34	2.43	2.78	3.10
Denmark	0.00	0.33	0.31	0.59	1.08	1.82	3.31	3.91	4.10
Estonia	..	..	..	..	0.19	0.51	0.72	0.85	0.76
Finland	5.26	4.96	4.85	4.34	5.49	7.75	7.97	9.22	9.04
France	3.52	13.67	13.94	14.68	15.22	15.89	19.13	20.95	18.39
Germany	1.03	3.70	3.81	5.41	5.32	9.09	27.60	32.55	34.72
Greece	0.04	0.68	0.64	0.74	1.10	1.40	1.87	2.14	1.90
Hungary	..	0.55	0.65	0.53	0.75	0.83	1.84	1.96	1.96
Iceland	0.15	0.42	0.54	0.90	1.40	2.30	4.40	4.43	4.84
Ireland	0.08	0.04	0.06	0.07	0.17	0.23	0.66	0.66	0.80
Israel	..	0.00	0.00	0.00	0.36	0.61	1.07	1.15	1.13
Italy	5.75	5.87	5.60	7.10	6.47	10.11 e	16.01	18.05	19.40
Japan	5.03	7.24	5.97	8.37	15.22	16.65	15.90	16.60	15.79
Korea	..	0.11	0.11	0.17	1.01	0.76 e	1.50	1.78	1.88
Luxembourg	0.00	0.00	0.00	0.02	0.02	0.04	0.12	0.13	0.13
Mexico	..	7.21	7.74	9.12	14.99	16.91	16.69	17.47	17.36
Netherlands	-	-	-	0.23	0.74	1.25	3.15	3.13	3.30
New Zealand	0.83	2.21	2.30	3.17	4.22	5.17	6.25	7.10	7.25
Norway	2.69	5.44	6.27	7.78	11.40	13.49	12.15	11.70	11.99
Poland	0.90	1.20	1.16	1.04	1.58	3.80	6.27	7.28	8.05
Portugal	0.97	1.23	1.27	1.41	3.28	3.76	4.80	5.48	5.12
Slovak Republic	..	0.33	0.30	0.36	0.33	0.49	1.21	1.39 e	1.26
Slovenia	..	..	..	..	0.52	0.79	1.01	1.07	0.97
Spain	1.34	2.75	2.50	2.81	6.20	6.93 e	12.34	15.07	14.37
Sweden	5.22	7.36	8.69	9.11	11.53	14.74	15.82	17.41	16.57
Switzerland	2.11	2.54	2.64	3.29	3.64	4.44	4.81	4.99	4.64
Turkey	5.97	6.06	6.72	8.72	9.66	10.10	9.92	11.63	11.70
United Kingdom	0.27	0.29	0.33	0.33	1.03	2.26	6.24	6.79	7.77
United States	45.07	58.28	62.43	83.07	96.17	101.96 e	117.73 e	125.01 e	133.29
<b>OECD TOTAL*</b>	..	<b>162.61</b>	<b>172.14</b>	<b>213.69</b>	<b>268.08</b>	<b>317.74</b>	<b>392.57</b>	<b>420.88</b>	<b>432.68</b>
<b>OECD AMERICAS</b>	..	88.89	96.53	123.90	148.67	167.61	186.14	192.21	203.60
<b>OECD ASIA OCEANIA</b>	..	14.12	12.90	16.45	25.89	29.54	31.63	33.49	33.39
<b>OECD EUROPE*</b>	..	59.60	62.72	73.34	93.52	120.58	174.80	195.18	195.69
<b>IEA</b>	..	153.17	162.05	201.20	246.71	290.31	360.99	389.11	400.68

\* Excludes Estonia and Slovenia prior to 1990.

Includes hydro, geothermal, solar, wind, tide, wave, biofuels and the renewable fraction of municipal waste.

Excludes hydro pumped storage.

**Electricity generation from coal and peat (% of total)***Production d'électricité à partir du charbon et de tourbe (% du total)**Stromerzeugung auf Kohle- und Torfbasis (in %)**Produzione di energia termoelettrica da carbone e torba (% del totale)**石炭及び泥炭からの発電量 (%)**Generación de electricidad a partir del carbón y turba (% del total)**Производство электроэнергии за счет потребления угля и торфа (в % к общему производству)*

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	74.42	71.03	74.88	73.25	78.74	83.03	76.11	74.81	69.34
Austria	13.86	13.12	10.32	7.02	14.21	11.26	7.59	9.87	11.75
Belgium	85.36	26.89	21.68	29.36	28.25	19.37	6.85	6.34	6.19
Canada	3.38	18.80	12.92	16.02	17.06	19.42	14.04	14.47	12.71
Chile	..	16.14	14.00	16.08	35.52	21.13	24.53	27.91	31.46
Czech Republic	..	84.84	85.14	84.75	76.44	75.13	59.60	58.79	57.20
Denmark	71.62	18.59	35.80	81.84	90.67	46.25	48.61	43.77	38.59
Estonia	..	..	..	..	86.22	92.13	92.09	89.29	88.58
Finland	29.68	27.95	28.07	42.63	23.56	18.78	22.20	26.55	22.22
France	36.47	29.37	19.66	27.35	8.49	5.76	4.52	4.66	4.06
Germany	87.03	74.99	69.00	62.94	58.73	53.15	44.27	43.98	45.76
Greece	53.36	43.18	35.45	44.85	72.37	64.23	55.96	53.68	58.07
Hungary	..	65.35	66.01	50.44	30.49	27.58	17.87	16.99	18.23
Iceland	-	-	-	-	-	-	-	-	-
Ireland	53.32	29.74	24.92	16.40	57.37	36.27	23.72	22.45	24.50
Israel	..	-	-	-	50.09	68.80	62.53	58.55	59.07
Italy	3.82	4.74	3.60	9.95	16.78	11.31	15.06	14.87	17.22
Japan	32.21	11.86	8.01	9.60	13.97	22.14	26.88	27.41	34.02
Korea	..	6.87	9.05	6.66	16.76	38.61	46.24	44.14	45.21
Luxembourg	97.81	63.17	58.82	51.63	76.44	-	-	-	-
Mexico	..	0.52	0.56	-	6.71	9.52	11.31	12.01	12.41
Netherlands	79.69	12.44	6.04	13.69	38.26	30.25	23.44	21.84	21.79
New Zealand	14.42	4.81	8.52	1.89	2.06	3.94	7.59	4.61	4.87
Norway	-	0.03	0.03	0.02	0.07	0.05	0.07	0.09	0.09
Poland	97.46	91.91	93.90	94.71	97.49	96.15	89.13	88.02	86.96
Portugal	1.10	3.56	3.94	2.30	32.11	33.87	26.06	13.22	19.03
Slovak Republic	..	66.34	64.40	37.86	31.86	19.84	16.50	14.86	15.87
Slovenia	..	..	..	..	31.26	33.84	31.29	32.55	33.36
Spain	12.90	21.74	18.87	30.01	40.13	36.38	12.66	8.78	15.51
Sweden	1.08	0.31	0.64	0.19	1.09	1.75	1.17	1.83	2.37
Switzerland	-	-	-	0.13	0.07	-	-	-	-
Turkey	54.67	30.48	26.11	25.61	35.07	30.57	28.58	26.06	28.45
United Kingdom	81.09	63.94	62.06	73.18	64.97	32.67	28.00	28.78	30.02
United States	53.91	44.79	46.16	51.20	53.07	52.90	45.44	45.80	43.37
<b>OECD TOTAL*</b>	..	<b>39.49</b>	<b>37.91</b>	<b>40.92</b>	<b>40.54</b>	<b>38.97</b>	<b>34.58</b>	<b>34.52</b>	<b>34.50</b>
<b>OECD AMERICAS</b>	..	41.03	41.36	45.31	47.03	46.66	39.66	40.27	37.95
<b>OECD ASIA OCEANIA</b>	..	18.00	15.47	17.24	23.25	33.68	38.79	37.94	41.56
<b>OECD EUROPE*</b>	..	44.54	40.98	43.30	38.69	30.00	24.82	24.23	25.57
<b>IEA</b>	..	39.96	38.37	41.58	40.99	39.54	35.11	35.00	34.95

\* Excludes Estonia and Slovenia prior to 1990.

**Electricity generation from oil (% of total)***Production d'électricité à partir du pétrole (% du total)**Stromerzeugung auf Ölbasis (in %)**Produzione di energia termoelettrica da prodotti petroliferi (% del totale)**石油からの発電量 (%)**Generación de electricidad a partir del petróleo (% del total)**Производство электроэнергии за счет потребления нефти (в % к общему производству)*

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	5.52	3.37	2.61	5.43	2.30	0.85	1.47	1.31	0.88
Austria	4.28	12.30	14.06	13.96	3.81	2.84	1.72	1.88	1.60
Belgium	13.23	54.14	53.72	34.67	1.87	0.96	0.31	0.43	0.49
Canada	1.03	2.89	3.36	3.70	3.42	2.43	1.69	1.22	1.21
Chile	..	25.55	20.48	14.74	9.62	4.25	20.01	14.02	9.61
Czech Republic	..	10.83	11.30	9.55	0.87	0.51	0.19	0.19	0.15
Denmark	27.92	81.28	64.07	18.00	3.39	12.31	3.16	1.93	0.83
Estonia	..	..	..	..	8.28	0.66	0.51	0.32	0.33
Finland	9.09	23.03	31.65	10.84	3.09	0.84	0.74	0.60	0.64
France	3.55	28.09	40.17	18.83	2.08	1.34	0.91	1.03	0.90
Germany	2.71	11.66	11.98	5.73	1.90	0.84	1.65	1.34	1.15
Greece	26.33	33.88	49.54	40.12	22.27	16.63	12.57	10.61	10.76
Hungary	..	22.24	17.19	13.89	4.75	12.51	1.76	1.31	0.39
Iceland	4.54	3.02	3.75	1.48	0.13	0.07	0.01	0.01	0.01
Ireland	5.48	62.86	66.32	60.43	10.04	19.59	3.29	2.13	0.89
Israel	..	99.23	100.00	100.00	49.89	31.09	4.05	3.66	7.04
Italy	6.67	55.40	62.36	57.00	48.19	31.81	9.02	7.27	6.03
Japan	17.06	62.63	73.24	46.23	29.67	13.07	8.44	8.77	10.55
Korea	..	80.61	82.29	78.67	17.90	11.99	4.39	3.81	2.94
Luxembourg	0.82	32.33	27.62	10.89	1.44	-	-	0.03	0.04
Mexico	..	35.52	41.13	57.94	53.58	46.20	17.53	16.19	17.75
Netherlands	19.42	26.22	12.33	38.42	4.33	2.95	1.31	1.06	1.22
New Zealand	-	2.02	6.11	0.17	0.02	-	0.02	0.00	0.00
Norway	0.70	0.42	0.19	0.15	0.00	0.01	0.02	0.02	0.02
Poland	0.11	2.30	2.34	2.89	1.17	1.34	1.80	1.84	1.52
Portugal	2.44	16.49	19.21	42.89	33.15	19.42	6.64	5.60	5.26
Slovak Republic	..	15.09	17.71	17.94	6.41	0.66	2.42	2.18	2.33
Slovenia	..	..	..	..	7.88	0.40	0.17	0.05	0.11
Spain	3.16	22.24	33.19	35.19	5.69	10.16	6.59	5.52	5.24
Sweden	10.10	21.15	19.44	10.38	0.89	1.06	0.53	1.19	0.95
Switzerland	0.87	9.35	7.07	1.02	0.70	0.34	0.16	0.11	0.11
Turkey	8.28	41.18	51.36	25.05	6.85	7.45	2.47	1.03	1.47
United Kingdom	15.04	23.02	25.65	11.67	10.91	2.26	1.62	1.29	0.79
United States	6.42	13.82	17.09	10.84	4.08	2.94	1.21	1.10	0.89
<b>OECD TOTAL*</b>	..	<b>21.66</b>	<b>25.40</b>	<b>17.52</b>	<b>9.14</b>	<b>6.11</b>	<b>3.12</b>	<b>2.85</b>	<b>2.81</b>
<b>OECD AMERICAS</b>	..	12.98	15.87	11.03	5.52	4.70	2.33	2.04	1.91
<b>OECD ASIA OCEANIA</b>	..	54.94	63.75	42.11	24.45	11.46	6.19	6.23	6.93
<b>OECD EUROPE*</b>	..	22.67	25.28	17.75	7.73	5.55	2.67	2.20	1.93
<b>IEA</b>	..	21.39	25.14	16.86	8.34	5.16	2.65	2.44	2.36

\* Excludes Estonia and Slovenia prior to 1990.

**Electricity generation from natural gas (% of total)***Production d'électricité à partir du gaz naturel (% du total)**Stromerzeugung auf Gasbasis (in %)**Produzione di energia termoelettrica da gas naturale (% del totale)**ガスからの発電量 (%)**Generación de electricidad a partir del gas natural (% del total)**Производство электроэнергии за счет потребления газа (в % к общему производству)*

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	-	3.27	4.27	7.33	9.31	7.74	14.68	15.00	19.30
Austria	8.30	16.25	14.32	9.19	15.66	13.11	18.61	21.12	18.76
Belgium	0.28	18.58	23.70	11.24	7.69	19.30	32.64	33.51	27.00
Canada	3.50	3.14	6.00	2.46	2.00	5.53	7.18	8.54	8.41
Chile	..	1.11	1.12	1.30	1.02	26.07	6.47	17.69	21.05
Czech Republic	..	1.00	0.93	1.14	0.62	2.32	1.19	1.26	1.64
Denmark	-	-	-	-	2.67	24.34	18.49	20.39	18.58
Estonia	..	..	..	..	5.50	7.00	1.23	2.34	1.94
Finland	-	-	-	4.22	8.56	14.48	13.59	13.96	13.13
France	5.32	4.75	5.53	2.72	0.73	2.15	3.86	4.21	3.66
Germany	0.07	6.49	10.94	14.15	7.39	9.17	13.50	13.96	13.81
Greece	-	-	-	-	0.26	11.08	18.04	17.14	15.99
Hungary	..	11.77	16.22	35.21	15.73	18.76	29.02	31.03	30.45
Iceland	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	15.24	27.70	39.13	58.29	62.30	54.82
Israel	..	0.77	-	-	-	0.03	32.75	37.49	32.92
Italy	3.84	2.22	3.11	5.03	18.63	37.55	51.08	51.12	47.59
Japan	0.09	1.44	2.26	14.17	20.00	23.96	27.55	27.42	34.57
Korea	..	-	-	-	9.11	10.21	15.56	20.77	21.17
Luxembourg	-	0.38	10.19	23.53	5.45	50.95	90.23	90.28	88.57
Mexico	..	17.64	14.25	15.48	12.48	20.31	53.05	52.03	49.70
Netherlands	0.88	60.43	79.53	39.83	50.88	57.49	60.53	62.81	60.77
New Zealand	-	0.32	1.41	7.54	17.70	24.39	20.55	21.98	19.13
Norway	-	-	-	-	-	0.15	3.23	3.94	3.20
Poland	0.23	3.28	1.68	0.12	0.09	0.65	3.17	3.05	3.57
Portugal	-	-	-	-	-	16.46	29.73	27.75	28.69
Slovak Republic	..	4.99	5.26	10.24	7.15	10.86	7.60	8.03	8.57
Slovenia	..	..	..	..	0.02	2.15	3.62	3.37	3.07
Spain	-	0.18	1.01	2.67	1.00	9.08	36.93	32.22	29.17
Sweden	-	-	-	-	0.27	0.32	1.13	1.94	2.29
Switzerland	-	-	-	0.61	0.60	1.30	1.07	1.58	1.69
Turkey	-	-	-	-	17.71	37.00	49.33	46.47	44.71
United Kingdom	-	0.96	0.97	0.75	1.57	39.55	44.63	46.30	40.12
United States	21.14	23.49	18.56	15.26	11.92	15.76	22.80	23.38	24.22
<b>OECD TOTAL*</b>	..	<b>12.95</b>	<b>11.64</b>	<b>10.90</b>	<b>10.10</b>	<b>15.81</b>	<b>22.81</b>	<b>23.44</b>	<b>23.85</b>
<b>OECD AMERICAS</b>	..	21.01	16.94	13.55	10.63	14.76	22.28	23.07	23.59
<b>OECD ASIA OCEANIA</b>	..	1.56	2.36	12.13	17.13	18.82	22.88	24.37	28.63
<b>OECD EUROPE*</b>	..	5.48	7.44	6.73	6.29	15.87	23.57	23.47	21.66
<b>IEA</b>	..	12.97	11.66	10.90	10.14	15.78	22.16	22.75	23.23

\* Excludes Estonia and Slovenia prior to 1990.



**Electricity generation from nuclear energy (% of total)***Production d'électricité à partir d'énergie nucléaire (% du total)**Stromerzeugung auf Kernkraftbasis (in %)**Produzione di energia nucleotermoelettrica (% del totale)**原子力からの発電量 (%)**Generación de electricidad a partir de energía nuclear (% del total)**Производство атомной электроэнергии (в % к общему производству)*

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	-	-	-	-	-	-	-	-	-
Austria	-	-	-	-	-	-	-	-	-
Belgium	-	-	0.19	23.64	60.78	58.18	52.59	51.13	54.72
Canada	-	1.92	5.65	10.19	15.14	12.02	14.67	14.91	14.30
Chile	..	-	-	-	-	-	-	-	-
Czech Republic	..	-	-	-	20.21	18.64	33.30	32.82	32.56
Denmark	-	-	-	-	-	-	-	-	-
Estonia	..	..	..	..	-	-	-	-	-
Finland	-	-	-	17.23	35.34	32.13	32.65	28.26	31.53
France	0.19	5.99	8.08	23.80	75.28	77.45	77.18	75.94	79.37
Germany	-	1.90	3.23	11.92	27.84	29.64	23.09	22.60	17.75
Greece	-	-	-	-	-	-	-	-	-
Hungary	..	-	-	-	48.29	40.29	42.96	42.17	43.28
Iceland	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Israel	..	-	-	-	-	-	-	-	-
Italy	-	2.72	2.18	1.20	-	-	-	-	-
Japan	-	2.09	2.09	14.43	24.21	30.70	26.81	25.95	9.70
Korea	..	-	-	9.34	50.19	37.77	32.72	29.92	29.13
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	..	-	-	-	2.54	4.03	4.02	2.17	3.71
Netherlands	-	0.90	2.11	6.48	4.87	4.38	3.73	3.36	3.67
New Zealand	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	..	-	1.89	22.65	47.21	53.56	54.33	53.07	55.98
Slovenia	..	..	..	..	37.14	34.95	34.99	34.82	39.06
Spain	-	4.10	8.65	4.75	35.90	27.99	18.08	20.67	19.90
Sweden	-	0.14	2.70	27.50	46.71	39.47	38.19	38.94	39.28
Switzerland	-	4.46	17.14	29.78	42.98	39.99	41.53	39.87	42.70
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	1.60	10.77	9.95	13.03	20.69	22.72	18.52	16.44	19.05
United States	0.07	2.38	4.54	10.97	19.10	19.81	19.93	19.27	19.01
<b>OECD TOTAL*</b>	..	<b>2.70</b>	<b>4.22</b>	<b>10.95</b>	<b>22.67</b>	<b>23.12</b>	<b>21.57</b>	<b>21.08</b>	<b>19.33</b>
<b>OECD AMERICAS</b>	..	2.28	4.58	10.57	18.00	18.02	18.25	17.67	17.42
<b>OECD ASIA OCEANIA</b>	..	1.70	1.70	11.63	22.22	26.45	23.26	22.37	13.21
<b>OECD EUROPE*</b>	..	3.63	4.60	11.24	29.56	29.13	25.59	25.39	25.46
<b>IEA</b>	..	2.74	4.27	11.14	23.14	23.76	22.32	21.85	20.00

\* Excludes Estonia and Slovenia prior to 1990.

**Electricity generation from hydro energy (% of total)***Production d'électricité à partir d'énergie hydraulique (% du total)**Stromerzeugung auf Wasserkraftbasis (in %)**Produzione di energia idroelettrica (% del totale)**水力からの発電量 (%)**Generación de electricidad a partir de energía hidráulica (% del total)**Производство гидроэлектроэнергии (в % к общему производству)*

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	18.64	21.83	17.72	13.59	9.17	7.80	4.50	5.16	6.21
Austria	73.56	57.50	60.65	69.05	63.92	69.87	61.68	56.53	54.18
Belgium	1.14	0.40	0.42	0.52	0.38	0.56	0.37	0.33	0.23
Canada	92.09	73.24	72.07	67.28	61.56	59.20	60.05	57.82	59.20
Chile	..	56.42	63.83	66.98	48.60	46.20	41.66	35.94	32.01
Czech Republic	..	3.32	2.63	4.56	1.86	2.41	2.97	3.27	2.46
Denmark	0.45	0.13	0.13	0.11	0.11	0.08	0.05	0.05	0.05
Estonia	..	..	..	..	-	0.06	0.36	0.21	0.23
Finland	61.23	49.02	40.28	25.07	19.97	20.95	17.60	16.02	16.97
France	54.47	31.34	26.13	27.02	12.90	12.52	10.78	10.99	8.09
Germany	10.19	4.11	4.07	4.09	3.18	3.80	3.19	3.28	3.02
Greece	20.31	22.94	15.00	15.03	5.09	6.91	8.80	13.00	7.20
Hungary	..	0.64	0.57	0.47	0.63	0.51	0.63	0.50	0.61
Iceland	95.46	96.18	95.13	96.95	93.22	82.72	72.94	73.81	72.67
Ireland	41.20	7.39	8.76	7.93	4.90	3.57	3.23	2.11	2.58
Israel	..	-	-	-	0.01	0.07	0.04	0.05	0.05
Italy	81.90	31.54	26.07	24.66	14.84	16.38	17.04	17.11	15.53
Japan	50.65	21.99	14.35	15.42	10.69	8.32	7.37	7.40	7.94
Korea	..	12.52	8.66	5.33	6.04	1.39	0.62	0.74	0.92
Luxembourg	1.37	4.13	3.37	10.68	11.22	29.38	3.36	3.34	2.31
Mexico	..	46.33	43.64	25.22	20.27	16.23	10.23	13.70	13.17
Netherlands	-	-	-	-	0.12	0.16	0.09	0.09	0.05
New Zealand	79.75	84.75	77.25	83.77	71.86	62.25	55.73	55.14	56.36
Norway	99.30	99.55	99.78	99.84	99.62	99.51	95.65	94.71	95.22
Poland	2.16	2.26	1.74	1.94	1.05	1.47	1.57	1.86	1.43
Portugal	95.09	78.14	74.81	52.71	32.29	26.11	16.74	30.08	22.30
Slovak Republic	..	13.58	10.75	11.30	7.37	14.98	16.85	19.13	14.33
Slovenia	..	..	..	..	23.71	28.14	28.74	27.77	22.37
Spain	83.94	51.66	38.21	27.05	16.81	13.31 e	9.02	14.10	10.56
Sweden	88.82	78.17	76.70	61.12	49.67	54.11	48.21	44.71	43.34
Switzerland	99.13	86.19	75.79	68.10	54.18	55.70	53.58	54.59	51.39
Turkey	35.60	26.68	20.95	48.76	40.23	24.72	18.46	24.52	22.80
United Kingdom	2.27	1.31	1.37	1.37	1.64	1.36	1.41	0.95	1.57
United States	18.44	15.47	13.50	11.49	8.53	6.29	6.62	6.02	7.58
<b>OECD TOTAL*</b>	..	<b>22.91</b>	<b>20.53</b>	<b>19.27</b>	<b>15.49</b>	<b>13.81</b>	<b>12.76</b>	<b>12.45</b>	<b>12.96</b>
<b>OECD AMERICAS</b>	..	22.66	21.12	19.26	15.77	13.61	13.65	12.71	14.37
<b>OECD ASIA OCEANIA</b>	..	23.47	16.40	16.51	11.58	8.11	6.25	6.31	6.71
<b>OECD EUROPE*</b>	..	23.07	21.15	20.29	16.77	16.99	14.90	15.40	14.21
<b>IEA</b>	..	22.65	20.25	19.10	15.35	13.61	12.60	12.24	12.81

\* Excludes Estonia and Slovenia prior to 1990.

Excludes hydro pumped storage.

**Other electricity generation (% of total)***Autre Production d'électricité (% du total)**Sonstige Stromerzeugung (in %)**Produzione di energia elettrica da altre fonti (% del totale)**その他の電力発電量 (%)**Otra electricidad generada (% del total)**Производство электричества из других видов энергии (в % от общего)*

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	1.41	0.50	0.52	0.40	0.49	0.59	3.25	3.72	4.27
Austria	-	0.83	0.65	0.78	2.39	2.91	10.40	10.61	13.71
Belgium	-	-	0.29	0.57	1.04	1.63	7.25	8.25	11.37
Canada	-	-	-	0.35	0.83	1.41 e	2.36	3.04	4.17
Chile	..	0.77	0.58	0.89	5.24	2.35	7.33	4.45	5.87
Czech Republic	..	-	-	-	-	0.99	2.73	3.68	6.00
Denmark	-	-	-	0.04	3.16	17.02	29.69	33.85	41.96
Estonia	..	..	..	..	-	0.15	5.80	7.84	8.93
Finland	-	-	-	-	9.48	12.83	13.22	14.61	15.51
France	-	0.46	0.44	0.28	0.53	0.79	2.75	3.17	3.93
Germany	-	0.85	0.78	1.17	0.96	3.41	14.30	14.84	18.51
Greece	-	-	-	-	0.01	1.15	4.63	5.56	7.98
Hungary	..	-	-	-	0.12	0.34	7.75	7.98	7.03
Iceland	-	0.80	1.12	1.57	6.65	17.22	27.05	26.17	27.32
Ireland	-	-	-	-	-	1.43	11.47	11.01	17.21
Israel	..	-	-	-	-	-	0.62	0.25	0.92
Italy	3.77	3.40	2.67	2.16	1.56	2.96 e	7.80	9.63	13.63
Japan	-	-	0.06	0.16	1.47	1.81	2.94	3.05	3.23
Korea	..	-	-	-	0.00	0.04	0.47	0.61	0.64
Luxembourg	-	-	-	3.27	5.45	19.67	6.41	6.34	9.08
Mexico	..	-	0.43	1.37	4.43	3.72	3.86	3.90	3.26
Netherlands	-	-	-	1.58	1.55	4.78	10.91	10.85	12.50
New Zealand	5.83	8.11	6.71	6.63	8.36	9.42	16.10	18.26	19.63
Norway	-	-	-	-	0.31	0.28	1.02	1.24	1.46
Poland	0.04	0.24	0.35	0.34	0.19	0.39	4.33	5.23	6.52
Portugal	1.37	1.81	2.04	2.10	2.45	4.15	20.83	23.35	24.72
Slovak Republic	..	-	-	-	-	0.10	2.31	2.73 e	2.92
Slovenia	..	..	..	..	-	0.51	1.20	1.45	2.04
Spain	-	0.08	0.07	0.33	0.46	3.08	16.71	18.71	19.63
Sweden	-	0.24	0.51	0.81	1.38	3.31	10.76	11.39	11.76
Switzerland	-	-	-	0.36	1.46	2.66	3.67	3.85	4.11
Turkey	1.46	1.66	1.59	0.58	0.14	0.26	1.17	1.91	2.57
United Kingdom	-	-	-	-	0.22	1.44	5.82	6.24	8.45
United States	0.02	0.05	0.14	0.24	3.31	2.30 e	4.00 e	4.43 e	4.92
<b>OECD TOTAL*</b>	..	<b>0.29</b>	<b>0.31</b>	<b>0.44</b>	<b>2.07</b>	<b>2.19</b>	<b>5.16</b>	<b>5.67</b>	<b>6.56</b>
<b>OECD AMERICAS</b>	..	0.05	0.13	0.28	3.04	2.25	3.84	4.25	4.76
<b>OECD ASIA OCEANIA</b>	..	0.32	0.32	0.38	1.37	1.48	2.62	2.78	2.97
<b>OECD EUROPE*</b>	..	0.61	0.56	0.68	0.97	2.46	8.45	9.32	11.18
<b>IEA</b>	..	0.29	0.31	0.43	2.03	2.16	5.17	5.72	6.66

\* Excludes Estonia and Slovenia prior to 1990.

Includes geothermal, solar, biofuels, waste, tide, wave, ocean, wind and other fuel sources.

**Total electricity generation (GWh)**  
*Production totale d'électricité (GWh)*  
*Gesamte Stromerzeugung (GWh)*  
*Produzione totale di energia elettrica (GWh)*  
*総発電量 (GWh)*  
*Generación total de electricidad (GWh)*  
*Общее производство электроэнергии (ГВт. ч)*

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	21 449	53 045	64 411	95 234	154 287	209 864	244 350	241 531	238 452
Austria	15 442	28 202	30 916	41 600	49 296	59 874	66 315	67 937	62 235
Belgium	15 152	33 237	40 615	53 091	70 292	82 773	89 796	93 764	88 153
Canada	115 966	221 833	270 081	373 278	482 041	605 596	613 936	607 841	635 834
Chile	..	8 524	8 766	11 751	18 372	40 078	60 722	60 434	65 631
Czech Republic	..	36 372	41 174	52 656	62 271	72 911	81 697	85 319	86 864
Denmark	5 540	18 624	19 120	26 765	25 982	36 053	36 384	38 785	34 930
Estonia	..	..	..	..	17 392	8 509	8 779	12 964	12 893
Finland	8 605	21 681	26 102	40 747	54 377	69 968	72 062	80 668	73 546
France	75 059	155 849	182 508	257 308	417 206	536 054	530 878	564 291	557 395
Germany	118 069	327 249	374 352	466 340	547 650	572 313	584 317	622 055	608 272
Greece	2 290	11 562	14 817	22 653	34 775	53 425	61 094	57 367	53 186
Hungary	..	14 994	17 643	23 876	28 436	35 191	35 908	37 371	36 241
Iceland	551	1 621	2 320	3 184	4 510	7 684	16 834	17 059	17 210
Ireland	2 262	6 304	7 348	10 566	14 229	23 673	27 955	28 434	27 441
Israel	..	7 639	8 720	12 404	20 898	42 661	55 006	58 566	59 574
Italy	55 990	123 920	143 916	183 474	213 147	269 947	288 336	298 773	298 470
Japan	115 500	382 900	465 387	572 531	835 514	1 048 984	1 043 390	1 110 751	1 049 557
Korea	..	10 540	14 825	37 239	105 371	288 526	451 676	496 718	515 540
Luxembourg	1 464	1 333	1 394	918	624	422	3 151	3 232	2 643
Mexico	..	31 039	37 100	66 962	115 837	204 177	261 018	270 968	271 803
Netherlands	16 516	44 904	52 627	64 806	71 938	89 631	113 502	118 140	112 724
New Zealand	6 978	15 478	18 531	22 596	32 263	39 247	43 454	44 819	44 495
Norway	31 444	63 528	73 029	83 750	121 611	142 511	130 979	124 099	126 882
Poland	29 282	69 537	83 908	120 941	134 415	143 174	151 121	157 089	162 608
Portugal	3 279	7 896	9 792	15 206	28 355	43 372	49 483	53 692	51 761
Slovak Republic	..	10 865	12 299	19 967	25 497	30 798	25 919	27 464	25 703
Slovenia	..	..	..	..	12 444	13 624	16 401	16 248	15 912
Spain	18 614	61 585	75 660	109 226	151 150	222 235	291 789	299 882	289 737
Sweden	34 936	66 534	78 060	96 316	145 984	145 231	136 604	148 506	152 877
Switzerland	20 700	31 181	36 817	48 175	54 994	66 124	66 673	66 060	62 546
Turkey	2 815	9 781	12 425	23 275	57 543	124 922	194 813	211 208	228 406
United Kingdom	138 748	255 756	281 352	284 071	317 755	374 375	373 055	377 979	362 379
United States	799 679	1 703 380	1 965 509	2 427 320	3 202 813	4 025 885	4 165 394	4 354 355	4 320 852
<b>OECD TOTAL*</b>	..	<b>3 836 893</b>	<b>4 471 524</b>	<b>5 668 226</b>	<b>7 629 269</b>	<b>9 729 812</b>	<b>10 392 791</b>	<b>10 854 369</b>	<b>10 752 752</b>
<b>OECD AMERICAS</b>	..	1 964 776	2 281 456	2 879 311	3 819 063	4 875 736	5 101 070	5 293 598	5 294 120
<b>OECD ASIA OCEANIA</b>	..	469 602	571 874	740 004	1 148 333	1 629 282	1 837 876	1 952 385	1 907 618
<b>OECD EUROPE*</b>	..	1 402 515	1 618 194	2 048 911	2 661 873	3 224 794	3 453 845	3 608 386	3 551 014
<b>IEA</b>	..	3 788 070	4 414 618	5 573 925	7 439 816	9 413 079	9 974 031	10 418 130	10 309 729

\* Excludes Estonia and Slovenia prior to 1990.

Excludes hydro pumped storage.

**Electricity generation from renewables (% of total)***Production d'électricité d'origine renouvelable (% du total)**Stromerzeugung auf Erneuerbarebasis (in %)**Produzione di elettricità da fonti rinnovabili (% del totale)**再生可能エネルギーによる発電量 (%)**Generación de electricidad a partir de renovables (% del total)**Производство возобновляемой электроэнергии (в % к общему производству)*

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	20.05	22.33	18.24	13.99	9.66	8.38	7.74	8.88	10.49
Austria	73.56	58.33	61.30	69.83	66.20	72.54	71.32	66.41	66.89
Belgium	1.14	0.40	0.71	1.09	0.79 e	1.26	6.06	6.93	9.79
Canada	92.09	73.24	72.07	67.63	62.38 e	60.60 e	62.40 e	60.85	63.36
Chile	..	57.19	64.41	67.88	53.84	48.55	48.83	40.20	37.71
Czech Republic	..	3.32	2.63	4.56	1.86	3.12	5.70	6.92	8.35
Denmark	0.45	0.13	0.13	0.15	3.19 e	15.59	27.75	32.14	40.11
Estonia	..	..	..	..	-	0.21	6.16	8.05	9.16
Finland	61.23	49.02	40.28	25.07	29.45	33.40	30.09	29.97	31.73
France	54.47	31.80 e	26.57 e	27.30 e	13.37 e	13.11	13.17	13.78	11.62
Germany	10.19	4.96	4.85	4.70	3.49	6.20	16.09	16.65	19.86
Greece	20.31	22.94	15.00	15.03	5.09	7.76	13.40	18.34	14.94
Hungary	..	0.64	0.57	0.47	0.69 e	0.69 e	8.06	8.08	7.30
Iceland	95.46	96.98	96.25	98.52	99.87	99.93	99.99	99.99	99.99
Ireland	41.20	7.39	8.76	7.93	4.90	5.01	14.70	13.12	19.78
Israel	..	-	-	-	0.01	0.07	0.18	0.25	0.50
Italy	85.67	34.93	28.74	26.82	16.38 e	18.85 e	24.02	25.76	28.07
Japan	50.65	21.99	14.41	15.58	12.05	9.90	9.93	10.06	10.73
Korea	..	12.52	8.66	5.33	6.04	1.42 e	1.04	1.25	1.44
Luxembourg	1.37	4.13	3.37	12.31 e	13.30 e	41.00	8.47	8.26	9.04
Mexico	..	46.33	44.07	26.58	24.69	19.95	14.09	17.60	16.43
Netherlands	-	-	-	1.58	1.12	3.32	9.55	9.48	10.85
New Zealand	85.58	92.86	83.96	90.39	80.01	71.50	71.71	73.28	75.85
Norway	99.30	99.55	99.78	99.84	99.79 e	99.72 e	96.57	95.73	96.53
Poland	2.19	2.40	2.00	2.15	1.10	1.63	5.74	6.93	7.78
Portugal	96.46	79.95	76.85	54.81	34.75	29.67 e	36.97	52.81	46.40
Slovak Republic	..	13.58	10.75	11.30	7.37	14.98	18.95	21.63 e	17.00
Slovenia	..	..	..	..	23.71	28.66	29.91	29.19	24.36
Spain	83.94	51.75	38.29	27.39	17.19 e	16.11 e	25.36	32.49	29.89
Sweden	88.82	78.41	77.21	61.87 e	51.00	57.25	58.42	55.28	54.53
Switzerland	99.13	86.19	75.79	68.45	54.98	57.00	55.54	56.71	53.65
Turkey	37.05	28.34	22.54	49.34	40.37	24.94	19.58	26.38	25.31
United Kingdom	2.27	1.31	1.37	1.37	1.83	2.66	6.75	6.81	9.59
United States	18.46	15.52	13.64	11.72	11.53 e	8.21 e	10.29 e	10.12 e	12.29
<b>OECD TOTAL*</b>	..	<b>23.19</b>	<b>20.84</b>	<b>19.67</b>	<b>17.33</b>	<b>15.66</b>	<b>17.51</b>	<b>17.70</b>	<b>19.13</b>
<b>OECD AMERICAS</b>	..	22.70	21.25	19.55	18.55	15.54	17.22	16.67	18.95
<b>OECD ASIA OCEANIA</b>	..	23.79	16.72	16.88	12.87	9.43	8.62	8.83	9.39
<b>OECD EUROPE*</b>	..	23.68	21.71	20.84	17.52	18.99	22.68	24.01	24.63
<b>IEA</b>	..	22.94	20.56	19.48	17.16	15.42	17.36	17.53	19.06

\* Excludes Estonia and Slovenia prior to 1990.

Includes electricity from hydro, geothermal, solar, wind, tide, wave, biofuels and the renewable fraction of municipal waste.

Excludes hydro pumped storage.

## Final consumption of coal and peat (Mtoe)

*Consommation finale de charbon et de tourbe (Mtep)**Endverbrauch von Kohle und Torf (Mtoe)**Consumo finale di carbone e torba (Mtep)*

石炭及び泥炭の最終消費量(石油換算百万トン)

*Consumo final de carbón y turba (Mtep)**Конечное потребление угля и торфа (Мтпэ)*

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	6.04	5.26	5.20	4.51	4.46	4.18	3.37	3.05	..
Austria	3.64	2.51	2.35	1.97	1.35	0.88	0.52	0.50	..
Belgium	9.01	5.55	5.71	4.23	3.54	2.58	0.75	0.79	..
Canada	10.34	5.09	5.29	4.38	3.20	3.63	3.38	3.09	..
Chile	..	0.76	0.70	0.57	0.63	0.64	0.27	0.42	..
Czech Republic	..	23.42	20.25	19.63	13.95	4.66	2.95	2.92	..
Denmark	2.13	0.42	0.46	0.58	0.43	0.31	0.14	0.15	..
Estonia	..	..	..	..	0.71	0.15	0.11	0.10	..
Finland	1.61	0.84	1.07	1.11	1.56	0.92	0.54	0.71	..
France	28.75	15.95	13.96	8.61	7.78	4.43	3.08	3.46	..
Germany	62.50	60.22	55.69	49.20	39.25	8.96	6.83	7.36	..
Greece	0.17	0.38	0.52	0.47	1.22	0.88	0.17	0.30	..
Hungary	..	4.61	4.08	3.54	2.31	0.54	0.35	0.39	..
Iceland	0.02	0.00	0.00	0.02	0.06	0.10	0.09	0.09	..
Ireland	1.50	1.31	1.03	1.36	1.53	0.63	0.58	0.55	..
Israel	..	0.01	0.00	0.00	0.01	0.02	-	-	..
Italy	5.78	4.08	3.68	3.82	3.57	2.68	1.10	1.93	..
Japan	27.23	22.97	24.08	25.25	32.31	27.07	25.85	28.67	..
Korea	..	5.17	6.49	9.74	11.72	9.07	8.18	9.54	..
Luxembourg	1.31	0.99	0.98	1.04	0.55	0.13	0.08	0.08	..
Mexico	..	1.10	1.37	1.61	1.56	1.38	1.09	1.63	..
Netherlands	5.68	1.25	1.08	0.78	1.38	0.91	0.76	0.81	..
New Zealand	1.20	0.85	0.90	0.82	0.92	0.52	0.54	0.60	..
Norway	0.77	0.82	0.82	0.87	0.78	0.95	0.47	0.57	..
Poland	27.05	28.98	29.02	31.96	17.34	13.25	11.18	13.26	..
Portugal	0.52	0.38	0.24	0.25	0.65	0.48	0.02	0.05	..
Slovak Republic	..	3.60	3.84	4.09	4.11	1.41	1.39	1.18	..
Slovenia	..	..	..	..	0.23	0.09	0.06	0.06	..
Spain	6.77	4.74	4.16	2.78	3.39	1.37	0.88	0.98	..
Sweden	2.01	0.96	1.03	0.92	1.07	0.77	0.47	0.85	..
Switzerland	1.67	0.51	0.42	0.33	0.35	0.14	0.15	0.15	..
Turkey	2.28	2.40	2.97	4.20	7.53	10.84	12.81	14.12	..
United Kingdom	70.42	40.42	31.72	14.14	10.77	4.12	2.85	2.80	..
United States	92.46	78.49	74.09	56.16	55.66	32.58	23.54	26.85	..
<b>OECD TOTAL*</b>	..	<b>324.02</b>	<b>303.19</b>	<b>258.92</b>	<b>235.88</b>	<b>141.24</b>	<b>114.54</b>	<b>128.00</b>	..
<b>OECD AMERICAS</b>	..	85.44	81.46	62.72	61.04	38.22	28.28	31.99	..
<b>OECD ASIA OCEANIA</b>	..	34.26	36.66	40.32	49.42	40.86	37.94	41.86	..
<b>OECD EUROPE*</b>	..	204.33	185.08	155.88	125.41	62.16	48.31	54.15	..
<b>IEA</b>	..	322.16	301.12	256.73	232.67	138.87	112.92	125.71	..

\* Excludes Estonia and Slovenia prior to 1990.

2011 data for consumption will be released in the 2013 edition.

For the United States, coal used by autoproducers of electricity and heat has been included in final consumption prior to 1992.

**Final consumption of oil (Mtoe)***Consommation finale de pétrole (Mtep)**Endverbrauch von Öl (Mtoe)**Consumo finale di petrolio (Mtep)*

石油の最終消費量(石油換算百万トン)

*Consumo final de petróleo (Mtep)**Конечное потребление нефти и нефтепродуктов (Мтнз)*

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	11.70	22.39	24.26	26.92	29.00	34.72	37.56	38.08	..
Austria	2.82	8.48	9.95	9.76	8.84	10.38	10.81	11.08	..
Belgium	6.10	18.16	20.16	16.85	16.13	20.95	19.93	20.06	..
Canada	37.17	66.74	75.65	79.99	68.79	80.78	84.72	90.17	..
Chile	..	3.80	3.84	4.03	5.49	9.19	11.65	12.08	..
Czech Republic	..	6.20	7.75	9.23	8.20	7.29	8.76	8.57	..
Denmark	4.28	12.99	13.31	11.32	6.86	6.57	6.20	6.15	..
Estonia	..	..	..	..	1.98	0.79	0.89	0.93	..
Finland	2.21	9.06	11.26	10.01	9.19	8.36	7.89	8.25	..
France	23.42	82.97	96.03	87.36	75.04	80.94	72.61	71.28	..
Germany	27.28	116.94	133.30	122.68	111.16	113.96	93.97	94.68	..
Greece	1.59	5.08	6.46	8.07	9.78	12.41	13.46	12.22	..
Hungary	..	5.10	6.46	9.00	7.12	5.20	6.36	6.08	..
Iceland	0.35	0.45	0.54	0.55	0.59	0.70	0.91	0.85	..
Ireland	0.98	3.27	3.55	3.90	3.73	6.51	6.77	6.62	..
Israel	..	2.63	2.91	3.44	5.00	8.03	8.79	9.42	..
Italy	17.13	63.42	69.94	64.20	61.45	62.30	55.68	54.32	..
Japan	21.01	144.54	171.06	156.56	183.99	209.56	172.31	171.37	..
Korea	..	7.64	9.90	18.73	43.66	79.88	79.70	81.87	..
Luxembourg	0.22	1.23	1.46	1.01	1.48	1.97	2.32	2.43	..
Mexico	..	18.92	22.18	39.69	51.21	61.66	72.50	73.86	..
Netherlands	7.41	19.57	23.47	24.35	18.07	20.79	26.38	27.69	..
New Zealand	1.65	3.09	3.49	3.62	4.03	5.31	5.81	5.88	..
Norway	3.29	6.95	7.31	8.09	7.36	7.51	8.21	8.54	..
Poland	1.93	6.95	8.96	13.00	10.93	17.51	22.12	22.89	..
Portugal	1.21	3.45	4.21	5.77	8.31	12.30	10.19	10.12	..
Slovak Republic	..	3.38	3.83	5.04	4.89	3.01	2.80	2.99	..
Slovenia	..	..	..	..	1.50	2.33	2.56	2.53	..
Spain	4.85	23.82	28.86	36.73	38.15	52.16	51.01	49.98	..
Sweden	11.55	23.55	24.38	20.16	14.02	14.17	10.61	11.23	..
Switzerland	3.72	12.12	13.41	12.04	11.60	11.32	10.77	11.01	..
Turkey	1.38	7.26	9.54	12.69	20.37	26.13	28.60	28.39	..
United Kingdom	29.40	67.55	73.09	59.62	61.22	62.57	55.87	56.27	..
United States	431.42	633.28	693.49	689.14	683.29	793.42	736.79	748.88	..
<b>OECD TOTAL*</b>	..	<b>1 410.97</b>	<b>1 584.02</b>	<b>1 573.54</b>	<b>1 592.42</b>	<b>1 850.66</b>	<b>1 745.53</b>	<b>1 766.76</b>	..
<b>OECD AMERICAS</b>	..	722.73	795.17	812.85	808.78	945.05	905.67	924.99	..
<b>OECD ASIA OCEANIA</b>	..	180.28	211.62	209.26	265.68	337.49	304.18	306.62	..
<b>OECD EUROPE*</b>	..	507.96	577.22	551.43	517.96	568.12	535.69	535.16	..
<b>IEA</b>	..	1 385.18	1 554.54	1 525.84	1 526.65	1 767.96	1 648.23	1 667.09	..

\* Excludes Estonia and Slovenia prior to 1990.

2011 data for consumption will be released in the 2013 edition.

## Final consumption of natural gas (Mtoe)

*Consommation finale de gaz naturel (Mtep)**Endverbrauch von Erdgas (Mtoe)**Consumo finale di gas naturale (Mtep)*

ガスの最終消費量(石油換算百万トン)

*Consumo final de gas natural (Mtep)**Конечное потребление газа (Мтпэ)*

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	-	1.01	2.11	5.03	8.64	11.39	12.68	13.14	..
Austria	0.47	1.05	1.45	2.83	3.04	4.27	4.50	4.91	..
Belgium	-	3.13	4.60	7.08	6.82	10.16	10.11	11.60	..
Canada	6.32	20.79	23.72	36.22	43.30	53.41	51.91	51.92	..
Chile	..	0.00	0.04	0.10	0.90	3.29	1.45	2.35	..
Czech Republic	..	0.68	0.81	1.18	4.24	5.91	5.46	6.35	..
Denmark	-	-	-	-	1.12	1.65	1.55	1.78	..
Estonia	..	..	..	..	0.44	0.28	0.20	0.21	..
Finland	-	-	-	0.43	0.98	0.94	0.98	1.06	..
France	0.99	6.97	10.27	19.27	23.92	32.14	31.07	32.99	..
Germany	0.38	11.48	18.58	33.48	39.05	55.10	57.27	53.49	..
Greece	-	-	-	-	0.10	0.38	1.07	1.14	..
Hungary	..	2.29	2.80	4.61	6.20	6.69	6.09	6.43	..
Iceland	-	-	-	-	-	-	-	-	..
Ireland	-	-	-	0.35	1.00	1.58	1.48	1.61	..
Israel	..	0.09	0.05	0.13	0.03	0.00	0.17	0.06	..
Italy	4.61	9.56	12.35	19.73	30.39	38.58	36.63	39.05	..
Japan	0.56	2.49	3.11	5.84	15.24	23.10	32.22	34.45	..
Korea	..	-	-	-	0.67	10.92	18.12	20.36	..
Luxembourg	-	0.01	0.18	0.36	0.42	0.60	0.62	0.68	..
Mexico	..	6.12	7.26	12.84	14.16	12.95	11.80	12.74	..
Netherlands	0.08	13.51	19.29	24.25	22.68	23.34	21.03	24.20	..
New Zealand	0.05	0.05	0.12	0.35	1.80	3.01	1.67	1.66	..
Norway	-	-	-	-	-	0.59	0.70	0.77	..
Poland	0.42	3.48	4.42	6.96	7.69	8.16	9.82	10.59	..
Portugal	-	-	-	-	-	0.79	1.44	1.58	..
Slovak Republic	..	1.18	1.40	1.63	3.91	4.17	3.24	3.70	..
Slovenia	..	..	..	..	0.71	0.69	0.66	0.70	..
Spain	-	0.17	0.45	0.72	4.32	12.29	13.38	14.74	..
Sweden	-	-	-	-	0.33	0.44	0.46	0.64	..
Switzerland	-	0.01	0.11	0.71	1.49	2.19	2.49	2.76	..
Turkey	-	-	-	-	0.71	4.91	11.25	13.13	..
United Kingdom	0.03	8.45	18.37	37.24	41.77	52.42	41.83	47.09	..
United States	191.50	357.94	366.97	337.41	302.99	359.89	311.99	319.07	..
<b>OECD TOTAL*</b>	..	<b>450.48</b>	<b>498.48</b>	<b>558.73</b>	<b>589.07</b>	<b>746.22</b>	<b>705.32</b>	<b>736.95</b>	..
<b>OECD AMERICAS</b>	..	<b>384.86</b>	<b>398.00</b>	<b>386.57</b>	<b>361.35</b>	<b>429.54</b>	<b>377.15</b>	<b>386.08</b>	..
<b>OECD ASIA OCEANIA</b>	..	<b>3.65</b>	<b>5.39</b>	<b>11.34</b>	<b>26.38</b>	<b>48.42</b>	<b>64.85</b>	<b>69.68</b>	..
<b>OECD EUROPE*</b>	..	<b>61.98</b>	<b>95.09</b>	<b>160.82</b>	<b>201.34</b>	<b>268.27</b>	<b>263.32</b>	<b>281.19</b>	..
<b>IEA</b>	..	<b>444.27</b>	<b>491.13</b>	<b>545.67</b>	<b>572.83</b>	<b>729.02</b>	<b>691.05</b>	<b>720.89</b>	..

\* Excludes Estonia and Slovenia prior to 1990.

2011 data for consumption will be released in the 2013 edition.

For the United States, gas used by autoproducers of electricity and heat has been included in final consumption prior to 1989.



**Final consumption of electricity (Mtoe)**  
*Consommation finale d'électricité (Mtep)*  
*Stromendverbrauch (Mtoe)*  
*Consumo finale di energia elettrica (Mtep)*  
 電力の最終消費量 (石油換算百万トン)  
*Consumo final de electricidad (Mtep)*  
*Конечное потребление электроэнергии (Мтнэ)*

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	1.51	3.89	4.51	6.81	11.11	14.86	17.46	17.31	..
Austria	0.98	1.88	2.18	2.84	3.68	4.43	5.07	5.27	..
Belgium	0.98	2.40	2.94	3.73	4.99	6.67	6.64	7.16	..
Canada	8.38	16.58	18.93	26.08	35.96	41.42	40.01	40.42	..
Chile	..	0.61	0.63	0.84	1.33	3.16	4.65	4.71	..
Czech Republic	..	2.30	2.54	3.26	4.14	4.25	4.72	4.92	..
Denmark	0.40	1.20	1.38	1.86	2.44	2.79	2.70	2.76	..
Estonia	..	..	..	..	0.60	0.43	0.57	0.59	..
Finland	0.69	1.86	2.32	3.20	5.07	6.51	6.63	7.18	..
France	5.19	10.86	12.78	17.98	25.99	33.10	35.94	38.19	..
Germany	8.30	23.29	26.91	33.70	39.14	41.58	42.62	45.49	..
Greece	0.16	0.85	1.09	1.71	2.45	3.71	4.71	4.57	..
Hungary	..	1.31	1.51	2.20	2.72	2.53	2.85	2.94	..
Iceland	0.04	0.12	0.18	0.25	0.34	0.59	1.35	1.35	..
Ireland	0.16	0.45	0.53	0.74	1.02	1.74	2.15	2.16	..
Israel	..	0.56	0.65	0.94	1.56	3.32	3.91	4.19	..
Italy	4.03	9.23	10.58	13.74	18.46	23.48	24.94	25.74	..
Japan	8.18	29.26	35.70	44.14	64.46	81.16	80.49	86.16	..
Korea	..	0.79	1.10	2.82	8.12	22.63	34.89	38.64	..
Luxembourg	0.12	0.22	0.26	0.31	0.36	0.50	0.53	0.57	..
Mexico	..	2.23	2.71	4.92	8.62	13.95	17.29	17.88	..
Netherlands	1.17	3.24	3.81	4.94	6.32	8.41	8.94	9.19	..
New Zealand	0.49	1.13	1.37	1.68	2.43	2.95	3.27	3.38	..
Norway	2.34	4.65	5.23	6.43	8.33	9.42	9.23	9.86	..
Poland	1.72	4.22	5.01	7.31	8.28	8.48	9.69	10.19	..
Portugal	0.24	0.59	0.70	1.23	2.02	3.30	4.12	4.29	..
Slovak Republic	..	0.93	1.06	1.64	2.01	1.89	1.99	2.08	..
Slovenia	..	..	..	..	0.79	0.90	0.97	1.03	..
Spain	1.18	4.06	5.08	7.72	10.82	16.21	21.76	22.41	..
Sweden	2.52	5.20	5.95	7.30	10.35	11.07	10.61	11.28	..
Switzerland	1.37	2.30	2.49	3.03	4.04	4.50	4.94	5.14	..
Turkey	0.18	0.67	0.85	1.68	3.87	8.25	13.31	14.61	..
United Kingdom	9.44	18.01	20.04	20.15	23.60	28.33	27.75	28.24	..
United States	59.17	123.83	143.39	174.19	226.49	300.95	313.23	326.97	..
<b>OECD TOTAL*</b>	..	<b>278.70</b>	<b>324.43</b>	<b>409.37</b>	<b>551.90</b>	<b>717.47</b>	<b>769.93</b>	<b>806.87</b>	..
<b>OECD AMERICAS</b>	..	143.25	165.66	206.03	272.40	359.49	375.18	389.96	..
<b>OECD ASIA OCEANIA</b>	..	35.63	43.34	56.39	87.68	124.91	140.02	149.68	..
<b>OECD EUROPE*</b>	..	99.82	115.43	146.95	191.82	233.08	254.73	267.22	..
<b>IEA</b>	..	275.18	320.25	402.42	538.65	695.11	741.19	777.12	..

\* Excludes Estonia and Slovenia prior to 1990.

2011 data for consumption will be released in the 2013 edition.

**Total final consumption of energy (Mtoe)***Consommation finale totale d'énergie (Mtep)**Gesamter Energieendverbrauch (Mtoe)**Consumo finale totale di energia (Mtep)**最終エネルギー総消費量（石油換算百万トン）**Consumo final total de energia (Mtep)**Общее конечное потребление топлива и энергии (Мтнэ)*

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	23.31	36.08	39.58	46.79	56.55	69.56	74.66	75.28	..
Austria	8.69	14.57	16.61	18.64	19.72	23.54	26.23	27.65	..
Belgium	16.09	29.24	33.73	32.29	32.07	41.38	39.22	41.68	..
Canada	66.19	116.62	131.31	155.12	159.07	189.75	190.95	195.98	..
Chile	..	6.54	6.52	7.29	11.10	20.39	22.52	23.82	..
Czech Republic	..	32.61	31.35	34.66	34.30	25.69	25.83	27.06	..
Denmark	6.81	14.67	15.31	14.74	13.17	14.23	14.26	14.96	..
Estonia	..	..	..	..	6.01	2.58	2.78	2.91	..
Finland	9.32	16.25	19.19	19.34	22.24	24.56	24.44	26.67	..
France	58.35	125.61	142.22	141.29	143.00	162.97	157.90	162.81	..
Germany	98.46	218.23	241.71	248.66	240.73	231.36	222.73	226.75	..
Greece	1.91	6.76	8.53	10.70	14.49	18.45	20.59	19.47	..
Hungary	..	14.80	16.53	21.57	20.64	17.19	17.84	18.12	..
Iceland	0.51	0.84	1.02	1.28	1.64	2.11	2.99	2.94	..
Ireland	2.64	5.02	5.11	6.34	7.39	10.58	11.26	11.24	..
Israel	..	3.29	3.61	4.51	6.97	11.98	13.92	14.81	..
Italy	31.55	86.29	96.56	102.23	114.94	128.83	125.58	129.77	..
Japan	56.98	199.26	233.98	231.89	300.08	345.12	314.41	324.58	..
Korea	..	13.60	17.49	31.29	64.91	127.11	147.82	157.44	..
Luxembourg	1.64	2.45	2.87	2.71	2.80	3.22	3.66	3.89	..
Mexico	..	34.33	39.74	65.92	84.11	98.17	110.10	113.45	..
Netherlands	14.34	37.57	47.65	54.31	49.14	56.69	60.10	64.77	..
New Zealand	3.39	5.11	5.87	6.91	9.96	12.93	12.45	12.77	..
Norway	6.40	12.42	13.36	15.98	17.44	19.80	20.01	21.40	..
Poland	36.59	55.91	60.55	78.01	61.42	58.18	64.35	69.69	..
Portugal	2.65	5.04	5.74	7.91	13.35	19.44	18.93	18.96	..
Slovak Republic	..	9.79	10.86	13.03	15.75	11.42	10.83	11.42	..
Slovenia	..	..	..	..	3.69	4.65	4.99	5.14	..
Spain	12.80	32.79	38.54	48.12	60.61	85.49	92.04	93.70	..
Sweden	18.63	32.54	34.82	34.60	32.12	35.30	31.88	35.23	..
Switzerland	7.10	15.18	16.67	16.62	18.66	19.58	20.17	21.05	..
Turkey	9.73	16.17	19.86	26.32	40.07	57.85	73.16	77.60	..
United Kingdom	109.29	134.43	143.23	131.28	137.79	150.50	131.46	137.91	..
United States	806.89	1 228.61	1 315.37	1 311.29	1 293.50	1 546.23	1 458.67	1 500.18	..
<b>OECD TOTAL*</b>	..	<b>2 562.60</b>	<b>2 815.48</b>	<b>2 941.62</b>	<b>3 109.43</b>	<b>3 646.83</b>	<b>3 568.70</b>	<b>3 691.11</b>	..
<b>OECD AMERICAS</b>	..	1 386.11	1 492.94	1 539.62	1 547.78	1 854.53	1 782.24	1 833.43	..
<b>OECD ASIA OCEANIA</b>	..	257.34	300.53	321.38	438.46	566.71	563.24	584.87	..
<b>OECD EUROPE*</b>	..	919.15	1 022.01	1 080.61	1 123.19	1 225.59	1 223.22	1 272.81	..
<b>IEA</b>	..	2 517.59	2 764.58	2 862.61	2 995.91	3 506.96	3 411.41	3 528.05	..

\* Excludes Estonia and Slovenia prior to 1990.

2011 data for consumption will be released in the 2013 edition.

For the United States, fuels used by autoproducers of electricity and heat have been included in final consumption for some years.

**Industry consumption of coal and peat (Mtoe)***Consommation industrielle de charbon et de tourbe (Mtep)**Industrieverbrauch von Kohle und Torf (Mtoe)**Consumo di carbone e torba nell'industria (Mtep)*

石炭及び泥炭の産業用消費量(石油換算百万トン)

*Consumo industrial de carbón y turba (Mtep)**Потребление угля и торфа промышленным сектором (Мтнэ)*

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	4.55	4.88	4.89	4.09	4.18	4.03	3.20	2.89	..
Austria	1.62	0.85	0.76	0.92	0.65	0.63	0.47	0.44	..
Belgium	4.12	3.00	3.54	3.20	3.01	2.38	0.51	0.66	..
Canada	5.96	4.29	4.77	4.28	3.15	3.59	3.38	3.09	..
Chile	..	0.48	0.46	0.44	0.52	0.59	0.24	0.40	..
Czech Republic	..	13.30	11.43	11.69	7.21	3.32	2.37	2.30	..
Denmark	0.25	0.13	0.23	0.39	0.32	0.27	0.10	0.11	..
Estonia	..	..	..	..	0.37	0.11	0.10	0.09	..
Finland	1.19	0.66	0.94	1.01	1.54	0.89	0.51	0.68	..
France	13.19	8.04	7.28	5.40	5.86	3.64	2.64	3.00	..
Germany	31.90	30.76	29.51	26.48	21.08	7.66	5.63	6.08	..
Greece	0.07	0.32	0.46	0.42	1.18	0.85	0.17	0.30	..
Hungary	..	1.64	1.57	1.29	0.52	0.29	0.21	0.24	..
Iceland	0.01	-	-	0.02	0.06	0.10	0.09	0.09	..
Ireland	0.33	0.11	0.07	0.12	0.25	0.11	0.11	0.10	..
Israel	..	0.01	0.00	0.00	0.01	0.02	-	-	..
Italy	2.82	2.51	2.66	2.98	3.29	2.45	1.00	1.80	..
Japan	17.89	16.70	18.65	21.42	31.35	26.47	25.32	28.16	..
Korea	..	0.37	0.39	1.35	3.05	8.50	7.29	8.69	..
Luxembourg	1.10	0.93	0.94	1.02	0.54	0.12	0.08	0.07	..
Mexico	..	1.10	1.37	1.61	1.56	1.38	1.09	1.63	..
Netherlands	1.68	0.69	0.76	0.69	1.33 e	0.88	0.75	0.80	..
New Zealand	0.74	0.63	0.71	0.56	0.79	0.43	0.47	0.51	..
Norway	0.47	0.56	0.76	0.84	0.77	0.95	0.47	0.57	..
Poland	8.82	10.42	10.80	10.85	6.74	7.56	3.65	3.98	..
Portugal	0.20	0.23	0.14	0.20	0.59	0.43	0.02	0.05	..
Slovak Republic	..	2.43	2.66	1.79	1.93	1.16	0.85	0.84	..
Slovenia	..	..	..	..	0.12	0.09	0.06	0.06	..
Spain	3.34	3.34	3.59	2.18	2.81	1.11	0.65	0.77	..
Sweden	1.12	0.70	0.89	0.83	1.00	0.74	0.45	0.84	..
Switzerland	0.65	0.13	0.11	0.23	0.31	0.11	0.14	0.14	..
Turkey	0.72	0.71	1.14	2.17	4.50	8.83	5.94	7.29	..
United Kingdom	26.30	16.95	14.04	5.96	6.38	2.51	2.18	2.11	..
United States	65.29	61.36	60.25	48.25	46.02	30.36	21.95	25.34	..
<b>OECD TOTAL*</b>	..	<b>188.23</b>	<b>185.79</b>	<b>162.65</b>	<b>163.00</b>	<b>122.56</b>	<b>92.07</b>	<b>104.11</b>	..
<b>OECD AMERICAS</b>	..	67.24	66.85	54.57	51.25	35.91	26.66	30.46	..
<b>OECD ASIA OCEANIA</b>	..	22.60	24.64	27.41	39.38	39.45	36.28	40.24	..
<b>OECD EUROPE*</b>	..	98.40	94.30	80.66	72.37	47.19	29.13	33.41	..
<b>IEA</b>	..	186.64	183.95	160.58	160.35	120.28	90.50	101.85	..

\* Excludes Estonia and Slovenia prior to 1990.

Includes non-energy use for industry/transformation/energy.

2011 data for consumption will be released in the 2013 edition.

For the United States, coal used by autoproducers of electricity and heat has been included in final consumption prior to 1992.

**Industry consumption of oil (Mtoe)***Consommation industrielle de pétrole (Mtep)**Ölverbrauch der Industrie (Mtoe)**Consumo di petrolio nell'industria (Mtep)**石油の産業用消費量(石油換算百万トン)**Consumo industrial de petróleo (Mtep)**Потребление нефти и нефтепродуктов промышленным сектором (Мтнэ)*

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	4.54	8.27	7.94	7.93	6.38	7.63	7.36	7.77	..
Austria	1.21	2.72	3.06	1.89	1.79	1.84	2.09	2.01	..
Belgium	2.46	7.42	7.79	4.45	4.18	7.57	6.99	7.31	..
Canada	8.10	15.09	20.85	20.28	17.13	20.48	20.32	23.06	..
Chile	..	1.18	1.21	1.26	1.51	2.13	3.39	3.32	..
Czech Republic	..	3.85	5.04	5.93	4.42	2.59	2.49	2.63	..
Denmark	1.69	3.42	3.38	2.52	1.18	1.00	0.75	0.77	..
Estonia	..	..	..	..	0.76	0.13	0.07	0.08	..
Finland	0.81	3.48	5.00	3.73	2.57	2.46	2.31	2.41	..
France	9.47	36.00	34.42	29.97	17.22	18.73	16.00	15.46	..
Germany	8.68	39.92	46.05	36.06	26.40	27.39	23.03	23.66	..
Greece	0.48	1.83	2.37	3.04	2.05	2.50	2.06	2.06	..
Hungary	..	1.83	2.22	3.24	2.08	1.53	1.73	1.75	..
Iceland	0.04	0.09	0.13	0.15	0.15	0.23	0.39	0.37	..
Ireland	0.37	1.73	1.61	1.59	0.83	1.29	0.78	0.84	..
Israel	..	1.01	1.12	1.44	1.68	2.25	1.86	2.29	..
Italy	7.87	27.40	29.40	22.25	16.50	13.48	11.93	12.14	..
Japan	11.13	81.54	95.20	67.00	69.56	74.84	62.55	61.43	..
Korea	..	5.06	6.40	10.07	17.61	35.49	41.80	43.16	..
Luxembourg	0.05	0.70	0.80	0.20	0.29	0.05	0.02	0.03	..
Mexico	..	4.69	5.34	9.10	13.97	14.08	11.44	11.25	..
Netherlands	3.13	7.09	10.08	13.74	7.90	8.94	14.13	15.54	..
New Zealand	0.26	0.83	0.99	0.83	0.60	0.64	0.69	0.71	..
Norway	1.16	2.78	2.99	3.55	2.77	2.43	2.68	2.79	..
Poland	0.50	2.21	2.92	4.61	2.98	3.86	4.00	3.95	..
Portugal	0.36	1.39	1.74	2.54	3.80	4.55	2.62	2.72	..
Slovak Republic	..	1.53	1.73	2.90	2.89	1.48	1.00	0.89	..
Slovenia	..	..	..	..	0.23	0.39	0.27	0.24	..
Spain	0.80	11.36	13.32	15.83	10.93	14.30	11.26	11.22	..
Sweden	4.38	7.92	8.13	6.08	3.97	4.61	2.66	3.08	..
Switzerland	1.33	3.33	3.61	2.71	1.26	1.42	1.18	1.20	..
Turkey	0.13	1.94	2.59	4.17	6.04	7.95	7.38	7.43	..
United Kingdom	11.36	31.12	32.75	18.86	15.20	15.88	11.77	11.81	..
United States	111.96	137.21	157.11	187.39	144.53	156.44	146.61	155.14	..
<b>OECD TOTAL*</b>	..	<b>455.94</b>	<b>517.26</b>	<b>495.30</b>	<b>411.40</b>	<b>460.57</b>	<b>425.58</b>	<b>440.49</b>	..
<b>OECD AMERICAS</b>	..	158.17	184.51	218.03	177.15	193.13	181.76	192.78	..
<b>OECD ASIA OCEANIA</b>	..	96.72	111.64	87.26	95.83	120.85	114.25	115.35	..
<b>OECD EUROPE*</b>	..	201.06	221.12	190.01	138.41	146.59	129.57	132.37	..
<b>IEA</b>	..	448.97	509.46	483.36	393.09	441.36	408.16	422.95	..

\* Excludes Estonia and Slovenia prior to 1990.

Includes non-energy use for industry/transformation/energy.

2011 data for consumption will be released in the 2013 edition.

**Industry consumption of natural gas (Mtoe)**  
*Consommation industrielle de gaz naturel (Mtep)*  
*Gasverbrauch der Industrie (Mtoe)*  
*Consumo di gas naturale nell'industria (Mtep)*  
*ガスの産業用消費量 (石油換算百万トン)*  
*Consumo industrial de gas natural (Mtep)*  
*Потребление газа промышленным сектором (Мтнэ)*

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	-	0.67	1.49	3.73	6.01	7.46	8.20	8.57	..
Austria	0.45	1.00	1.29	2.10	1.98	2.40	2.71	2.79	..
Belgium	-	2.24	3.15	3.63	3.30	5.33	4.84	5.48	..
Canada	2.73	10.18	11.87	18.53	20.23	23.40	23.55	25.38	..
Chile	..	0.00	0.00	0.01	0.74	2.98	0.92	1.82	..
Czech Republic	..	0.39	0.46	0.28	2.42	2.60	1.98	2.39	..
Denmark	-	-	-	-	0.53	0.78	0.65	0.71	..
Estonia	..	..	..	..	0.37	0.22	0.11	0.11	..
Finland	-	-	-	0.40	0.94	0.86	0.89	0.95	..
France	0.86	4.18	5.65	9.43	11.09	14.67	9.30	10.42	..
Germany	0.38	8.49	12.51	19.51	19.30	21.40 e	16.91	21.55	..
Greece	-	-	-	-	0.10	0.36	0.66	0.73	..
Hungary	..	1.86	2.22	3.50	3.76	1.70	1.21	1.33	..
Iceland	-	-	-	-	-	-	-	-	..
Ireland	-	-	-	0.35	0.79	0.85	0.43	0.47	..
Israel	..	0.09	0.05	0.13	0.03	0.00	0.17	0.06	..
Italy	3.92	7.20	8.64	11.10	14.64	17.60	10.46	10.91	..
Japan	0.51	1.79	1.64	2.14	4.00	5.30	7.65	8.16	..
Korea	..	-	-	-	0.07	2.88	5.63	6.87	..
Luxembourg	-	0.01	0.14	0.25	0.28	0.28	0.27	0.32	..
Mexico	..	5.82	6.87	12.37	13.35	12.25	10.89	11.76	..
Netherlands	0.03	6.06	8.14	8.41	8.79	9.00	6.76	7.55	..
New Zealand	0.01	0.01	0.03	0.26	1.53	2.67	1.33	1.35	..
Norway	-	-	-	-	-	0.59	0.61	0.67	..
Poland	0.38	3.20	4.00	5.40	4.43	4.12	4.49	4.76	..
Portugal	-	-	-	-	-	0.66	0.95	1.02	..
Slovak Republic	..	0.69	0.82	0.60	1.33	1.12	1.02	1.10	..
Slovenia	..	..	..	..	0.57	0.61	0.54	0.56	..
Spain	-	0.14	0.39	0.60	3.77	9.62	7.91	8.73	..
Sweden	-	-	-	-	0.25	0.30	0.30	0.45	..
Switzerland	-	0.01	0.01	0.35	0.58	0.73	0.82	0.85	..
Turkey	-	-	-	-	0.67	1.76	4.56	6.50	..
United Kingdom	0.03	4.64	9.42	13.50	11.96	15.26	9.62	10.09	..
United States	94.72	165.88	177.21	151.53	123.77	155.30	114.67	120.77	..
<b>OECD TOTAL*</b>	..	<b>224.55</b>	<b>256.01</b>	<b>268.11</b>	<b>261.59</b>	<b>325.05</b>	<b>261.03</b>	<b>285.22</b>	..
<b>OECD AMERICAS</b>	..	181.89	195.95	182.44	158.10	193.94	150.03	159.74	..
<b>OECD ASIA OCEANIA</b>	..	2.56	3.21	6.26	11.64	18.31	22.98	25.01	..
<b>OECD EUROPE*</b>	..	40.10	56.86	79.41	91.85	112.80	88.01	100.47	..
<b>IEA</b>	..	218.63	249.09	255.60	246.53	308.98	248.39	270.89	..

\* Excludes Estonia and Slovenia prior to 1990.

Includes non-energy use for industry/transformation/energy.

2011 data for consumption will be released in the 2013 edition.

For the United States, gas used by autoproducers of electricity and heat has been included in final consumption prior to 1989.

**Industry consumption of electricity (Mtoe)***Consommation industrielle d'électricité (Mtep)**Stromerbrauch der Industrie (Mtoe)**Consumo di energia elettrica nell'industria (Mtep)**電力の産業用消費量(石油換算百万トン)**Consumo industrial de electricidad (Mtep)**Потребление электроэнергии промышленным сектором (Мтиэ)*

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	0.86	1.68	1.99	2.80	5.09	6.62	6.55	6.44	..
Austria	0.59	0.93	1.04	1.22	1.55	1.78	2.29	2.30	..
Belgium	0.69	1.58	1.93	2.06	2.62	3.43	2.81	3.28	..
Canada	5.49	8.30	9.10	11.67	14.44	17.48	13.93	14.29	..
Chile	..	0.42	0.41	0.55	0.87	2.21	3.15	3.08	..
Czech Republic	..	1.51	1.61	1.91	2.32	1.63	1.88	1.98	..
Denmark	0.12	0.37	0.40	0.50	0.73	0.86	0.73	0.74	..
Estonia	..	..	..	..	0.25	0.16	0.17	0.18	..
Finland	0.53	1.27	1.55	1.96	2.80	3.69	3.11	3.47	..
France	3.56	6.42	7.22	8.20	9.86	11.58	9.61	10.10	..
Germany	5.59	13.03	15.34	17.16	18.62	18.20	17.38	19.38	..
Greece	0.08	0.51	0.63	0.90	1.04	1.17	1.21	1.22	..
Hungary	..	0.83	0.92	1.19	1.18	0.76	0.74	0.84	..
Iceland	0.02	0.08	0.13	0.17	0.22	0.45	1.16	1.18	..
Ireland	0.05	0.15	0.19	0.28	0.39	0.66	0.72	0.59	..
Israel	..	0.17	0.20	0.30	0.45	0.90	0.91	1.07	..
Italy	2.79	5.76	6.63	8.09	9.54	12.20	10.37	11.00	..
Japan	6.32	20.91	25.06	28.19	29.01	31.10	24.94	28.69	..
Korea	..	0.54	0.76	1.95	4.97	12.93	17.14	19.62	..
Luxembourg	0.10	0.18	0.20	0.21	0.24	0.28	0.27	0.31	..
Mexico	..	1.29	1.56	2.60	4.59	8.56	9.29	9.90	..
Netherlands	0.61	1.67	1.95	2.41	2.86	3.51	3.12	3.36	..
New Zealand	0.20	0.32	0.48	0.66	0.96	1.21	1.13	1.22	..
Norway	1.53	2.82	3.20	3.43	3.94	4.43	3.55	3.82	..
Poland	1.15	2.81	3.28	4.48	3.68	3.48	3.42	3.60	..
Portugal	0.16	0.37	0.44	0.71	1.05	1.37	1.39	1.50	..
Slovak Republic	..	0.63	0.72	1.11	1.29	0.84	0.93	0.94	..
Slovenia	..	..	..	..	0.51	0.48	0.43	0.47	..
Spain	0.83	2.65	3.26	4.64	5.44	7.37	6.97	7.18	..
Sweden	1.62	2.95	3.40	3.49	4.64	4.90	4.42	4.68	..
Switzerland	0.61	0.92	0.95	1.02	1.48	1.55	1.57	1.66	..
Turkey	0.12	0.44	0.55	1.05	2.35	3.96	5.88	6.64	..
United Kingdom	4.67	7.15	7.85	7.51	8.66	9.81	8.67	8.99	..
United States	27.86	49.24	55.54	64.17	74.52	98.22	68.72	75.63	..
<b>OECD TOTAL*</b>	..	<b>137.89</b>	<b>158.51</b>	<b>186.58</b>	<b>222.17</b>	<b>277.78</b>	<b>238.54</b>	<b>259.35</b>	..
<b>OECD AMERICAS</b>	..	59.25	66.61	78.98	94.43	126.47	95.09	102.90	..
<b>OECD ASIA OCEANIA</b>	..	23.62	28.50	33.90	40.49	52.76	50.67	57.05	..
<b>OECD EUROPE*</b>	..	55.02	63.41	73.69	87.25	98.54	92.78	99.40	..
<b>IEA</b>	..	135.93	156.22	182.96	215.26	265.03	223.44	243.46	..

\* Excludes Estonia and Slovenia prior to 1990.

2011 data for consumption will be released in the 2013 edition.

**Total industry consumption of energy (Mtoe)***Consommation industrielle totale d'énergie (Mtep)**Gesamtenergieverbrauch der Industrie (Mtoe)**Consumo totale di energia nell'industria (Mtep)**産業用エネルギー総消費量（石油換算百万トン）**Consumo total industrial de energia (Mtep)**Общее потребление топлива и энергии промышленным сектором (Мтнэ)*

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	14.01	17.03	17.81	20.45	23.15	28.20	27.05	27.45	..
Austria	3.88	5.54	6.19	6.34	6.66	7.61	9.21	9.31	..
Belgium	7.27	14.23	16.73	13.70	13.49	19.51	16.27	18.01	..
Canada	24.35	43.39	52.39	61.27	61.28	73.48	69.00	72.64	..
Chile	..	2.31	2.32	2.79	4.33	9.05	9.20	9.72	..
Czech Republic	..	19.04	18.54	19.82	17.44	11.06	9.78	10.44	..
Denmark	2.06	3.91	4.06	3.56	2.95	3.18	2.55	2.66	..
Estonia	..	..	..	..	2.78	0.75	0.58	0.61	..
Finland	2.53	5.46	7.57	7.22	10.48	12.61	11.05	12.40	..
France	27.08	55.69	55.75	54.13	45.53	50.19	39.45	40.93	..
Germany	46.56	93.46	105.02	101.22	88.59	76.00	69.88	78.47	..
Greece	0.63	2.65	3.47	4.36	4.56	5.11	4.33	4.54	..
Hungary	..	6.72	7.41	9.86	7.77	4.85	4.33	4.59	..
Iceland	0.07	0.21	0.28	0.36	0.48	0.84	1.65	1.65	..
Ireland	0.75	1.99	1.87	2.34	2.32	3.02	2.19	2.15	..
Israel	..	1.28	1.37	1.87	2.17	3.17	2.93	3.43	..
Italy	17.41	42.87	47.33	44.53	44.19	46.01	37.10	39.17	..
Japan	35.85	120.93	140.54	118.74	136.44	140.32	122.78	129.15	..
Korea	..	5.97	7.55	13.37	25.99	62.99	76.31	82.42	..
Luxembourg	1.26	1.82	2.09	1.68	1.35	0.74	0.67	0.77	..
Mexico	..	14.12	16.46	27.21	35.42	37.65	33.74	35.57	..
Netherlands	5.46	15.51	20.94	25.25	20.92	24.16	25.93	28.46	..
New Zealand	1.21	1.80	2.21	2.62	4.46	5.90	4.53	4.80	..
Norway	3.16	6.16	6.95	8.00	7.87	9.02	7.68	8.29	..
Poland	14.26	26.49	29.46	36.75	27.15	21.45	18.35	19.18	..
Portugal	1.07	2.34	2.64	3.77	6.65	8.40	6.71	7.08	..
Slovak Republic	..	5.51	6.13	6.59	7.64	4.93	4.29	4.26	..
Slovenia	..	..	..	..	1.54	1.66	1.43	1.47	..
Spain	4.96	17.49	20.57	23.42	24.81	33.70	28.36	29.61	..
Sweden	9.41	14.11	15.36	13.42	13.71	15.23	12.24	14.13	..
Switzerland	2.60	4.37	4.69	4.46	3.84	4.41	4.27	4.46	..
Turkey	0.97	3.10	4.28	7.38	13.58	22.99	24.82	29.08	..
United Kingdom	42.36	59.86	64.06	45.95	42.29	44.84	33.39	34.25	..
United States	316.51	439.21	478.67	485.28	397.90	480.46	387.08	414.41	..
<b>OECD TOTAL*</b>	..	<b>1 054.57</b>	<b>1 170.73</b>	<b>1 177.70</b>	<b>1 109.71</b>	<b>1 273.45</b>	<b>1 109.13</b>	<b>1 185.58</b>	..
<b>OECD AMERICAS</b>	..	499.03	549.85	576.54	498.92	600.63	499.02	532.34	..
<b>OECD ASIA OCEANIA</b>	..	147.01	169.47	157.06	192.22	240.58	233.61	247.25	..
<b>OECD EUROPE*</b>	..	408.54	451.40	444.11	418.58	432.25	376.50	405.99	..
<b>IEA</b>	..	1 036.66	1 150.29	1 145.47	1 063.00	1 220.34	1 059.60	1 133.13	..

\* Excludes Estonia and Slovenia prior to 1990.

Includes non-energy use for industry/transformation/energy.

2011 data for consumption will be released in the 2013 edition.

For the United States, fuels used by autoproducers of electricity and heat have been included in final consumption for some years.

**Consumption of oil in transport (Mtoe)***Consommation de pétrole dans les transports (Mtep)**Ölverbrauch im Verkehrssektor (Mtoe)**Consumo di petrolio nel settore dei trasporti (Mtep)**運輸部門の石油消費量(石油換算百万トン)**Consumo de petróleo en el transporte (Mtep)**Потребление нефти и нефтепродуктов в транспорте (Мтиэ)*

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	5.58	11.19	12.85	16.74	20.87	25.06	27.40	27.46	..
Austria	1.20	3.20	3.85	4.03	4.58	6.08	6.89	7.14	..
Belgium	1.71	3.95	4.34	5.42	6.75	8.10	8.72	8.19	..
Canada	16.42	28.42	33.19	42.49	40.22	47.06	53.70	55.67	..
Chile	..	1.83	1.69	2.02	3.02	5.64	6.84	7.09	..
Czech Republic	..	1.82	2.12	2.19	2.52	4.14	5.91	5.58	..
Denmark	1.00	2.51	2.69	3.02	3.46	4.03	4.40	4.31	..
Estonia	..	..	..	..	0.80	0.55	0.71	0.74	..
Finland	0.71	2.09	2.39	2.78	3.91	3.94	4.02	4.18	..
France	9.04	20.23	24.52	30.10	38.13	44.57	40.79	40.74	..
Germany	10.99	31.08	33.97	43.41	53.71	58.15	48.95	48.72	..
Greece	0.67	1.60	2.05	3.18	5.15	6.42	8.28	7.36	..
Hungary	..	1.58	1.84	2.66	2.83	2.95	4.29	3.90	..
Iceland	0.09	0.10	0.13	0.16	0.21	0.21	0.30	0.28	..
Ireland	0.41	1.00	1.17	1.58	1.68	3.46	4.07	3.85	..
Israel	..	1.06	1.15	1.39	2.21	3.37	3.80	4.05	..
Italy	5.35	15.95	18.37	23.68	32.18	39.11	36.60	35.64	..
Japan	7.61	34.27	39.79	52.92	71.23	87.11	75.45	76.06	..
Korea	..	2.09	2.48	4.74	14.49	26.57	28.60	29.07	..
Luxembourg	0.10	0.18	0.23	0.43	0.88	1.60	2.02	2.14	..
Mexico	..	10.24	12.38	22.76	28.46	36.06	50.37	51.73	..
Netherlands	2.37	5.73	6.46	7.60	8.85	10.90	11.05	11.21	..
New Zealand	0.96	1.71	1.94	2.28	2.89	4.06	4.56	4.59	..
Norway	1.10	2.26	2.25	2.83	3.35	4.00	4.45	4.62	..
Poland	1.21	4.00	5.01	6.96	6.52	9.30	14.90	15.67	..
Portugal	0.51	1.30	1.60	2.30	3.28	6.00	6.26	6.10	..
Slovak Republic	..	1.41	1.62	1.21	1.35	1.35	1.67	1.97	..
Slovenia	..	..	..	..	0.88	1.19	1.69	1.70	..
Spain	3.44	8.32	10.71	14.90	21.23	30.08	33.26	32.31	..
Sweden	2.53	4.77	5.17	5.73	6.78	7.29	7.12	7.24	..
Switzerland	1.33	3.17	3.42	3.56	4.97	5.64	5.79	5.76	..
Turkey	0.75	2.89	3.85	5.29	9.31	11.93	15.32	15.05	..
United Kingdom	12.81	25.14	27.84	30.46	39.08	41.43	40.04	39.96	..
United States	228.15	359.42	400.90	414.29	476.68	574.32	537.81	541.36	..
<b>OECD TOTAL*</b>	..	<b>594.51</b>	<b>671.96</b>	<b>763.11</b>	<b>922.45</b>	<b>1 121.70</b>	<b>1 105.97</b>	<b>1 111.46</b>	..
<b>OECD AMERICAS</b>	..	399.91	448.16	481.57	548.39	663.08	648.71	655.85	..
<b>OECD ASIA OCEANIA</b>	..	50.31	58.22	78.07	111.70	146.18	139.81	141.24	..
<b>OECD EUROPE*</b>	..	144.28	165.58	203.47	262.37	312.44	317.45	314.38	..
<b>IEA</b>	..	581.27	656.61	736.78	886.86	1 074.67	1 042.28	1 045.86	..

\* Excludes Estonia and Slovenia prior to 1990.

Includes non-energy use in transport.

2011 data for consumption will be released in the 2013 edition.



**Consumption of electricity in transport (Mtoe)***Consommation d'électricité dans les transports (Mtep)**Stromverbrauch im Verkehrssektor (Mtoe)**Consumo di energia elettrica nel settore dei trasporti (Mtep)**運輸部門の電力消費量(石油換算百万トン)**Consumo de electricidad en el transporte (Mtep)**Потребление электроэнергии в транспорте (Мтнэ)*

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	0.06	0.06	0.06	0.08	0.16	0.20	0.35	0.33	..
Austria	0.08	0.14	0.15	0.20	0.24	0.30	0.29	0.30	..
Belgium	0.05	0.07	0.07	0.08	0.11	0.12	0.15	0.15	..
Canada	0.05	0.17	0.28	0.20	0.28	0.39	0.33	0.32	..
Chile	..	0.02	0.02	0.02	0.02	0.02	0.04	0.04	..
Czech Republic	..	0.15	0.16	0.20	0.27	0.20	0.18	0.19	..
Denmark	0.01	0.01	0.01	0.01	0.02	0.03	0.03	0.03	..
Estonia	..	..	..	..	0.01	0.01	0.01	0.00	..
Finland	0.00	0.00	0.01	0.02	0.04	0.05	0.06	0.06	..
France	0.30	0.50	0.55	0.59	0.76	1.00	1.08	1.08	..
Germany	0.33	0.78	0.85	1.03	1.18	1.37	1.37	1.44	..
Greece	0.00	0.00	0.00	0.01	0.01	0.02	0.02	0.02	..
Hungary	..	0.06	0.07	0.09	0.10	0.09	0.10	0.10	..
Iceland	-	-	-	-	-	-	-	-	..
Ireland	-	-	-	-	0.00	0.00	0.00	0.00	..
Israel	..	-	-	-	-	-	-	-	..
Italy	0.28	0.32	0.33	0.41	0.58	0.73	0.91	0.92	..
Japan	0.43	1.00	1.14	1.31	1.45	1.60	1.66	1.66	..
Korea	..	-	0.01	0.03	0.09	0.18	0.19	0.19	..
Luxembourg	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	..
Mexico	..	0.02	0.03	0.04	0.07	0.09	0.10	0.10	..
Netherlands	0.06	0.08	0.08	0.08	0.11	0.14	0.14	0.15	..
New Zealand	-	0.00	0.00	0.00	0.01	0.01	0.01	0.01	..
Norway	0.03	0.04	0.04	0.06	0.06	0.05	0.06	0.06	..
Poland	0.06	0.26	0.30	0.41	0.47	0.40	0.28	0.27	..
Portugal	0.01	0.02	0.02	0.02	0.03	0.03	0.04	0.04	..
Slovak Republic	..	0.05	0.05	0.08	0.10	0.08	0.04	0.05	..
Slovenia	..	..	..	..	0.02	0.02	0.01	0.01	..
Spain	0.06	0.11	0.12	0.16	0.32	0.36	0.27	0.28	..
Sweden	0.14	0.17	0.18	0.20	0.21	0.27	0.21	0.21	..
Switzerland	0.12	0.17	0.17	0.18	0.22	0.23	0.26	0.27	..
Turkey	0.00	0.01	0.01	0.01	0.03	0.07	0.06	0.05	..
United Kingdom	0.19	0.24	0.22	0.26	0.45	0.74	0.34	0.34	..
United States	0.47	0.39	0.37	0.27	0.35	0.38	0.67	0.66	..
<b>OECD TOTAL*</b>	..	<b>4.85</b>	<b>5.30</b>	<b>6.07</b>	<b>7.76</b>	<b>9.19</b>	<b>9.26</b>	<b>9.33</b>	..
<b>OECD AMERICAS</b>	..	0.60	0.69	0.52	0.72	0.88	1.14	1.13	..
<b>OECD ASIA OCEANIA</b>	..	1.06	1.21	1.42	1.70	1.98	2.21	2.18	..
<b>OECD EUROPE*</b>	..	3.19	3.40	4.13	5.34	6.32	5.91	6.02	..
<b>IEA</b>	..	4.81	5.26	6.01	7.64	9.04	9.11	9.17	..

\* Excludes Estonia and Slovenia prior to 1990.

2011 data for consumption will be released in the 2013 edition.

**Total consumption of energy in transport (Mtoe)***Consommation totale d'énergie dans les transports (Mtep)**Gesamtenergieverbrauch im Verkehrssektor (Mtoe)**Consumo totale di energia nel settore dei trasporti (Mtep)**運輸部門のエネルギー総消費量（石油換算百万トン）**Consumo total de energia en el transporte (Mtep)**Общее потребление топлива и энергии в транспорте (Мтнэ)*

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	7.00	11.32	12.93	16.82	21.11	25.66	28.54	28.62	..
Austria	1.83	3.52	4.13	4.28	4.92	6.53	7.85	8.06	..
Belgium	2.27	4.03	4.42	5.50	6.85	8.22	9.16	8.70	..
Canada	17.05	28.73	33.60	44.32	43.40	52.34	57.54	59.53	..
Chile	..	2.01	1.84	2.09	3.05	5.67	6.89	7.14	..
Czech Republic	..	2.11	2.40	2.48	2.79	4.44	6.35	6.07	..
Denmark	1.10	2.52	2.70	3.03	3.48	4.06	4.44	4.37	..
Estonia	..	..	..	..	0.82	0.56	0.71	0.75	..
Finland	0.91	2.11	2.41	2.80	3.95	4.01	4.21	4.38	..
France	11.65	20.87	25.15	30.72	38.90	45.92	44.42	44.52	..
Germany	16.71	33.99	36.54	44.75	54.90	59.75	53.14	53.35	..
Greece	0.75	1.63	2.07	3.19	5.16	6.44	8.39	7.51	..
Hungary	..	2.23	2.28	2.88	2.93	3.04	4.56	4.17	..
Iceland	0.09	0.10	0.13	0.16	0.21	0.21	0.30	0.28	..
Ireland	0.45	1.00	1.17	1.58	1.68	3.46	4.14	3.95	..
Israel	..	1.06	1.15	1.39	2.21	3.37	3.80	4.05	..
Italy	6.41	16.55	18.96	24.35	32.96	40.17	39.29	38.72	..
Japan	11.87	35.87	41.13	54.22	72.68	88.71	77.11	77.72	..
Korea	..	2.12	2.50	4.78	14.57	26.75	29.90	30.59	..
Luxembourg	0.13	0.18	0.23	0.44	0.88	1.61	2.07	2.19	..
Mexico	..	10.26	12.41	22.80	28.53	36.16	50.47	51.85	..
Netherlands	2.47	5.82	6.53	7.68	8.95	11.04	11.58	11.60	..
New Zealand	1.07	1.72	1.94	2.29	2.96	4.07	4.57	4.61	..
Norway	1.20	2.31	2.30	2.89	3.41	4.06	4.65	4.85	..
Poland	6.99	8.33	8.97	9.17	7.17	9.76	16.10	17.06	..
Portugal	0.59	1.35	1.64	2.32	3.31	6.03	6.53	6.48	..
Slovak Republic	..	1.45	1.68	1.50	1.45	1.43	2.29	2.58	..
Slovenia	..	..	..	..	0.90	1.21	1.74	1.76	..
Spain	5.02	8.52	10.85	15.07	21.54	30.52	34.69	34.12	..
Sweden	2.76	4.94	5.35	5.92	6.99	7.57	7.73	7.87	..
Switzerland	1.46	3.34	3.59	3.74	5.19	5.87	6.07	6.06	..
Turkey	1.58	3.47	4.38	5.49	9.35	12.04	15.57	15.33	..
United Kingdom	18.45	25.51	28.12	30.76	39.53	42.18	41.36	41.44	..
United States	229.94	377.15	418.11	429.31	492.45	593.07	575.24	583.63	..
<b>OECD TOTAL*</b>	..	<b>626.14</b>	<b>701.60</b>	<b>788.73</b>	<b>949.19</b>	<b>1 155.92</b>	<b>1 171.41</b>	<b>1 183.89</b>	..
<b>OECD AMERICAS</b>	..	418.15	465.95	498.52	567.42	687.23	690.14	702.15	..
<b>OECD ASIA OCEANIA</b>	..	52.09	59.66	79.51	113.53	148.56	143.93	145.59	..
<b>OECD EUROPE*</b>	..	155.89	176.00	210.71	268.24	320.13	337.34	336.15	..
<b>IEA</b>	..	612.70	686.08	762.29	913.46	1 108.73	1 107.50	1 118.05	..

\* Excludes Estonia and Slovenia prior to 1990.

Includes non-energy use in transport.

2011 data for consumption will be released in the 2013 edition.

**Other consumption of coal and peat (Mtoe)***Consommation de charbon et de tourbe des autres secteurs (Mtep)**Kohle- und Torfverbrauch in restlichen Sektoren (Mtoe)**Consumo di carbone e torba negli altri settori (Mtep)**他の部門の石炭及び泥炭消費量(石油換算百万トン)**Consumo de carbón y turba de otros sectores (Mtep)**Потребление угля и торфа другими секторами (Мтнэ)*

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	0.13	0.30	0.28	0.41	0.20	0.07	0.04	0.04	..
Austria	1.48	1.49	1.47	1.04	0.70	0.24	0.06	0.06	..
Belgium	4.38	2.53	2.15	1.03	0.52	0.20	0.24	0.13	..
Canada	3.79	0.66	0.40	0.10	0.05	0.04	0.00	0.00	..
Chile	..	0.12	0.11	0.08	0.11	0.05	0.03	0.02	..
Czech Republic	..	9.98	8.70	7.84	6.74	1.34	0.58	0.62	..
Denmark	1.78	0.30	0.23	0.19	0.11	0.04	0.04	0.04	..
Estonia	..	..	..	..	0.33	0.04	0.01	0.01	..
Finland	0.22	0.17	0.11	0.11	0.02	0.03	0.03	0.04	..
France	13.32	7.78	6.62	3.19	1.92	0.79	0.44	0.46	..
Germany	25.21	27.34	24.46	22.47	18.15	1.29	1.20	1.28	..
Greece	0.02	0.04	0.04	0.04	0.03	0.02	0.00	0.00	..
Hungary	..	2.37	2.13	2.12	1.79	0.25	0.15	0.15	..
Iceland	0.01	0.00	0.00	-	-	-	-	-	..
Ireland	1.13	1.20	0.96	1.24	1.28	0.52	0.47	0.44	..
Israel	..	-	-	-	-	-	-	-	..
Italy	2.35	1.39	0.87	0.83	0.28	0.24	0.11	0.13	..
Japan	5.52	5.67	5.23	3.83	0.96	0.61	0.52	0.51	..
Korea	..	4.77	6.08	8.39	8.66	0.57	0.89	0.86	..
Luxembourg	0.18	0.06	0.03	0.02	0.01	0.00	0.00	0.00	..
Mexico	..	-	-	-	-	-	-	-	..
Netherlands	3.95	0.55	0.32	0.08	0.05	0.03	0.01	0.01	..
New Zealand	0.36	0.21	0.19	0.26	0.13	0.08	0.07	0.09	..
Norway	0.23	0.26	0.06	0.03	0.01	0.00	-	-	..
Poland	12.51	14.50	14.56	19.31	10.42	5.70	7.53	9.28	..
Portugal	0.26	0.12	0.08	0.05	0.05	0.04	-	-	..
Slovak Republic	..	1.17	1.19	2.30	2.18	0.26	0.54	0.33	..
Slovenia	..	..	..	..	0.11	0.00	-	-	..
Spain	1.92	1.30	0.55	0.59	0.58	0.25	0.23	0.21	..
Sweden	0.80	0.26	0.14	0.09	0.07	0.03	0.01	0.01	..
Switzerland	1.02	0.38	0.30	0.10	0.04	0.03	0.01	0.01	..
Turkey	0.74	1.12	1.30	1.85	3.01	2.02	6.87	6.83	..
United Kingdom	38.67	23.34	17.63	8.14	4.39	1.61	0.65	0.68	..
United States	25.84	17.13	13.84	7.92	9.64	2.22	1.59	1.51	..
<b>OECD TOTAL*</b>	..	<b>126.49</b>	<b>110.07</b>	<b>93.68</b>	<b>72.59</b>	<b>18.58</b>	<b>22.32</b>	<b>23.76</b>	..
<b>OECD AMERICAS</b>	..	17.90	14.35	8.10	9.80	2.31	1.62	1.53	..
<b>OECD ASIA OCEANIA</b>	..	10.94	11.79	12.90	9.96	1.32	1.53	1.49	..
<b>OECD EUROPE*</b>	..	97.64	83.93	72.69	52.83	14.95	19.17	20.73	..
<b>IEA</b>	..	126.37	109.95	93.60	72.04	18.49	22.28	23.73	..

\* Excludes Estonia and Slovenia prior to 1990.

Includes residential, commerce/public services, agriculture/forestry and other non-specified. Also includes non-energy use for these sectors.

2011 data for consumption will be released in the 2013 edition.

For the United States, coal used by autoproducers of electricity and heat has been included in final consumption prior to 1992.

**Other consumption of oil (Mtoe)***Consommation de pétrole des autres secteurs (Mtep)**Ölverbrauch in restlichen Sektoren (Mtoe)**Consumo di petrolio negli altri settori (Mtep)**他の部門の石油消費量(石油換算百万トン)**Consumo de petróleo de otros sectores (Mtep)**Потребление нефти и нефтепродуктов другими секторами (Мтиэ)*

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	1.59	2.93	3.47	2.24	1.74	2.02	2.81	2.85	..
Austria	0.41	2.56	3.04	3.83	2.47	2.46	1.82	1.92	..
Belgium	1.93	6.80	8.04	6.99	5.21	5.28	4.22	4.56	..
Canada	12.65	23.22	21.61	17.22	11.44	13.23	10.70	11.44	..
Chile	..	0.79	0.94	0.75	0.95	1.42	1.43	1.67	..
Czech Republic	..	0.53	0.59	1.11	1.26	0.56	0.37	0.36	..
Denmark	1.59	7.06	7.24	5.78	2.22	1.53	1.06	1.07	..
Estonia	..	..	..	..	0.42	0.11	0.11	0.10	..
Finland	0.70	3.49	3.86	3.49	2.71	1.95	1.57	1.67	..
France	4.91	26.74	37.09	27.28	19.69	17.63	15.82	15.08	..
Germany	7.60	45.94	53.28	43.21	31.04	28.43	21.99	22.29	..
Greece	0.44	1.65	2.04	1.86	2.58	3.50	3.13	2.80	..
Hungary	..	1.70	2.41	3.10	2.20	0.73	0.35	0.43	..
Iceland	0.22	0.26	0.29	0.24	0.24	0.25	0.22	0.20	..
Ireland	0.20	0.54	0.78	0.73	1.22	1.76	1.93	1.93	..
Israel	..	0.56	0.63	0.61	1.11	2.41	3.13	3.08	..
Italy	3.91	20.06	22.17	18.27	12.77	9.71	7.15	6.55	..
Japan	2.27	28.73	36.07	36.64	43.20	47.60	34.31	33.88	..
Korea	..	0.49	1.02	3.92	11.57	17.81	9.29	9.64	..
Luxembourg	0.07	0.35	0.43	0.37	0.31	0.31	0.27	0.27	..
Mexico	..	3.98	4.47	7.82	8.78	11.53	10.70	10.87	..
Netherlands	1.92	6.76	6.93	3.02	1.33	0.95	1.20	0.94	..
New Zealand	0.42	0.54	0.57	0.51	0.53	0.61	0.57	0.58	..
Norway	1.03	1.90	2.07	1.71	1.24	1.07	1.08	1.13	..
Poland	0.23	0.74	1.03	1.43	1.43	4.35	3.23	3.26	..
Portugal	0.35	0.75	0.87	0.94	1.23	1.76	1.31	1.30	..
Slovak Republic	..	0.44	0.48	0.92	0.65	0.18	0.13	0.14	..
Slovenia	..	..	..	..	0.38	0.75	0.61	0.60	..
Spain	0.61	4.15	4.83	6.00	5.99	7.78	6.49	6.45	..
Sweden	4.64	10.86	11.08	8.36	3.27	2.27	0.84	0.91	..
Switzerland	1.05	5.63	6.38	5.77	5.37	4.25	3.81	4.06	..
Turkey	0.50	2.43	3.11	3.23	5.02	6.24	5.91	5.91	..
United Kingdom	5.23	11.29	12.49	10.30	6.94	5.26	4.07	4.49	..
United States	91.31	136.65	135.49	87.46	62.08	62.67	52.37	52.38	..
<b>OECD TOTAL*</b>	..	<b>360.52</b>	<b>394.79</b>	<b>315.13</b>	<b>258.57</b>	<b>268.38</b>	<b>213.98</b>	<b>214.80</b>	..
<b>OECD AMERICAS</b>	..	164.65	162.50	113.25	83.25	88.84	75.20	76.37	..
<b>OECD ASIA OCEANIA</b>	..	33.25	41.77	43.93	58.15	70.46	50.11	50.03	..
<b>OECD EUROPE*</b>	..	162.62	190.52	157.94	117.17	109.09	88.68	88.41	..
<b>IEA</b>	..	354.93	388.47	305.70	246.70	251.92	197.79	198.28	..

\* Excludes Estonia and Slovenia prior to 1990.

Includes residential, commerce/public services, agriculture/forestry and other non-specified. Also includes non-energy use for these sectors. 2011 data for consumption will be released in the 2013 edition.

**Other consumption of natural gas (Mtoe)***Consommation de gaz des autres secteurs (Mtep)**Gasverbrauch in restlichen Sektoren (Mtoe)**Consumo di gas negli altri settori (Mtep)**他の部門のガス消費量(石油換算百万トン)**Consumo de gas natural de otros sectores (Mtep)**Потребление газа другими секторами (Мтпэ)*

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	-	0.34	0.62	1.29	2.62	3.63	4.05	4.14	..
Austria	0.01	0.03	0.14	0.69	0.96	1.73	1.60	1.98	..
Belgium	-	0.89	1.45	3.45	3.52	4.84	5.27	6.11	..
Canada	3.59	10.61	11.86	16.06	20.17	25.26	25.64	24.08	..
Chile	..	0.00	0.04	0.09	0.15	0.30	0.51	0.51	..
Czech Republic	..	0.30	0.35	0.90	1.83	3.28	3.41	3.88	..
Denmark	-	-	-	-	0.59	0.87	0.90	1.07	..
Estonia	..	..	..	..	0.07	0.06	0.09	0.09	..
Finland	-	-	-	0.04	0.04	0.07	0.08	0.09	..
France	0.07	2.77	4.61	9.83	12.83	17.47	21.68	22.29	..
Germany	-	3.00	6.07	13.91	19.76	33.70	40.23	31.71	..
Greece	-	-	-	-	-	0.01	0.40	0.39	..
Hungary	..	0.44	0.58	1.11	2.44	4.99	4.88	5.10	..
Iceland	-	-	-	-	-	-	-	-	..
Ireland	-	-	-	-	0.21	0.73	1.05	1.15	..
Israel	..	-	-	0.00	0.00	-	-	-	..
Italy	0.51	2.27	3.59	8.37	15.54	20.65	25.57	27.45	..
Japan	0.06	0.70	1.48	3.70	11.24	17.80	24.57	26.29	..
Korea	..	-	-	-	0.60	8.04	11.59	12.47	..
Luxembourg	-	-	0.04	0.11	0.14	0.33	0.35	0.36	..
Mexico	..	0.30	0.39	0.47	0.81	0.69	0.90	0.97	..
Netherlands	0.05	7.45	11.15	15.84	13.89	14.34	14.27	16.64	..
New Zealand	0.04	0.04	0.08	0.08	0.21	0.34	0.34	0.31	..
Norway	-	-	-	-	-	0.00	0.04	0.05	..
Poland	0.05	0.29	0.42	1.56	3.26	3.98	5.07	5.61	..
Portugal	-	-	-	-	-	0.13	0.47	0.55	..
Slovak Republic	..	0.49	0.58	0.82	2.58	3.05	1.81	2.21	..
Slovenia	..	..	..	..	0.15	0.08	0.12	0.14	..
Spain	-	0.02	0.05	0.12	0.55	2.66	5.39	5.91	..
Sweden	-	-	-	-	0.08	0.13	0.14	0.16	..
Switzerland	-	0.01	0.10	0.35	0.91	1.45	1.65	1.89	..
Turkey	-	-	-	-	0.04	3.11	6.49	6.41	..
United Kingdom	-	3.81	8.96	23.75	29.82	37.16	32.20	37.00	..
United States	96.79	174.71	172.92	171.13	163.81	189.40	182.74	182.08	..
<b>OECD TOTAL*</b>	..	<b>208.47</b>	<b>225.47</b>	<b>273.67</b>	<b>308.80</b>	<b>400.28</b>	<b>423.47</b>	<b>429.06</b>	..
<b>OECD AMERICAS</b>	..	185.62	185.20	187.75	184.94	215.65	209.78	207.63	..
<b>OECD ASIA OCEANIA</b>	..	1.09	2.18	5.08	14.67	29.81	40.55	43.21	..
<b>OECD EUROPE*</b>	..	21.76	38.08	80.84	109.18	154.82	173.14	178.22	..
<b>IEA</b>	..	208.16	225.04	273.11	307.62	399.16	421.86	427.35	..

\* Excludes Estonia and Slovenia prior to 1990.

Includes residential, commerce/public services, agriculture/forestry and other non-specified.

2011 data for consumption will be released in the 2013 edition.

**Total other consumption of energy (Mtoe)**  
*Consommation totale d'énergie des autres secteurs (Mtep)*  
*Gesamtenergieverbrauch in restlichen Sektoren (Mtoe)*  
*Consumo totale di energia negli altri settori (Mtep)*  
 他の部門のエネルギー総消費量(石油換算百万トン)  
*Consumo total de energía de otros sectores (Mtep)*  
*Общее потребление топлива и энергии другими секторами (Мтпэ)*

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	2.30	7.72	8.84	9.51	12.28	15.71	19.06	19.21	..
Austria	2.99	5.50	6.29	8.02	8.13	9.39	9.16	10.29	..
Belgium	6.54	10.97	12.58	13.09	11.72	13.65	13.80	14.96	..
Canada	24.79	44.51	45.32	49.53	54.39	63.92	64.42	63.81	..
Chile	..	2.23	2.36	2.42	3.73	5.68	6.43	6.95	..
Czech Republic	..	11.45	10.40	12.36	14.07	10.20	9.70	10.54	..
Denmark	3.65	8.24	8.55	8.15	6.74	6.98	7.28	7.94	..
Estonia	..	..	..	..	2.40	1.27	1.49	1.55	..
Finland	5.88	8.67	9.20	9.33	7.81	7.95	9.17	9.90	..
France	19.63	49.04	61.32	56.43	58.58	66.87	74.03	77.36	..
Germany	35.19	90.77	100.16	102.70	97.24	95.62	99.71	94.93	..
Greece	0.54	2.48	2.99	3.15	4.77	6.90	7.87	7.41	..
Hungary	..	5.85	6.83	8.82	9.93	9.30	8.95	9.36	..
Iceland	0.35	0.53	0.61	0.76	0.95	1.06	1.04	1.00	..
Ireland	1.43	2.03	2.08	2.43	3.39	4.10	4.92	5.14	..
Israel	..	0.95	1.09	1.26	2.58	5.44	7.18	7.33	..
Italy	7.73	26.87	30.26	33.34	37.78	42.66	49.19	51.88	..
Japan	9.27	42.46	52.31	58.92	90.96	116.09	114.51	117.71	..
Korea	..	5.51	7.44	13.14	24.35	37.37	41.60	44.43	..
Luxembourg	0.25	0.45	0.55	0.60	0.57	0.87	0.92	0.93	..
Mexico	..	9.96	10.87	15.91	20.16	24.36	25.88	26.03	..
Netherlands	6.41	16.25	20.18	21.38	19.27	21.50	22.59	24.72	..
New Zealand	1.11	1.59	1.73	1.99	2.54	2.97	3.34	3.36	..
Norway	2.04	3.95	4.11	5.09	6.15	6.72	7.68	8.25	..
Poland	15.35	21.09	22.13	32.09	27.11	26.97	29.89	33.45	..
Portugal	0.99	1.35	1.46	1.83	3.39	5.00	5.69	5.40	..
Slovak Republic	..	2.83	3.04	4.93	6.67	5.06	4.25	4.59	..
Slovenia	..	..	..	..	1.25	1.77	1.83	1.91	..
Spain	2.82	6.78	7.12	9.62	14.26	21.27	29.00	29.97	..
Sweden	6.46	13.49	14.11	15.26	11.42	12.50	11.91	13.23	..
Switzerland	3.05	7.46	8.39	8.42	9.63	9.30	9.83	10.54	..
Turkey	7.18	9.60	11.20	13.45	17.14	22.83	32.77	33.20	..
United Kingdom	48.48	49.06	51.05	54.57	55.98	63.49	56.71	62.22	..
United States	260.44	412.24	418.58	396.71	403.16	472.71	496.35	502.15	..
<b>OECD TOTAL*</b>	..	<b>881.89</b>	<b>943.15</b>	<b>975.19</b>	<b>1 050.52</b>	<b>1 217.46</b>	<b>1 288.16</b>	<b>1 321.64</b>	..
<b>OECD AMERICAS</b>	..	468.93	477.13	464.57	481.44	566.67	593.08	598.94	..
<b>OECD ASIA OCEANIA</b>	..	58.24	71.40	84.82	132.71	177.57	185.70	192.04	..
<b>OECD EUROPE*</b>	..	354.73	394.62	425.80	436.37	473.22	509.38	530.66	..
<b>IEA</b>	..	868.22	928.22	954.84	1 019.45	1 177.88	1 244.31	1 276.87	..

\* Excludes Estonia and Slovenia prior to 1990.

Includes residential, commerce/public services, agriculture/forestry and other non-specified. Also includes non-energy use for these sectors.

2011 data for consumption will be released in the 2013 edition.

For the United States, coal used by autoproducers of electricity and heat has been included in final consumption prior to 1992.

**GDP using exchange rates (billion 2005 USD)***PIB sur la base des taux de change (milliards USD 2005)**BIP auf Wechselkursbasis (Milliarden USD 2005)**PIL utilizzando i tassi di cambio (miliardi di USD 2005)*

為替換算による国内総生産（十億米ドル，2005年価格）

*PIB basado en los tipos de cambio (millardos USD 2005)**ВВП по валютному курсу (млрд.долл.США в ценах 2005 г.)*

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	149.93 e	259.76	277.41	333.94	451.43	644.74	853.27	874.48	893.35
Austria	76.43 e	127.28	141.79	172.84	215.29	280.62	319.80	327.21	337.37
Belgium	103.16 e	170.82	190.80	229.34	279.84	348.62	391.06	399.92	407.49
Canada	233.01 e	397.70	448.57	568.25	749.89	999.93	1 166.39	1 203.89	1 233.50
Chile	..	29.42	27.74	35.77	51.78	96.24	131.85	138.70	147.01
Czech Republic	..	70.68 e	75.68 e	89.76 e	101.98	106.45	144.62	148.58	151.04
Denmark	76.28 e	125.86	136.04	152.56	187.36	242.10	252.86	256.13	258.69
Estonia	..	..	..	..	10.13	9.84	13.59	13.90	14.96
Finland	44.78 e	73.27	84.45	103.73	140.23	171.94	197.91	205.30	211.16
France	514.06 e	942.10	1 049.95	1 283.62	1 623.84	1 973.04	2 176.41	2 208.62	2 245.72
Germany	857.70 e	1 365.07	1 491.79	1 760.61	2 216.25	2 685.20	2 840.94	2 945.78	3 034.03
Greece	41.23 e	100.39	119.54	145.93	156.25	196.96	252.10	243.23	226.43
Hungary	..	51.26 e	61.13 e	78.31 e	87.69 e	89.96	107.91	109.27	111.11
Iceland	2.70 e	4.79	5.44	7.84	10.27	13.21	17.08	16.40	16.90
Ireland	24.11 e	37.62	41.96	57.75	82.43	159.79	203.20	202.33	203.75
Israel	..	31.30	37.07	47.07	68.12	120.91	156.55	164.14	171.94
Italy	452.27 e	802.29	891.18	1 144.33	1 451.61	1 700.99	1 734.00	1 765.29	1 772.90
Japan	576.76 e	1 631.80	1 911.20	2 411.74	3 794.08	4 266.88	4 403.91	4 578.55	4 544.32
Korea	..	66.70	81.55	142.47	360.30	678.27	958.51	1 017.57	1 054.55
Luxembourg	6.53 e	9.47	10.94	11.91	19.32	31.57	40.22	41.30	41.94
Mexico	..	251.78	296.12	457.99	547.80	770.74	871.55	920.02	956.24
Netherlands	156.94 e	269.52	292.25	351.21	437.83	597.95	673.70	685.08	693.12
New Zealand	33.51 e	49.78	56.41	57.08	69.76	93.77	118.54	121.30	122.90
Norway	62.07 e	98.80	108.66	147.84	189.55	272.71	314.56	316.69	321.75
Poland	83.43 e	135.96 e	156.73 e	181.39 e	180.14	261.10	368.24	382.76	399.41
Portugal	33.90 e	66.98	80.45	99.81	137.44	184.10	193.42	196.13	192.97
Slovak Republic	..	23.76 e	25.43 e	30.17 e	34.94 e	37.70	57.65	60.06	62.07
Slovenia	..	..	..	..	24.90	29.90	38.50	39.03	38.97
Spain	187.71 e	401.15	467.63	547.32	730.87	963.13	1 182.70	1 181.88	1 190.25
Sweden	111.14 e	176.57	187.78	212.36	263.88	324.51	376.91	400.03	415.77
Switzerland	140.87 e	231.72	246.43	252.01	313.93	349.05	400.78	411.66	419.27
Turkey	64.53 e	115.02	127.59	162.29	269.69	386.59	517.70	564.32	612.22
United Kingdom	706.96 e	954.24	1 058.72	1 132.21	1 485.13	1 979.33	2 289.69	2 337.59	2 352.90
United States	2 890.97 e	4 359.10	4 871.70	5 796.40	7 962.60	11 158.10	12 635.20	13 017.00	13 243.00
<b>OECD TOTAL*</b>	..	<b>13 431.94</b>	<b>15 060.10</b>	<b>18 205.85</b>	<b>24 706.52</b>	<b>32 225.93</b>	<b>36 401.29</b>	<b>37 494.11</b>	<b>38 098.98</b>
<b>OECD AMERICAS</b>	..	5 038.00	5 644.12	6 858.42	9 312.07	13 025.01	14 804.99	15 279.61	15 579.75
<b>OECD ASIA OCEANIA</b>	..	2 039.34	2 363.63	2 992.30	4 743.69	5 804.58	6 490.77	6 756.03	6 787.05
<b>OECD EUROPE*</b>	..	6 354.60	7 052.35	8 355.13	10 650.77	13 396.35	15 105.53	15 458.47	15 732.18
<b>IEA</b>	..	13 114.65	14 693.74	17 657.17	23 993.52	31 185.09	35 172.17	36 201.92	36 752.97

\* Excludes Estonia and Slovenia prior to 1990.

The OECD National Accounts has rebased the GDP and GDP PPP series from 2000 USD to 2005 USD. As a result, those series and all associated ratios now refer to 2005 USD.

**GDP using purchasing power parities (billion 2005 USD)***PIB sur la base des parités de pouvoir d'achat (milliards USD 2005)**BIP nach Kaufkraftparitätenbasis (Milliarden USD 2005)**PIL utilizzando i PPA (miliardi di USD 2005)**購買力平価換算による国内総生産 (十億米ドル, 2005年価格)**PIB basado en la paridad de poder adquisitivo (millardos USD 2005)**ВВП по ППС (млрд.долл.США в ценах 2005 г.)*

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	141.41 e	245.00	261.65	314.97	425.78	608.11	804.79	824.79	842.59
Austria	69.33 e	115.46	128.63	156.79	195.31	254.57	290.12	296.83	306.06
Belgium	92.21 e	152.69	170.55	205.00	250.14	311.62	349.56	357.48	364.24
Canada	232.64 e	397.09	447.87	567.37	748.72	998.38	1 164.58	1 202.02	1 231.59
Chile	..	49.35	46.53	60.01	86.86	161.45	221.18	232.68	246.61
Czech Republic	..	118.28 e	126.64 e	150.20 e	170.66	178.13	242.01	248.64	252.75
Denmark	53.25 e	87.87	94.97	106.51	130.80	169.01	176.52	178.81	180.59
Estonia	..	..	..	..	16.23	15.77	21.77	22.27	23.97
Finland	36.85 e	60.29	69.49	85.35	115.39	141.48	162.85	168.93	173.75
France	447.69 e	820.46	914.39	1 117.89	1 414.18	1 718.30	1 895.41	1 923.46	1 955.77
Germany	795.61 e	1 266.24	1 383.79	1 633.15	2 055.81	2 490.81	2 635.28	2 732.53	2 814.39
Greece	46.43 e	113.06	134.62	164.34	175.97	221.81	283.90	273.92	255.00
Hungary	..	79.55 e	94.88 e	121.53 e	136.10 e	139.62	167.48	169.58	172.45
Iceland	1.72 e	3.05	3.46	4.98	6.53	8.40	10.86	10.42	10.74
Ireland	19.19 e	29.95	33.40	45.97	65.61	127.19	161.74	161.05	162.18
Israel	..	37.79	44.75	56.84	82.25	145.99	189.01	198.17	207.59
Italy	419.64 e	744.41	826.89	1 061.77	1 346.88	1 578.27	1 608.90	1 637.93	1 644.99
Japan	490.69 e	1 388.28	1 625.98	2 051.82	3 227.86	3 630.11	3 746.68	3 895.26	3 866.14
Korea	..	86.59	105.86	184.94	467.71	880.48	1 244.26	1 320.93	1 368.94
Luxembourg	5.51 e	8.00	9.23	10.05	16.30	26.64	33.94	34.85	35.39
Mexico	..	385.00	452.80	700.33	837.66	1 178.55	1 332.71	1 406.83	1 462.22
Netherlands	140.82 e	241.84	262.24	315.14	392.86	536.54	604.51	614.73	621.94
New Zealand	31.01 e	46.06	52.19	52.81	64.55	86.77	109.68	112.23	113.71
Norway	44.95 e	71.55	78.69	107.06	137.26	197.49	227.79	229.33	233.00
Poland	144.41 e	235.36 e	271.31 e	313.98 e	311.83	451.96	637.43	662.57	691.39
Portugal	39.83 e	78.70	94.53	117.28	161.50	216.33	227.28	230.46	226.75
Slovak Republic	..	43.22 e	46.27 e	54.89 e	63.56 e	68.58	104.87	109.26	112.92
Slovenia	..	..	..	..	32.73	39.31	50.62	51.32	51.23
Spain	197.33 e	421.71	491.60	575.38	768.33	1 012.50	1 243.33	1 242.46	1 251.26
Sweden	88.56 e	140.70	149.63	169.22	210.27	258.58	300.34	318.76	331.31
Switzerland	100.65 e	165.56	176.07	180.06	224.30	249.39	286.35	294.12	299.57
Turkey	104.37 e	186.04	206.38	262.52	436.22	625.31	837.38	912.80	990.28
United Kingdom	611.19 e	824.98	915.30	978.84	1 283.95	1 711.21	1 979.53	2 020.94	2 034.18
United States	2 890.97 e	4 359.10	4 871.70	5 796.40	7 962.60	11 158.10	12 635.20	13 017.00	13 243.00
<b>OECD TOTAL*</b>	..	<b>13 003.20</b>	<b>14 592.27</b>	<b>17 723.39</b>	<b>24 022.72</b>	<b>31 596.75</b>	<b>35 987.86</b>	<b>37 113.37</b>	<b>37 778.46</b>
<b>OECD AMERICAS</b>	..	5 190.54	5 818.90	7 124.11	9 635.84	13 496.48	15 353.67	15 858.53	16 183.41
<b>OECD ASIA OCEANIA</b>	..	1 803.71	2 090.43	2 661.37	4 268.14	5 351.45	6 094.42	6 351.39	6 398.97
<b>OECD EUROPE*</b>	..	6 008.95	6 682.94	7 937.90	10 118.73	12 748.82	14 539.77	14 903.45	15 196.08
<b>IEA</b>	..	12 528.01	14 044.73	16 901.23	22 960.46	30 047.28	34 161.70	35 191.68	35 776.10

\* Excludes Estonia and Slovenia prior to 1990.

The OECD National Accounts has rebased the GDP and GDP PPP series from 2000 USD to 2005 USD. As a result, those series and all associated ratios now refer to 2005 USD.



**Population (millions)***Population (millions)**Bevölkerung (Millionen)**Popolazione (milioni)**人口 (100 万人)**Población (millones)**Численность населения (млн. человек)*

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	10.39 e	13.20	13.61	14.81	17.17	19.27	22.16	22.55	22.86
Austria	7.05 e	7.50	7.59	7.55	7.68	8.01	8.36	8.39	8.38
Belgium	9.13 e	9.66	9.73	9.86	9.97	10.25	10.79	10.88	10.95
Canada	18.19 e	21.96	22.49	24.52	27.69	30.69	33.72	34.11	34.44
Chile	..	9.77	10.11	11.19	13.18	15.40	16.93	17.09	17.26
Czech Republic	..	9.83	9.92	10.33	10.36	10.27	10.49	10.52	10.53
Denmark	4.56 e	4.96	5.02	5.12	5.14	5.34	5.52	5.55	5.55
Estonia	..	..	..	..	1.59	1.37	1.34	1.34	1.34
Finland	4.43 e	4.61	4.67	4.78	4.99	5.18	5.34	5.36	5.36
France	46.62 e	52.41	53.30	55.11	58.17	60.73	64.50	64.85	65.00
Germany	71.22 e	78.35	78.96	78.30	79.36	82.19	81.88	81.76	81.62
Greece	8.47 e	8.98	9.08	9.81	10.34	10.92	11.28	11.31	11.33
Hungary	..	10.37	10.43	10.71	10.37	10.21	10.02	10.00	9.97
Iceland	0.18 e	0.21	0.21	0.23	0.26	0.28	0.32	0.32	0.32
Ireland	2.83 e	2.98	3.07	3.40	3.51	3.80	4.47	4.48	4.56
Israel	..	3.10	3.30	3.90	4.68	6.30	7.48	7.62	7.76
Italy	49.94 e	54.07	54.75	56.43	56.72	56.94	60.19	60.48	60.24
Japan	93.66 e	104.98	108.90	117.06	123.61	126.93	127.51	127.38	126.91
Korea	..	32.88	34.10	38.12	42.87	47.01	48.75	48.88	48.92
Luxembourg	0.31 e	0.34	0.35	0.36	0.38	0.44	0.50	0.51	0.52
Mexico	..	49.88	53.27	65.70	81.25	98.30	107.44	108.29	109.15
Netherlands	11.48 e	13.19	13.44	14.15	14.95	15.92	16.53	16.61	16.74
New Zealand	2.38 e	2.86	2.97	3.14	3.37	3.87	4.33	4.38	4.42
Norway	3.58 e	3.90	3.96	4.09	4.24	4.49	4.83	4.89	4.95
Poland	29.56 e	32.80	33.37	35.58	38.03	38.26	38.15	38.19	38.15
Portugal	9.23 e	8.73	8.72	9.86	10.00	10.23	10.63	10.64	10.66
Slovak Republic	..	4.56	4.64	4.98	5.30	5.40	5.42	5.43	5.45
Slovenia	..	..	..	..	2.00	1.99	2.04	2.05	2.06
Spain	30.40 e	34.33	34.96	37.67	39.01	40.26	45.93	46.07	46.04
Sweden	7.48 e	8.10	8.14	8.31	8.56	8.87	9.30	9.38	9.41
Switzerland	5.40 e	6.34	6.44	6.39	6.80	7.21	7.80	7.79	7.77
Turkey	27.53 e	36.22	38.07	44.44	55.12	64.26	71.90	72.85	73.87
United Kingdom	52.37 e	55.93	56.22	56.33	57.24	58.89	61.79	62.18	62.40
United States	180.70 e	207.69	211.94	227.73	250.18	282.42	307.48	310.11	313.16
<b>OECD TOTAL*</b>	..	<b>894.70</b>	<b>915.74</b>	<b>979.95</b>	<b>1 064.06</b>	<b>1 151.87</b>	<b>1 225.13</b>	<b>1 232.22</b>	<b>1 238.02</b>
<b>OECD AMERICAS</b>	..	289.31	297.82	329.13	372.30	426.80	465.58	469.60	474.00
<b>OECD ASIA OCEANIA</b>	..	157.02	162.89	177.03	191.70	203.37	210.24	210.82	210.88
<b>OECD EUROPE*</b>	..	448.37	455.03	473.78	500.06	521.70	549.32	551.80	553.14
<b>IEA</b>	..	831.75	848.84	898.93	961.11	1 028.23	1 089.57	1 095.51	1 100.13

\* Excludes Estonia and Slovenia prior to 1990.

**Energy production/TPES (self-sufficiency)**  
*Production d'énergie/ATEP (indépendance énergétique)*  
*Energieerzeugung/TPES (Eigenversorgung)*  
*Produzione di energia/ATEP (indice di autosufficienza energetica)*  
 エネルギー生産量／一次エネルギー総供給量(自給率)  
*Producción energética/TPES (autosuficiencia energética)*  
*Производство топлива и энергии/ОППТЭ (самостоятельность)*

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	0.6767	1.0434	1.1916	1.2271	1.8269	2.1603	2.3582	2.4903	2.5738
Austria	0.6752	0.3915	0.3687	0.3296	0.3271	0.3425	0.3605	0.3475	0.3294
Belgium	0.6070	0.1726	0.1415	0.1730	0.2714	0.2347	0.2682	0.2636	0.2820
Canada	0.7498	1.1025	1.2440	1.0769	1.3125	1.4823	1.5560	1.5797	1.5967
Chile	..	0.6140	0.5977	0.6120	0.5659	0.3411	0.3458	0.2979	0.2786
Czech Republic	..	0.8802	0.8527	0.8777	0.8255	0.7479	0.7423	0.7169	0.7392
Denmark	0.1130	0.0178	0.0224	0.0498	0.5806	1.4884	1.3052	1.2116	1.2253
Estonia	..	..	..	..	0.5463	0.6747	0.8754	0.8855	0.9024
Finland	0.5438	0.2743	0.2322	0.2810	0.4257	0.4620	0.4959	0.4756	0.4951
France	0.5718	0.3002	0.2452	0.2743	0.4997	0.5193	0.5084	0.5169	0.5417
Germany	0.8810	0.5744	0.5129	0.5197	0.5302	0.4021	0.4010	0.4012	0.4085
Greece	0.1338	0.2399	0.1976	0.2467	0.4290	0.3687	0.3424	0.3420	0.3568
Hungary	..	0.6225	0.5969	0.5110	0.5107	0.4647	0.4427	0.4304	0.4322
Iceland	0.2787	0.4687	0.4839	0.6040	0.6704	0.7438	0.8176	0.8249	0.8440
Ireland	0.3705	0.2119	0.1622	0.2299	0.3471	0.1595	0.1107	0.1379	0.1353
Israel	..	1.0347	0.7920	0.0196	0.0370	0.0352	0.1519	0.1683	0.1925
Italy	0.3468	0.1853	0.1711	0.1521	0.1727	0.1642	0.1637	0.1750	0.1881
Japan	0.5812	0.1338	0.0921	0.1257	0.1712	0.2039	0.1990	0.1948	0.1038
Korea	..	0.3758	0.3138	0.2250	0.2430	0.1831	0.1934	0.1797	0.1764
Luxembourg	0.0005	0.0012	0.0009	0.0083	0.0084	0.0192	0.0274	0.0307	0.0274
Mexico	..	1.0088	0.8995	1.5458	1.5891	1.5318	1.2599	1.2709	1.2179
Netherlands	0.4864	0.7341	0.9155	1.1158	0.9217	0.7862	0.8066	0.8362	0.8319
New Zealand	0.6055	0.4943	0.5048	0.6089	0.8953	0.8374	0.8758	0.9263	0.8869
Norway	0.4346	0.4534	0.5650	3.0011	5.6693	8.7080	7.5842	6.3329	6.5625
Poland	1.1962	1.1524	1.1564	1.0002	1.0074	0.8930	0.7184	0.6642	0.6746
Portugal	0.4243	0.2206	0.2032	0.1483	0.2027	0.1559	0.2046	0.2371	0.2280
Slovak Republic	..	0.1887	0.1659	0.1746	0.2478	0.3565	0.3550	0.3482	0.3540
Slovenia	..	..	..	..	0.5374	0.4830	0.5161	0.5138	0.5214
Spain	0.6090	0.2453	0.2200	0.2330	0.3839	0.2597	0.2352	0.2680	0.2472
Sweden	0.2714	0.2049	0.2382	0.3984	0.6289	0.6418	0.6683	0.6533	0.6709
Switzerland	0.2833	0.1772	0.2264	0.3508	0.4215	0.4808	0.4741	0.4822	0.4860
Turkey	0.8766	0.7066	0.6374	0.5450	0.4893	0.3387	0.3101	0.3065	0.2913
United Kingdom	0.7225	0.5262	0.4976	0.9971	1.0101	1.2222	0.8065	0.7346	0.6867
United States	0.9466	0.9048	0.8418	0.8607	0.8629	0.7334	0.7787	0.7781	0.8136
<b>OECD TOTAL*</b>	..	<b>0.6983</b>	<b>0.6570</b>	<b>0.7161</b>	<b>0.7610</b>	<b>0.7237</b>	<b>0.7255</b>	<b>0.7176</b>	<b>0.7287</b>
<b>OECD AMERICAS</b>	..	0.9216	0.8751	0.9104	0.9419	0.8426	0.8803	0.8807	0.9102
<b>OECD ASIA OCEANIA</b>	..	0.3021	0.2759	0.3041	0.4157	0.4571	0.5240	0.5183	0.4807
<b>OECD EUROPE*</b>	..	0.4897	0.4626	0.5730	0.6455	0.6701	0.5929	0.5772	0.5753
<b>IEA</b>	..	0.6940	0.6534	0.6978	0.7411	0.7054	0.7115	0.7034	0.7160

\* Excludes Estonia and Slovenia prior to 1990.

**TPES/GDP (toe per thousand 2005 USD)***ATEP/PIB (tep par millier de USD 2005)**TPES/BIP (in toe pro tausend 2005er USD)**DTEP/PIL (tep per migliaia di USD 2005)**一次エネルギー供給/GDP (石油換算トン/千米ドル、2005年価格)**TPES/PIB (tep por mile de USD 2005)**ОППТЭ / ВВП (тыс на тыс.долл.США в ценах и по валютному курсу 2005 г.)*

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	0.2100 e	0.1987	0.2057	0.2084	0.1910	0.1677	0.1476	0.1426	0.1341
Austria	0.1426 e	0.1478	0.1515	0.1340	0.1154	0.1018	0.0993	0.1034	0.0967
Belgium	0.2235 e	0.2322	0.2410	0.2039	0.1725	0.1678	0.1460	0.1522	0.1373
Canada	0.3268 e	0.3554	0.3552	0.3389	0.2781	0.2515	0.2150	0.2092	0.2076
Chile	..	0.2959	0.3065	0.2650	0.2706	0.2616	0.2236	0.2229	0.2205
Czech Republic	..	0.6421 e	0.5968 e	0.5231 e	0.4861	0.3851	0.2909	0.2969	0.2840
Denmark	0.1155 e	0.1470	0.1396	0.1254	0.0927	0.0770	0.0726	0.0752	0.0677
Estonia	..	..	..	..	0.9782	0.4791	0.3495	0.4006	0.3709
Finland	0.2173 e	0.2480	0.2491	0.2371	0.2024	0.1874	0.1680	0.1773	0.1622
France	0.1541 e	0.1683	0.1716	0.1494	0.1379	0.1277	0.1165	0.1188	0.1120
Germany	0.1658 e	0.2235	0.2244	0.2029	0.1584	0.1253	0.1116	0.1111	0.1012
Greece	0.0584 e	0.0866	0.0988	0.1027	0.1372	0.1375	0.1168	0.1135	0.1172
Hungary	..	0.3713 e	0.3480 e	0.3621 e	0.3279 e	0.2779	0.2304	0.2349	0.2256
Iceland	0.2005 e	0.1882	0.2058	0.1909	0.2033	0.2346	0.3152	0.3274	0.3395
Ireland	0.1547 e	0.1786	0.1646	0.1426	0.1212	0.0859	0.0709	0.0712	0.0663
Israel	..	0.1834	0.2095	0.1662	0.1685	0.1509	0.1375	0.1396	0.1415
Italy	0.0882 e	0.1314	0.1337	0.1143	0.1010	0.1008	0.0951	0.0964	0.0931
Japan	0.1402 e	0.1639	0.1676	0.1429	0.1158	0.1216	0.1072	0.1085	0.1008
Korea	..	0.2544	0.2642	0.2893	0.2584	0.2774	0.2391	0.2457	0.2443
Luxembourg	0.5060 e	0.4288	0.4052	0.2988	0.1766	0.1053	0.0982	0.1024	0.0989
Mexico	..	0.1707	0.1775	0.2077	0.2236	0.1883	0.2004	0.1936	0.1955
Netherlands	0.1336 e	0.1887	0.2121	0.1833	0.1500	0.1225	0.1160	0.1218	0.1119
New Zealand	0.1226 e	0.1389	0.1422	0.1574	0.1845	0.1819	0.1473	0.1500	0.1465
Norway	0.1100 e	0.1346	0.1312	0.1239	0.1108	0.0957	0.0895	0.1025	0.0929
Poland	0.6494 e	0.6334 e	0.5926 e	0.6981 e	0.5724	0.3413	0.2552	0.2651	0.2569
Portugal	0.0880 e	0.0937	0.0857	0.1001	0.1218	0.1340	0.1249	0.1200	0.1199
Slovak Republic	..	0.6002 e	0.6102 e	0.6579 e	0.6104 e	0.4707	0.2901	0.2966	0.2729
Slovenia	..	..	..	..	0.2294	0.2145	0.1842	0.1847	0.1858
Spain	0.0861 e	0.1062	0.1103	0.1237	0.1233	0.1266	0.1078	0.1081	0.1058
Sweden	0.1817 e	0.2041	0.2068	0.1906	0.1789	0.1465	0.1205	0.1282	0.1188
Switzerland	0.0529 e	0.0707	0.0767	0.0795	0.0775	0.0717	0.0673	0.0637	0.0609
Turkey	0.1657 e	0.1699	0.1909	0.1938	0.1956	0.1975	0.1886	0.1863	0.1865
United Kingdom	0.2248 e	0.2187	0.2060	0.1753	0.1387	0.1126	0.0861	0.0866	0.0803
United States	0.3526 e	0.3642	0.3551	0.3113	0.2405	0.2037	0.1713	0.1703	0.1663
<b>OECD TOTAL*</b>	..	<b>0.2511</b>	<b>0.2484</b>	<b>0.2235</b>	<b>0.1830</b>	<b>0.1642</b>	<b>0.1437</b>	<b>0.1442</b>	<b>0.1392</b>
<b>OECD AMERICAS</b>	..	0.3534	0.3456	0.3065	0.2427	0.2069	0.1770	0.1752	0.1719
<b>OECD ASIA OCEANIA</b>	..	0.1710	0.1755	0.1578	0.1355	0.1465	0.1335	0.1351	0.1293
<b>OECD EUROPE*</b>	..	0.1956	0.1950	0.1788	0.1521	0.1304	0.1154	0.1175	0.1112
<b>IEA</b>	..	0.2527	0.2498	0.2240	0.1816	0.1632	0.1418	0.1424	0.1372

\* Excludes Estonia and Slovenia prior to 1990.

The OECD National Accounts has rebased the GDP and GDP PPP series from 2000 USD to 2005 USD. As a result, those series and all associated ratios now refer to 2005 USD.

**TPES/GDP PPP (toe per thousand 2005 USD)***ATEP/PIB PPA (tep par millier de USD 2005)**TPES/BIP Kaufkraftparität (in toe pro tausend 2005er USD)**DTEP/PIL PPA (tep per migliaia di USD 2005)**一次エネルギー供給 / GDP (石油換算トン/千米ドル、2005年価格、購買力平価)**TPES/PIB PPP (tep por mile de USD 2005)**ОППТЭ / ВВП (млн на тыс.долл.США в ценах и по ППС 2005 г.)*

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	0.2226 e	0.2107	0.2181	0.2210	0.2025	0.1778	0.1565	0.1512	0.1422
Austria	0.1572 e	0.1630	0.1670	0.1477	0.1272	0.1122	0.1095	0.1140	0.1066
Belgium	0.2501 e	0.2597	0.2697	0.2281	0.1930	0.1878	0.1634	0.1702	0.1536
Canada	0.3273 e	0.3560	0.3558	0.3395	0.2785	0.2518	0.2153	0.2095	0.2079
Chile	..	0.1764	0.1827	0.1579	0.1613	0.1559	0.1333	0.1329	0.1314
Czech Republic	..	0.3837 e	0.3566 e	0.3126 e	0.2905	0.2301	0.1738	0.1774	0.1697
Denmark	0.1654 e	0.2106	0.2000	0.1797	0.1328	0.1103	0.1040	0.1077	0.0970
Estonia	..	..	..	..	0.6105	0.2990	0.2181	0.2501	0.2315
Finland	0.2641 e	0.3014	0.3027	0.2882	0.2460	0.2278	0.2041	0.2155	0.1972
France	0.1770 e	0.1933	0.1970	0.1715	0.1583	0.1466	0.1337	0.1364	0.1286
Germany	0.1787 e	0.2409	0.2419	0.2187	0.1708	0.1351	0.1203	0.1198	0.1091
Greece	0.0519 e	0.0769	0.0877	0.0912	0.1218	0.1221	0.1037	0.1008	0.1041
Hungary	..	0.2393 e	0.2242 e	0.2333 e	0.2113 e	0.1790	0.1484	0.1514	0.1453
Iceland	0.3154 e	0.2961	0.3237	0.3003	0.3198	0.3691	0.4958	0.5151	0.5340
Ireland	0.1944 e	0.2243	0.2068	0.1792	0.1522	0.1080	0.0890	0.0894	0.0833
Israel	..	0.1519	0.1735	0.1376	0.1395	0.1250	0.1139	0.1156	0.1172
Italy	0.0951 e	0.1416	0.1441	0.1232	0.1088	0.1087	0.1025	0.1039	0.1004
Japan	0.1647 e	0.1927	0.1970	0.1679	0.1361	0.1430	0.1260	0.1276	0.1185
Korea	..	0.1960	0.2035	0.2228	0.1990	0.2137	0.1842	0.1893	0.1882
Luxembourg	0.5996 e	0.5081	0.4802	0.3540	0.2093	0.1248	0.1164	0.1213	0.1173
Mexico	..	0.1116	0.1161	0.1358	0.1462	0.1231	0.1310	0.1266	0.1279
Netherlands	0.1489 e	0.2103	0.2364	0.2042	0.1672	0.1365	0.1293	0.1357	0.1247
New Zealand	0.1325 e	0.1501	0.1537	0.1701	0.1994	0.1966	0.1592	0.1621	0.1583
Norway	0.1519 e	0.1859	0.1812	0.1711	0.1530	0.1321	0.1236	0.1415	0.1282
Poland	0.3751 e	0.3659 e	0.3423 e	0.4033 e	0.3306	0.1972	0.1474	0.1531	0.1484
Portugal	0.0749 e	0.0797	0.0730	0.0851	0.1036	0.1141	0.1063	0.1021	0.1021
Slovak Republic	..	0.3299 e	0.3354 e	0.3616 e	0.3355 e	0.2587	0.1595	0.1630	0.1500
Slovenia	..	..	..	..	0.1744	0.1631	0.1401	0.1405	0.1413
Spain	0.0819 e	0.1010	0.1049	0.1177	0.1172	0.1205	0.1025	0.1028	0.1006
Sweden	0.2281 e	0.2562	0.2596	0.2393	0.2245	0.1839	0.1512	0.1609	0.1491
Switzerland	0.0740 e	0.0990	0.1074	0.1113	0.1084	0.1003	0.0942	0.0891	0.0852
Turkey	0.1024 e	0.1051	0.1180	0.1198	0.1209	0.1221	0.1166	0.1152	0.1153
United Kingdom	0.2600 e	0.2529	0.2383	0.2027	0.1604	0.1303	0.0996	0.1002	0.0929
United States	0.3526 e	0.3642	0.3551	0.3113	0.2405	0.2037	0.1713	0.1703	0.1663
<b>OECD TOTAL*</b>	..	<b>0.2593</b>	<b>0.2563</b>	<b>0.2295</b>	<b>0.1883</b>	<b>0.1675</b>	<b>0.1453</b>	<b>0.1457</b>	<b>0.1404</b>
<b>OECD AMERICAS</b>	..	0.3430	0.3352	0.2950	0.2345	0.1997	0.1706	0.1688	0.1655
<b>OECD ASIA OCEANIA</b>	..	0.1934	0.1984	0.1774	0.1506	0.1589	0.1421	0.1437	0.1372
<b>OECD EUROPE*</b>	..	0.2069	0.2058	0.1882	0.1600	0.1370	0.1199	0.1218	0.1151
<b>IEA</b>	..	0.2645	0.2614	0.2340	0.1898	0.1694	0.1460	0.1465	0.1410

\* Excludes Estonia and Slovenia prior to 1990.

The OECD National Accounts has rebased the GDP and GDP PPP series from 2000 USD to 2005 USD. As a result, those series and all associated ratios now refer to 2005 USD.

**TPES/population (toe per capita)***ATEP/Population (tep par habitant)**TPES/Bevölkerung (toe pro Kopf)**DTEP/Popolazione (tep per abitante)*

一人当たり一次エネルギー供給 (石油換算トン/人)

*TPES/ población (tep per capita)**ОППЭ / Численность населения (тнэ на человека)*

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	3.0295 e	3.9107	4.1910	4.7007	5.0219	5.6103	5.6841	5.5302	5.2400
Austria	1.5464 e	2.5083	2.8310	3.0672	3.2355	3.5644	3.7979	4.0344	3.8944
Belgium	2.5270 e	4.1055	4.7289	4.7437	4.8439	5.7104	5.2921	5.5921	5.1108
Canada	4.1853 e	6.4362	7.0846	7.8565	7.5311	8.1940	7.4361	7.3833	7.4365
Chile	..	0.8906	0.8405	0.8467	1.0630	1.6349	1.7417	1.8088	1.8776
Czech Republic	..	4.6164	4.5514	4.5462	4.7834	3.9904	4.0103	4.1939	4.0761
Denmark	1.9308 e	3.7286	3.7817	3.7344	3.3781	3.4908	3.3236	3.4715	3.1535
Estonia	..	..	..	..	6.2411	3.4363	3.5443	4.1550	4.1402
Finland	2.1968 e	3.9393	4.5076	5.1461	5.6921	6.2266	6.2269	6.7877	6.3932
France	1.6993 e	3.0258	3.3798	3.4798	3.8488	4.1477	3.9303	4.0447	3.8683
Germany	1.9963 e	3.8937	4.2390	4.5615	4.4245	4.0953	3.8730	4.0042	3.7631
Greece	0.2843 e	0.9673	1.3003	1.5273	2.0742	2.4811	2.6089	2.4421	2.3434
Hungary	..	1.8364	2.0406	2.6481	2.7745	2.4482	2.4802	2.5667	2.5148
Iceland	3.0753 e	4.3804	5.2768	6.5650	8.1901	11.0312	16.8784	16.8847	18.0399
Ireland	1.3163 e	2.2559	2.2479	2.4215	2.8487	3.6095	3.2234	3.2165	2.9644
Israel	..	1.8544	2.3512	2.0069	2.4541	2.8962	2.8764	3.0060	3.1341
Italy	0.7989 e	1.9491	2.1756	2.3184	2.5839	3.0122	2.7388	2.8147	2.7413
Japan	0.8631 e	2.5483	2.9418	2.9431	3.5541	4.0887	3.7025	3.9004	3.6100
Korea	..	0.5161	0.6318	1.0810	2.1714	4.0028	4.7014	5.1153	5.2655
Luxembourg	10.5224 e	11.8777	12.6287	9.7787	8.9284	7.6232	7.9515	8.3583	8.0583
Mexico	..	0.8618	0.9868	1.4478	1.5076	1.4764	1.6254	1.6447	1.7130
Netherlands	1.8268 e	3.8555	4.6137	4.5494	4.3945	4.5988	4.7304	5.0220	4.6340
New Zealand	1.7278 e	2.4134	2.6993	2.8578	3.8151	4.4103	4.0298	4.1510	4.0706
Norway	1.9052 e	3.4071	3.6009	4.4827	4.9523	5.8097	5.8333	6.6377	6.0329
Poland	1.8327 e	2.6257	2.7832	3.5589	2.7111	2.3295	2.4634	2.6568	2.6899
Portugal	0.3235 e	0.7190	0.7911	1.0125	1.6748	2.4128	2.2716	2.2131	2.1722
Slovak Republic	..	3.1275	3.3437	3.9825	4.0256	3.2851	3.0865	3.2805	3.1109
Slovenia	..	..	..	..	2.8592	3.2243	3.4723	3.5194	3.5220
Spain	0.5316 e	1.2409	1.4753	1.7971	2.3090	3.0292	2.7751	2.7725	2.7348
Sweden	2.7005 e	4.4506	4.7734	4.8719	5.5144	5.3602	4.8829	5.4683	5.2498
Switzerland	1.3795 e	2.5838	2.9358	3.1380	3.5785	3.4695	3.4577	3.3660	3.2836
Turkey	0.3882 e	0.5397	0.6397	0.7076	0.9571	1.1881	1.3583	1.4432	1.5458
United Kingdom	3.0344 e	3.7312	3.8787	3.5227	3.5977	3.7859	3.1893	3.2567	3.0287
United States	5.6407 e	7.6434	8.1624	7.9248	7.6544	8.0495	7.0409	7.1470	7.0339
<b>OECD TOTAL*</b>	..	<b>3.7692</b>	<b>4.0847</b>	<b>4.1515</b>	<b>4.2502</b>	<b>4.5948</b>	<b>4.2687</b>	<b>4.3871</b>	<b>4.2850</b>
<b>OECD AMERICAS</b>	..	6.1544	6.5488	6.3861	6.0705	6.3146	5.6271	5.7010	5.6501
<b>OECD ASIA OCEANIA</b>	..	2.2211	2.5462	2.6670	3.3541	4.1822	4.1203	4.3293	4.1629
<b>OECD EUROPE*</b>	..	2.7723	3.0228	3.1538	3.2386	3.3486	3.1742	3.2910	3.1618
<b>IEA</b>	..	3.9844	4.3243	4.3989	4.5331	4.9500	4.5769	4.7063	4.5838

\* Excludes Estonia and Slovenia prior to 1990.

## Index of industry consumption/industrial production (2005=100)

*Indice de Consommation industrielle/Production industrielle (2005=100)*

*Index des Industrieverbrauchs/Industrieerzeugung (2005=100)*

*Indice di Consumo industriale/Produzione industriale (2005=100)*

*産業部門エネルギー消費原単位 (2005=100)*

*Indice del Consumo industrial / Producción industrial (2005=100)*

*Потребление промышленным сектором/Объем промышленной продукции (Индекс 2005=100)*

	1960	1971	1973	1980	1990	2000	2009	2010	2011e
Australia	..	..	..	135.20	113.93	109.68	93.48	90.75	..
Austria	242.07	189.41	186.36	155.75	124.72	99.67	99.90	94.39	..
Belgium	141.00	166.69	171.80	130.78	106.77	141.90	87.56	86.83	..
Canada	..	131.54	130.96	139.64	113.69	94.15	104.97	104.13	..
Chile	..	..	..	..	..	116.40	94.21	99.07	..
Czech Republic	..	..	..	..	168.97	128.60	83.81	81.11	..
Denmark	..	..	..	209.88	132.00	106.33	95.67	98.03	..
Estonia	..	..	..	..	..	133.37	76.95	65.19	..
Finland	147.81	148.10	175.84	131.07	143.67	111.67	94.35	100.15	..
France	169.32	196.58	170.74	150.88	108.77	105.97	96.10	95.00	..
Germany	167.75	190.96	194.36	173.60	125.88	98.56	90.42	91.01	..
Greece	..	125.88	126.19	118.73	112.91	105.24	97.08	108.18	..
Hungary	..	..	..	348.04	281.13	119.76	83.22	79.86	..
Iceland	..	..	..	..	..	..	..	..	..
Ireland	..	..	..	631.95	340.13	139.80	74.81	68.37	..
Israel	..	..	..	..	145.83	120.41	93.39	101.10	..
Italy	128.50	161.80	155.99	118.64	105.60	95.07	96.80	96.05	..
Japan	208.39	193.28	181.87	130.08	101.50	102.79	108.33	98.20	..
Korea	..	..	..	184.76	119.28	123.35	92.76	86.15	..
Luxembourg	461.85	531.38	521.70	482.17	271.39	118.32	110.79	115.15	..
Mexico	..	..	..	136.00	148.66	106.42	95.55	94.94	..
Netherlands	74.71	99.19	118.22	127.78	99.59	94.11	98.54	101.00	..
New Zealand	..	..	..	87.06	131.58	144.36	109.56	115.42	..
Norway	208.51	230.12	230.04	184.97	117.71	95.79	91.37	104.45	..
Poland	..	..	..	..	286.86	139.56	75.80	71.33	..
Portugal	69.55	86.87	77.60	80.25	88.99	97.95	92.47	96.02	..
Slovak Republic	..	..	..	..	181.92	131.67	74.32	61.39	..
Slovenia	..	..	..	..	..	99.88	76.95	74.92	..
Spain	..	105.81	96.44	93.08	81.77	89.84	89.29	92.46	..
Sweden	262.50	214.88	213.42	187.61	151.69	117.37	101.39	107.77	..
Switzerland	167.01	163.37	162.22	152.72	107.81	97.96	85.34	83.71	..
Turkey	..	..	..	..	94.34	112.68	95.56	98.95	..
United Kingdom	185.79	207.10	199.81	145.58	114.15	104.42	90.44	91.14	..
United States	291.69	248.14	228.52	207.45	137.23	111.72	97.25	98.82	..
<b>OECD TOTAL*</b>	..	..	..	<b>163.74</b>	<b>121.69</b>	<b>107.50</b>	<b>96.17</b>	<b>95.16</b>	..
<b>OECD AMERICAS</b>	..	..	..	..	..	..	..	..	..
<b>OECD ASIA OCEANIA</b>	..	..	..	..	..	..	..	..	..
<b>OECD EUROPE*</b>	..	185.00	179.40	156.77	121.99	104.53	91.64	92.39	..
<b>IEA</b>	..	..	..	..	..	..	..	..	..

\* Excludes Estonia and Slovenia prior to 1990.

2011 data for consumption will be released in the 2013 edition.

# RENEWABLE ENERGY AND WASTE

## OECD Total

### Contribution from renewable energies and energy from waste

	1990	1995	2000	2007	2008	2009	2010	2011e
<b>TPES (ktoe)</b>								
<b>TOTAL PRIMARY ENERGY SUPPLY</b>	<b>4 522 496</b>	<b>4 873 087</b>	<b>5 292 543</b>	<b>5 548 771</b>	<b>5 473 242</b>	<b>5 229 704</b>	<b>5 405 869</b>	<b>5 304 954</b>
% contribution of renewables and waste	6.1	6.4	6.3	6.9	7.4	7.9	8.2	8.6
<b>Renewables</b>	<b>268 077</b>	<b>298 067</b>	<b>317 738</b>	<b>365 574</b>	<b>383 464</b>	<b>392 571</b>	<b>420 884</b>	<b>432 683</b>
% contribution	5.9	6.1	6.0	6.6	7.0	7.5	7.8	8.2
Hydro	101 617	113 956	115 520	110 434	114 600	114 012	116 210	119 830
Geothermal (transformation*)	24 268	25 446	27 615	26 496	26 541	26 989	27 878	29 029
Geothermal (direct use**)	2 023	2 424	2 843	3 754	3 068	3 564	3 764	3 920
Solar photovoltaic (transformation*)	2	11	62	604	979	1 666	2 632	4 665
Solar thermal (transformation*)	57	71	134	152	201	226	482	461
Solar thermal (direct use**)	1 806	2 000	3 677	4 200	4 725	4 911	5 197	4 960
Tide/wave/ocean	51	52	52	47	47	45	48	52
Wind	331	632	2 456	12 887	16 184	19 454	23 144	28 769
Municipal waste (renewable)	4 798	6 645	9 081	13 020	13 431	13 272	13 705	14 126
Solid biofuels	131 544	141 488	146 641	158 013	159 045	157 182	167 631	163 815
Biogasoline	-	2 668	3 125	15 095	21 197	24 357	28 524	27 035
Biodiesels	-	154	434	5 622	8 018	10 420	11 278	13 154
Other liquid biofuels	6	43	242	2 957	2 506	2 235	3 060	2 631
Biogases	1 573	2 476	5 856	12 293	12 921	14 239	17 330	20 235
<b>Non-renewable waste</b>	<b>8 950</b>	<b>13 525</b>	<b>17 304</b>	<b>19 524</b>	<b>19 008</b>	<b>20 544</b>	<b>22 074</b>	<b>20 970</b>
% contribution	0.2	0.3	0.3	0.4	0.3	0.4	0.4	0.4
Industrial waste	4 343	6 999	8 472	7 893	6 980	8 665	9 932	8 405
Municipal waste (non-renewable)	4 606	6 525	8 831	11 631	12 028	11 878	12 142	12 564
<i>Memo: total waste***</i>	<i>13 748</i>	<i>20 169</i>	<i>26 385</i>	<i>32 544</i>	<i>32 439</i>	<i>33 816</i>	<i>35 779</i>	<i>35 096</i>

### ELECTRICITY (GWh)

<b>TOTAL ELECTRICITY GENERATED</b>	<b>7 629 269</b>	<b>8 545 464</b>	<b>9 729 812</b>	<b>10 780 031</b>	<b>10 796 056</b>	<b>10 392 791</b>	<b>10 854 369</b>	<b>10 752 752</b>
% contribution of renewables and waste	17.6	17.4	16.0	15.8	16.7	17.9	18.1	19.5
<b>Renewables</b>	<b>1 322 415</b>	<b>1 460 562</b>	<b>1 523 537</b>	<b>1 667 864</b>	<b>1 766 434</b>	<b>1 820 101</b>	<b>1 921 407</b>	<b>2 056 758</b>
% contribution	17.3	17.1	15.7	15.5	16.4	17.5	17.7	19.1
Hydro (excl. pumped storage)	1 181 593	1 325 069	1 343 260	1 284 120	1 332 563	1 325 719	1 351 283	1 393 376
Geothermal	28 614	29 798	32 976	40 307	40 815	42 073	43 445	44 772
Solar photovoltaic	19	123	725	7 019	11 383	19 374	30 605	54 239
Solar thermal	663	824	526	685	898	923	1 575	1 778
Tide/wave/ocean	597	601	605	549	546	527	558	607
Wind	3 845	7 349	28 553	149 848	188 186	226 206	269 115	334 528
Municipal waste (renewable)	9 134	13 170	18 875	28 870	29 275	29 283	30 655	31 760
Solid biofuels	94 298	77 463	84 904	124 603	128 571	133 973	145 072	142 466
Liquid biofuels	-	-	-	3 267	3 443	4 811	5 862	5 578
Biogases	3 652	6 165	13 113	28 596	30 754	37 212	43 237	47 654
<b>Non-renewable waste</b>	<b>16 644</b>	<b>22 376</b>	<b>31 557</b>	<b>34 622</b>	<b>34 629</b>	<b>35 850</b>	<b>38 717</b>	<b>35 613</b>
% contribution	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.3
Industrial waste	7 665	9 399	13 234	9 083	8 743	10 006	11 823	7 514
Municipal waste (non-renewable)	8 979	12 977	18 323	25 539	25 886	25 844	26 894	28 099
<i>Memo: total waste***</i>	<i>25 778</i>	<i>35 546</i>	<i>50 432</i>	<i>63 492</i>	<i>63 904</i>	<i>65 133</i>	<i>69 372</i>	<i>67 373</i>

\* Primary energy used in the production of electricity and heat by main activity producers or autoproducers in electricity plants, CHP plants and heat plants (e.g. solar thermal power plants, geothermal power plants, etc.).

\*\* Primary energy used elsewhere than in transformation as described above (e.g. remote photovoltaic electricity production for households, heating of buildings/greenhouses by geothermal, etc.).

\*\*\* Includes municipal waste and industrial waste.



## OECD Americas

### Contribution from renewable energies and energy from waste

	1990	1995	2000	2007	2008	2009	2010	2011e
<b>TPES (ktoe)</b>								
<b>TOTAL PRIMARY ENERGY SUPPLY</b>	<b>2 260 041</b>	<b>2 446 133</b>	<b>2 695 069</b>	<b>2 815 247</b>	<b>2 753 181</b>	<b>2 619 842</b>	<b>2 677 196</b>	<b>2 678 169</b>
% contribution of renewables and waste	6.8	7.0	6.5	6.5	6.9	7.3	7.4	7.8
<b>Renewables</b>	<b>148 669</b>	<b>165 007</b>	<b>167 613</b>	<b>177 740</b>	<b>185 501</b>	<b>186 138</b>	<b>192 214</b>	<b>203 600</b>
% contribution	6.6	6.7	6.2	6.3	6.7	7.1	7.2	7.6
Hydro	51 797	59 854	57 049	57 414	59 717	59 877	57 842	65 438
Geothermal (transformation*)	18 170	17 718	17 642	14 116	13 924	13 733	13 876	14 300
Geothermal (direct use**)	336	406	519	1 036	244	219	222	228
Solar photovoltaic (transformation*)	-	1	18	89	108	156	279	301
Solar thermal (transformation*)	57	71	133	148	196	181	193	202
Solar thermal (direct use**)	17	25	1 484	1 434	1 503	1 536	1 506	1 571
Tide/wave/ocean	2	3	3	3	3	3	2	2
Wind	264	281	510	3 259	5 135	7 013	9 140	12 202
Municipal waste (renewable)	2 136	3 304	4 172	4 001	4 127	4 085	4 003	4 131
Solid biofuels	75 132	79 632	79 836	76 550	75 302	71 079	73 034	72 813
Biogasoline	-	2 644	3 067	13 852	19 240	21 913	25 536	23 944
Biodiesels	-	-	21	1 168	1 039	954	919	2 593
Other liquid biofuels	-	-	-	92	85	88	100	98
Biogases	757	1 068	3 160	4 578	4 878	5 301	5 562	5 774
<b>Non-renewable waste</b>	<b>4 073</b>	<b>6 422</b>	<b>8 331</b>	<b>6 510</b>	<b>5 797</b>	<b>6 171</b>	<b>6 569</b>	<b>5 049</b>
% contribution	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2
Industrial waste	1 965	3 153	4 194	3 384	2 573	2 982	3 444	1 784
Municipal waste (non-renewable)	2 108	3 268	4 137	3 126	3 224	3 190	3 125	3 265
<i>Memo: total waste***</i>	<i>6 209</i>	<i>9 725</i>	<i>12 503</i>	<i>10 511</i>	<i>9 924</i>	<i>10 256</i>	<i>10 571</i>	<i>9 181</i>

### ELECTRICITY (GWh)

<b>TOTAL ELECTRICITY GENERATED</b>	<b>3 819 063</b>	<b>4 298 654</b>	<b>4 875 736</b>	<b>5 278 550</b>	<b>5 305 486</b>	<b>5 101 070</b>	<b>5 293 598</b>	<b>5 294 120</b>
% contribution of renewables and waste	18.8	18.5	15.9	15.5	16.3	17.5	16.9	19.1
<b>Renewables</b>	<b>708 427</b>	<b>782 269</b>	<b>757 546</b>	<b>804 028</b>	<b>852 470</b>	<b>878 226</b>	<b>882 535</b>	<b>1 003 122</b>
% contribution	18.5	18.2	15.5	15.2	16.1	17.2	16.7	18.9
Hydro (excl. pumped storage)	602 295	695 981	663 362	667 610	694 381	696 247	672 584	760 912
Geothermal	21 136	20 610	20 522	24 202	23 929	23 786	24 195	24 750
Solar photovoltaic	4	13	206	1 035	1 257	1 813	3 244	3 499
Solar thermal	663	824	526	673	878	816	879	879
Tide/wave/ocean	26	33	32	30	33	30	28	28
Wind	3 067	3 262	5 933	37 898	59 709	81 542	106 276	141 888
Municipal waste (renewable)	5 382	7 485	8 463	9 680	9 620	9 576	9 415	9 547
Solid biofuels	73 337	50 729	52 547	54 527	53 311	54 182	55 072	51 050
Liquid biofuels	-	-	-	84	88	91	94	133
Biogases	2 517	3 332	5 955	8 289	9 264	10 143	10 748	10 436
<b>Non-renewable waste</b>	<b>10 058</b>	<b>11 709</b>	<b>15 587</b>	<b>12 587</b>	<b>12 875</b>	<b>13 029</b>	<b>13 742</b>	<b>9 128</b>
% contribution	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2
Industrial waste	4 710	4 268	7 170	5 006	5 344	5 532	6 370	1 638
Municipal waste (non-renewable)	5 348	7 441	8 417	7 581	7 531	7 497	7 372	7 490
<i>Memo: total waste***</i>	<i>15 440</i>	<i>19 194</i>	<i>24 050</i>	<i>22 267</i>	<i>22 495</i>	<i>22 605</i>	<i>23 157</i>	<i>18 675</i>

\* Primary energy used in the production of electricity and heat by main activity producers or autoproducers in electricity plants, CHP plants and heat plants (e.g. solar thermal power plants, geothermal power plants, etc.).

\*\* Primary energy used elsewhere than in transformation as described above (e.g. remote photovoltaic electricity production for households, heating of buildings/greenhouses by geothermal, etc.).

\*\*\* Includes municipal waste and industrial waste.

## OECD Asia Oceania

## Contribution from renewable energies and energy from waste

	1990	1995	2000	2007	2008	2009	2010	2011e
<b>TPES (ktoe)</b>								
<b>TOTAL PRIMARY ENERGY SUPPLY</b>	<b>642 982</b>	<b>763 984</b>	<b>850 543</b>	<b>894 937</b>	<b>886 831</b>	<b>866 241</b>	<b>912 697</b>	<b>877 865</b>
% contribution of renewables and waste	4.1	3.7	3.7	3.8	3.9	4.0	4.1	4.2
<b>Renewables</b>	<b>25 886</b>	<b>27 065</b>	<b>29 541</b>	<b>30 962</b>	<b>31 340</b>	<b>31 629</b>	<b>33 492</b>	<b>33 395</b>
% contribution	4.0	3.5	3.5	3.5	3.5	3.7	3.7	3.8
Hydro	11 438	11 036	11 359	9 939	9 785	9 884	10 587	11 006
Geothermal (transformation*)	2 803	4 038	4 634	4 553	4 693	5 211	5 680	5 758
Geothermal (direct use**)	248	387	415	443	447	459	462	468
Solar photovoltaic (transformation*)	-	6	34	188	229	301	423	482
Solar thermal (transformation*)	-	-	-	-	-	-	-	-
Solar thermal (direct use**)	1 617	1 569	1 527	1 436	1 742	1 718	1 812	1 777
Tide/wave/ocean	-	-	-	-	-	-	-	4
Wind	-	1	26	563	649	825	965	1 118
Municipal waste (renewable)	200	321	598	1 052	1 064	1 073	986	1 093
Solid biofuels	9 466	9 503	10 596	11 997	11 789	11 037	11 323	10 396
Biogasoline	-	-	-	68	123	166	226	263
Biodiesels	-	-	-	123	191	284	357	357
Other liquid biofuels	-	-	-	-	-	13	3	-
Biogases	113	205	352	598	628	657	670	672
<b>Non-renewable waste</b>	<b>665</b>	<b>1 291</b>	<b>1 854</b>	<b>2 898</b>	<b>3 098</b>	<b>3 055</b>	<b>3 484</b>	<b>3 709</b>
% contribution	0.1	0.2	0.2	0.3	0.3	0.4	0.4	0.4
Industrial waste	466	976	1 292	1 944	2 094	2 034	2 523	2 651
Municipal waste (non-renewable)	199	315	562	954	1 005	1 021	961	1 057
<i>Memo: total waste***</i>	<i>865</i>	<i>1 612</i>	<i>2 452</i>	<i>3 950</i>	<i>4 163</i>	<i>4 128</i>	<i>4 470</i>	<i>4 802</i>

## ELECTRICITY (GWh)

<b>TOTAL ELECTRICITY GENERATED</b>	<b>1 148 333</b>	<b>1 380 715</b>	<b>1 629 282</b>	<b>1 891 859</b>	<b>1 863 335</b>	<b>1 837 876</b>	<b>1 952 385</b>	<b>1 907 618</b>
% contribution of renewables and waste	12.9	10.7	9.6	8.4	8.5	8.8	9.1	9.6
<b>Renewables</b>	<b>147 740</b>	<b>146 431</b>	<b>153 613</b>	<b>155 066</b>	<b>155 225</b>	<b>158 448</b>	<b>172 351</b>	<b>179 065</b>
% contribution	12.9	10.6	9.4	8.2	8.3	8.6	8.8	9.4
Hydro (excl. pumped storage)	133 000	128 320	132 087	115 572	113 778	114 935	123 106	127 981
Geothermal	3 872	5 334	6 270	6 598	6 954	7 751	8 515	8 762
Solar photovoltaic	2	64	390	2 190	2 659	3 504	4 914	5 604
Solar thermal	-	-	-	4	4	4	4	11
Tide/wave/ocean	-	-	-	-	-	-	-	52
Wind	-	9	304	6 550	7 541	9 592	11 219	13 001
Municipal waste (renewable)	903	1 401	2 374	3 531	3 509	3 532	2 939	3 119
Solid biofuels	9 823	11 065	11 619	19 413	19 249	17 510	19 955	18 715
Liquid biofuels	-	-	-	-	-	36	6	14
Biogases	140	238	569	1 208	1 531	1 584	1 693	1 806
<b>Non-renewable waste</b>	<b>904</b>	<b>1 402</b>	<b>2 465</b>	<b>3 937</b>	<b>3 974</b>	<b>4 113</b>	<b>4 525</b>	<b>4 922</b>
% contribution	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3
Industrial waste	-	-	97	436	489	616	1 625	1 847
Municipal waste (non-renewable)	904	1 402	2 368	3 501	3 485	3 497	2 900	3 075
<i>Memo: total waste***</i>	<i>1 807</i>	<i>2 803</i>	<i>4 839</i>	<i>7 468</i>	<i>7 483</i>	<i>7 645</i>	<i>7 464</i>	<i>8 041</i>

\* Primary energy used in the production of electricity and heat by main activity producers or autoproducers in electricity plants, CHP plants and heat plants (e.g. solar thermal power plants, geothermal power plants, etc.).

\*\* Primary energy used elsewhere than in transformation as described above (e.g. remote photovoltaic electricity production for households, heating of buildings/greenhouses by geothermal, etc.).

\*\*\* Includes municipal waste and industrial waste.

## OECD Europe

### Contribution from renewable energies and energy from waste

	1990	1995	2000	2007	2008	2009	2010	2011e
<b>TPES (ktoe)</b>								
<b>TOTAL PRIMARY ENERGY SUPPLY</b>	<b>1 619 473</b>	<b>1 662 971</b>	<b>1 746 931</b>	<b>1 838 587</b>	<b>1 833 229</b>	<b>1 743 622</b>	<b>1 815 976</b>	<b>1 748 920</b>
% contribution of renewables and waste	6.0	6.7	7.3	9.1	9.6	10.7	11.4	11.9
<b>Renewables</b>	<b>93 522</b>	<b>105 995</b>	<b>120 584</b>	<b>156 872</b>	<b>166 623</b>	<b>174 804</b>	<b>195 178</b>	<b>195 688</b>
% contribution	5.8	6.4	6.9	8.5	9.1	10.0	10.7	11.2
Hydro	38 382	43 066	47 112	43 081	45 099	44 250	47 781	43 386
Geothermal (transformation*)	3 294	3 690	5 339	7 828	7 924	8 045	8 322	8 899
Geothermal (direct use**)	1 438	1 632	1 909	2 275	2 376	2 885	3 081	3 295
Solar photovoltaic (transformation*)	1	4	11	326	642	1 209	1 930	3 882
Solar thermal (transformation*)	-	-	1	3	5	45	289	249
Solar thermal (direct use**)	172	406	667	1 330	1 480	1 657	1 879	1 623
Tide/wave/ocean	49	49	49	45	44	43	46	45
Wind	67	351	1 919	9 064	10 400	11 616	13 039	15 449
Municipal waste (renewable)	2 462	3 020	4 310	7 966	8 240	8 114	8 717	8 902
Solid biofuels	46 946	52 353	56 209	69 466	71 954	75 066	83 274	80 606
Biogasoline	-	24	58	1 175	1 834	2 278	2 761	2 828
Biodiesels	-	154	414	4 330	6 787	9 182	10 002	10 204
Other liquid biofuels	6	43	242	2 866	2 421	2 134	2 958	2 532
Biogases	704	1 203	2 344	7 117	7 416	8 280	11 098	13 789
<b>Non-renewable waste</b>	<b>4 212</b>	<b>5 812</b>	<b>7 119</b>	<b>10 117</b>	<b>10 113</b>	<b>11 317</b>	<b>12 021</b>	<b>12 212</b>
% contribution	0.3	0.3	0.4	0.6	0.6	0.6	0.7	0.7
Industrial waste	1 913	2 870	2 986	2 565	2 313	3 649	3 965	3 970
Municipal waste (non-renewable)	2 299	2 942	4 133	7 552	7 799	7 668	8 057	8 242
<i>Memo: total waste***</i>	<i>6 674</i>	<i>8 832</i>	<i>11 430</i>	<i>18 083</i>	<i>18 352</i>	<i>19 431</i>	<i>20 738</i>	<i>21 113</i>

### ELECTRICITY (GWh)

<b>TOTAL ELECTRICITY GENERATED</b>	<b>2 661 873</b>	<b>2 866 095</b>	<b>3 224 794</b>	<b>3 609 622</b>	<b>3 627 235</b>	<b>3 453 845</b>	<b>3 608 386</b>	<b>3 551 014</b>
% contribution of renewables and waste	17.7	18.9	19.4	20.1	21.4	23.2	24.6	25.2
<b>Renewables</b>	<b>466 248</b>	<b>531 862</b>	<b>612 378</b>	<b>708 770</b>	<b>758 739</b>	<b>783 427</b>	<b>866 521</b>	<b>874 571</b>
% contribution	17.5	18.6	19.0	19.6	20.9	22.7	24.0	24.6
Hydro (excl. pumped storage)	446 298	500 768	547 811	500 938	524 404	514 537	555 593	504 483
Geothermal	3 606	3 854	6 184	9 507	9 932	10 536	10 735	11 260
Solar photovoltaic	13	46	129	3 794	7 467	14 057	22 447	45 136
Solar thermal	-	-	-	8	16	103	692	888
Tide/wave/ocean	571	568	573	519	513	497	530	527
Wind	778	4 078	22 316	105 400	120 936	135 072	151 620	179 639
Municipal waste (renewable)	2 849	4 284	8 038	15 659	16 146	16 175	18 301	19 094
Solid biofuels	11 138	15 669	20 738	50 663	56 011	62 281	70 045	72 701
Liquid biofuels	-	-	-	3 183	3 355	4 684	5 762	5 431
Biogases	995	2 595	6 589	19 099	19 959	25 485	30 796	35 412
<b>Non-renewable waste</b>	<b>5 682</b>	<b>9 265</b>	<b>13 505</b>	<b>18 098</b>	<b>17 780</b>	<b>18 708</b>	<b>20 450</b>	<b>21 563</b>
% contribution	0.2	0.3	0.4	0.5	0.5	0.5	0.6	0.6
Industrial waste	2 955	5 131	5 967	3 641	2 910	3 858	3 828	4 029
Municipal waste (non-renewable)	2 727	4 134	7 538	14 457	14 870	14 850	16 622	17 534
<i>Memo: total waste***</i>	<i>8 531</i>	<i>13 549</i>	<i>21 543</i>	<i>33 757</i>	<i>33 926</i>	<i>34 883</i>	<i>38 751</i>	<i>40 657</i>

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\*\* Primary energy used elsewhere than in transformation as described above (e.g. remote photovoltaic electricity production for households, heating of buildings/greenhouses by geothermal, etc.).

\*\*\* Includes municipal waste and industrial waste.

## IEA

## Contribution from renewable energies and energy from waste

	1990	1995	2000	2007	2008	2009	2010	2011e
<b>TPES (ktoe)</b>								
<b>TOTAL PRIMARY ENERGY SUPPLY</b>	<b>4 356 810</b>	<b>4 696 068</b>	<b>5 089 769</b>	<b>5 303 769</b>	<b>5 220 425</b>	<b>4 986 829</b>	<b>5 155 776</b>	<b>5 042 721</b>
% contribution of renewables and waste	5.9	6.1	6.0	6.7	7.1	7.7	8.0	8.4
<b>Renewables</b>	<b>246 712</b>	<b>273 582</b>	<b>290 306</b>	<b>334 818</b>	<b>350 885</b>	<b>360 995</b>	<b>389 115</b>	<b>400 681</b>
% contribution	5.7	5.8	5.7	6.3	6.7	7.2	7.5	7.9
Hydro	98 215	109 320	110 199	105 094	107 732	108 073	109 675	113 558
Geothermal (transformation*)	19 415	19 960	21 413	17 493	17 709	18 406	19 396	20 240
Geothermal (direct use**)	1 432	1 875	2 215	3 168	2 552	3 002	3 183	3 322
Solar photovoltaic (transformation*)	2	10	62	603	978	1 663	2 622	4 639
Solar thermal (transformation*)	57	71	134	152	201	226	482	455
Solar thermal (direct use**)	1 431	1 513	3 038	3 344	3 528	3 706	3 952	3 724
Tide/wave/ocean	51	52	52	47	47	45	48	52
Wind	331	631	2 454	12 855	16 145	19 378	22 984	28 590
Municipal waste (renewable)	4 798	6 644	9 080	13 017	13 429	13 268	13 702	14 123
Solid biofuels	119 419	128 199	132 022	143 133	143 993	142 095	153 024	149 066
Biogasoline	-	2 668	3 125	15 095	21 195	24 355	28 520	27 035
Biodiesels	-	154	434	5 608	7 996	10 392	11 236	13 127
Other liquid biofuels	6	43	242	2 957	2 506	2 221	3 058	2 631
Biogases	1 556	2 440	5 837	12 251	12 874	14 164	17 232	20 119
<b>Non-renewable waste</b>	<b>8 950</b>	<b>13 524</b>	<b>17 296</b>	<b>19 507</b>	<b>18 988</b>	<b>20 521</b>	<b>22 048</b>	<b>20 938</b>
% contribution	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.4
Industrial waste	4 343	6 999	8 465	7 879	6 962	8 643	9 906	8 374
Municipal waste (non-renewable)	4 606	6 525	8 831	11 628	12 026	11 878	12 142	12 564
<i>Memo: total waste***</i>	<i>13 748</i>	<i>20 168</i>	<i>26 376</i>	<i>32 524</i>	<i>32 417</i>	<i>33 790</i>	<i>35 750</i>	<i>35 061</i>

## ELECTRICITY (GWh)

<b>TOTAL ELECTRICITY GENERATED</b>	<b>7 439 816</b>	<b>8 308 082</b>	<b>9 413 079</b>	<b>10 371 275</b>	<b>10 374 046</b>	<b>9 974 031</b>	<b>10 418 130</b>	<b>10 309 729</b>
% contribution of renewables and waste	17.4	17.1	15.8	15.7	16.4	17.7	17.9	19.4
<b>Renewables</b>	<b>1 276 463</b>	<b>1 396 005</b>	<b>1 451 716</b>	<b>1 589 193</b>	<b>1 669 142</b>	<b>1 731 298</b>	<b>1 826 425</b>	<b>1 964 805</b>
% contribution	17.2	16.8	15.4	15.3	16.1	17.4	17.5	19.1
Hydro (excl. pumped storage)	1 142 030	1 271 166	1 281 385	1 222 019	1 252 703	1 256 664	1 275 285	1 320 447
Geothermal	23 190	23 839	25 752	29 324	29 721	30 780	32 362	33 564
Solar photovoltaic	18	118	718	7 010	11 373	19 334	30 491	53 940
Solar thermal	663	824	526	685	898	923	1 575	1 778
Tide/wave/ocean	597	601	605	549	546	527	558	607
Wind	3 844	7 342	28 534	149 476	187 737	225 327	267 259	332 438
Municipal waste (renewable)	9 134	13 170	18 875	28 869	29 274	29 277	30 649	31 752
Solid biofuels	93 335	72 780	82 237	119 509	122 825	126 645	139 392	137 421
Liquid biofuels	-	-	-	3 267	3 443	4 775	5 856	5 564
Biogases	3 652	6 165	13 084	28 485	30 622	37 046	42 998	47 294
<b>Non-renewable waste</b>	<b>16 644</b>	<b>22 376</b>	<b>31 557</b>	<b>34 616</b>	<b>34 626</b>	<b>35 846</b>	<b>38 712</b>	<b>35 591</b>
% contribution	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.3
Industrial waste	7 665	9 399	13 234	9 078	8 740	10 002	11 818	7 492
Municipal waste (non-renewable)	8 979	12 977	18 323	25 538	25 886	25 844	26 894	28 099
<i>Memo: total waste***</i>	<i>25 778</i>	<i>35 546</i>	<i>50 432</i>	<i>63 485</i>	<i>63 900</i>	<i>65 123</i>	<i>69 361</i>	<i>67 343</i>

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\*\* Primary energy used elsewhere than in transformation as described above (e.g. remote photovoltaic electricity production for households, heating of buildings/greenhouses by geothermal, etc.).

\*\*\* Includes municipal waste and industrial waste.

## Australia

## Contribution from renewable energies and energy from waste

	1990	1995	2000	2007	2008	2009	2010	2011e
<b>TPES (ktoe)</b>								
<b>TOTAL PRIMARY ENERGY SUPPLY</b>	<b>86 226</b>	<b>92 559</b>	<b>108 110</b>	<b>119 755</b>	<b>124 236</b>	<b>125 978</b>	<b>124 728</b>	<b>119 797</b>
% contribution of renewables and waste	6.1	6.2	6.0	5.8	5.8	5.6	5.6	6.2
<b>Renewables</b>	<b>5 074</b>	<b>5 531</b>	<b>6 353</b>	<b>6 868</b>	<b>7 053</b>	<b>6 913</b>	<b>6 868</b>	<b>7 342</b>
% contribution	5.9	6.0	5.9	5.7	5.7	5.5	5.5	6.1
Hydro	1 217	1 366	1 407	1 228	1 024	945	1 072	1 274
Geothermal (transformation*)	-	-	-	-	-	-	-	-
Geothermal (direct use**)	-	-	-	-	-	-	-	-
Solar photovoltaic (transformation*)	-	1	3	9	11	13	23	69
Solar thermal (transformation*)	-	-	-	-	-	-	-	-
Solar thermal (direct use**)	81	80	82	143	157	197	242	263
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	-	1	5	225	266	327	413	502
Municipal waste (renewable)	-	-	-	-	-	-	-	-
Solid biofuels	3 776	4 067	4 718	4 956	5 175	4 926	4 576	4 606
Biogasoline	-	-	-	68	121	165	223	259
Biodiesels	-	-	-	43	40	69	55	62
Other liquid biofuels	-	-	-	-	-	-	-	-
Biogases	-	16	138	196	258	270	263	306
<b>Non-renewable waste</b>	<b>185</b>	<b>187</b>	<b>179</b>	<b>101</b>	<b>103</b>	<b>126</b>	<b>137</b>	<b>145</b>
% contribution	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1
Industrial waste	185	187	179	101	103	126	137	145
Municipal waste (non-renewable)	-	-	-	-	-	-	-	-
<i>Memo: total waste***</i>	<i>185</i>	<i>187</i>	<i>179</i>	<i>101</i>	<i>103</i>	<i>126</i>	<i>137</i>	<i>145</i>

## ELECTRICITY (GWh)

<b>TOTAL ELECTRICITY GENERATED</b>	<b>154 287</b>	<b>172 805</b>	<b>209 864</b>	<b>242 919</b>	<b>243 074</b>	<b>244 350</b>	<b>241 531</b>	<b>238 452</b>
% contribution of renewables and waste	9.7	9.6	8.4	8.6	8.1	7.7	8.9	10.5
<b>Renewables</b>	<b>14 898</b>	<b>16 631</b>	<b>17 590</b>	<b>20 952</b>	<b>19 725</b>	<b>18 924</b>	<b>21 450</b>	<b>25 004</b>
% contribution	9.7	9.6	8.4	8.6	8.1	7.7	8.9	10.5
Hydro (excl. pumped storage)	14 148	15 885	16 360	14 279	11 909	10 985	12 469	14 819
Geothermal	-	-	-	-	-	-	-	-
Solar photovoltaic	-	16	38	105	123	156	273	803
Solar thermal	-	-	-	4	4	4	4	11
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	-	7	58	2 611	3 093	3 806	4 798	5 841
Municipal waste (renewable)	-	-	-	-	-	-	-	-
Solid biofuels	750	670	685	3 316	3 737	3 089	3 013	2 548
Liquid biofuels	-	-	-	-	-	-	-	-
Biogases	-	53	449	637	859	884	893	982
<b>Non-renewable waste</b>	-	-	-	-	-	-	-	-
% contribution	-	-	-	-	-	-	-	-
Industrial waste	-	-	-	-	-	-	-	-
Municipal waste (non-renewable)	-	-	-	-	-	-	-	-
<i>Memo: total waste***</i>	-	-	-	-	-	-	-	-

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\*\* Primary energy used elsewhere than in transformation as described above (e.g. remote photovoltaic electricity production for households, heating of buildings/greenhouses by geothermal, etc.).

\*\*\* Includes municipal waste and industrial waste.

## Austria

## Contribution from renewable energies and energy from waste

	1990	1995	2000	2007	2008	2009	2010	2011e
<b>TPES (ktoe)</b>								
<b>TOTAL PRIMARY ENERGY SUPPLY</b>	<b>24 842</b>	<b>26 771</b>	<b>28 558</b>	<b>33 389</b>	<b>33 546</b>	<b>31 762</b>	<b>33 841</b>	<b>32 624</b>
% contribution of renewables and waste	21.1	22.8	23.9	25.6	27.2	29.6	28.7	26.8
<b>Renewables</b>	<b>5 038</b>	<b>5 891</b>	<b>6 574</b>	<b>8 043</b>	<b>8 490</b>	<b>8 860</b>	<b>9 071</b>	<b>8 094</b>
% contribution	20.3	22.0	23.0	24.1	25.3	27.9	26.8	24.8
Hydro	2 710	3 188	3 598	3 191	3 298	3 518	3 303	2 900
Geothermal (transformation*)	-	2 e	20	26	27	27	27	29
Geothermal (direct use**)	4	3 e	5	6	6	7	8	8
Solar photovoltaic (transformation*)	-	-	-	2	3	4	8	9
Solar thermal (transformation*)	-	-	-	-	-	-	-	-
Solar thermal (direct use**)	15	36	62	106	115	123	164	180
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	-	-	6	175	173	169	178	179
Municipal waste (renewable)	22	35	42	131	130	172	189	199
Solid biofuels	2 282	2 595	2 793	3 870	4 128	4 133	4 504	3 948
Biogasoline	-	-	-	13	54	64	62	56
Biodiesels	-	-	-	279	274	354	373	333
Other liquid biofuels	6	11	17	90	111	130	85	82
Biogases	-	20	30	154	171	160	171	171
<b>Non-renewable waste</b>	<b>193</b>	<b>225</b>	<b>251</b>	<b>499</b>	<b>631</b>	<b>552</b>	<b>644</b>	<b>649</b>
% contribution	0.8	0.8	0.9	1.5	1.9	1.7	1.9	2.0
Industrial waste	157	167	182	370	492	408	503	501
Municipal waste (non-renewable)	36	58	69	129	139	144	141	148
<i>Memo: total waste***</i>	<i>215</i>	<i>261</i>	<i>293</i>	<i>630</i>	<i>761</i>	<i>724</i>	<i>833</i>	<i>847</i>

## ELECTRICITY (GWh)

<b>TOTAL ELECTRICITY GENERATED</b>	<b>49 296</b>	<b>55 178</b>	<b>59 874</b>	<b>62 612</b>	<b>64 540</b>	<b>66 315</b>	<b>67 937</b>	<b>62 235</b>
% contribution of renewables and waste	66.3	70.6	72.8	69.9	70.0	72.1	67.1	67.9
<b>Renewables</b>	<b>32 635</b>	<b>38 904</b>	<b>43 434</b>	<b>43 337</b>	<b>44 697</b>	<b>47 296</b>	<b>45 114</b>	<b>41 629</b>
% contribution	66.2	70.5	72.5	69.2	69.3	71.3	66.4	66.9
Hydro (excl. pumped storage)	31 509	37 067	41 836	37 103	38 353	40 906	38 406	33 716
Geothermal	-	-	-	2	2	2	1	1
Solar photovoltaic	-	1	3	24	30	49	89	107
Solar thermal	-	-	-	-	-	-	-	-
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	-	1	67	2 037	2 011	1 968	2 064	2 086
Municipal waste (renewable)	10	15	32	379	331	301	300	377
Solid biofuels	1 116	1 766	1 436	3 180	3 332	3 419	3 574	4 488
Liquid biofuels	-	-	-	72	37	40	30	38
Biogases	-	54	60	540	601	611	650	816
<b>Non-renewable waste</b>	<b>54</b>	<b>72</b>	<b>128</b>	<b>426</b>	<b>462</b>	<b>489</b>	<b>480</b>	<b>603</b>
% contribution	0.1	0.1	0.2	0.7	0.7	0.7	0.7	1.0
Industrial waste	38	48	69	272	306	290	273	343
Municipal waste (non-renewable)	16	24	59	154	156	199	207	260
<i>Memo: total waste***</i>	<i>64</i>	<i>87</i>	<i>160</i>	<i>805</i>	<i>793</i>	<i>790</i>	<i>780</i>	<i>980</i>

\* Primary energy used in the production of electricity and heat by main activity producers or autoproducers in electricity plants, CHP plants and heat plants (e.g. solar thermal power plants, geothermal power plants, etc.).

\*\* Primary energy used elsewhere than in transformation as described above (e.g. remote photovoltaic electricity production for households, heating of buildings/greenhouses by geothermal, etc.).

\*\*\* Includes municipal waste and industrial waste.

## Belgium

## Contribution from renewable energies and energy from waste

	1990	1995	2000	2007	2008	2009	2010	2011e
<b>TPES (ktoe)</b>								
<b>TOTAL PRIMARY ENERGY SUPPLY</b>	<b>48 284</b>	<b>53 766</b>	<b>58 508</b>	<b>57 025</b>	<b>58 579</b>	<b>57 102</b>	<b>60 859</b>	<b>55 948</b>
% contribution of renewables and waste	1.6	1.7	1.8	3.8	4.2	5.1	5.4	6.2
<b>Renewables</b>	<b>481</b>	<b>528</b>	<b>638</b>	<b>1 524</b>	<b>1 820</b>	<b>2 187</b>	<b>2 554</b>	<b>2 704</b>
% contribution	1.0	1.0	1.1	2.7	3.1	3.8	4.2	4.8
Hydro	23	29	40	33	35	28	27	17
Geothermal (transformation*)	2	3	3	3	3	4	4	4
Geothermal (direct use**)	-	-	1	-	-	-	-	-
Solar photovoltaic (transformation*)	-	-	-	1	4	14	48	129
Solar thermal (transformation*)	-	-	-	-	-	-	-	-
Solar thermal (direct use**)	1	1	1	5	6	11	12	12
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	1	1	1	42	55	86	111	201
Municipal waste (renewable)	112	129	141	135	202	237	329	329
Solid biofuels	336	354	423	1 083	1 287	1 318	1 477	1 477
Biogasoline	-	-	-	-	12	39	55	55
Biodiesels	-	-	-	90	88	235	296	285
Other liquid biofuels	-	-	-	51	42	89	67	67
Biogases	6	11	29	81	86	125	127	127
<b>Non-renewable waste</b>	<b>300</b>	<b>409</b>	<b>443</b>	<b>623</b>	<b>650</b>	<b>712</b>	<b>758</b>	<b>758</b>
% contribution	0.6	0.8	0.8	1.1	1.1	1.2	1.2	1.4
Industrial waste	131	215	261	390	291	324	350	350
Municipal waste (non-renewable)	169	194	182	234	359	389	408	408
<i>Memo: total waste***</i>	<i>412</i>	<i>538</i>	<i>584</i>	<i>758</i>	<i>852</i>	<i>949</i>	<i>1 088</i>	<i>1 088</i>

**ELECTRICITY (GWh)**

<b>TOTAL ELECTRICITY GENERATED</b>	<b>70 292</b>	<b>73 516</b>	<b>82 773</b>	<b>87 526</b>	<b>83 583</b>	<b>89 796</b>	<b>93 764</b>	<b>88 153</b>
% contribution of renewables and waste	1.4	1.9	2.2	5.2	6.6	7.5	8.3	11.3
<b>Renewables</b>	<b>555</b>	<b>668</b>	<b>1 044</b>	<b>3 486</b>	<b>4 418</b>	<b>5 439</b>	<b>6 494</b>	<b>8 629</b>
% contribution	0.8	0.9	1.3	4.0	5.3	6.1	6.9	9.8
Hydro (excl. pumped storage)	266	338	460	389	410	328	312	199
Geothermal	-	-	-	-	-	-	-	-
Solar photovoltaic	-	-	-	6	42	166	560	1 503
Solar thermal	-	-	-	-	-	-	-	-
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	7	9	16	491	637	996	1 292	2 336
Municipal waste (renewable)	140 e	187 e	306	297	370	463	591	627
Solid biofuels	135	121	164	1 818	2 485	2 657	2 904	3 079
Liquid biofuels	-	-	-	196	141	360	269	285
Biogases	7	13	98	289	333	469	566	600
<b>Non-renewable waste</b>	<b>441</b>	<b>721</b>	<b>768</b>	<b>1 041</b>	<b>1 064</b>	<b>1 313</b>	<b>1 297</b>	<b>1 375</b>
% contribution	0.6	1.0	0.9	1.2	1.3	1.5	1.4	1.6
Industrial waste	231	441	385	533	405	484	447	474
Municipal waste (non-renewable)	210 e	280 e	383	508	659	829	850	901
<i>Memo: total waste***</i>	<i>581 e</i>	<i>908 e</i>	<i>1 074</i>	<i>1 338</i>	<i>1 434</i>	<i>1 776</i>	<i>1 888</i>	<i>2 002</i>

\* Primary energy used in the production of electricity and heat by main activity producers or autoproducers in electricity plants, CHP plants and heat plants (e.g. solar thermal power plants, geothermal power plants, etc.).

\*\* Primary energy used elsewhere than in transformation as described above (e.g. remote photovoltaic electricity production for households, heating of buildings/greenhouses by geothermal, etc.).

\*\*\* Includes municipal waste and industrial waste.

## Canada

## Contribution from renewable energies and energy from waste

	1990	1995	2000	2007	2008	2009	2010	2011e
<b>TPES (ktoe)</b>								
<b>TOTAL PRIMARY ENERGY SUPPLY</b>	<b>208 542</b>	<b>230 773</b>	<b>251 440</b>	<b>271 731</b>	<b>264 748</b>	<b>250 746</b>	<b>251 838</b>	<b>256 076</b>
% contribution of renewables and waste	16.1	16.8	16.9	16.2	16.8	17.6	17.1	18.0
<b>Renewables</b>	<b>33 609</b>	<b>38 591</b>	<b>42 430</b>	<b>43 942</b>	<b>44 373</b>	<b>44 029</b>	<b>42 939</b>	<b>46 021</b>
% contribution	16.1	16.7	16.9	16.2	16.8	17.6	17.1	18.0
Hydro	25 519	28 889	30 832	31 612	32 189	31 704	30 227	32 370
Geothermal (transformation*)	-	-	-	-	-	-	-	-
Geothermal (direct use**)	-	-	-	-	-	-	-	-
Solar photovoltaic (transformation*)	-	-	1 e	2	3	9	14	35
Solar thermal (transformation*)	-	-	-	-	-	-	-	-
Solar thermal (direct use**)	-	-	-	-	-	-	-	-
Tide/wave/ocean	2	3	3	3	3	3	2	2
Wind	-	5	23	260	319	571	822	1 693
Municipal waste (renewable)	60	77	77	73	75	81	81	81
Solid biofuels	8 021	9 604	11 175	11 163	10 917	10 707	10 527	10 137
Biogasoline	-	-	133	661	690	771	904	1 319
Biodiesels	-	-	-	1	11	17	174	195
Other liquid biofuels	-	-	-	-	-	-	-	-
Biogases	7	12	186	167	167	167	188	188
<b>Non-renewable waste</b>	<b>70</b>	<b>128</b>	<b>117</b>	<b>128</b>	<b>143</b>	<b>152</b>	<b>170</b>	<b>190</b>
% contribution	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.1
Industrial waste	37	86	76	89	103	109	126	146
Municipal waste (non-renewable)	32	42	42	39	40	44	44	44
<i>Memo: total waste***</i>	<i>130</i>	<i>205</i>	<i>194</i>	<i>202</i>	<i>218</i>	<i>234</i>	<i>251</i>	<i>271</i>

## ELECTRICITY (GWh)

<b>TOTAL ELECTRICITY GENERATED</b>	<b>482 041</b>	<b>560 005</b>	<b>605 596</b>	<b>638 882</b>	<b>640 940</b>	<b>613 936</b>	<b>607 841</b>	<b>635 834</b>
% contribution of renewables and waste	62.4	61.0	60.6	59.3	60.1	62.4	60.9	63.4
<b>Renewables</b>	<b>300 691</b>	<b>341 626</b>	<b>366 993</b>	<b>379 065</b>	<b>385 153</b>	<b>383 103</b>	<b>369 872</b>	<b>402 851</b>
% contribution	62.4	61.0	60.6	59.3	60.1	62.4	60.9	63.4
Hydro (excl. pumped storage)	296 737	335 923	358 509	367 585	374 296	368 648	351 480	376 395
Geothermal	-	-	-	-	-	-	-	-
Solar photovoltaic	-	4	16 e	26	35	103	158	403
Solar thermal	-	-	-	-	-	-	-	-
Tide/wave/ocean	26	33	32	30	33	30	28	28
Wind	-	59	264	3 024	3 706	6 641	9 557	19 687
Municipal waste (renewable)	76 e	99 e	99 e	102 e	107 e	107 e	107	78
Solid biofuels	3 829	5 465	7 365	7 528	6 206	6 803	7 706	5 647
Liquid biofuels	-	-	-	-	-	-	-	-
Biogases	23	43	708	770	770	771	836	613
<b>Non-renewable waste</b>	<b>41</b>	<b>54</b>	<b>54</b>	<b>55</b>	<b>57</b>	<b>57</b>	<b>57</b>	<b>42</b>
% contribution	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Industrial waste	-	-	-	-	-	-	-	-
Municipal waste (non-renewable)	41 e	54 e	54 e	55 e	57 e	57 e	57	42
<i>Memo: total waste***</i>	<i>117 e</i>	<i>153 e</i>	<i>153 e</i>	<i>157 e</i>	<i>164 e</i>	<i>164 e</i>	<i>164</i>	<i>120</i>

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\*\* Primary energy used elsewhere than in transformation as described above (e.g. remote photovoltaic electricity production for households, heating of buildings/greenhouses by geothermal, etc.).

\*\*\* Includes municipal waste and industrial waste.



## Chile

## Contribution from renewable energies and energy from waste

	1990	1995	2000	2007	2008	2009	2010	2011e
<b>TPES (ktoe)</b>								
<b>TOTAL PRIMARY ENERGY SUPPLY</b>	<b>14 009</b>	<b>18 342</b>	<b>25 174</b>	<b>30 565</b>	<b>30 310</b>	<b>29 484</b>	<b>30 920</b>	<b>32 409</b>
% contribution of renewables and waste	27.8	30.0	25.1	23.5	24.4	26.1	22.0	21.4
<b>Renewables</b>	<b>3 901</b>	<b>5 501</b>	<b>6 313</b>	<b>7 181</b>	<b>7 405</b>	<b>7 692</b>	<b>6 798</b>	<b>6 926</b>
% contribution	27.8	30.0	25.1	23.5	24.4	26.1	22.0	21.4
Hydro	768	1 584	1 592	1 989	2 081	2 175	1 868	1 807
Geothermal (transformation*)	-	-	-	-	-	-	-	-
Geothermal (direct use**)	-	-	-	-	-	-	-	-
Solar photovoltaic (transformation*)	-	-	-	-	-	-	-	-
Solar thermal (transformation*)	-	-	-	-	-	-	-	-
Solar thermal (direct use**)	-	-	-	-	-	-	-	-
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	-	-	-	1	3	7	29	29
Municipal waste (renewable)	-	-	-	-	-	-	-	-
Solid biofuels	3 115	3 884	4 715	5 191	5 320	5 503	4 893	5 075
Biogasoline	-	-	-	-	-	-	-	-
Biodiesels	-	-	-	-	-	-	-	-
Other liquid biofuels	-	-	-	-	-	-	-	-
Biogases	18	34	5	-	1	7	9	16
<b>Non-renewable waste</b>	-	-	<b>6</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>2</b>
% contribution	-	-	0.0	0.0	0.0	0.0	0.0	0.0
Industrial waste	-	-	6	2	3	2	2	2
Municipal waste (non-renewable)	-	-	-	-	-	-	-	-
<i>Memo: total waste***</i>	-	-	6	2	3	2	2	2

**ELECTRICITY (GWh)**

<b>TOTAL ELECTRICITY GENERATED</b>	<b>18 372</b>	<b>28 027</b>	<b>40 078</b>	<b>58 509</b>	<b>59 704</b>	<b>60 722</b>	<b>60 434</b>	<b>65 631</b>
% contribution of renewables and waste	53.8	72.4	48.5	44.2	45.7	48.8	40.2	37.7
<b>Renewables</b>	<b>9 891</b>	<b>20 293</b>	<b>19 457</b>	<b>25 835</b>	<b>27 314</b>	<b>29 649</b>	<b>24 296</b>	<b>24 747</b>
% contribution	53.8	72.4	48.5	44.2	45.7	48.8	40.2	37.7
Hydro (excl. pumped storage)	8 928	18 414	18 516	23 130	24 193	25 296	21 717	21 009
Geothermal	-	-	-	-	-	-	-	-
Solar photovoltaic	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	-	-	-	9	38	79	332	332
Municipal waste (renewable)	-	-	-	-	-	-	-	-
Solid biofuels	963	1 879	941	2 696	3 083	4 274	2 247	3 406
Liquid biofuels	-	-	-	-	-	-	-	-
Biogases	-	-	-	-	-	-	-	-
<b>Non-renewable waste</b>	-	-	-	-	-	-	-	-
% contribution	-	-	-	-	-	-	-	-
Industrial waste	-	-	-	-	-	-	-	-
Municipal waste (non-renewable)	-	-	-	-	-	-	-	-
<i>Memo: total waste***</i>	-	-	-	-	-	-	-	-

\* Primary energy used in the production of electricity and heat by main activity producers or autoproducers in electricity plants, CHP plants and heat plants (e.g. solar thermal power plants, geothermal power plants, etc.).

\*\* Primary energy used elsewhere than in transformation as described above (e.g. remote photovoltaic electricity production for households, heating of buildings/greenhouses by geothermal, etc.).

\*\*\* Includes municipal waste and industrial waste.

## Czech Republic

## Contribution from renewable energies and energy from waste

	1990	1995	2000	2007	2008	2009	2010	2011e
<b>TPES (ktoe)</b>								
<b>TOTAL PRIMARY ENERGY SUPPLY</b>	<b>49 570</b>	<b>41 491</b>	<b>40 993</b>	<b>45 845</b>	<b>44 870</b>	<b>42 072</b>	<b>44 108</b>	<b>42 901</b>
% contribution of renewables and waste	1.8	2.9	3.7	5.0	5.3	6.2	6.8	7.7
<b>Renewables</b>	<b>908</b>	<b>1 177</b>	<b>1 341</b>	<b>2 139</b>	<b>2 212</b>	<b>2 427</b>	<b>2 780</b>	<b>3 097</b>
% contribution	1.8	2.8	3.3	4.7	4.9	5.8	6.3	7.2
Hydro	100	172	151	180	174	209	240	184
Geothermal (transformation*)	-	-	-	-	-	-	-	-
Geothermal (direct use**)	-	-	-	-	-	-	-	-
Solar photovoltaic (transformation*)	-	-	-	-	1	8	53	182
Solar thermal (transformation*)	-	-	-	-	-	-	-	-
Solar thermal (direct use**)	-	-	-	4	5	6	9	11
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	-	-	-	11	21	25	29	34
Municipal waste (renewable)	-	-	44	57	57	54	63	80
Solid biofuels	808	955	1 046	1 782	1 753	1 801	1 977	2 056
Biogasoline	-	-	-	1	34	59	59	61
Biodiesels	-	16	64	29	76	136	175	240
Other liquid biofuels	-	-	-	-	-	-	-	-
Biogases	-	34	36	76	90	130	177	250
<b>Non-renewable waste</b>	<b>..</b>	<b>28</b>	<b>176</b>	<b>165</b>	<b>187</b>	<b>192</b>	<b>202</b>	<b>215</b>
% contribution	-	0.1	0.4	0.4	0.4	0.5	0.5	0.5
Industrial waste	..	28	132	127	144	157	160	162
Municipal waste (non-renewable)	-	-	44	38	43	36	42	53
<i>Memo: total waste***</i>	..	28	220	222	244	246	264	295

## ELECTRICITY (GWh)

<b>TOTAL ELECTRICITY GENERATED</b>	<b>62 271</b>	<b>60 575</b>	<b>72 911</b>	<b>87 764</b>	<b>83 166</b>	<b>81 697</b>	<b>85 319</b>	<b>86 864</b>
% contribution of renewables and waste	1.9	4.0	3.4	3.9	4.5	5.7	6.9	8.5
<b>Renewables</b>	<b>1 161</b>	<b>2 407</b>	<b>2 277</b>	<b>3 410</b>	<b>3 731</b>	<b>4 654</b>	<b>5 903</b>	<b>7 252</b>
% contribution	1.9	4.0	3.1	3.9	4.5	5.7	6.9	8.3
Hydro (excl. pumped storage)	1 161	2 002	1 758	2 089	2 024	2 429	2 789	2 138
Geothermal	-	-	-	-	-	-	-	-
Solar photovoltaic	-	-	-	2	13	89	616	2 118
Solar thermal	-	-	-	-	-	-	-	-
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	-	-	-	125	245	288	335	397
Municipal waste (renewable)	-	-	2	11	11	11	35	55
Solid biofuels	..	302	382	968	1 171	1 396	1 492	1 673
Liquid biofuels	..	-	-	-	-	-	-	-
Biogases	..	103	135	215	267	441	636	871
<b>Non-renewable waste</b>	<b>..</b>	<b>16</b>	<b>204</b>	<b>8</b>	<b>10</b>	<b>9</b>	<b>25</b>	<b>97</b>
% contribution	-	0.0	0.3	0.0	0.0	0.0	0.0	0.1
Industrial waste	..	16	201	-	2	2	2	2
Municipal waste (non-renewable)	-	-	3	8	8	7	23	95
<i>Memo: total waste***</i>	..	16	206	19	21	20	60	152

\* Primary energy used in the production of electricity and heat by main activity producers or autoproducers in electricity plants, CHP plants and heat plants (e.g. solar thermal power plants, geothermal power plants, etc.).

\*\* Primary energy used elsewhere than in transformation as described above (e.g. remote photovoltaic electricity production for households, heating of buildings/greenhouses by geothermal, etc.).

\*\*\* Includes municipal waste and industrial waste.

## Denmark

## Contribution from renewable energies and energy from waste

	1990	1995	2000	2007	2008	2009	2010	2011e
<b>TPES (ktoe)</b>								
<b>TOTAL PRIMARY ENERGY SUPPLY</b>	<b>17 363</b>	<b>19 392</b>	<b>18 634</b>	<b>19 762</b>	<b>19 201</b>	<b>18 353</b>	<b>19 253</b>	<b>17 512</b>
% contribution of renewables and waste	6.9	7.9	11.4	18.3	19.0	20.1	22.2	25.5
<b>Renewables</b>	<b>1 080</b>	<b>1 324</b>	<b>1 825</b>	<b>3 220</b>	<b>3 248</b>	<b>3 307</b>	<b>3 908</b>	<b>4 103</b>
% contribution	6.2	6.8	9.8	16.3	16.9	18.0	20.3	23.4
Hydro	2	3	3	2	2	2	2	1
Geothermal (transformation*)	2 e	2 e	3 e	14	12	12	10	8
Geothermal (direct use**)	-	-	-	-	-	-	-	-
Solar photovoltaic (transformation*)	-	-	-	-	-	-	1	1
Solar thermal (transformation*)	-	-	1	1	2	2	3	4
Solar thermal (direct use**)	2	5	7	10	11	12	12	16
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	52	101	365	617	596	578	672	841
Municipal waste (renewable)	251	332	427	558	583	552	534	524
Solid biofuels	752	839	950	1 918	1 943	2 040	2 545	2 527
Biogasoline	-	-	-	6	5	5	27	60
Biodiesels	-	-	-	-	-	4	-	14
Other liquid biofuels	-	-	-	-	1	1	1	1
Biogases	18	42	70	93	94	100	102	107
<b>Non-renewable waste</b>	<b>119</b>	<b>215</b>	<b>299</b>	<b>391</b>	<b>408</b>	<b>386</b>	<b>374</b>	<b>367</b>
% contribution	0.7	1.1	1.6	2.0	2.1	2.1	1.9	2.1
Industrial waste	-	-	-	-	-	-	-	-
Municipal waste (non-renewable)	119	215	299	391	408	386	374	367
<i>Memo: total waste***</i>	<i>370</i>	<i>547</i>	<i>726</i>	<i>949</i>	<i>991</i>	<i>938</i>	<i>909</i>	<i>891</i>

## ELECTRICITY (GWh)

<b>TOTAL ELECTRICITY GENERATED</b>	<b>25 982</b>	<b>36 759</b>	<b>36 053</b>	<b>39 316</b>	<b>36 620</b>	<b>36 384</b>	<b>38 785</b>	<b>34 930</b>
% contribution of renewables and waste	3.3	5.8	17.0	28.2	29.9	29.7	33.9	42.0
<b>Renewables</b>	<b>828</b>	<b>1 886</b>	<b>5 619</b>	<b>10 372</b>	<b>10 168</b>	<b>10 095</b>	<b>12 467</b>	<b>14 010</b>
% contribution	3.2	5.1	15.6	26.4	27.8	27.7	32.1	40.1
Hydro (excl. pumped storage)	28	30	30	28	26	19	21	17
Geothermal	-	-	-	-	-	-	-	-
Solar photovoltaic	-	-	1	2	3	4	6	6
Solar thermal	-	-	-	-	-	-	-	-
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	610	1 177	4 241	7 171	6 928	6 721	7 809	9 774
Municipal waste (renewable)	42 e	361	727	1 039	1 117	1 035	976	946
Solid biofuels	108	208	411	1 828	1 803	1 996	3 324	2 924
Liquid biofuels	-	-	-	-	-	-	-	-
Biogases	40	110	209	304	291	320	331	343
<b>Non-renewable waste</b>	<b>20</b>	<b>234</b>	<b>509</b>	<b>728</b>	<b>783</b>	<b>725</b>	<b>684</b>	<b>663</b>
% contribution	0.1	0.6	1.4	1.9	2.1	2.0	1.8	1.9
Industrial waste	-	-	-	-	-	-	-	-
Municipal waste (non-renewable)	20 e	234	509	728	783	725	684	663
<i>Memo: total waste***</i>	<i>62 e</i>	<i>595</i>	<i>1 236</i>	<i>1 767</i>	<i>1 900</i>	<i>1 760</i>	<i>1 660</i>	<i>1 609</i>

\* Primary energy used in the production of electricity and heat by main activity producers or autoproducers in electricity plants, CHP plants and heat plants (e.g. solar thermal power plants, geothermal power plants, etc.).

\*\* Primary energy used elsewhere than in transformation as described above (e.g. remote photovoltaic electricity production for households, heating of buildings/greenhouses by geothermal, etc.).

\*\*\* Includes municipal waste and industrial waste.

## Estonia

## Contribution from renewable energies and energy from waste

	1990	1995	2000	2007	2008	2009	2010	2011e
<b>TPES (ktoe)</b>								
<b>TOTAL PRIMARY ENERGY SUPPLY</b>	<b>9 911</b>	<b>5 035</b>	<b>4 715</b>	<b>5 624</b>	<b>5 440</b>	<b>4 749</b>	<b>5 568</b>	<b>5 548</b>
% contribution of renewables and waste	1.9	6.7	10.9	10.7	11.9	15.1	15.2	13.8
<b>Renewables</b>	<b>188</b>	<b>336</b>	<b>513</b>	<b>602</b>	<b>646</b>	<b>717</b>	<b>846</b>	<b>763</b>
% contribution	1.9	6.7	10.9	10.7	11.9	15.1	15.2	13.8
Hydro	-	-	-	2	2	3	2	3
Geothermal (transformation*)	-	-	-	-	-	-	-	-
Geothermal (direct use**)	-	-	-	-	-	-	-	-
Solar photovoltaic (transformation*)	-	-	-	-	-	-	-	-
Solar thermal (transformation*)	-	-	-	-	-	-	-	-
Solar thermal (direct use**)	-	-	-	-	-	-	-	-
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	-	-	-	8	11	17	24	32
Municipal waste (renewable)	-	-	-	-	-	-	-	-
Solid biofuels	188	334	511	588	629	695	817	726
Biogasoline	-	-	-	-	-	-	-	-
Biodiesels	-	-	-	-	-	-	-	-
Other liquid biofuels	-	-	-	-	-	-	-	-
Biogases	-	2	2	4	3	3	4	3
<b>Non-renewable waste</b>	-	-	-	-	-	-	-	-
% contribution	-	-	-	-	-	-	-	-
Industrial waste	-	-	-	-	-	-	-	-
Municipal waste (non-renewable)	-	-	-	-	-	-	-	-
<i>Memo: total waste***</i>	-	-	-	-	-	-	-	-

## ELECTRICITY (GWh)

<b>TOTAL ELECTRICITY GENERATED</b>	<b>17 392</b>	<b>8 788</b>	<b>8 509</b>	<b>12 190</b>	<b>10 581</b>	<b>8 779</b>	<b>12 964</b>	<b>12 893</b>
% contribution of renewables and waste	-	0.1	0.2	1.2	1.9	6.2	8.1	9.2
<b>Renewables</b>	-	<b>8</b>	<b>18</b>	<b>145</b>	<b>197</b>	<b>541</b>	<b>1 044</b>	<b>1 181</b>
% contribution	-	0.1	0.2	1.2	1.9	6.2	8.1	9.2
Hydro (excl. pumped storage)	-	2	5	21	28	32	27	30
Geothermal	-	-	-	-	-	-	-	-
Solar photovoltaic	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	-	-	-	91	133	195	277	368
Municipal waste (renewable)	-	-	-	-	-	-	-	-
Solid biofuels	-	6	13	20	27	307	730	766
Liquid biofuels	-	-	-	-	-	-	-	-
Biogases	-	-	-	13	9	7	10	17
<b>Non-renewable waste</b>	-	-	-	-	-	-	-	-
% contribution	-	-	-	-	-	-	-	-
Industrial waste	-	-	-	-	-	-	-	-
Municipal waste (non-renewable)	-	-	-	-	-	-	-	-
<i>Memo: total waste***</i>	-	-	-	-	-	-	-	-

\* Primary energy used in the production of electricity and heat by main activity producers or autoproducers in electricity plants, CHP plants and heat plants (e.g. solar thermal power plants, geothermal power plants, etc.).

\*\* Primary energy used elsewhere than in transformation as described above (e.g. remote photovoltaic electricity production for households, heating of buildings/greenhouses by geothermal, etc.).

\*\*\* Includes municipal waste and industrial waste.

## Finland

## Contribution from renewable energies and energy from waste

	1990	1995	2000	2007	2008	2009	2010	2011e
<b>TPES (ktoe)</b>								
<b>TOTAL PRIMARY ENERGY SUPPLY</b>	<b>28 381</b>	<b>28 920</b>	<b>32 229</b>	<b>36 795</b>	<b>35 275</b>	<b>33 245</b>	<b>36 402</b>	<b>34 255</b>
% contribution of renewables and waste	19.4	21.2	24.2	23.8	26.1	24.4	25.7	26.8
<b>Renewables</b>	<b>5 489</b>	<b>6 127</b>	<b>7 747</b>	<b>8 644</b>	<b>9 094</b>	<b>7 969</b>	<b>9 225</b>	<b>9 042</b>
% contribution	19.3	21.2	24.0	23.5	25.8	24.0	25.3	26.4
Hydro	934	1 112	1 261	1 219	1 472	1 091	1 111	1 073
Geothermal (transformation*)	-	-	-	-	-	-	-	-
Geothermal (direct use**)	-	-	-	-	-	-	-	-
Solar photovoltaic (transformation*)	-	-	-	-	-	-	-	-
Solar thermal (transformation*)	-	-	-	-	-	-	-	-
Solar thermal (direct use**)	-	-	-	1	1	1	1	1
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	-	1	7	16	22	24	25	42
Municipal waste (renewable)	11	7	54	119	141	134	145	146
Solid biofuels	4 544	5 007	6 404	7 242	7 330	6 479	7 681	7 517
Biogasoline	-	-	-	1	66	77	73	89
Biodiesels	-	-	-	-	9	87	100	88
Other liquid biofuels	-	-	-	4	9	35	47	44
Biogases	-	-	20	42	45	41	40	42
<b>Non-renewable waste</b>	<b>7</b>	<b>5</b>	<b>66</b>	<b>99</b>	<b>116</b>	<b>145</b>	<b>145</b>	<b>146</b>
% contribution	0.0	0.0	0.2	0.3	0.3	0.4	0.4	0.4
Industrial waste	-	-	42	47	48	45	42	41
Municipal waste (non-renewable)	7	5	24	52	68	99	104	105
<i>Memo: total waste***</i>	<i>19</i>	<i>12</i>	<i>120</i>	<i>218</i>	<i>258</i>	<i>278</i>	<i>290</i>	<i>291</i>

## ELECTRICITY (GWh)

<b>TOTAL ELECTRICITY GENERATED</b>	<b>54 377</b>	<b>64 035</b>	<b>69 968</b>	<b>81 247</b>	<b>77 435</b>	<b>72 062</b>	<b>80 668</b>	<b>73 546</b>
% contribution of renewables and waste	29.5	30.5	33.5	30.1	36.1	30.4	30.2	32.0
<b>Renewables</b>	<b>16 015</b>	<b>19 545</b>	<b>23 370</b>	<b>24 312</b>	<b>27 765</b>	<b>21 684</b>	<b>24 178</b>	<b>23 337</b>
% contribution	29.5	30.5	33.4	29.9	35.9	30.1	30.0	31.7
Hydro (excl. pumped storage)	10 859	12 925	14 660	14 177	17 112	12 686	12 922	12 478
Geothermal	-	-	-	-	-	-	-	-
Solar photovoltaic	-	1	2	4	4	4	5	5
Solar thermal	-	-	-	-	-	-	-	-
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	-	11	78	188	261	277	294	483
Municipal waste (renewable)	-	-	107	288	295	290	299	310
Solid biofuels	5 156	6 608	8 501	9 626	10 064	8 396	10 569	9 968
Liquid biofuels	-	-	-	-	-	-	-	-
Biogases	-	-	22	29	29	31	89	93
<b>Non-renewable waste</b>	<b>-</b>	<b>-</b>	<b>73</b>	<b>167</b>	<b>170</b>	<b>223</b>	<b>214</b>	<b>215</b>
% contribution	-	-	0.1	0.2	0.2	0.3	0.3	0.3
Industrial waste	-	-	31	47	36	33	29	25
Municipal waste (non-renewable)	-	-	42	120	134	190	185	190
<i>Memo: total waste***</i>	<i>-</i>	<i>-</i>	<i>180</i>	<i>455</i>	<i>465</i>	<i>513</i>	<i>513</i>	<i>525</i>

\* Primary energy used in the production of electricity and heat by main activity producers or autoproducers in electricity plants, CHP plants and heat plants (e.g. solar thermal power plants, geothermal power plants, etc.).

\*\* Primary energy used elsewhere than in transformation as described above (e.g. remote photovoltaic electricity production for households, heating of buildings/greenhouses by geothermal, etc.).

\*\*\* Includes municipal waste and industrial waste.

## France

## Contribution from renewable energies and energy from waste

	1990	1995	2000	2007	2008	2009	2010	2011e
<b>TPES (ktoe)</b>								
<b>TOTAL PRIMARY ENERGY SUPPLY</b>	<b>223 890</b>	<b>236 664</b>	<b>251 867</b>	<b>263 483</b>	<b>264 796</b>	<b>253 489</b>	<b>262 288</b>	<b>251 449</b>
% contribution of renewables and waste	7.1	7.5	6.7	6.7	7.5	8.0	8.5	7.8
<b>Renewables</b>	<b>15 219</b>	<b>17 025</b>	<b>15 888</b>	<b>16 678</b>	<b>18 852</b>	<b>19 129</b>	<b>20 952</b>	<b>18 390</b>
% contribution	6.8	7.2	6.3	6.3	7.1	7.5	8.0	7.3
Hydro	4 627	6 272	5 774	4 982	5 470	4 919	5 333	3 879
Geothermal (transformation*)	-	-	-	-	-	-	-	-
Geothermal (direct use**)	110	132	126	82	88	89	91	94
Solar photovoltaic (transformation*)	-	-	-	2	4	15	49	173
Solar thermal (transformation*)	-	-	-	-	-	-	-	-
Solar thermal (direct use**)	19	20	17	35	44	51	59	64
Tide/wave/ocean	49	49	49	45	44	43	46	45
Wind	-	-	7	349	489	680	857	1 052
Municipal waste (renewable)	573	721	928	1 013	1 063	1 137	1 214	1 218
Solid biofuels	9 767	9 587	8 432	8 439	9 085	9 364	10 469	9 219
Biogasoline	-	24	58	279	411	407	399	394
Biodiesels	-	138	279	1 168	1 860	2 062	2 022	1 901
Other liquid biofuels	-	-	-	-	-	-	-	-
Biogases	72	82	218	285	294	362	413	350
<b>Non-renewable waste</b>	<b>573</b>	<b>721</b>	<b>928</b>	<b>1 013</b>	<b>1 063</b>	<b>1 137</b>	<b>1 214</b>	<b>1 218</b>
% contribution	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5
Industrial waste	-	-	-	-	-	-	-	-
Municipal waste (non-renewable)	573	721	928	1 013	1 063	1 137	1 214	1 218
<i>Memo: total waste***</i>	<i>1 146</i>	<i>1 442</i>	<i>1 857</i>	<i>2 027</i>	<i>2 127</i>	<i>2 275</i>	<i>2 427</i>	<i>2 436</i>

**ELECTRICITY (GWh)**

<b>TOTAL ELECTRICITY GENERATED</b>	<b>417 206</b>	<b>491 068</b>	<b>536 054</b>	<b>564 135</b>	<b>569 253</b>	<b>530 878</b>	<b>564 291</b>	<b>557 395</b>
% contribution of renewables and waste	13.4	15.4	13.3	12.1	13.3	13.5	14.2	12.0
<b>Renewables</b>	<b>55 786</b>	<b>75 321</b>	<b>70 272</b>	<b>66 277</b>	<b>73 820</b>	<b>69 917</b>	<b>77 780</b>	<b>64 771</b>
% contribution	13.4	15.3	13.1	11.7	13.0	13.2	13.8	11.6
Hydro (excl. pumped storage)	53 804	72 925	67 137	57 926	63 605	57 203	62 013	45 106
Geothermal	-	-	-	-	-	-	-	-
Solar photovoltaic	-	1	5	18	42	171	564	2 015
Solar thermal	-	-	-	-	-	-	-	-
Tide/wave/ocean	571	568	573	519	513	497	530	527
Wind	-	5	77	4 060	5 689	7 911	9 969	12 235
Municipal waste (renewable)	222 e	371	1 081	1 779	1 866	2 024	2 096	2 213
Solid biofuels	1 116	1 368	1 090	1 364	1 408	1 234	1 530	1 558
Liquid biofuels	-	-	-	-	-	-	-	-
Biogases	73	83	309	611	697	877	1 078	1 117
<b>Non-renewable waste</b>	<b>221</b>	<b>371</b>	<b>1 081</b>	<b>1 781</b>	<b>1 811</b>	<b>1 881</b>	<b>2 096</b>	<b>2 213</b>
% contribution	0.1	0.1	0.2	0.3	0.3	0.4	0.4	0.4
Industrial waste	-	-	-	-	-	-	-	-
Municipal waste (non-renewable)	221 e	371	1 081	1 781	1 811	1 881	2 096	2 213
<i>Memo: total waste***</i>	<i>443 e</i>	<i>742</i>	<i>2 162</i>	<i>3 560</i>	<i>3 677</i>	<i>3 905</i>	<i>4 192</i>	<i>4 426</i>

\* Primary energy used in the production of electricity and heat by main activity producers or autoproducers in electricity plants, CHP plants and heat plants (e.g. solar thermal power plants, geothermal power plants, etc.).

\*\* Primary energy used elsewhere than in transformation as described above (e.g. remote photovoltaic electricity production for households, heating of buildings/greenhouses by geothermal, etc.).

\*\*\* Includes municipal waste and industrial waste.

## Germany

## Contribution from renewable energies and energy from waste

	1990	1995	2000	2007	2008	2009	2010	2011e
<b>TPES (ktoe)</b>								
<b>TOTAL PRIMARY ENERGY SUPPLY</b>	<b>351 145</b>	<b>336 503</b>	<b>336 584</b>	<b>331 169</b>	<b>334 102</b>	<b>317 104</b>	<b>327 375</b>	<b>307 160</b>
% contribution of renewables and waste	1.8	2.2	3.2	8.7	8.7	9.8	11.1	12.6
<b>Renewables</b>	<b>5 320</b>	<b>6 095</b>	<b>9 093</b>	<b>26 009</b>	<b>26 641</b>	<b>27 598</b>	<b>32 550</b>	<b>34 724</b>
% contribution	1.5	1.8	2.7	7.9	8.0	8.7	9.9	11.3
Hydro	1 499	1 873	1 869	1 798	1 801	1 605	1 757	1 580
Geothermal (transformation*)	-	-	-	28	44	66	73	81
Geothermal (direct use**)	7	123	123	184	202	399	456	507
Solar photovoltaic (transformation*)	-	1	5	264	380	566	1 005	1 634
Solar thermal (transformation*)	-	-	-	-	-	-	-	-
Solar thermal (direct use**)	11	38	110	315	355	407	447	482
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	6	147 e	804	3 415	3 489	3 323	3 250	3 999
Municipal waste (renewable)	561	588	709	2 466	2 461	2 045	2 271	2 409
Solid biofuels	2 943	2 961	4 691	9 804	10 398	11 215	12 227	11 300
Biogasoline	-	-	-	289	394	564	732	775
Biodiesels	-	-	-	1 262	1 432	1 941	1 981	2 064
Other liquid biofuels	-	31	225	2 506	1 991	1 256	1 683	1 358
Biogases	292	333	557	3 677	3 694	4 213	6 668	8 535
<b>Non-renewable waste</b>	<b>999</b>	<b>1 436</b>	<b>1 681</b>	<b>2 757</b>	<b>2 532</b>	<b>3 545</b>	<b>3 846</b>	<b>4 009</b>
% contribution	0.3	0.4	0.5	0.8	0.8	1.1	1.2	1.3
Industrial waste	490	901	1 028	291	71	1 500	1 575	1 600
Municipal waste (non-renewable)	509	536	653	2 466	2 461	2 045	2 271	2 409
<i>Memo: total waste***</i>	<i>1 561</i>	<i>2 024</i>	<i>2 390</i>	<i>5 223</i>	<i>4 994</i>	<i>5 590</i>	<i>6 117</i>	<i>6 419</i>

**ELECTRICITY (GWh)**

<b>TOTAL ELECTRICITY GENERATED</b>	<b>547 650</b>	<b>532 814</b>	<b>572 313</b>	<b>629 546</b>	<b>631 211</b>	<b>584 317</b>	<b>622 055</b>	<b>608 272</b>
% contribution of renewables and waste	4.1	5.9	7.2	14.7	15.1	17.0	17.7	21.0
<b>Renewables</b>	<b>19 093</b>	<b>25 932</b>	<b>35 475</b>	<b>87 561</b>	<b>90 311</b>	<b>93 991</b>	<b>103 602</b>	<b>120 811</b>
% contribution	3.5	4.9	6.2	13.9	14.3	16.1	16.7	19.9
Hydro (excl. pumped storage)	17 426	21 780	21 732	20 903	20 942	18 660	20 427	18 372
Geothermal	-	-	-	-	18	19	28	19
Solar photovoltaic	1	7	60	3 075	4 420	6 579	11 682	19 000
Solar thermal	-	-	-	-	-	-	-	-
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	71	1 712	9 352	39 713	40 574	38 639	37 793	46 500
Municipal waste (renewable)	1 219	1 348	1 844	4 521	4 506	4 166	4 587	5 000
Solid biofuels	129	496	804	8 374	8 960	10 881	10 730	11 300
Liquid biofuels	-	-	-	2 624	2 582	2 484	2 150	1 400
Biogases	247	589	1 683	8 351	8 309	12 563	16 205	19 220
<b>Non-renewable waste</b>	<b>3 591</b>	<b>5 263</b>	<b>5 790</b>	<b>5 204</b>	<b>4 862</b>	<b>5 468</b>	<b>6 193</b>	<b>6 650</b>
% contribution	0.7	1.0	1.0	0.8	0.8	0.9	1.0	1.1
Industrial waste	2 373	3 915	3 946	683	356	1 302	1 606	1 650
Municipal waste (non-renewable)	1 218	1 348	1 844	4 521	4 506	4 166	4 587	5 000
<i>Memo: total waste***</i>	<i>4 810</i>	<i>6 611</i>	<i>7 634</i>	<i>9 725</i>	<i>9 368</i>	<i>9 634</i>	<i>10 780</i>	<i>11 650</i>

\* Primary energy used in the production of electricity and heat by main activity producers or autoproducers in electricity plants, CHP plants and heat plants (e.g. solar thermal power plants, geothermal power plants, etc.).

\*\* Primary energy used elsewhere than in transformation as described above (e.g. remote photovoltaic electricity production for households, heating of buildings/greenhouses by geothermal, etc.).

\*\*\* Includes municipal waste and industrial waste.

## Greece

## Contribution from renewable energies and energy from waste

	1990	1995	2000	2007	2008	2009	2010	2011e
<b>TPES (ktoe)</b>								
<b>TOTAL PRIMARY ENERGY SUPPLY</b>	<b>21 441</b>	<b>22 678</b>	<b>27 086</b>	<b>30 217</b>	<b>30 419</b>	<b>29 436</b>	<b>27 615</b>	<b>26 544</b>
% contribution of renewables and waste	5.2	5.8	5.4	5.7	5.6	6.4	7.9	7.3
<b>Renewables</b>	<b>1 104</b>	<b>1 289</b>	<b>1 402</b>	<b>1 729</b>	<b>1 714</b>	<b>1 872</b>	<b>2 142</b>	<b>1 898</b>
% contribution	5.2	5.7	5.2	5.7	5.6	6.4	7.8	7.1
Hydro	152	303	318	223	285	462	642	329
Geothermal (transformation*)	-	-	-	-	-	-	-	-
Geothermal (direct use**)	3	3	2	14	17	22	27	27
Solar photovoltaic (transformation*)	-	-	-	-	-	4	14	52
Solar thermal (transformation*)	-	-	-	-	-	-	-	-
Solar thermal (direct use**)	56	82	99	160	173	182	183	184
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	-	3	39	156	193	219	233	285
Municipal waste (renewable)	-	-	-	-	-	-	-	-
Solid biofuels	893	897	944	1 054	943	848	866	871
Biogasoline	-	-	-	-	-	-	-	-
Biodiesels	-	-	-	86	69	78	128	100
Other liquid biofuels	-	-	-	-	-	-	-	-
Biogases	-	1	1	35	34	56	49	49
<b>Non-renewable waste</b>	<b>..</b>	<b>37</b>	<b>64</b>	<b>6</b>	<b>4</b>	<b>4</b>	<b>32</b>	<b>32</b>
% contribution	-	0.2	0.2	0.0	0.0	0.0	0.1	0.1
Industrial waste	..	37	64	6	4	4	32	32
Municipal waste (non-renewable)	-	-	-	-	-	-	-	-
<i>Memo: total waste***</i>	..	37	64	6	4	4	32	32

**ELECTRICITY (GWh)**

<b>TOTAL ELECTRICITY GENERATED</b>	<b>34 775</b>	<b>41 299</b>	<b>53 425</b>	<b>62 711</b>	<b>62 912</b>	<b>61 094</b>	<b>57 367</b>	<b>53 186</b>
% contribution of renewables and waste	5.1	8.9	8.1	7.4	9.2	13.4	18.6	15.2
<b>Renewables</b>	<b>1 771</b>	<b>3 564</b>	<b>4 144</b>	<b>4 594</b>	<b>5 750</b>	<b>8 185</b>	<b>10 522</b>	<b>7 946</b>
% contribution	5.1	8.6	7.8	7.3	9.1	13.4	18.3	14.9
Hydro (excl. pumped storage)	1 769	3 529	3 693	2 591	3 312	5 374	7 460	3 831
Geothermal	-	-	-	-	-	-	-	-
Solar photovoltaic	-	-	-	1	5	50	158	610
Solar thermal	-	-	-	-	-	-	-	-
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	2	34	451	1 818	2 242	2 543	2 714	3 315
Municipal waste (renewable)	-	-	-	-	-	-	-	-
Solid biofuels	-	1	-	-	-	-	-	-
Liquid biofuels	-	-	-	-	-	-	-	-
Biogases	-	-	-	184	191	218	190	190
<b>Non-renewable waste</b>	<b>..</b>	<b>103</b>	<b>163</b>	<b>25</b>	<b>19</b>	<b>19</b>	<b>129</b>	<b>129</b>
% contribution	-	0.2	0.3	0.0	0.0	0.0	0.2	0.2
Industrial waste	..	103	163	25	19	19	129	129
Municipal waste (non-renewable)	-	-	-	-	-	-	-	-
<i>Memo: total waste***</i>	..	103	163	25	19	19	129	129

\* Primary energy used in the production of electricity and heat by main activity producers or autoproducers in electricity plants, CHP plants and heat plants (e.g. solar thermal power plants, geothermal power plants, etc.).

\*\* Primary energy used elsewhere than in transformation as described above (e.g. remote photovoltaic electricity production for households, heating of buildings/greenhouses by geothermal, etc.).

\*\*\* Includes municipal waste and industrial waste.



## Hungary

### Contribution from renewable energies and energy from waste

	1990	1995	2000	2007	2008	2009	2010	2011e
<b>TPES (ktoe)</b>								
<b>TOTAL PRIMARY ENERGY SUPPLY</b>	<b>28 757</b>	<b>25 875</b>	<b>24 999</b>	<b>26 729</b>	<b>26 458</b>	<b>24 859</b>	<b>25 667</b>	<b>25 065</b>
% contribution of renewables and waste	2.6	3.5	3.4	5.4	6.3	7.7	8.0	8.1
<b>Renewables</b>	<b>746</b>	<b>868</b>	<b>830</b>	<b>1 365</b>	<b>1 591</b>	<b>1 836</b>	<b>1 955</b>	<b>1 964</b>
% contribution	2.6	3.4	3.3	5.1	6.0	7.4	7.6	7.8
Hydro	15	14	15	18	18	20	16	19
Geothermal (transformation*)	-	7	6	5	5	5	6	6
Geothermal (direct use**)	86	79	80	81	91	91	93	92
Solar photovoltaic (transformation*)	-	-	-	-	-	-	-	-
Solar thermal (transformation*)	-	-	-	-	-	-	-	-
Solar thermal (direct use**)	-	-	-	2	4	4	5	5
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	-	-	-	9	18	28	46	54
Municipal waste (renewable)	12	26	29	54	46	46	53	45
Solid biofuels	633	743	700	1 151	1 220	1 442	1 524	1 524
Biogasoline	-	-	-	27	46	46	57	47
Biodiesels	-	-	-	1	122	123	118	122
Other liquid biofuels	-	-	-	-	-	-	-	-
Biogases	-	-	-	17	22	31	36	49
<b>Non-renewable waste</b>	<b>12</b>	<b>26</b>	<b>29</b>	<b>74</b>	<b>68</b>	<b>74</b>	<b>88</b>	<b>70</b>
% contribution	0.0	0.1	0.1	0.3	0.3	0.3	0.3	0.3
Industrial waste	-	-	-	20	22	27	35	25
Municipal waste (non-renewable)	12	26	29	54	46	46	53	45
<i>Memo: total waste***</i>	<i>24</i>	<i>52</i>	<i>58</i>	<i>128</i>	<i>114</i>	<i>120</i>	<i>141</i>	<i>115</i>

### ELECTRICITY (GWh)

<b>TOTAL ELECTRICITY GENERATED</b>	<b>28 436</b>	<b>34 018</b>	<b>35 191</b>	<b>39 960</b>	<b>40 025</b>	<b>35 908</b>	<b>37 371</b>	<b>36 241</b>
% contribution of renewables and waste	0.7	0.8	0.8	5.1	6.2	8.4	8.5	7.6
<b>Renewables</b>	<b>195</b>	<b>219</b>	<b>243</b>	<b>1 883</b>	<b>2 357</b>	<b>2 895</b>	<b>3 020</b>	<b>2 647</b>
% contribution	0.7	0.6	0.7	4.7	5.9	8.1	8.1	7.3
Hydro (excl. pumped storage)	178	163	178	210	213	228	188	222
Geothermal	-	-	-	-	-	-	-	-
Solar photovoltaic	-	-	-	-	1	1	1	-
Solar thermal	-	-	-	-	-	-	-	-
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	-	-	-	110	205	331	534	626
Municipal waste (renewable)	17 e	48 e	55 e	141	109	113	145	119
Solid biofuels	-	8	10	1 374	1 760	2 126	2 034	1 522
Liquid biofuels	-	-	-	-	-	-	-	-
Biogases	-	-	-	48	69	96	118	158
<b>Non-renewable waste</b>	<b>17</b>	<b>47</b>	<b>55</b>	<b>146</b>	<b>114</b>	<b>117</b>	<b>152</b>	<b>124</b>
% contribution	0.1	0.1	0.2	0.4	0.3	0.3	0.4	0.3
Industrial waste	-	-	-	5	5	4	7	5
Municipal waste (non-renewable)	17 e	47 e	55 e	141	109	113	145	119
<i>Memo: total waste***</i>	<i>34 e</i>	<i>95 e</i>	<i>110 e</i>	<i>287</i>	<i>223</i>	<i>230</i>	<i>297</i>	<i>243</i>

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\*\* Primary energy used elsewhere than in transformation as described above (e.g. remote photovoltaic electricity production for households, heating of buildings/greenhouses by geothermal, etc.).

\*\*\* Includes municipal waste and industrial waste.

## Iceland

## Contribution from renewable energies and energy from waste

	1990	1995	2000	2007	2008	2009	2010	2011e
<b>TPES (ktoe)</b>								
<b>TOTAL PRIMARY ENERGY SUPPLY</b>	<b>2 088</b>	<b>2 253</b>	<b>3 100</b>	<b>4 836</b>	<b>5 354</b>	<b>5 384</b>	<b>5 369</b>	<b>5 737</b>
% contribution of renewables and waste	67.0	69.5	74.4	81.7	81.3	81.8	82.5	84.4
<b>Renewables</b>	<b>1 400</b>	<b>1 565</b>	<b>2 305</b>	<b>3 949</b>	<b>4 353</b>	<b>4 402</b>	<b>4 429</b>	<b>4 841</b>
% contribution	67.0	69.5	74.4	81.7	81.3	81.8	82.5	84.4
Hydro	362	403	547	722	1 069	1 056	1 083	1 076
Geothermal (transformation*)	448	612	1 129	2 638	2 766 e	2 790	2 790	3 139
Geothermal (direct use**)	591	549	629	586	516 e	555	555	626
Solar photovoltaic (transformation*)	-	-	-	-	-	-	-	-
Solar thermal (transformation*)	-	-	-	-	-	-	-	-
Solar thermal (direct use**)	-	-	-	-	-	-	-	-
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	-	-	-	-	-	-	-	-
Municipal waste (renewable)	-	1	1	3	2	1	-	-
Solid biofuels	-	-	-	-	-	-	-	-
Biogasoline	-	-	-	-	-	-	-	-
Biodiesels	-	-	-	-	-	-	-	-
Other liquid biofuels	-	-	-	-	-	-	-	-
Biogases	-	-	-	-	-	-	1	1
<b>Non-renewable waste</b>	-	<b>1</b>	<b>1</b>	<b>3</b>	<b>2</b>	-	-	-
% contribution	-	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Industrial waste	-	-	-	-	-	-	-	-
Municipal waste (non-renewable)	-	1	1	3	2	-	-	-
<i>Memo: total waste***</i>	-	<i>1</i>	<i>1</i>	<i>6</i>	<i>4</i>	<i>1</i>	<i>1</i>	<i>1</i>

**ELECTRICITY (GWh)**

<b>TOTAL ELECTRICITY GENERATED</b>	<b>4 510</b>	<b>4 981</b>	<b>7 684</b>	<b>11 977</b>	<b>16 468</b>	<b>16 834</b>	<b>17 059</b>	<b>17 210</b>
% contribution of renewables and waste	99.9	99.8	99.9	100.0	100.0	100.0	100.0	100.0
<b>Renewables</b>	<b>4 504</b>	<b>4 972</b>	<b>7 679</b>	<b>11 974</b>	<b>16 466</b>	<b>16 832</b>	<b>17 057</b>	<b>17 208</b>
% contribution	99.9	99.8	99.9	100.0	100.0	100.0	100.0	100.0
Hydro (excl. pumped storage)	4 204	4 682	6 356	8 394	12 427	12 279	12 592	12 507
Geothermal	300	290	1 323	3 579	4 038	4 553	4 465	4 701
Solar photovoltaic	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	-	-	-	-	-	-	-	-
Municipal waste (renewable)	-	-	-	1	1	-	-	-
Solid biofuels	-	-	-	-	-	-	-	-
Liquid biofuels	-	-	-	-	-	-	-	-
Biogases	-	-	-	-	-	-	-	-
<b>Non-renewable waste</b>	-	-	-	<b>1</b>	-	-	-	-
% contribution	-	-	-	0.0	-	-	-	-
Industrial waste	-	-	-	-	-	-	-	-
Municipal waste (non-renewable)	-	-	-	1	-	-	-	-
<i>Memo: total waste***</i>	-	-	-	<i>2</i>	<i>1</i>	-	-	-

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\*\* Primary energy used elsewhere than in transformation as described above (e.g. remote photovoltaic electricity production for households, heating of buildings/greenhouses by geothermal, etc.).

\*\*\* Includes municipal waste and industrial waste.

## Ireland

## Contribution from renewable energies and energy from waste

	1990	1995	2000	2007	2008	2009	2010	2011e
<b>TPES (ktoe)</b>								
<b>TOTAL PRIMARY ENERGY SUPPLY</b>	<b>9 988</b>	<b>10 635</b>	<b>13 730</b>	<b>15 089</b>	<b>14 956</b>	<b>14 402</b>	<b>14 397</b>	<b>13 515</b>
% contribution of renewables and waste	1.7	1.5	1.7	3.2	3.8	4.7	4.6	6.0
<b>Renewables</b>	<b>168</b>	<b>155</b>	<b>235</b>	<b>476</b>	<b>574</b>	<b>659</b>	<b>658</b>	<b>798</b>
% contribution	1.7	1.5	1.7	3.2	3.8	4.6	4.6	5.9
Hydro	60	61	73	57	83	78	52	61
Geothermal (transformation*)	-	-	-	-	-	-	-	-
Geothermal (direct use**)	-	-	-	-	-	-	-	-
Solar photovoltaic (transformation*)	-	-	-	-	-	-	-	-
Solar thermal (transformation*)	-	-	-	-	-	-	-	-
Solar thermal (direct use**)	-	-	-	1	3	4	6	6
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	-	1	21	168	207	254	242	377
Municipal waste (renewable)	-	-	-	-	-	5	6	11
Solid biofuels	105	89	113	182	178	188	204	214
Biogasoline	-	-	-	3	17	21	28	26
Biodiesels	-	-	-	16	35	53	61	44
Other liquid biofuels	-	-	-	2	3	1	3	-
Biogases	2	3	28	46	49	54	57	59
<b>Non-renewable waste</b>	-	-	-	-	-	<b>13</b>	<b>9</b>	<b>19</b>
% contribution	-	-	-	-	-	0.1	0.1	0.1
Industrial waste	-	-	-	-	-	-	-	-
Municipal waste (non-renewable)	-	-	-	-	-	13	9	19
<i>Memo: total waste***</i>	-	-	-	-	-	<i>18</i>	<i>15</i>	<i>30</i>

**ELECTRICITY (GWh)**

<b>TOTAL ELECTRICITY GENERATED</b>	<b>14 229</b>	<b>17 604</b>	<b>23 673</b>	<b>27 847</b>	<b>29 907</b>	<b>27 955</b>	<b>28 434</b>	<b>27 441</b>
% contribution of renewables and waste	4.9	4.1	5.0	10.0	12.0	14.7	13.1	19.8
<b>Renewables</b>	<b>697</b>	<b>729</b>	<b>1 185</b>	<b>2 794</b>	<b>3 588</b>	<b>4 108</b>	<b>3 731</b>	<b>5 429</b>
% contribution	4.9	4.1	5.0	10.0	12.0	14.7	13.1	19.8
Hydro (excl. pumped storage)	697	713	846	667	969	902	599	707
Geothermal	-	-	-	-	-	-	-	-
Solar photovoltaic	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	-	16	244	1 958	2 410	2 955	2 815	4 380
Municipal waste (renewable)	-	-	-	-	-	-	-	-
Solid biofuels	-	-	-	13	33	65	111	141
Liquid biofuels	-	-	-	-	-	-	-	-
Biogases	-	-	95	156	176	186	206	201
<b>Non-renewable waste</b>	-	-	-	-	-	-	-	-
% contribution	-	-	-	-	-	-	-	-
Industrial waste	-	-	-	-	-	-	-	-
Municipal waste (non-renewable)	-	-	-	-	-	-	-	-
<i>Memo: total waste***</i>	-	-	-	-	-	-	-	-

\* Primary energy used in the production of electricity and heat by main activity producers or autoproducers in electricity plants, CHP plants and heat plants (e.g. solar thermal power plants, geothermal power plants, etc.).

\*\* Primary energy used elsewhere than in transformation as described above (e.g. remote photovoltaic electricity production for households, heating of buildings/greenhouses by geothermal, etc.).

\*\*\* Includes municipal waste and industrial waste.

## Israel

## Contribution from renewable energies and energy from waste

	1990	1995	2000	2007	2008	2009	2010	2011e
<b>TPES (ktoe)</b>								
<b>TOTAL PRIMARY ENERGY SUPPLY</b>	<b>11 475</b>	<b>15 518</b>	<b>18 249</b>	<b>20 719</b>	<b>22 884</b>	<b>21 527</b>	<b>22 912</b>	<b>24 330</b>
% contribution of renewables and waste	3.1	3.0	3.3	3.7	4.7	5.0	5.0	4.7
<b>Renewables</b>	<b>361</b>	<b>470</b>	<b>607</b>	<b>758</b>	<b>1 074</b>	<b>1 072</b>	<b>1 155</b>	<b>1 135</b>
% contribution	3.1	3.0	3.3	3.7	4.7	5.0	5.0	4.7
Hydro	-	2	3	1	1	2	2	2
Geothermal (transformation*)	-	-	-	-	-	-	-	-
Geothermal (direct use**)	-	-	-	-	-	-	-	-
Solar photovoltaic (transformation*)	-	-	-	-	-	2	6	17
Solar thermal (transformation*)	-	-	-	-	-	-	-	-
Solar thermal (direct use**)	358	462	596	747	1 063	1 039	1 122	1 100
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	-	-	-	1	1	1	1	1
Municipal waste (renewable)	-	-	-	-	-	3	3	3
Solid biofuels	3	6	9	9	9	9	9	9
Biogasoline	-	-	-	-	-	-	-	-
Biodiesels	-	-	-	-	-	-	-	-
Other liquid biofuels	-	-	-	-	-	13	3	-
Biogases	-	-	-	-	1	3	9	3
<b>Non-renewable waste</b>	-	-	-	-	-	-	-	-
% contribution	-	-	-	-	-	-	-	-
Industrial waste	-	-	-	-	-	-	-	-
Municipal waste (non-renewable)	-	-	-	-	-	-	-	-
<i>Memo: total waste***</i>	-	-	-	-	-	3	3	3

**ELECTRICITY (GWh)**

<b>TOTAL ELECTRICITY GENERATED</b>	<b>20 898</b>	<b>30 425</b>	<b>42 661</b>	<b>53 792</b>	<b>56 995</b>	<b>55 006</b>	<b>58 566</b>	<b>59 574</b>
% contribution of renewables and waste	0.0	0.1	0.1	0.0	0.0	0.2	0.2	0.5
<b>Renewables</b>	<b>3</b>	<b>25</b>	<b>31</b>	<b>24</b>	<b>25</b>	<b>97</b>	<b>145</b>	<b>297</b>
% contribution	0.0	0.1	0.1	0.0	0.0	0.2	0.2	0.5
Hydro (excl. pumped storage)	3	25	31	14	16	22	29	28
Geothermal	-	-	-	-	-	-	-	-
Solar photovoltaic	-	-	-	-	-	24	70	192
Solar thermal	-	-	-	-	-	-	-	-
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	-	-	-	10	9	9	8	7
Municipal waste (renewable)	-	-	-	-	-	6	6	8
Solid biofuels	-	-	-	-	-	-	-	14
Liquid biofuels	-	-	-	-	-	36	6	14
Biogases	-	-	-	-	-	-	26	34
<b>Non-renewable waste</b>	-	-	-	-	-	-	-	<b>15</b>
% contribution	-	-	-	-	-	-	-	0.0
Industrial waste	-	-	-	-	-	-	-	15
Municipal waste (non-renewable)	-	-	-	-	-	-	-	-
<i>Memo: total waste***</i>	-	-	-	-	-	6	6	23

\* Primary energy used in the production of electricity and heat by main activity producers or autoproducers in electricity plants, CHP plants and heat plants (e.g. solar thermal power plants, geothermal power plants, etc.).

\*\* Primary energy used elsewhere than in transformation as described above (e.g. remote photovoltaic electricity production for households, heating of buildings/greenhouses by geothermal, etc.).

\*\*\* Includes municipal waste and industrial waste.

## Italy

## Contribution from renewable energies and energy from waste

	1990	1995	2000	2007	2008	2009	2010	2011e
<b>TPES (ktoe)</b>								
<b>TOTAL PRIMARY ENERGY SUPPLY</b>	<b>146 556</b>	<b>159 131</b>	<b>171 522</b>	<b>179 599</b>	<b>176 004</b>	<b>164 858</b>	<b>170 239</b>	<b>165 138</b>
% contribution of renewables and waste	4.5	5.0	6.0	7.2	8.2	10.2	11.2	12.3
<b>Renewables</b>	<b>6 472</b>	<b>7 719</b>	<b>10 113</b>	<b>12 035</b>	<b>13 631</b>	<b>16 009</b>	<b>18 048</b>	<b>19 397</b>
% contribution	4.4	4.9	5.9	6.7	7.7	9.7	10.6	11.7
Hydro	2 720	3 249	3 802	2 822	3 580	4 226	4 396	3 986
Geothermal (transformation*)	2 770	2 954	4 045 e	4 788	4 746	4 592	4 650	4 884
Geothermal (direct use**)	201	213	213 e	213	213	213	125	132
Solar photovoltaic (transformation*)	-	1	2 e	3	17	58	164	923
Solar thermal (transformation*)	-	-	-	-	-	-	-	-
Solar thermal (direct use**)	5	7	11	52	67	85	134	153
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	-	1	48	347	418	563	785	872
Municipal waste (renewable)	11	62	167	700	639	686	778	740
Solid biofuels	764	1 209	1 695	2 542	2 771	3 690	4 452	4 702
Biogasoline	-	-	-	-	89	117	155	145
Biodiesels	-	-	-	180	665	1 063	1 312	1 218
Other liquid biofuels	-	-	-	-	17	289	589	547
Biogases	1	23	131	388	410	427	507	1 095
<b>Non-renewable waste</b>	<b>164</b>	<b>162</b>	<b>258</b>	<b>826</b>	<b>752</b>	<b>740</b>	<b>944</b>	<b>907</b>
% contribution	0.1	0.1	0.2	0.5	0.4	0.4	0.6	0.5
Industrial waste	153	100	92	126	113	54	165	167
Municipal waste (non-renewable)	11	62	167	700	639	686	778	740
<i>Memo: total waste***</i>	<i>175</i>	<i>224</i>	<i>425</i>	<i>1 525</i>	<i>1 391</i>	<i>1 426</i>	<i>1 722</i>	<i>1 648</i>

**ELECTRICITY (GWh)**

<b>TOTAL ELECTRICITY GENERATED</b>	<b>213 147</b>	<b>237 364</b>	<b>269 947</b>	<b>308 222</b>	<b>313 526</b>	<b>288 336</b>	<b>298 773</b>	<b>298 470</b>
% contribution of renewables and waste	16.4	17.5	19.0	16.0	19.1	24.6	26.5	28.9
<b>Renewables</b>	<b>34 905</b>	<b>41 458</b>	<b>50 885</b>	<b>47 715</b>	<b>58 162</b>	<b>69 256</b>	<b>76 966</b>	<b>83 766</b>
% contribution	16.4	17.5	18.8	15.5	18.6	24.0	25.8	28.1
Hydro (excl. pumped storage)	31 626	37 782	44 205	32 816	41 623	49 138	51 116	46 349
Geothermal	3 222	3 436	4 705	5 569	5 520	5 342	5 376	5 654
Solar photovoltaic	4	13	18 e	38	193	676	1 906	10 730
Solar thermal	-	-	-	-	-	-	-	-
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	2	9	563	4 034	4 861	6 543	9 126	10 140
Municipal waste (renewable)	37 e	85 e	402 e	1 512 e	1 556 e	1 616	2 047	2 362
Solid biofuels	12	30	425	2 298	2 746	2 827	2 261	2 608
Liquid biofuels	-	-	-	-	64	1 448	3 078	3 551
Biogases	2	103	567	1 448	1 599	1 666	2 056	2 372
<b>Non-renewable waste</b>	<b>52</b>	<b>171</b>	<b>514</b>	<b>1 696</b>	<b>1 699</b>	<b>1 772</b>	<b>2 145</b>	<b>2 474</b>
% contribution	0.0	0.1	0.2	0.6	0.5	0.6	0.7	0.8
Industrial waste	16	87	112	184	143	156	98	113
Municipal waste (non-renewable)	36 e	84 e	402 e	1 512 e	1 556 e	1 616	2 047	2 361
<i>Memo: total waste***</i>	<i>89 e</i>	<i>256 e</i>	<i>916 e</i>	<i>3 208 e</i>	<i>3 255 e</i>	<i>3 388</i>	<i>4 192</i>	<i>4 836</i>

\* Primary energy used in the production of electricity and heat by main activity producers or autoproducers in electricity plants, CHP plants and heat plants (e.g. solar thermal power plants, geothermal power plants, etc.).

\*\* Primary energy used elsewhere than in transformation as described above (e.g. remote photovoltaic electricity production for households, heating of buildings/greenhouses by geothermal, etc.).

\*\*\* Includes municipal waste and industrial waste.

## Japan

## Contribution from renewable energies and energy from waste

	1990	1995	2000	2007	2008	2009	2010	2011e
<b>TPES (ktoe)</b>								
<b>TOTAL PRIMARY ENERGY SUPPLY</b>	<b>439 325</b>	<b>496 262</b>	<b>518 964</b>	<b>515 193</b>	<b>495 352</b>	<b>472 101</b>	<b>496 849</b>	<b>458 147</b>
% contribution of renewables and waste	3.5	3.3	3.3	3.4	3.5	3.6	3.6	3.7
<b>Renewables</b>	<b>15 221</b>	<b>15 897</b>	<b>16 648</b>	<b>16 500</b>	<b>16 140</b>	<b>15 898</b>	<b>16 595</b>	<b>15 786</b>
% contribution	3.5	3.2	3.2	3.2	3.3	3.4	3.3	3.4
Hydro	7 680	7 062	7 504	6 365	6 575	6 613	7 070	7 167
Geothermal (transformation*)	1 497	2 728	2 878	2 617	2 364	2 482	2 263	2 240
Geothermal (direct use**)	79	208	221	204	202	202	202	200
Solar photovoltaic (transformation*)	-	4	30	173	194	237	327	327
Solar thermal (transformation*)	-	-	-	-	-	-	-	-
Solar thermal (direct use**)	1 168	1 006	808	509	487	443	410	377
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	-	-	9	226	253	311	341	374
Municipal waste (renewable)	196	303	489	699	693	686	566	641
Solid biofuels	4 542	4 480	4 563	5 559	5 230	4 785	5 287	4 351
Biogasoline	-	-	-	-	-	-	-	-
Biodiesels	-	-	-	-	-	-	-	-
Other liquid biofuels	-	-	-	-	-	-	-	-
Biogases	58	107	146	148	142	139	130	110
<b>Non-renewable waste</b>	<b>198</b>	<b>305</b>	<b>665</b>	<b>981</b>	<b>976</b>	<b>981</b>	<b>1 161</b>	<b>1 349</b>
% contribution	0.0	0.1	0.1	0.2	0.2	0.2	0.2	0.3
Industrial waste	2	3	176	282	282	295	596	708
Municipal waste (non-renewable)	196	303	489	699	693	686	566	641
<i>Memo: total waste***</i>	<i>394</i>	<i>608</i>	<i>1 154</i>	<i>1 680</i>	<i>1 669</i>	<i>1 667</i>	<i>1 727</i>	<i>1 990</i>

**ELECTRICITY (GWh)**

<b>TOTAL ELECTRICITY GENERATED</b>	<b>835 514</b>	<b>960 284</b>	<b>1 048 984</b>	<b>1 125 493</b>	<b>1 075 493</b>	<b>1 043 390</b>	<b>1 110 751</b>	<b>1 049 557</b>
% contribution of renewables and waste	12.2	10.2	10.1	9.3	9.9	10.3	10.4	11.2
<b>Renewables</b>	<b>100 663</b>	<b>96 524</b>	<b>103 819</b>	<b>100 845</b>	<b>102 938</b>	<b>103 581</b>	<b>111 726</b>	<b>112 609</b>
% contribution	12.0	10.1	9.9	9.0	9.6	9.9	10.1	10.7
Hydro (excl. pumped storage)	89 305	82 118	87 253	74 009	76 448	76 896	82 212	83 332
Geothermal	1 741	3 173	3 348	3 043	2 750	2 886	2 632	2 646
Solar photovoltaic	1	46	347	2 015	2 251	2 758	3 799	3 799
Solar thermal	-	-	-	-	-	-	-	-
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	-	1	109	2 624	2 946	3 616	3 962	4 345
Municipal waste (renewable)	903	1 401	2 352	3 418	3 418	3 418	2 812	2 984
Solid biofuels	8 713	9 785	10 410	15 736	15 125	14 007	16 309	15 503
Liquid biofuels	-	-	-	-	-	-	-	-
Biogases	-	-	-	-	-	-	-	-
<b>Non-renewable waste</b>	<b>904</b>	<b>1 402</b>	<b>2 451</b>	<b>3 844</b>	<b>3 891</b>	<b>4 021</b>	<b>4 333</b>	<b>4 659</b>
% contribution	0.1	0.1	0.2	0.3	0.4	0.4	0.4	0.4
Industrial waste	-	-	97	425	472	602	1 521	1 676
Municipal waste (non-renewable)	904	1 402	2 354	3 419	3 419	3 419	2 812	2 983
<i>Memo: total waste***</i>	<i>1 807</i>	<i>2 803</i>	<i>4 803</i>	<i>7 262</i>	<i>7 309</i>	<i>7 439</i>	<i>7 145</i>	<i>7 643</i>

\* Primary energy used in the production of electricity and heat by main activity producers or autoproducers in electricity plants, CHP plants and heat plants (e.g. solar thermal power plants, geothermal power plants, etc.).

\*\* Primary energy used elsewhere than in transformation as described above (e.g. remote photovoltaic electricity production for households, heating of buildings/greenhouses by geothermal, etc.).

\*\*\* Includes municipal waste and industrial waste.

## Korea

## Contribution from renewable energies and energy from waste

	1990	1995	2000	2007	2008	2009	2010	2011e
<b>TPES (ktoe)</b>								
<b>TOTAL PRIMARY ENERGY SUPPLY</b>	<b>93 087</b>	<b>144 756</b>	<b>188 161</b>	<b>222 147</b>	<b>226 946</b>	<b>229 178</b>	<b>250 010</b>	<b>257 590</b>
% contribution of renewables and waste	1.4	0.8	0.9	1.4	1.5	1.5	1.6	1.6
<b>Renewables</b>	<b>1 007</b>	<b>430</b>	<b>758</b>	<b>1 322</b>	<b>1 347</b>	<b>1 498</b>	<b>1 779</b>	<b>1 882</b>
% contribution	1.1	0.3	0.4	0.6	0.6	0.7	0.7	0.7
Hydro	547	237	345	312	264	242	317	406
Geothermal (transformation*)	-	-	-	-	-	-	-	-
Geothermal (direct use**)	-	-	-	11	16	22	33	46
Solar photovoltaic (transformation*)	-	-	-	6	25	49	66	70
Solar thermal (transformation*)	-	-	-	-	-	-	-	-
Solar thermal (direct use**)	10	22	42	29	28	31	29	28
Tide/wave/ocean	-	-	-	-	-	-	-	4
Wind	-	-	1 e	32	37	59	70	74
Municipal waste (renewable)	4	18	109	353	371	384	417	449
Solid biofuels	428	120	225	309	292	319	347	325
Biogasoline	-	-	-	-	-	-	-	-
Biodiesels	-	-	-	79	150	214	300	294
Other liquid biofuels	-	-	-	-	-	-	-	-
Biogases	18	33	36	189	164	179	199	187
<b>Non-renewable waste</b>	<b>281</b>	<b>798</b>	<b>1 010</b>	<b>1 816</b>	<b>2 019</b>	<b>1 948</b>	<b>2 185</b>	<b>2 215</b>
% contribution	0.3	0.6	0.5	0.8	0.9	0.8	0.9	0.9
Industrial waste	279	786	937	1 561	1 708	1 613	1 790	1 799
Municipal waste (non-renewable)	3	12	73	255	311	335	395	416
<i>Memo: total waste***</i>	<i>285</i>	<i>817</i>	<i>1 119</i>	<i>2 169</i>	<i>2 390</i>	<i>2 332</i>	<i>2 602</i>	<i>2 664</i>

**ELECTRICITY (GWh)**

<b>TOTAL ELECTRICITY GENERATED</b>	<b>105 371</b>	<b>181 139</b>	<b>288 526</b>	<b>425 905</b>	<b>443 935</b>	<b>451 676</b>	<b>496 718</b>	<b>515 540</b>
% contribution of renewables and waste	6.0	1.7	1.4	1.1	1.0	1.1	1.3	1.5
<b>Renewables</b>	<b>6 362</b>	<b>3 012</b>	<b>4 111</b>	<b>4 557</b>	<b>4 375</b>	<b>4 687</b>	<b>6 186</b>	<b>7 404</b>
% contribution	6.0	1.7	1.4	1.1	1.0	1.0	1.2	1.4
Hydro (excl. pumped storage)	6 361	2 760	4 010	3 631	3 070	2 813	3 682	4 723
Geothermal	-	-	-	-	-	-	-	-
Solar photovoltaic	1	2	5	70	285	566	772	810
Solar thermal	-	-	-	-	-	-	-	-
Tide/wave/ocean	-	-	-	-	-	-	-	52
Wind	-	-	17	376	436	685	817	858
Municipal waste (renewable)	..	-	22 e	113	91	108	121	127
Solid biofuels	-	250	46	25	40	46	262	275
Liquid biofuels	-	-	-	-	-	-	-	-
Biogases	-	-	11	342	453	469	532	559
<b>Non-renewable waste</b>	<b>-</b>	<b>-</b>	<b>14</b>	<b>93</b>	<b>83</b>	<b>92</b>	<b>192</b>	<b>248</b>
% contribution	-	-	0.0	0.0	0.0	0.0	0.0	0.0
Industrial waste	-	-	-	11	17	14	104	156
Municipal waste (non-renewable)	-	-	14 e	82	66	78	88	92
<i>Memo: total waste***</i>	<i>..</i>	<i>-</i>	<i>36 e</i>	<i>206</i>	<i>174</i>	<i>200</i>	<i>313</i>	<i>375</i>

\* Primary energy used in the production of electricity and heat by main activity producers or autoproducers in electricity plants, CHP plants and heat plants (e.g. solar thermal power plants, geothermal power plants, etc.).

\*\* Primary energy used elsewhere than in transformation as described above (e.g. remote photovoltaic electricity production for households, heating of buildings/greenhouses by geothermal, etc.).

\*\*\* Includes municipal waste and industrial waste.

## Luxembourg

## Contribution from renewable energies and energy from waste

	1990	1995	2000	2007	2008	2009	2010	2011e
<b>TPES (ktoe)</b>								
<b>TOTAL PRIMARY ENERGY SUPPLY</b>	<b>3 411</b>	<b>3 151</b>	<b>3 324</b>	<b>4 208</b>	<b>4 207</b>	<b>3 952</b>	<b>4 229</b>	<b>4 150</b>
% contribution of renewables and waste	0.8	1.4	1.9	3.8	4.0	3.8	4.1	3.8
<b>Renewables</b>	<b>18</b>	<b>35</b>	<b>39</b>	<b>128</b>	<b>133</b>	<b>123</b>	<b>134</b>	<b>126</b>
% contribution	0.5	1.1	1.2	3.0	3.2	3.1	3.2	3.0
Hydro	6	8	11	10	11	9	9	5
Geothermal (transformation*)	-	-	-	-	-	-	-	-
Geothermal (direct use**)	-	-	-	-	-	-	-	-
Solar photovoltaic (transformation*)	-	-	-	2	2	2	2	2
Solar thermal (transformation*)	-	-	-	-	-	-	-	-
Solar thermal (direct use**)	-	-	-	-	1	1	1	1
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	-	-	2	6	5	5	5	6
Municipal waste (renewable)	12	11	10	13	13	11	14	11
Solid biofuels	-	15	15	44	46	40	48	44
Biogasoline	-	-	-	1	1	1	1	5
Biodiesels	-	-	-	44	44	41	41	39
Other liquid biofuels	-	-	-	1	1	1	-	-
Biogases	-	-	1	9	10	12	13	13
<b>Non-renewable waste</b>	<b>11</b>	<b>10</b>	<b>25</b>	<b>33</b>	<b>35</b>	<b>28</b>	<b>38</b>	<b>32</b>
% contribution	0.3	0.3	0.7	0.8	0.8	0.7	0.9	0.8
Industrial waste	-	-	6	14	15	10	14	14
Municipal waste (non-renewable)	11	10	18	19	20	18	24	18
<i>Memo: total waste***</i>	<i>23</i>	<i>21</i>	<i>34</i>	<i>45</i>	<i>48</i>	<i>39</i>	<i>52</i>	<i>43</i>

**ELECTRICITY (GWh)**

<b>TOTAL ELECTRICITY GENERATED</b>	<b>624</b>	<b>487</b>	<b>422</b>	<b>3 200</b>	<b>2 725</b>	<b>3 151</b>	<b>3 232</b>	<b>2 643</b>
% contribution of renewables and waste	16.7	29.0	49.1	9.5	11.9	9.8	9.7	11.4
<b>Renewables</b>	<b>83</b>	<b>107</b>	<b>173</b>	<b>265</b>	<b>283</b>	<b>267</b>	<b>267</b>	<b>239</b>
% contribution	13.3	22.0	41.0	8.3	10.4	8.5	8.3	9.0
Hydro (excl. pumped storage)	70	88	124	117	132	106	108	61
Geothermal	-	-	-	-	-	-	-	-
Solar photovoltaic	-	-	-	21	20	20	21	21
Solar thermal	-	-	-	-	-	-	-	-
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	-	-	27	64	61	63	55	64
Municipal waste (renewable)	13 e	19 e	18	26	26	25	28	38
Solid biofuels	-	-	-	-	-	-	-	-
Liquid biofuels	-	-	-	-	-	-	-	-
Biogases	-	-	4	37	44	53	55	55
<b>Non-renewable waste</b>	<b>21</b>	<b>34</b>	<b>34</b>	<b>40</b>	<b>40</b>	<b>41</b>	<b>46</b>	<b>62</b>
% contribution	3.4	7.0	8.1	1.3	1.5	1.3	1.4	2.3
Industrial waste	-	-	-	-	-	-	-	-
Municipal waste (non-renewable)	21 e	34 e	34	40	40	41	46	62
<i>Memo: total waste***</i>	<i>34 e</i>	<i>53 e</i>	<i>52</i>	<i>66</i>	<i>66</i>	<i>66</i>	<i>74</i>	<i>100</i>

\* Primary energy used in the production of electricity and heat by main activity producers or autoproducers in electricity plants, CHP plants and heat plants (e.g. solar thermal power plants, geothermal power plants, etc.).

\*\* Primary energy used elsewhere than in transformation as described above (e.g. remote photovoltaic electricity production for households, heating of buildings/greenhouses by geothermal, etc.).

\*\*\* Includes municipal waste and industrial waste.



## Mexico

## Contribution from renewable energies and energy from waste

	1990	1995	2000	2007	2008	2009	2010	2011e
<b>TPES (ktoe)</b>								
<b>TOTAL PRIMARY ENERGY SUPPLY</b>	<b>122 493</b>	<b>129 804</b>	<b>145 123</b>	<b>175 937</b>	<b>181 089</b>	<b>174 640</b>	<b>178 113</b>	<b>186 968</b>
% contribution of renewables and waste	12.2	12.4	11.7	10.0	10.1	9.6	9.8	9.3
<b>Renewables</b>	<b>14 994</b>	<b>16 070</b>	<b>16 907</b>	<b>17 532</b>	<b>18 247</b>	<b>16 688</b>	<b>17 471</b>	<b>17 363</b>
% contribution	12.2	12.4	11.7	10.0	10.1	9.6	9.8	9.3
Hydro	2 019	2 367	2 849	2 346	3 369	2 297	3 192	3 078
Geothermal (transformation*)	4 405	4 874	5 073	6 365	6 066	5 794	5 690	5 594
Geothermal (direct use**)	-	-	-	-	-	-	-	-
Solar photovoltaic (transformation*)	-	-	1	1	1	1	3	4
Solar thermal (transformation*)	-	-	-	-	-	-	-	-
Solar thermal (direct use**)	17	25	44	109	134	161	117	137
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	-	1	2	23	23	51	107	119
Municipal waste (renewable)	-	-	-	-	-	-	-	-
Solid biofuels	8 552	8 803	8 931	8 664	8 625	8 344	8 317	8 374
Biogasoline	-	-	-	-	-	-	-	-
Biodiesels	-	-	-	-	-	-	-	-
Other liquid biofuels	-	-	-	-	-	-	-	-
Biogases	-	-	9	25	28	39	45	57
<b>Non-renewable waste</b>	-	-	-	-	-	-	-	-
% contribution	-	-	-	-	-	-	-	-
Industrial waste	-	-	-	-	-	-	-	-
Municipal waste (non-renewable)	-	-	-	-	-	-	-	-
<i>Memo: total waste***</i>	-	-	-	-	-	-	-	-

## ELECTRICITY (GWh)

<b>TOTAL ELECTRICITY GENERATED</b>	<b>115 837</b>	<b>152 248</b>	<b>204 177</b>	<b>257 245</b>	<b>261 863</b>	<b>261 018</b>	<b>270 968</b>	<b>271 803</b>
% contribution of renewables and waste	24.7	23.7	19.9	14.5	18.7	14.1	17.6	16.4
<b>Renewables</b>	<b>28 604</b>	<b>36 007</b>	<b>40 732</b>	<b>37 314</b>	<b>48 982</b>	<b>36 779</b>	<b>47 698</b>	<b>44 644</b>
% contribution	24.7	23.7	19.9	14.5	18.7	14.1	17.6	16.4
Hydro (excl. pumped storage)	23 478	27 528	33 133	27 276	39 178	26 713	37 121	35 796
Geothermal	5 124	5 669	5 901	7 404	7 056	6 740	6 618	6 507
Solar photovoltaic	1	5	7	9	9	12	31	41
Solar thermal	-	-	-	-	-	-	-	-
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	1	7	19	262	269	596	1 239	1 383
Municipal waste (renewable)	-	-	-	-	-	-	-	-
Solid biofuels	-	2 798	1 655	2 313	2 403	2 627	2 583	734
Liquid biofuels	-	-	-	-	-	-	-	-
Biogases	-	-	17	50	67	91	106	183
<b>Non-renewable waste</b>	-	-	-	-	-	-	-	-
% contribution	-	-	-	-	-	-	-	-
Industrial waste	-	-	-	-	-	-	-	-
Municipal waste (non-renewable)	-	-	-	-	-	-	-	-
<i>Memo: total waste***</i>	-	-	-	-	-	-	-	-

\* Primary energy used in the production of electricity and heat by main activity producers or autoproducers in electricity plants, CHP plants and heat plants (e.g. solar thermal power plants, geothermal power plants, etc.).

\*\* Primary energy used elsewhere than in transformation as described above (e.g. remote photovoltaic electricity production for households, heating of buildings/greenhouses by geothermal, etc.).

\*\*\* Includes municipal waste and industrial waste.

## Netherlands

## Contribution from renewable energies and energy from waste

	1990	1995	2000	2007	2008	2009	2010	2011e
<b>TPES (ktoe)</b>								
<b>TOTAL PRIMARY ENERGY SUPPLY</b>	<b>65 685</b>	<b>70 748</b>	<b>73 223</b>	<b>79 350</b>	<b>79 550</b>	<b>78 175</b>	<b>83 426</b>	<b>77 550</b>
% contribution of renewables and waste	1.5	1.7	2.5	3.9	4.5	5.0	4.6	5.3
<b>Renewables</b>	<b>738</b>	<b>884</b>	<b>1 248</b>	<b>2 399</b>	<b>2 792</b>	<b>3 148</b>	<b>3 132</b>	<b>3 300</b>
% contribution	1.1	1.2	1.7	3.0	3.5	4.0	3.8	4.3
Hydro	7	8	12	9	9	8	9	5
Geothermal (transformation*)	-	-	-	-	-	-	-	-
Geothermal (direct use**)	-	-	-	-	2	3	8	8
Solar photovoltaic (transformation*)	-	-	1	3	3	4	5	7
Solar thermal (transformation*)	-	-	-	-	-	-	-	-
Solar thermal (direct use**)	2	5	11	20	20	22	24	25
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	5	27	71	296	366	394	343	438
Municipal waste (renewable)	315	369	609	665	730	775	817	899
Solid biofuels	351	359	419	845	1 025	1 252	1 379	1 307
Biogasoline	-	-	-	88	109	138	134	147
Biodiesels	-	-	-	242	179	235	95	163
Other liquid biofuels	-	-	-	59	123	48	26	7
Biogases	57	117	124	173	226	268	293	294
<b>Non-renewable waste</b>	<b>230</b>	<b>315</b>	<b>579</b>	<b>720</b>	<b>759</b>	<b>744</b>	<b>724</b>	<b>797</b>
% contribution	0.4	0.4	0.8	0.9	1.0	1.0	0.9	1.0
Industrial waste	-	-	-	-	-	-	-	-
Municipal waste (non-renewable)	230	315	579	720	759	744	724	797
<i>Memo: total waste***</i>	<i>545</i>	<i>684</i>	<i>1 188</i>	<i>1 385</i>	<i>1 489</i>	<i>1 519</i>	<i>1 541</i>	<i>1 695</i>

## ELECTRICITY (GWh)

<b>TOTAL ELECTRICITY GENERATED</b>	<b>71 938</b>	<b>80 926</b>	<b>89 631</b>	<b>105 162</b>	<b>107 645</b>	<b>113 502</b>	<b>118 140</b>	<b>112 724</b>
% contribution of renewables and waste	1.7	2.5	4.7	8.6	10.2	10.9	10.8	12.4
<b>Renewables</b>	<b>805</b>	<b>1 404</b>	<b>2 973</b>	<b>7 581</b>	<b>9 530</b>	<b>10 836</b>	<b>11 200</b>	<b>12 229</b>
% contribution	1.1	1.7	3.3	7.2	8.9	9.5	9.5	10.8
Hydro (excl. pumped storage)	85	88	142	107	102	98	105	57
Geothermal	-	-	-	-	-	-	-	-
Solar photovoltaic	-	1	8	35	38	46	60	84
Solar thermal	-	-	-	-	-	-	-	-
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	56	317	829	3 438	4 260	4 581	3 993	5 097
Municipal waste (renewable)	539	703	1 272	1 395	1 408	1 573	1 763	2 009
Solid biofuels	34	41	435	1 970	2 563	3 550	4 197	3 937
Liquid biofuels	-	-	-	124	425	74	54	12
Biogases	91	254	287	512	734	914	1 028	1 033
<b>Non-renewable waste</b>	<b>394</b>	<b>601</b>	<b>1 209</b>	<b>1 512</b>	<b>1 466</b>	<b>1 511</b>	<b>1 564</b>	<b>1 781</b>
% contribution	0.5	0.7	1.3	1.4	1.4	1.3	1.3	1.6
Industrial waste	-	-	-	-	-	-	-	-
Municipal waste (non-renewable)	394	601	1 209	1 512	1 466	1 511	1 564	1 781
<i>Memo: total waste***</i>	<i>933</i>	<i>1 304</i>	<i>2 481</i>	<i>2 907</i>	<i>2 874</i>	<i>3 084</i>	<i>3 327</i>	<i>3 790</i>

\* Primary energy used in the production of electricity and heat by main activity producers or autoproducers in electricity plants, CHP plants and heat plants (e.g. solar thermal power plants, geothermal power plants, etc.).

\*\* Primary energy used elsewhere than in transformation as described above (e.g. remote photovoltaic electricity production for households, heating of buildings/greenhouses by geothermal, etc.).

\*\*\* Includes municipal waste and industrial waste.

## New Zealand

## Contribution from renewable energies and energy from waste

	1990	1995	2000	2007	2008	2009	2010	2011e
<b>TPES (ktoe)</b>								
<b>TOTAL PRIMARY ENERGY SUPPLY</b>	<b>12 868</b>	<b>14 890</b>	<b>17 059</b>	<b>17 124</b>	<b>17 413</b>	<b>17 457</b>	<b>18 198</b>	<b>18 000</b>
% contribution of renewables and waste	32.8	31.8	30.3	32.2	32.9	35.8	39.0	40.3
<b>Renewables</b>	<b>4 224</b>	<b>4 737</b>	<b>5 175</b>	<b>5 515</b>	<b>5 726</b>	<b>6 248</b>	<b>7 095</b>	<b>7 251</b>
% contribution	32.8	31.8	30.3	32.2	32.9	35.8	39.0	40.3
Hydro	1 994	2 368	2 101	2 033	1 921	2 083	2 125	2 157
Geothermal (transformation*)	1 307	1 310	1 755	1 936	2 329	2 730	3 417	3 508
Geothermal (direct use**)	169	179	194	228	230	235	226	233
Solar photovoltaic (transformation*)	-	-	-	-	-	-	-	-
Solar thermal (transformation*)	-	-	-	-	-	-	-	-
Solar thermal (direct use**)	-	-	-	7	8	8	9	9
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	-	-	10	80	91	127	141	168
Municipal waste (renewable)	-	-	-	-	-	-	-	-
Solid biofuels	717	831	1 082	1 164	1 082	997	1 105	1 105
Biogasoline	-	-	-	-	2	1	3	4
Biodiesels	-	-	-	1	1	1	1	2
Other liquid biofuels	-	-	-	-	-	-	-	-
Biogases	37	49	32	65	63	66	69	65
<b>Non-renewable waste</b>	-	-	-	-	-	-	-	-
% contribution	-	-	-	-	-	-	-	-
Industrial waste	-	-	-	-	-	-	-	-
Municipal waste (non-renewable)	-	-	-	-	-	-	-	-
<i>Memo: total waste***</i>	-	-	-	-	-	-	-	-

**ELECTRICITY (GWh)**

<b>TOTAL ELECTRICITY GENERATED</b>	<b>32 263</b>	<b>36 062</b>	<b>39 247</b>	<b>43 750</b>	<b>43 838</b>	<b>43 454</b>	<b>44 819</b>	<b>44 495</b>
% contribution of renewables and waste	80.0	83.9	71.5	65.6	64.2	71.7	73.3	75.9
<b>Renewables</b>	<b>25 814</b>	<b>30 239</b>	<b>28 062</b>	<b>28 688</b>	<b>28 162</b>	<b>31 159</b>	<b>32 844</b>	<b>33 751</b>
% contribution	80.0	83.9	71.5	65.6	64.2	71.7	73.3	75.9
Hydro (excl. pumped storage)	23 183	27 532	24 433	23 639	22 335	24 219	24 714	25 079
Geothermal	2 131	2 161	2 922	3 555	4 204	4 865	5 883	6 116
Solar photovoltaic	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	-	1	120	929	1 057	1 476	1 634	1 950
Municipal waste (renewable)	-	-	-	-	-	-	-	-
Solid biofuels	360	360	478	336	347	368	371	375
Liquid biofuels	-	-	-	-	-	-	-	-
Biogases	140	185	109	229	219	231	242	231
<b>Non-renewable waste</b>	-	-	-	-	-	-	-	-
% contribution	-	-	-	-	-	-	-	-
Industrial waste	-	-	-	-	-	-	-	-
Municipal waste (non-renewable)	-	-	-	-	-	-	-	-
<i>Memo: total waste***</i>	-	-	-	-	-	-	-	-

\* Primary energy used in the production of electricity and heat by main activity producers or autoproducers in electricity plants, CHP plants and heat plants (e.g. solar thermal power plants, geothermal power plants, etc.).

\*\* Primary energy used elsewhere than in transformation as described above (e.g. remote photovoltaic electricity production for households, heating of buildings/greenhouses by geothermal, etc.).

\*\*\* Includes municipal waste and industrial waste.

## Norway

## Contribution from renewable energies and energy from waste

	1990	1995	2000	2007	2008	2009	2010	2011e
<b>TPES (ktoe)</b>								
<b>TOTAL PRIMARY ENERGY SUPPLY</b>	<b>21 003</b>	<b>23 440</b>	<b>26 092</b>	<b>27 546</b>	<b>29 801</b>	<b>28 157</b>	<b>32 452</b>	<b>29 875</b>
% contribution of renewables and waste	54.5	49.5	52.0	46.9	45.3	43.6	36.5	40.6
<b>Renewables</b>	<b>11 396</b>	<b>11 532</b>	<b>13 488</b>	<b>12 809</b>	<b>13 368</b>	<b>12 153</b>	<b>11 705</b>	<b>11 994</b>
% contribution	54.3	49.2	51.7	46.5	44.9	43.2	36.1	40.1
Hydro	10 418	10 452	12 196	11 494	11 958	10 774	10 108	10 390
Geothermal (transformation*)	-	-	-	-	-	-	-	-
Geothermal (direct use**)	-	-	-	-	-	-	-	-
Solar photovoltaic (transformation*)	-	-	-	-	-	-	-	-
Solar thermal (transformation*)	-	-	-	-	-	-	-	-
Solar thermal (direct use**)	-	-	-	-	-	-	-	-
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	-	1	3	77	79	84	77	111
Municipal waste (renewable)	54	57	64	102	109	112	133	128
Solid biofuels	923	1 006	1 199	1 081	1 113	1 063	1 247	1 225
Biogasoline	-	-	-	-	1	1	5	8
Biodiesels	-	-	-	27	77	92	111	105
Other liquid biofuels	-	-	-	3	4	2	1	2
Biogases	-	16	26	25	27	25	23	23
<b>Non-renewable waste</b>	<b>54</b>	<b>61</b>	<b>75</b>	<b>116</b>	<b>125</b>	<b>128</b>	<b>144</b>	<b>149</b>
% contribution	0.3	0.3	0.3	0.4	0.4	0.5	0.4	0.5
Industrial waste	-	4	11	16	15	16	21	21
Municipal waste (non-renewable)	54	57	64	101	109	112	123	128
<i>Memo: total waste***</i>	<i>108</i>	<i>118</i>	<i>140</i>	<i>218</i>	<i>234</i>	<i>241</i>	<i>277</i>	<i>277</i>

**ELECTRICITY (GWh)**

<b>TOTAL ELECTRICITY GENERATED</b>	<b>121 611</b>	<b>122 242</b>	<b>142 511</b>	<b>136 112</b>	<b>141 197</b>	<b>130 979</b>	<b>124 099</b>	<b>126 882</b>
% contribution of renewables and waste	99.8	99.7	99.7	99.2	99.5	96.6	95.8	96.6
<b>Renewables</b>	<b>121 358</b>	<b>121 829</b>	<b>142 105</b>	<b>134 934</b>	<b>140 354</b>	<b>126 487</b>	<b>118 800</b>	<b>122 479</b>
% contribution	99.8	99.7	99.7	99.1	99.4	96.6	95.7	96.5
Hydro (excl. pumped storage)	121 145	121 530	141 818	133 656	139 044	125 283	117 536	120 817
Geothermal	-	-	-	-	-	-	-	-
Solar photovoltaic	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	-	10	31	892	913	977	895	1 293
Municipal waste (renewable)	29 e	24 e	30 e	59	58	50	112	104
Solid biofuels	184	265	226	314	322	166	244	255
Liquid biofuels	-	-	-	-	-	-	-	-
Biogases	-	-	-	13	17	11	13	10
<b>Non-renewable waste</b>	<b>29</b>	<b>24</b>	<b>30</b>	<b>67</b>	<b>67</b>	<b>55</b>	<b>121</b>	<b>114</b>
% contribution	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
Industrial waste	-	-	-	11	10	6	11	11
Municipal waste (non-renewable)	29 e	24 e	30 e	56	57	49	110	103
<i>Memo: total waste***</i>	<i>58 e</i>	<i>48 e</i>	<i>60 e</i>	<i>126</i>	<i>125</i>	<i>105</i>	<i>233</i>	<i>218</i>

\* Primary energy used in the production of electricity and heat by main activity producers or autoproducers in electricity plants, CHP plants and heat plants (e.g. solar thermal power plants, geothermal power plants, etc.).

\*\* Primary energy used elsewhere than in transformation as described above (e.g. remote photovoltaic electricity production for households, heating of buildings/greenhouses by geothermal, etc.).

\*\*\* Includes municipal waste and industrial waste.

## Poland

## Contribution from renewable energies and energy from waste

	1990	1995	2000	2007	2008	2009	2010	2011e
<b>TPES (ktoe)</b>								
<b>TOTAL PRIMARY ENERGY SUPPLY</b>	<b>103 105</b>	<b>99 472</b>	<b>89 116</b>	<b>96 824</b>	<b>97 892</b>	<b>93 987</b>	<b>101 454</b>	<b>102 623</b>
% contribution of renewables and waste	2.3	4.8	4.8	5.5	6.3	7.4	7.9	8.5
<b>Renewables</b>	<b>1 579</b>	<b>3 923</b>	<b>3 801</b>	<b>4 824</b>	<b>5 559</b>	<b>6 265</b>	<b>7 278</b>	<b>8 052</b>
% contribution	1.5	3.9	4.3	5.0	5.7	6.7	7.2	7.8
Hydro	122	162	181	202	185	204	251	200
Geothermal (transformation*)	-	-	-	-	-	-	-	-
Geothermal (direct use**)	-	-	3	10	13	14	13	12
Solar photovoltaic (transformation*)	-	-	-	-	-	-	-	-
Solar thermal (transformation*)	-	-	-	-	-	-	-	-
Solar thermal (direct use**)	-	-	-	-	1	2	2	3
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	-	-	-	45	72	93	143	231
Municipal waste (renewable)	-	-	1	1	-	1	3	2
Solid biofuels	1 448	3 748	3 587	4 394	4 750	5 189	5 864	6 531
Biogasoline	-	-	-	80	126	195	189	179
Biodiesels	-	-	-	24	311	387	485	537
Other liquid biofuels	-	-	-	3	5	82	212	229
Biogases	9	13	29	65	96	98	115	127
<b>Non-renewable waste</b>	<b>772</b>	<b>838</b>	<b>448</b>	<b>544</b>	<b>567</b>	<b>703</b>	<b>726</b>	<b>690</b>
% contribution	0.7	0.8	0.5	0.6	0.6	0.7	0.7	0.7
Industrial waste	772	838	447	502	548	589	610	567
Municipal waste (non-renewable)	-	-	1	42	19	114	117	124
<i>Memo: total waste***</i>	<i>772</i>	<i>838</i>	<i>449</i>	<i>545</i>	<i>567</i>	<i>704</i>	<i>729</i>	<i>692</i>

**ELECTRICITY (GWh)**

<b>TOTAL ELECTRICITY GENERATED</b>	<b>134 415</b>	<b>137 042</b>	<b>143 174</b>	<b>158 761</b>	<b>154 710</b>	<b>151 121</b>	<b>157 089</b>	<b>162 608</b>
% contribution of renewables and waste	1.2	1.6	1.9	3.6	4.4	5.9	7.1	8.0
<b>Renewables</b>	<b>1 472</b>	<b>1 955</b>	<b>2 332</b>	<b>5 429</b>	<b>6 606</b>	<b>8 679</b>	<b>10 888</b>	<b>12 657</b>
% contribution	1.1	1.4	1.6	3.4	4.3	5.7	6.9	7.8
Hydro (excl. pumped storage)	1 417	1 887	2 106	2 352	2 152	2 375	2 920	2 331
Geothermal	-	-	-	-	-	-	-	-
Solar photovoltaic	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	-	1	5	522	837	1 077	1 664	2 690
Municipal waste (renewable)	-	-	-	-	-	-	-	-
Solid biofuels	55	54	190	2 360	3 366	4 904	5 905	7 178
Liquid biofuels	-	-	-	-	-	3	1	1
Biogases	-	13	31	195	251	320	398	457
<b>Non-renewable waste</b>	<b>203</b>	<b>297</b>	<b>331</b>	<b>232</b>	<b>208</b>	<b>236</b>	<b>244</b>	<b>271</b>
% contribution	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2
Industrial waste	203	297	331	232	197	227	234	261
Municipal waste (non-renewable)	-	-	-	-	11	9	10	10
<i>Memo: total waste***</i>	<i>203</i>	<i>297</i>	<i>331</i>	<i>232</i>	<i>208</i>	<i>236</i>	<i>244</i>	<i>271</i>

\* Primary energy used in the production of electricity and heat by main activity producers or autoproducers in electricity plants, CHP plants and heat plants (e.g. solar thermal power plants, geothermal power plants, etc.).

\*\* Primary energy used elsewhere than in transformation as described above (e.g. remote photovoltaic electricity production for households, heating of buildings/greenhouses by geothermal, etc.).

\*\*\* Includes municipal waste and industrial waste.

## Portugal

## Contribution from renewable energies and energy from waste

	1990	1995	2000	2007	2008	2009	2010	2011e
<b>TPES (ktoe)</b>								
<b>TOTAL PRIMARY ENERGY SUPPLY</b>	<b>16 739</b>	<b>20 211</b>	<b>24 673</b>	<b>25 302</b>	<b>24 430</b>	<b>24 152</b>	<b>23 541</b>	<b>23 147</b>
% contribution of renewables and waste	19.6	16.4	15.6	18.3	18.3	20.4	23.9	22.7
<b>Renewables</b>	<b>3 278</b>	<b>3 318</b>	<b>3 759</b>	<b>4 489</b>	<b>4 333</b>	<b>4 796</b>	<b>5 480</b>	<b>5 116</b>
% contribution	19.6	16.4	15.2	17.7	17.7	19.9	23.3	22.1
Hydro	788	717	974	868	585	712	1 389	993
Geothermal (transformation*)	3	37	69	183	175	168	180	161
Geothermal (direct use**)	-	1	1	10	10	10	10	9
Solar photovoltaic (transformation*)	-	-	-	2	3	14	18	23
Solar thermal (transformation*)	-	-	-	-	-	-	-	-
Solar thermal (direct use**)	11	15	18	26	30	38	58	68
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	-	1	14	347	495	652	790	783
Municipal waste (renewable)	-	-	87	94	91	99	96	98
Solid biofuels	2 476	2 546	2 594	2 807	2 788	2 856	2 582	2 634
Biogasoline	-	-	-	-	-	-	-	-
Biodiesels	-	-	-	133	128	220	323	300
Other liquid biofuels	-	-	-	3	4	4	4	4
Biogases	-	1	1	16	23	24	31	43
<b>Non-renewable waste</b>	-	-	<b>87</b>	<b>133</b>	<b>133</b>	<b>140</b>	<b>143</b>	<b>142</b>
% contribution	-	-	0.4	0.5	0.5	0.6	0.6	0.6
Industrial waste	-	-	-	39	41	41	47	44
Municipal waste (non-renewable)	-	-	87	94	91	99	96	98
<i>Memo: total waste***</i>	-	-	174	227	224	239	239	241

**ELECTRICITY (GWh)**

<b>TOTAL ELECTRICITY GENERATED</b>	<b>28 355</b>	<b>33 154</b>	<b>43 372</b>	<b>46 896</b>	<b>45 471</b>	<b>49 483</b>	<b>53 692</b>	<b>51 761</b>
% contribution of renewables and waste	34.7	28.3	30.3	35.2	32.8	37.6	53.4	47.0
<b>Renewables</b>	<b>9 852</b>	<b>9 390</b>	<b>12 868</b>	<b>16 218</b>	<b>14 638</b>	<b>18 292</b>	<b>28 354</b>	<b>24 017</b>
% contribution	34.7	28.3	29.7	34.6	32.2	37.0	52.8	46.4
Hydro (excl. pumped storage)	9 157	8 343	11 323	10 092	6 798	8 284	16 148	11 545
Geothermal	4	42	80	201	192	184	197	186
Solar photovoltaic	1	1	1	24	38	160	211	265
Solar thermal	-	-	-	-	-	-	-	-
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	1	16	168	4 037	5 757	7 577	9 182	9 106
Municipal waste (renewable)	-	-	257 e	276	281	290	289	296
Solid biofuels	689	987	1 037	1 530	1 501	1 713	2 226	2 459
Liquid biofuels	-	-	-	-	-	-	-	-
Biogases	-	1	2	58	71	84	101	160
<b>Non-renewable waste</b>	-	-	<b>257</b>	<b>286</b>	<b>290</b>	<b>298</b>	<b>327</b>	<b>321</b>
% contribution	-	-	0.6	0.6	0.6	0.6	0.6	0.6
Industrial waste	-	-	-	10	9	9	39	25
Municipal waste (non-renewable)	-	-	257 e	276	281	289	288	296
<i>Memo: total waste***</i>	-	-	514 e	562	571	588	616	617

\* Primary energy used in the production of electricity and heat by main activity producers or autoproducers in electricity plants, CHP plants and heat plants (e.g. solar thermal power plants, geothermal power plants, etc.).

\*\* Primary energy used elsewhere than in transformation as described above (e.g. remote photovoltaic electricity production for households, heating of buildings/greenhouses by geothermal, etc.).

\*\*\* Includes municipal waste and industrial waste.

## Slovak Republic

## Contribution from renewable energies and energy from waste

	1990	1995	2000	2007	2008	2009	2010	2011e
<b>TPES (ktoe)</b>								
<b>TOTAL PRIMARY ENERGY SUPPLY</b>	<b>21 327</b>	<b>17 778</b>	<b>17 743</b>	<b>17 849</b>	<b>18 304</b>	<b>16 723</b>	<b>17 813</b>	<b>16 939</b>
% contribution of renewables and waste	1.6	4.0	4.6	5.7	5.7	7.5	8.0	7.7
<b>Renewables</b>	<b>328</b>	<b>497</b>	<b>488</b>	<b>972</b>	<b>991</b>	<b>1 213</b>	<b>1 386</b>	<b>1 263</b>
% contribution	1.5	2.8	2.8	5.4	5.4	7.3	7.8	7.5
Hydro	162	420	397	383	347	376	452	317
Geothermal (transformation*)	-	-	-	9	7	7	7	7
Geothermal (direct use**)	-	-	-	2	2	2	2	2
Solar photovoltaic (transformation*)	-	-	-	-	-	-	1 e	2
Solar thermal (transformation*)	-	-	-	-	-	-	-	-
Solar thermal (direct use**)	-	-	-	-	-	-	-	-
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	-	-	-	1	1	1	1	-
Municipal waste (renewable)	-	-	-	19	25	25	22	21
Solid biofuels	166	78	91	461	473	620	725	716
Biogasoline	-	-	-	12	26	34	31	31
Biodiesels	-	-	-	78	101	133	132	151
Other liquid biofuels	-	-	-	-	-	-	-	-
Biogases	-	-	-	7	10	16	14	15
<b>Non-renewable waste</b>	<b>8</b>	<b>210</b>	<b>322</b>	<b>52</b>	<b>50</b>	<b>49</b>	<b>35</b>	<b>36</b>
% contribution	0.0	1.2	1.8	0.3	0.3	0.3	0.2	0.2
Industrial waste	8	210	322	33	29	29	18	19
Municipal waste (non-renewable)	-	-	-	19	21	20	17	17
<i>Memo: total waste***</i>	<i>8</i>	<i>210</i>	<i>322</i>	<i>71</i>	<i>75</i>	<i>74</i>	<i>57</i>	<i>57</i>

## ELECTRICITY (GWh)

<b>TOTAL ELECTRICITY GENERATED</b>	<b>25 497</b>	<b>26 428</b>	<b>30 798</b>	<b>27 892</b>	<b>28 760</b>	<b>25 919</b>	<b>27 464</b>	<b>25 703</b>
% contribution of renewables and waste	7.4	18.5	15.1	17.8	15.9	19.0	21.7	17.1
<b>Renewables</b>	<b>1 880</b>	<b>4 880</b>	<b>4 615</b>	<b>4 934</b>	<b>4 563</b>	<b>4 911</b>	<b>5 940</b>	<b>4 369</b>
% contribution	7.4	18.5	15.0	17.7	15.9	18.9	21.6	17.0
Hydro (excl. pumped storage)	1 880	4 880	4 615	4 451	4 039	4 368	5 255	3 683
Geothermal	-	-	-	-	-	-	-	-
Solar photovoltaic	-	-	-	-	-	-	17 e	20
Solar thermal	-	-	-	-	-	-	-	-
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	-	-	-	8	7	6	6	4
Municipal waste (renewable)	-	-	-	22	22	22	22	22
Solid biofuels	-	-	-	441	480	493	606	606
Liquid biofuels	-	-	-	-	-	-	-	-
Biogases	-	-	-	12	15	22	34	34
<b>Non-renewable waste</b>	<b>-</b>	<b>-</b>	<b>32</b>	<b>24</b>	<b>18</b>	<b>16</b>	<b>24</b>	<b>24</b>
% contribution	-	-	0.1	0.1	0.1	0.1	0.1	0.1
Industrial waste	-	-	32	1	1	2	11	11
Municipal waste (non-renewable)	-	-	-	23	17	14	13	13
<i>Memo: total waste***</i>	<i>-</i>	<i>-</i>	<i>32</i>	<i>46</i>	<i>40</i>	<i>38</i>	<i>46</i>	<i>46</i>

\* Primary energy used in the production of electricity and heat by main activity producers or autoproducers in electricity plants, CHP plants and heat plants (e.g. solar thermal power plants, geothermal power plants, etc.).

\*\* Primary energy used elsewhere than in transformation as described above (e.g. remote photovoltaic electricity production for households, heating of buildings/greenhouses by geothermal, etc.).

\*\*\* Includes municipal waste and industrial waste.

## Slovenia

## Contribution from renewable energies and energy from waste

	1990	1995	2000	2007	2008	2009	2010	2011e
<b>TPES (ktoe)</b>								
<b>TOTAL PRIMARY ENERGY SUPPLY</b>	<b>5 710</b>	<b>6 068</b>	<b>6 413</b>	<b>7 321</b>	<b>7 740</b>	<b>7 091</b>	<b>7 211</b>	<b>7 241</b>
% contribution of renewables and waste	9.1	8.9	12.3	10.2	11.2	14.5	15.2	13.9
<b>Renewables</b>	<b>521</b>	<b>543</b>	<b>788</b>	<b>735</b>	<b>853</b>	<b>1 006</b>	<b>1 070</b>	<b>974</b>
% contribution	9.1	8.9	12.3	10.0	11.0	14.2	14.8	13.4
Hydro	254	280	330	281	346	405	388	306
Geothermal (transformation*)	-	-	-	-	-	-	2	2
Geothermal (direct use**)	-	-	-	-	-	6	26	26
Solar photovoltaic (transformation*)	-	-	-	-	-	-	1	6
Solar thermal (transformation*)	-	-	-	-	-	-	-	-
Solar thermal (direct use**)	-	-	-	-	-	4	5	5
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	-	-	-	-	-	-	-	-
Municipal waste (renewable)	-	-	-	-	-	-	-	-
Solid biofuels	267	263	454	429	469	537	572	565
Biogasoline	-	-	-	1	3	2	3	-
Biodiesels	-	-	-	13	22	28	42	27
Other liquid biofuels	-	-	-	-	-	-	-	-
Biogases	-	-	4	12	14	22	30	36
<b>Non-renewable waste</b>	-	-	-	<b>13</b>	<b>15</b>	<b>20</b>	<b>23</b>	<b>29</b>
% contribution	-	-	0.0	0.2	0.2	0.3	0.3	0.4
Industrial waste	-	-	-	13	15	20	23	29
Municipal waste (non-renewable)	-	-	-	-	-	-	-	-
<i>Memo: total waste***</i>	-	-	-	13	15	20	23	29

## ELECTRICITY (GWh)

<b>TOTAL ELECTRICITY GENERATED</b>	<b>12 444</b>	<b>12 913</b>	<b>13 624</b>	<b>15 043</b>	<b>16 399</b>	<b>16 401</b>	<b>16 248</b>	<b>15 912</b>
% contribution of renewables and waste	23.7	25.2	28.7	22.5	26.3	29.9	29.2	24.4
<b>Renewables</b>	<b>2 950</b>	<b>3 252</b>	<b>3 904</b>	<b>3 379</b>	<b>4 308</b>	<b>4 905</b>	<b>4 742</b>	<b>3 876</b>
% contribution	23.7	25.2	28.7	22.5	26.3	29.9	29.2	24.4
Hydro (excl. pumped storage)	2 950	3 252	3 834	3 266	4 018	4 713	4 512	3 559
Geothermal	-	-	-	-	-	-	-	-
Solar photovoltaic	-	-	-	-	1	4	13	66
Solar thermal	-	-	-	-	-	-	-	-
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	-	-	-	-	-	-	-	-
Municipal waste (renewable)	-	-	-	-	-	-	-	-
Solid biofuels	-	-	58	65	233	120	120	125
Liquid biofuels	-	-	-	-	-	-	-	-
Biogases	-	-	12	48	56	68	97	126
<b>Non-renewable waste</b>	-	-	-	<b>5</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>7</b>
% contribution	-	-	-	0.0	0.0	0.0	0.0	0.0
Industrial waste	-	-	-	5	3	4	5	7
Municipal waste (non-renewable)	-	-	-	-	-	-	-	-
<i>Memo: total waste***</i>	-	-	-	5	3	4	5	7

\* Primary energy used in the production of electricity and heat by main activity producers or autoproducers in electricity plants, CHP plants and heat plants (e.g. solar thermal power plants, geothermal power plants, etc.).

\*\* Primary energy used elsewhere than in transformation as described above (e.g. remote photovoltaic electricity production for households, heating of buildings/greenhouses by geothermal, etc.).

\*\*\* Includes municipal waste and industrial waste.



## Spain

## Contribution from renewable energies and energy from waste

	1990	1995	2000	2007	2008	2009	2010	2011e
<b>TPES (ktoe)</b>								
<b>TOTAL PRIMARY ENERGY SUPPLY</b>	<b>90 085</b>	<b>100 792</b>	<b>121 969</b>	<b>143 829</b>	<b>139 031</b>	<b>127 456</b>	<b>127 739</b>	<b>125 898</b>
% contribution of renewables and waste	6.9	5.7	5.8	7.2	7.8	9.9	12.0	11.5
<b>Renewables</b>	<b>6 197</b>	<b>5 510</b>	<b>6 928</b>	<b>10 001</b>	<b>10 570</b>	<b>12 344</b>	<b>15 070</b>	<b>14 367</b>
% contribution	6.9	5.5	5.7	7.0	7.6	9.7	11.8	11.4
Hydro	2 186	1 988	2 543 e	2 342	2 024	2 264	3 636	2 631
Geothermal (transformation*)	-	-	-	-	-	-	-	-
Geothermal (direct use**)	4	4	5	9	11	14	16	17
Solar photovoltaic (transformation*)	1	1	2	43	220	513	552	708
Solar thermal (transformation*)	-	-	-	2	4	42	285	122
Solar thermal (direct use**)	-	25	31	93	129	156	183	79
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	1	23	407	2 371	2 833	3 278	3 798	3 644
Municipal waste (renewable)	41	94	115	309	328	319	215	174
Solid biofuels	3 955	3 300	3 623	4 231	4 206	4 493	4 750	5 020
Biogasoline	-	-	-	114	116	151	231	226
Biodiesels	-	-	72	270	492	921	1 205	1 501
Other liquid biofuels	-	-	-	-	-	-	-	-
Biogases	10	75	131	217	207	193	199	246
<b>Non-renewable waste</b>	<b>61</b>	<b>214</b>	<b>190</b>	<b>309</b>	<b>328</b>	<b>319</b>	<b>215</b>	<b>174</b>
% contribution	0.1	0.2	0.2	0.2	0.2	0.3	0.2	0.1
Industrial waste	20	120	75	-	-	-	-	-
Municipal waste (non-renewable)	41	94	115	309	328	319	215	174
<i>Memo: total waste***</i>	<i>101</i>	<i>308</i>	<i>304</i>	<i>618</i>	<i>656</i>	<i>638</i>	<i>431</i>	<i>348</i>

**ELECTRICITY (GWh)**

<b>TOTAL ELECTRICITY GENERATED</b>	<b>151 150</b>	<b>165 628</b>	<b>222 235</b>	<b>301 763</b>	<b>311 146</b>	<b>291 789</b>	<b>299 882</b>	<b>289 737</b>
% contribution of renewables and waste	17.3	14.9	16.4	19.5	20.3	25.6	32.8	30.1
<b>Renewables</b>	<b>25 976</b>	<b>24 408</b>	<b>35 808</b>	<b>58 207</b>	<b>62 311</b>	<b>74 000</b>	<b>97 442</b>	<b>86 600</b>
% contribution	17.2	14.7	16.1	19.3	20.0	25.4	32.5	29.9
Hydro (excl. pumped storage)	25 414	23 112	29 570 e	27 233	23 532	26 331	42 278	30 593
Geothermal	-	-	-	-	-	-	-	-
Solar photovoltaic	6	15	18	500	2 562	5 961	6 413	8 232
Solar thermal	-	-	-	8	16	103	692	888
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	14	270	4 727	27 568	32 946	38 117	44 165	42 374
Municipal waste (renewable)	80 e	196 e	334 e	737	782	761	782	703
Solid biofuels	462	668	841	1 553	1 888	2 197	2 459	2 936
Liquid biofuels	-	-	-	-	-	-	-	-
Biogases	-	147	318	608	585	530	653	874
<b>Non-renewable waste</b>	<b>130</b>	<b>313</b>	<b>607</b>	<b>737</b>	<b>782</b>	<b>761</b>	<b>782</b>	<b>703</b>
% contribution	0.1	0.2	0.3	0.2	0.3	0.3	0.3	0.2
Industrial waste	50	118	274	..	..	..	..	-
Municipal waste (non-renewable)	80 e	195 e	333 e	737	782	761	782	703
<i>Memo: total waste***</i>	<i>210 e</i>	<i>509 e</i>	<i>941 e</i>	<i>1 474</i>	<i>1 564</i>	<i>1 522</i>	<i>1 564</i>	<i>1 406</i>

\* Primary energy used in the production of electricity and heat by main activity producers or autoproducers in electricity plants, CHP plants and heat plants (e.g. solar thermal power plants, geothermal power plants, etc.).

\*\* Primary energy used elsewhere than in transformation as described above (e.g. remote photovoltaic electricity production for households, heating of buildings/greenhouses by geothermal, etc.).

\*\*\* Includes municipal waste and industrial waste.

## Sweden

## Contribution from renewable energies and energy from waste

	1990	1995	2000	2007	2008	2009	2010	2011e
<b>TPES (ktoe)</b>								
<b>TOTAL PRIMARY ENERGY SUPPLY</b>	<b>47 198</b>	<b>50 333</b>	<b>47 556</b>	<b>50 060</b>	<b>49 601</b>	<b>45 407</b>	<b>51 282</b>	<b>49 400</b>
% contribution of renewables and waste	24.9	26.0	31.7	31.3	32.4	35.8	34.9	34.6
<b>Renewables</b>	<b>11 530</b>	<b>12 836</b>	<b>14 741</b>	<b>15 293</b>	<b>15 619</b>	<b>15 819</b>	<b>17 407</b>	<b>16 572</b>
% contribution	24.4	25.5	31.0	30.5	31.5	34.8	33.9	33.5
Hydro	6 235	5 857	6 758	5 690	5 940	5 663	5 710	5 699
Geothermal (transformation*)	-	-	-	-	-	-	-	-
Geothermal (direct use**)	-	-	-	-	-	-	-	-
Solar photovoltaic (transformation*)	-	-	-	-	-	1	1	1
Solar thermal (transformation*)	-	-	-	-	-	-	-	-
Solar thermal (direct use**)	3	5	5	9	9	10	10	11
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	1	9	39	123	172	214	301	523
Municipal waste (renewable)	140	158	199	553	635	645	743	712
Solid biofuels	5 152	6 782	7 706	8 439	8 305	8 619	9 909	8 869
Biogasoline	-	-	-	182	214	198	203	213
Biodiesels	-	-	-	102	130	162	177	233
Other liquid biofuels	-	-	-	145	112	197	241	192
Biogases	-	25	32	48	102	109	111	119
<b>Non-renewable waste</b>	<b>215</b>	<b>239</b>	<b>324</b>	<b>400</b>	<b>434</b>	<b>450</b>	<b>515</b>	<b>499</b>
% contribution	0.5	0.5	0.7	0.8	0.9	1.0	1.0	1.0
Industrial waste	5	2	25	31	11	20	21	24
Municipal waste (non-renewable)	210	237	299	369	423	430	494	475
<i>Memo: total waste***</i>	<i>355</i>	<i>397</i>	<i>524</i>	<i>954</i>	<i>1 069</i>	<i>1 096</i>	<i>1 258</i>	<i>1 210</i>

## ELECTRICITY (GWh)

<b>TOTAL ELECTRICITY GENERATED</b>	<b>145 984</b>	<b>148 293</b>	<b>145 231</b>	<b>148 823</b>	<b>149 894</b>	<b>136 604</b>	<b>148 506</b>	<b>152 877</b>
% contribution of renewables and waste	51.0	47.6	57.4	52.6	54.9	59.0	56.1	55.1
<b>Renewables</b>	<b>74 452</b>	<b>70 556</b>	<b>83 140</b>	<b>77 428</b>	<b>81 406</b>	<b>79 804</b>	<b>82 101</b>	<b>83 366</b>
% contribution	51.0	47.6	57.2	52.0	54.3	58.4	55.3	54.5
Hydro (excl. pumped storage)	72 503	68 102	78 584	66 159	69 069	65 852	66 398	66 264
Geothermal	-	-	-	-	-	-	-	-
Solar photovoltaic	-	1	1	3	4	7	9	12
Solar thermal	-	-	-	-	-	-	-	-
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	6	99	457	1 430	1 996	2 485	3 502	6 083
Municipal waste (renewable)	41	46	96	1 109	1 269	1 048	1 716	1 253
Solid biofuels	1 902	2 278	3 970	8 496	8 932	10 103	10 260	9 581
Liquid biofuels	-	-	-	167	106	275	180	144
Biogases	-	30	32	64	30	34	36	29
<b>Non-renewable waste</b>	<b>62</b>	<b>70</b>	<b>244</b>	<b>820</b>	<b>888</b>	<b>749</b>	<b>1 205</b>	<b>876</b>
% contribution	0.0	0.0	0.2	0.6	0.6	0.5	0.8	0.6
Industrial waste	-	-	101	78	42	50	61	41
Municipal waste (non-renewable)	62	70	143	742	846	699	1 144	835
<i>Memo: total waste***</i>	<i>103</i>	<i>116</i>	<i>340</i>	<i>1 929</i>	<i>2 157</i>	<i>1 797</i>	<i>2 921</i>	<i>2 129</i>

\* Primary energy used in the production of electricity and heat by main activity producers or autoproducers in electricity plants, CHP plants and heat plants (e.g. solar thermal power plants, geothermal power plants, etc.).

\*\* Primary energy used elsewhere than in transformation as described above (e.g. remote photovoltaic electricity production for households, heating of buildings/greenhouses by geothermal, etc.).

\*\*\* Includes municipal waste and industrial waste.

## Switzerland

## Contribution from renewable energies and energy from waste

	1990	1995	2000	2007	2008	2009	2010	2011e
<b>TPES (ktoe)</b>								
<b>TOTAL PRIMARY ENERGY SUPPLY</b>	<b>24 320</b>	<b>24 058</b>	<b>25 012</b>	<b>25 765</b>	<b>26 777</b>	<b>26 974</b>	<b>26 208</b>	<b>25 517</b>
% contribution of renewables and waste	16.8	19.5	20.4	20.8	20.8	20.6	22.0	21.3
<b>Renewables</b>	<b>3 637</b>	<b>4 207</b>	<b>4 437</b>	<b>4 583</b>	<b>4 778</b>	<b>4 808</b>	<b>4 985</b>	<b>4 637</b>
% contribution	15.0	17.5	17.7	17.8	17.8	17.8	19.0	18.2
Hydro	2 562	3 025	3 168	3 032	3 099	3 072	3 101	2 764
Geothermal (transformation*)	-	-	-	-	-	-	-	-
Geothermal (direct use**)	69	88	103	164	194	210	259	320
Solar photovoltaic (transformation*)	-	-	1	2	3	4	7	7
Solar thermal (transformation*)	-	-	-	-	-	-	-	-
Solar thermal (direct use**)	8	15	21	27	30	39	44	50
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	-	-	-	1	2	2	3	3
Municipal waste (renewable)	277	294	419	533	522	519	533	549
Solid biofuels	684	734	666	752	854	887	954	840
Biogasoline	-	-	-	2	2	1	1	5
Biodiesels	-	-	-	8	8	5	8	15
Other liquid biofuels	-	-	-	-	-	-	-	-
Biogases	38	52	59	61	65	68	75	84
<b>Non-renewable waste</b>	<b>437</b>	<b>496</b>	<b>669</b>	<b>786</b>	<b>787</b>	<b>745</b>	<b>772</b>	<b>809</b>
% contribution	1.8	2.1	2.7	3.1	2.9	2.8	2.9	3.2
Industrial waste	160	202	249	253	265	226	240	259
Municipal waste (non-renewable)	277	294	419	533	522	519	533	549
<i>Memo: total waste***</i>	<i>714</i>	<i>790</i>	<i>1 088</i>	<i>1 320</i>	<i>1 309</i>	<i>1 263</i>	<i>1 305</i>	<i>1 358</i>

**ELECTRICITY (GWh)**

<b>TOTAL ELECTRICITY GENERATED</b>	<b>54 994</b>	<b>62 247</b>	<b>66 124</b>	<b>66 438</b>	<b>67 037</b>	<b>66 673</b>	<b>66 060</b>	<b>62 546</b>
% contribution of renewables and waste	55.6	58.3	58.4	56.6	57.4	57.2	58.4	55.5
<b>Renewables</b>	<b>30 236</b>	<b>35 748</b>	<b>37 691</b>	<b>36 477</b>	<b>37 323</b>	<b>37 029</b>	<b>37 461</b>	<b>33 553</b>
% contribution	55.0	57.4	57.0	54.9	55.7	55.5	56.7	53.6
Hydro (excl. pumped storage)	29 795	35 169	36 834	35 250	36 036	35 723	36 061	32 140
Geothermal	-	-	-	-	-	-	-	-
Solar photovoltaic	1	5	11	27	34	50	83	83
Solar thermal	-	-	-	-	-	-	-	-
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	-	-	3	16	19	23	37	37
Municipal waste (renewable)	320	410	635	890	912	877	919	928
Solid biofuels	40	41	59	126	145	165	151	153
Liquid biofuels	-	-	-	-	-	-	-	-
Biogases	80	123	149	168	177	191	210	212
<b>Non-renewable waste</b>	<b>364</b>	<b>516</b>	<b>903</b>	<b>1 119</b>	<b>1 156</b>	<b>1 141</b>	<b>1 146</b>	<b>1 157</b>
% contribution	0.7	0.8	1.4	1.7	1.7	1.7	1.7	1.8
Industrial waste	44	106	268	229	244	264	227	229
Municipal waste (non-renewable)	320	410	635	890	912	877	919	928
<i>Memo: total waste***</i>	<i>684</i>	<i>926</i>	<i>1 538</i>	<i>2 009</i>	<i>2 068</i>	<i>2 018</i>	<i>2 065</i>	<i>2 085</i>

\* Primary energy used in the production of electricity and heat by main activity producers or autoproducers in electricity plants, CHP plants and heat plants (e.g. solar thermal power plants, geothermal power plants, etc.).

\*\* Primary energy used elsewhere than in transformation as described above (e.g. remote photovoltaic electricity production for households, heating of buildings/greenhouses by geothermal, etc.).

\*\*\* Includes municipal waste and industrial waste.

## Turkey

## Contribution from renewable energies and energy from waste

	1990	1995	2000	2007	2008	2009	2010	2011e
<b>TPES (ktoe)</b>								
<b>TOTAL PRIMARY ENERGY SUPPLY</b>	<b>52 756</b>	<b>61 545</b>	<b>76 348</b>	<b>100 005</b>	<b>98 502</b>	<b>97 661</b>	<b>105 133</b>	<b>114 183</b>
% contribution of renewables and waste	18.3	17.5	13.3	9.6	9.5	10.2	11.1	10.3
<b>Renewables</b>	<b>9 657</b>	<b>10 775</b>	<b>10 101</b>	<b>9 602</b>	<b>9 310</b>	<b>9 915</b>	<b>11 626</b>	<b>11 701</b>
% contribution	18.3	17.5	13.2	9.6	9.5	10.2	11.1	10.2
Hydro	1 991	3 057	2 656	3 083	2 861	3 092	4 454	4 478
Geothermal (transformation*)	69	74	65	134	140	375	575	582
Geothermal (direct use**)	364	437	618	914	1 011	1 249	1 391	1 410
Solar photovoltaic (transformation*)	-	-	-	-	-	-	-	-
Solar thermal (transformation*)	-	-	-	-	-	-	-	-
Solar thermal (direct use**)	28	143	262	420	420	429	432	302
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	-	-	3	31	73	129	251	406
Municipal waste (renewable)	-	-	-	-	-	-	-	-
Solid biofuels	7 205	7 065	6 492	4 993	4 764	4 588	4 449	4 449
Biogasoline	-	-	-	-	6	6	-	-
Biodiesels	-	-	-	12	9	1	6	6
Other liquid biofuels	-	-	-	-	-	-	-	-
Biogases	-	-	5	15	26	47	68	68
<b>Non-renewable waste</b>	-	-	<b>15</b>	<b>34</b>	<b>22</b>	<b>25</b>	<b>36</b>	<b>36</b>
% contribution	-	-	0.0	0.0	0.0	0.0	0.0	0.0
Industrial waste	-	-	15	34	22	25	36	36
Municipal waste (non-renewable)	-	-	-	-	-	-	-	-
<i>Memo: total waste***</i>	-	-	15	34	22	25	36	36

**ELECTRICITY (GWh)**

<b>TOTAL ELECTRICITY GENERATED</b>	<b>57 543</b>	<b>86 247</b>	<b>124 922</b>	<b>191 558</b>	<b>198 418</b>	<b>194 813</b>	<b>211 208</b>	<b>228 406</b>
% contribution of renewables and waste	40.4	41.6	25.0	19.1	17.4	19.6	26.4	25.4
<b>Renewables</b>	<b>23 228</b>	<b>35 849</b>	<b>31 154</b>	<b>36 457</b>	<b>34 421</b>	<b>38 141</b>	<b>55 712</b>	<b>57 816</b>
% contribution	40.4	41.6	24.9	19.0	17.3	19.6	26.4	25.3
Hydro (excl. pumped storage)	23 148	35 541	30 879	35 851	33 270	35 958	51 796	52 067
Geothermal	80	86	76	156	162	436	668	699
Solar photovoltaic	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	-	-	33	355	847	1 495	2 916	4 726
Municipal waste (renewable)	-	-	-	-	-	-	-	-
Solid biofuels	-	222	145	25	24	30	36	-
Liquid biofuels	-	-	-	-	-	-	-	-
Biogases	-	-	21	70	118	222	296	324
<b>Non-renewable waste</b>	-	-	<b>54</b>	<b>119</b>	<b>77</b>	<b>88</b>	<b>125</b>	<b>127</b>
% contribution	-	-	0.0	0.1	0.0	0.0	0.1	0.1
Industrial waste	-	-	54	119	77	88	125	127
Municipal waste (non-renewable)	-	-	-	-	-	-	-	-
<i>Memo: total waste***</i>	-	-	54	119	77	88	125	127

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\*\* Primary energy used elsewhere than in transformation as described above (e.g. remote photovoltaic electricity production for households, heating of buildings/greenhouses by geothermal, etc.).

\*\*\* Includes municipal waste and industrial waste.

## United Kingdom

### Contribution from renewable energies and energy from waste

	1990	1995	2000	2007	2008	2009	2010	2011e
<b>TPES (ktoe)</b>								
<b>TOTAL PRIMARY ENERGY SUPPLY</b>	<b>205 920</b>	<b>216 264</b>	<b>222 936</b>	<b>210 968</b>	<b>208 392</b>	<b>197 073</b>	<b>202 506</b>	<b>189 004</b>
% contribution of renewables and waste	0.5	0.9	1.1	2.4	2.8	3.4	3.5	4.3
<b>Renewables</b>	<b>1 029</b>	<b>1 836</b>	<b>2 264</b>	<b>4 626</b>	<b>5 449</b>	<b>6 241</b>	<b>6 787</b>	<b>7 772</b>
% contribution	0.5	0.8	1.0	2.2	2.6	3.2	3.4	4.1
Hydro	448	416	437	438	444	453	310	490
Geothermal (transformation*)	-	-	-	-	-	-	-	-
Geothermal (direct use**)	1	1	1	1	1	1	1	1
Solar photovoltaic (transformation*)	-	-	-	1	1	2	3	22
Solar thermal (transformation*)	-	-	-	-	-	-	-	-
Solar thermal (direct use**)	10	10	11	45	56	69	87	87
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	1	34	81	454	610	800	876	1 335
Municipal waste (renewable)	70	136	264	439	462	541	558	606
Solid biofuels	303	886	659	1 337	1 496	1 708	2 053	2 325
Biogasoline	-	-	-	77	104	153	316	307
Biodiesels	-	-	-	264	656	818	812	716
Other liquid biofuels	-	-	-	-	-	-	-	-
Biogases	196	354	810	1 571	1 618	1 697	1 772	1 884
<b>Non-renewable waste</b>	<b>58</b>	<b>164</b>	<b>189</b>	<b>519</b>	<b>444</b>	<b>463</b>	<b>393</b>	<b>428</b>
% contribution	0.0	0.1	0.1	0.2	0.2	0.2	0.2	0.2
Industrial waste	16	46	35	256	166	153	73	80
Municipal waste (non-renewable)	42	119	154	264	277	311	320	348
<i>Memo: total waste***</i>	<i>128</i>	<i>300</i>	<i>453</i>	<i>958</i>	<i>906</i>	<i>1 004</i>	<i>951</i>	<i>1 034</i>

### ELECTRICITY (GWh)

<b>TOTAL ELECTRICITY GENERATED</b>	<b>317 755</b>	<b>332 489</b>	<b>374 375</b>	<b>392 921</b>	<b>384 606</b>	<b>373 055</b>	<b>377 979</b>	<b>362 379</b>
% contribution of renewables and waste	1.9	2.2	2.8	5.5	6.1	7.2	7.2	10.0
<b>Renewables</b>	<b>5 811</b>	<b>6 871</b>	<b>9 970</b>	<b>19 601</b>	<b>21 566</b>	<b>25 183</b>	<b>25 736</b>	<b>34 754</b>
% contribution	1.8	2.1	2.7	5.0	5.6	6.8	6.8	9.6
Hydro (excl. pumped storage)	5 207	4 838	5 086	5 090	5 168	5 262	3 604	5 694
Geothermal	-	-	-	-	-	-	-	-
Solar photovoltaic	-	-	1	14	17	20	33	259
Solar thermal	-	-	-	-	-	-	-	-
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	9	391	947	5 274	7 097	9 304	10 183	15 525
Municipal waste (renewable)	140	471	840	1 177	1 226	1 510	1 594	1 732
Solid biofuels	-	199	541	2 920	2 768	3 536	4 582	5 444
Liquid biofuels	-	-	-	-	-	-	-	-
Biogases	455	972	2 555	5 126	5 290	5 551	5 740	6 100
<b>Non-renewable waste</b>	<b>83</b>	<b>412</b>	<b>519</b>	<b>1 914</b>	<b>1 791</b>	<b>1 792</b>	<b>1 446</b>	<b>1 577</b>
% contribution	0.0	0.1	0.1	0.5	0.5	0.5	0.4	0.4
Industrial waste	-	-	-	1 207	1 055	918	524	576
Municipal waste (non-renewable)	83	412	519	707	736	874	922	1 001
<i>Memo: total waste***</i>	<i>223</i>	<i>883</i>	<i>1 359</i>	<i>3 091</i>	<i>3 017</i>	<i>3 302</i>	<i>3 040</i>	<i>3 309</i>

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\*\* Primary energy used elsewhere than in transformation as described above (e.g. remote photovoltaic electricity production for households, heating of buildings/greenhouses by geothermal, etc.).

\*\*\* Includes municipal waste and industrial waste.

## United States

## Contribution from renewable energies and energy from waste

	1990	1995	2000	2007	2008	2009	2010	2011e
<b>TPES (ktoe)</b>								
<b>TOTAL PRIMARY ENERGY SUPPLY</b>	<b>1 914 996</b>	<b>2 067 213</b>	<b>2 273 332</b>	<b>2 337 014</b>	<b>2 277 034</b>	<b>2 164 972</b>	<b>2 216 324</b>	<b>2 202 716</b>
% contribution of renewables and waste	5.2	5.4	4.8	4.9	5.3	5.7	5.9	6.3
<b>Renewables</b>	<b>96 165</b>	<b>104 844</b>	<b>101 963</b>	<b>109 085</b>	<b>115 476</b>	<b>117 729</b>	<b>125 006</b>	<b>133 289</b>
% contribution	5.0	5.1	4.5	4.7	5.1	5.4	5.6	6.1
Hydro	23 491	27 014	21 776	21 467	22 077	23 701	22 555	28 183
Geothermal (transformation*)	13 765	12 844	12 569	7 751	7 858	7 939 e	8 186 e	8 699
Geothermal (direct use**)	336	406	519	1 036	244	219 e	222 e	236
Solar photovoltaic (transformation*)	-	-	16 e	86 e	104 e	146 e	263 e	263
Solar thermal (transformation*)	57	71	133	148	196	181	193	200
Solar thermal (direct use**)	-	-	1 440	1 325	1 369	1 375	1 389	1 435
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	264	275	486	2 976	4 790	6 383	8 183 e	10 362
Municipal waste (renewable)	2 076	3 227	4 095	3 928	4 052	4 004	3 922	4 050
Solid biofuels	55 444	57 342	55 015	51 533	50 440	46 526	49 297	49 227
Biogasoline	..	2 644	2 934	13 191	18 550	21 142	24 632	22 625
Biodiesels	..	-	21	1 167	1 029	938	745	2 398
Other liquid biofuels	..	-	-	92	85	88	100	98
Biogases	732	1 022	2 960	4 386	4 681	5 089	5 320	5 513
<b>Non-renewable waste</b>	<b>4 003</b>	<b>6 294</b>	<b>8 207</b>	<b>6 380</b>	<b>5 650</b>	<b>6 017</b>	<b>6 397</b>	<b>4 858</b>
% contribution	0.2	0.3	0.4	0.3	0.2	0.3	0.3	0.2
Industrial waste	1 928	3 067	4 112	3 294	2 467	2 871	3 316	1 636
Municipal waste (non-renewable)	2 076	3 227	4 095	3 086	3 184	3 146	3 081	3 221
<i>Memo: total waste***</i>	<i>6 079</i>	<i>9 520</i>	<i>12 302</i>	<i>10 308</i>	<i>9 702</i>	<i>10 020</i>	<i>10 318</i>	<i>8 908</i>

## ELECTRICITY (GWh)

<b>TOTAL ELECTRICITY GENERATED</b>	<b>3 202 813</b>	<b>3 558 374</b>	<b>4 025 885</b>	<b>4 323 914</b>	<b>4 342 979</b>	<b>4 165 394</b>	<b>4 354 355</b>	<b>4 320 852</b>
% contribution of renewables and waste	11.8	11.1	8.6	8.7	9.3	10.6	10.4	12.5
<b>Renewables</b>	<b>369 241</b>	<b>384 343</b>	<b>330 364</b>	<b>361 814</b>	<b>391 021</b>	<b>428 695</b>	<b>440 669</b>	<b>530 880</b>
% contribution	11.5	10.8	8.2	8.4	9.0	10.3	10.1	12.3
Hydro (excl. pumped storage)	273 152	314 116	253 204	249 619	256 714	275 590	262 266	327 712
Geothermal	16 012	14 941	14 621	16 798	16 873	17 046	17 577	18 243
Solar photovoltaic	3	4	183 e	1 000 e	1 213 e	1 698 e	3 055 e	3 055
Solar thermal	663	824	526	673	878	816	879	879
Tide/wave/ocean	-	-	-	-	-	-	-	-
Wind	3 066	3 196	5 650	34 603	55 696	74 226	95 148	120 486
Municipal waste (renewable)	5 306 e	7 386	8 364	9 578	9 513	9 469	9 308	9 469
Solid biofuels	68 545	40 587	42 586	41 990	41 619	40 478	42 536	41 263
Liquid biofuels	-	-	-	84	88	91	94	133
Biogases	2 494	3 289	5 230	7 469	8 427	9 281	9 806	9 640
<b>Non-renewable waste</b>	<b>10 017</b>	<b>11 655</b>	<b>15 533</b>	<b>12 532</b>	<b>12 818</b>	<b>12 972</b>	<b>13 685</b>	<b>9 086</b>
% contribution	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.2
Industrial waste	4 710	4 268	7 170	5 006	5 344	5 532	6 370	1 638
Municipal waste (non-renewable)	5 307	7 387	8 363	7 526	7 474	7 440	7 315	7 448
<i>Memo: total waste***</i>	<i>15 323 e</i>	<i>19 041</i>	<i>23 897</i>	<i>22 110</i>	<i>22 331</i>	<i>22 441</i>	<i>22 993</i>	<i>18 555</i>

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\*\* Primary energy used elsewhere than in transformation as described above (e.g. remote photovoltaic electricity production for households, heating of buildings/greenhouses by geothermal, etc.).

\*\*\* Includes municipal waste and industrial waste.

# MULTILINGUAL GLOSSARIES

## English

coal and peat  
 crude oil and NGL  
 oil products  
 natural gas  
 nuclear energy  
 hydro energy  
 geothermal energy  
 solar energy  
 wind energy  
 tide energy  
 biofuels and waste  
 electricity  
 heat  
 total energy

## Français

charbon et tourbe  
 pétrole brut et LGN  
 produits pétroliers  
 gaz naturel  
 énergie nucléaire  
 énergie hydraulique  
 énergie géothermique  
 énergie d'origine solaire  
 énergie d'origine éolienne  
 énergie des marées  
 biocarburants et déchets  
 électricité  
 chaleur  
 énergie totale

## Deutsch

Kohle und Torf  
 Rohöl und Kondensate  
 Ölprodukte  
 Erdgas  
 Kernenergie  
 Wasserkraft  
 Geothermischer Energie  
 Sonnenenergie  
 Windenergie  
 Gezeitenenergie  
 Biokraftstoffe und Abfälle  
 Elektrizität  
 Wärme  
 Total Energie



## Français

## Deutsch

1	Production	Produktion
2	Importations	Importe
3	Exportations	Exporte
4	Soutes maritimes internationales	Bunkerbestände der Internationalen Seeschifffahrt
5	Soutes aériennes internationales	Bunkerbestände der Internationalen Luftfahrt
6	Variation des stocks	Bestandsveränderungen
<b>7</b>	<b>APPROV. TOTAUX EN ENERGIE PRIMAIRE</b>	<b>GESAMTENERGIEAUFKOMMEN</b>
8	Transferts	Transfer
9	Ecarts statistiques	Statistische Differenzen
10	Centrales électriques	Elektrizitätswerke
11	Centrales de cogénération	Elektrizitäts- und Heizkraftwerke
12	Centrales calogènes	Heizkraftwerke
13	Hauts fourneaux	Hochöfen
14	Usines à gaz	Gaswerke
15	Cokeries/usines d'agglomérés/usines de briquettes de lignite	Koks- und Brikettfabriken
16	Raffineries de pétrole	Oelraffinerien
17	Usines pétrochimiques	Petrochemische Werke
18	Unités de liquéfaction	Verflüssigung
19	Autres transformations	Sonst. Umwandlungsbereich
20	Consommation propre de l'industrie énergétique	Energieindustrie Eigener Verbrauch
21	Pertes	Verluste
<b>22</b>	<b>CONSOMMATION FINALE TOTALE</b>	<b>ENDENERGIEVERBRAUCH</b>
<b>23</b>	<b>INDUSTRIE</b>	<b>INDUSTRIE</b>
24	Sidérurgie	Eisen- und Stahlindustrie
25	Industrie chimique et pétrochimique	Chemische Industrie
26	Métaux non ferreux	Ne-Metallerzeugung
27	Produits minéraux non métalliques	Glas- und Keramikindustrie
28	Matériel de transport	Fahrzeugbau
29	Construction mécanique	Maschinenbau
30	Industries extractives	Bergbau- und Steinbrüche
31	Industrie alimentaire et tabacs	Nahrungs- und Genussmittel
32	Papier, pâte à papier et imprimerie	Zellstoff, Papier, Pappeerzeugung
33	Bois et produits dérivés	Holz und Holzprodukte
34	Construction	Baugewerbe
35	Textiles et cuir	Textil- und Lederindustrie
36	Non spécifiés	Sonstige
<b>37</b>	<b>TRANSPORTS</b>	<b>VERKEHRS</b>
38	Aviation intérieure	Inland Luftverkehr
39	Transport routier	Straßenverkehr
40	Transport ferroviaire	Schienenverkehr
41	Transport par conduits	Rohrleitungen
42	Navigation intérieure	Binnenschifffahrt
43	Non spécifiés	Sonstige
<b>44</b>	<b>AUTRES</b>	<b>ANDERE</b>
45	Résidentiel	Wohnsektor
46	Commerce et services publics	Handel- und öffentliche Einrichtungen
47	Agriculture / sylviculture	Landwirtschaft / Forstwirtschaft
48	Pêche	Fischfang
49	Non spécifiés	Sonstige
<b>50</b>	<b>UTILISATIONS NON ENERGETIQUES</b>	<b>NICHTENERGETISCHER VERBRAUCH</b>
51	dans l'industrie/transformation/énergie	im Industrie-/Umwandlung-/Energiesektor
52	dont : produits d'alimentation	davon: Feedstocks
53	dans les transports	im Verkehr
54	dans les autres secteurs	in anderen Sektoren
<b>55</b>	<b>Electricité produite - TWh</b>	<b>Elektrizitätsproduktion - TWh</b>
56	Centrales électriques	Elektrizitätswerke
57	Centrales de cogénération	Elektrizitäts- und Heizkraftwerke
<b>58</b>	<b>Chaleur produite - PJ</b>	<b>Wärmeerzeugung - PJ</b>
59	Centrales de cogénération	Elektrizitäts- und Heizkraftwerke
60	Centrales calogènes	Heizkraftwerke

## English

coal and peat  
 crude oil and NGL  
 oil products  
 natural gas  
 nuclear energy  
 hydro energy  
 geothermal energy  
 solar energy  
 wind energy  
 tide energy  
 biofuels and waste  
 electricity  
 heat  
 total energy

## Italiano

carbone e torba  
 petrolio grezzo e LGN  
 prodotti petroliferi  
 gas naturale  
 energia nucleare  
 energia idroelettrica  
 energia geotérmica  
 energia solare  
 energia eolica  
 energia maremotrice  
 biocarburanti e rifiuti  
 energia elettrica  
 calore  
 energia totale

## 日本語

石炭 及び 泥炭  
 原油 及び NGL  
 石油製品  
 天然ガス  
 原子力  
 水力  
 地熱  
 太陽光  
 風力  
 潮力  
 バイオ燃料や廃棄物  
 電力  
 熱  
 総エネルギー

## Italiano

日本語  
Japanese

1	Produzione	国内生産
2	Importazioni	輸入
3	Esportazioni	輸出
4	Bunkeraggi marittimi internazionali	国際海運バンカー
5	Bunkeraggi aerei internazionali	国際航空バンカー
6	Variazioni di stock	在庫変動
<b>7</b>	<b>TOTALE RISORSE PRIMARIE</b>	<b>一次エネルギー国内供給計</b>
8	Ritorni e trasferimenti	品種振替
9	Differenza statistica	統計誤差
10	Centrali elettriche	電気事業者・自家発
11	Impianti di cogenerazione	コージェネレーション
12	Impianti di produzione di calore	熱供給事業者
13	Altiforni	高炉
14	Officine del gas	ガス業
15	Cokerie/fabbriche di agglomerati e bricchette o formelle di lignite	コークス・練豆炭
16	Raffinerie di petrolio	石油精製
17	Impianti petrochimici	石油化学
18	Liquefazione	液化
19	Altri settori di trasformazione	その他の転換
20	Autoconsumo dell'industria energetica	エネルギー産業自家消費
21	Perdite	ロス
<b>22</b>	<b>CONSUMI FINALI</b>	<b>最終エネルギー消費計</b>
<b>23</b>	<b>INDUSTRIA</b>	<b>産業</b>
24	Siderurgico	鉄鋼業
25	Chimico	化学工業
26	Metalli non ferrosi	非鉄金属
27	Minerali non metalllici	窯業土石
28	Equipaggiamento per trasporti	輸送用機械
29	Meccanico	金属機械
30	Estrattivo	鉱業
31	Alimentare e del tabacco	食料品・たばこ
32	Cartario e grafico	紙・パルプ
33	Legno e prodotti del legno	木製品
34	Costruzioni	建設業
35	Tessile e pelli	繊維工業
36	Non specificato	分類不明
<b>37</b>	<b>TRASPORTI</b>	<b>運輸</b>
38	Aviazione nazionale	国内航空輸送
39	Trasporti stradali	道路輸送
40	Trasporti ferroviari	鉄道
41	Trasporti per condotti	パイプライン輸送
42	Trasporti fluviali interni	内航海運
43	Non specificato	分類不明
<b>44</b>	<b>ALTRO</b>	<b>その他</b>
45	Domestico	民生・家庭
46	Commercio e servizi pubblici	民生・業務
47	Agricoltura / selvicoltura	農林業
48	Pesca	漁業
49	Non specificato	分類不明
<b>50</b>	<b>USI NON ENERGETICI</b>	<b>非エネルギー</b>
51	dell'industria	産業・転換・エネルギー産業
52	di cui: prodotti intermedi	(うちフィードストック)
53	dei trasporti	運輸
54	degli altri settori	その他
<b>55</b>	<b>Elettricità Prodotta - TWh</b>	<b>発電量 - TWh</b>
56	Centrali elettriche	電気事業者・自家発
57	Impianti di cogenerazione	コージェネレーション
<b>58</b>	<b>Calore Prodotto - PJ</b>	<b>熱発生量 - PJ</b>
59	Impianti di cogenerazione	コージェネレーション
60	Impianti di produzione di calore	熱供給事業者

## English

coal and peat  
 crude oil and NGL  
 oil products  
 natural gas  
 nuclear energy  
 hydro energy  
 geothermal energy  
 solar energy  
 wind energy  
 tide energy  
 biofuels and waste  
 electricity  
 heat  
 total energy

## Español

carbón y turba  
 petróleo crudo y LGN  
 productos petrolíferos  
 gas natural  
 energía nuclear  
 energía hidráulica  
 energía geotérmica  
 energía solar  
 energía eólica  
 energía maremotriz  
 biocombustibles y residuos  
 electricidad  
 calor  
 energía total

## Русский

уголь и торф  
 сырая нефть/ Газ. конденсаты  
 нефтепродукты  
 природный газ  
 атомная энергия  
 гидроэнергия  
 геотермальная энергия  
 солнечная энергия  
 энергия ветра  
 энергия приливов  
 биотоплива и отходов  
 электричество  
 тепло  
 всего источников энергии

## Español

Русский  
Russian

1	Producción	Собственное производство
2	Importaciones	Импорт
3	Exportaciones	Экспорт
4	Búncers marítimos internacional	международный бункер водных перевозок
5	Búncers aéreos internacional	международный бункер авиационных перевозок
6	Cambio de stocks	Изменение остатков
<b>7</b>	<b>SUMINISTRO AL CONSUMO</b>	<b>ОБЩАЯ ПЕРВИЧНАЯ ПОСТАВКА ТОПЛИВА И ЭНЕРГИИ</b>
8	Transferencias	Передачи
9	Diferencias estadísticas	Статистическое расхождение
10	Central eléctrica	Электростанции
11	Central combinada de calor y electricidad	Тепло-электроцентрали
12	Central de calor	Теплоцентрали
13	Alto horno	Доменные печи
14	Gas ciudad	Газовые заводы
15	Plantas de coque/combustible 'patente'/BKB	Коксовые печи/Предпр-ия по пр-ву каменноуг./буроуг. брикетов
16	Refinerías de petróleo	Нефтеперерабатывающие заводы
17	Plantas de petroquímica	Нефтехимические заводы
18	Licuefacción	Ожижение
19	Otros sect. de transformación	Др. преобразование и переработка топлива
20	Consumos propios de la industria de energía	Собственное использование сектором энергетики
21	Pérdidas	Потери
<b>22</b>	<b>CONSUMO FINAL</b>	<b>КОНЕЧНОЕ ПОТРЕБЛЕНИЕ</b>
<b>23</b>	<b>INDUSTRIA</b>	<b>ПРОМЫШЛЕННОСТЬ</b>
24	Siderurgia	Черная металлургия
25	Químico	Химия и нефтехимия
26	Metales no féreos	Цветная металлургия
27	Minerales no metálicos	Неметалл. минералы
28	Equipos de transporte	Транспортное оборудование
29	Maquinaria	Машиностроение
30	Extracción y minas	Горнодобывающая промышленность
31	Alimentación y tabaco	Пищевая и табачная промышленность
32	Papel, pasta e impresión	Бум.-целл. и полиграф. пр-сть
33	Madera	Пр-во древесины и деревообработка
34	Construcción	Строительство
35	Textil y piel	Текст.-кожевенная пр-сть
36	No especificado	Др. отрасли промышленности
<b>37</b>	<b>TRANSPORTE</b>	<b>ТРАНСПОРТ</b>
38	Transporte aéreo interno	Внутренний воздушный транспорт
39	Transporte por carretera	Автомобильный транспорт
40	Ferrocarril	Железнодорожный транспорт
41	Oleoducto	Транспортировка по трубопроводам
42	Navegación interna	Внутренний водный транспорт
43	No especificado	Неспецифицированный транспорт
<b>44</b>	<b>SECTORES</b>	<b>ДРУГИЕ</b>
45	Residencial	Бытовой сектор
46	Comercio y serv. públicos	Торговля и услуги
47	Agricultura / selvicultura	Сельское хозяйство / Лесное хозяйство
48	Pesca	Рыболовство
49	No especificado	Неспецифицированные другие секторы
<b>50</b>	<b>USOS NO ENERGETICOS</b>	<b>НЕЭНЕРГЕТИЧЕСКОЕ ИСПОЛЬЗОВАНИЕ</b>
51	en la industria/trañf./energía	в промышленности/преобраз.-переработке/топл.-энергетике
52	incl.: prod. de aliment.	в т.ч. П/фабрикаты нефтепереработки
53	en el transporte	в транспорте
54	en otros sectores	в других секторах
<b>55</b>	<b>Electr. Producida - TWh</b>	<b>Производство электроэнергии - Твт.ч</b>
56	Central Eléctrica	Электростанции
57	Central combinada de calor y electricidad	Тепло-электроцентрали
<b>58</b>	<b>Calor producido - PJ</b>	<b>Производство тепла - ПДж</b>
59	Central combinada de calor y electricidad	Тепло-электроцентрали
60	Central de calor	Теплоцентрали

## English

coal and peat  
crude oil and NGL  
oil products  
natural gas  
nuclear energy  
hydro energy  
geothermal energy  
solar energy  
wind energy  
tide energy  
biofuels and waste  
electricity  
heat  
total energy

## 中文

煤和泥炭  
原油和液态天然气  
石油产品  
天然气  
核能  
水能  
地热能  
太阳能  
风能  
潮汐能  
生物燃料和废物  
电力  
热能  
能源合计

# 中文

## Chinese

1	本国产量
2	进口
3	出口
4	国际海运加油
5	国际航空
6	库存变化
<b>7</b>	<b>转换</b>
8	统计差额
9	发电厂
10	热电联产厂
11	热力厂
12	高炉气厂
13	高炉气厂
14	制气厂
15	炼焦 / 专用燃料 / 褐煤型煤厂
16	炼油厂
17	石油化学厂
18	液化厂
19	其它转换
20	其它转化
21	能源工业自用
<b>22</b>	<b>最终消费合计 (TFC)</b>
<b>23</b>	<b>工业</b>
24	钢铁
25	化学和石化
26	有色金属
27	非金属矿物
28	交通设备
29	机械工业
30	采矿和挖掘
31	食品和烟草
32	纸, 纸浆和印刷
33	木材和木材制品
34	建筑业
35	纺织和皮革
36	其它
<b>37</b>	<b>交通运输</b>
38	国内航空
39	公路运输
40	铁路运输
41	管道运输
42	国内海运
43	其它
<b>44</b>	<b>其它</b>
45	居民消费
46	商业和公共事业
47	农业林业
48	捕鱼业
49	其它
<b>50</b>	<b>非能源使用</b>
51	工业 / 转化 / 能源
52	其中: 用做原料
53	交通
54	其它
<b>55</b>	<b>发电 (10<sup>9</sup> 千瓦时)</b>
56	发电厂
57	热电联产厂
<b>58</b>	<b>供热 (10<sup>12</sup> 焦)</b>
59	热电联产厂
60	热力厂

# Energy Data Manager / Statistician

Possible Staff Vacancies  
International Energy Agency, Paris, France

## The IEA

The International Energy Agency, based in Paris, acts as energy policy advisor to 34 member countries in their effort to ensure reliable, affordable and clean energy for their citizens. Founded during the oil crisis of 1973-74, the IEA's initial role was to co-ordinate measures in times of oil supply emergencies. As energy markets have changed, so has the IEA. Its mandate has broadened to incorporate the "Three E's" of balanced energy policy making: energy security, economic development and environmental protection. Current work focuses on climate change policies, market reform, energy technology collaboration and outreach to the rest of the world, especially major consumers and producers of energy like China, India, Russia and the OPEC countries.

The Energy Data Centre, with a staff of around 30 people, provides a dynamic environment for young people just finishing their studies or with one to two years of work experience.

## Job description

The data managers/statisticians compile, verify and disseminate information on all aspects of energy including production, transformation and consumption of all fuels, renewables, the emergency reporting system, energy efficiency indicators, CO<sub>2</sub> emissions, and energy prices and taxes. The data managers are responsible for receiving, reviewing and inputting data submissions from Member countries and other sources into large computerised databases. They check for completeness, correct calculations, internal consistency, accuracy and consistency with definitions. Often this entails proactively investigating and helping to resolve anomalies in collaboration with national administrations of Member and Non-Member countries. The data managers/statisticians also play a key role in helping to design and implement computer macros used in the preparation of their energy statistics publication(s).

## Principal Qualifications

- University degree in a topic relevant to energy, computer programming or statistics. We currently have staff with degrees in Mathematics, Statistics, Information Technology, Economics, Engineering, Physics, Chemistry, Environmental Studies, Hydrology, Public Administration and Business.
- Experience in the basic use of databases and computer software. Good computer programming skills in Visual Basic.
- Ability to work accurately, pay attention to detail and work to deadlines. Ability to deal simultaneously with a wide variety of tasks and to organise work efficiently.
- Good communication skills; ability to work well in a team and in a multicultural environment, particularly in liaising with contacts in national administrations and industry.
- Very good knowledge of one of the two official languages of the Organisation (English or French). Knowledge of other languages would be an advantage.
- Some knowledge of energy industry operations and terminology would also be an advantage, but is not required.

Nationals of any OECD Member country are eligible for appointment. Basic salaries start at 3 080 Euros per month. The possibilities for advancement are good for candidates with appropriate qualifications and experience. Tentative enquiries about future vacancies are welcomed from men and women with relevant qualifications and experience. Applications in French or English, accompanied by a curriculum vitae, should be sent to:

Office of Management and Administration  
International Energy Agency  
9 rue de la Fédération  
75739 Paris Cedex 15, France  
Email: [recruitment@iea.org](mailto:recruitment@iea.org)



## On-Line Data Services

Users can instantly access not only all the data published in this book, but also all the time series used for preparing this publication and all the other statistics publications of the IEA. The data are available on-line, either through annual subscription or pay-per-view access. More information on this service can be found on our website: <http://data.iea.org>

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## Ten Annual Publications

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### ■ Energy Statistics of OECD Countries, 2012 Edition

No other publication offers such in-depth statistical coverage. It is intended for anyone involved in analytical or policy work related to energy issues. It contains data on energy supply and consumption in original units for coal, oil, natural gas, biofuels/waste and products derived from these primary fuels, as well as for electricity and heat. Complete data are available for 2009 and 2010 and supply estimates are available for the most recent year (*i.e.* 2011). Historical tables summarise data on production, trade and final consumption. Each issue includes definitions of products and flows and explanatory notes on the individual country data.

*Published July 2012 - Price €120*

### ■ Energy Balances of OECD Countries, 2012 Edition

A companion volume to *Energy Statistics of OECD Countries*, this publication presents standardised energy balances expressed in million tonnes of oil equivalent. Energy supply and consumption data are divided by main fuel: coal, oil, natural gas, nuclear, hydro, geothermal/solar, biofuels/waste, electricity and heat. This allows for easy comparison of the contributions each fuel makes to the economy and their interrelationships through the conversion of one fuel to another. All of this is essential for estimating total energy supply, forecasting, energy conservation, and analysing the potential for interfuel substitution. Complete data are available for 2009 and 2010 and supply estimates are available for the most recent year (*i.e.* 2011). Historical tables summarise key energy and economic indicators as well as data on production, trade and final consumption. Each issue includes definitions of products and flows and explanatory notes on the individual country data as well as conversion factors from original units to tonnes of oil equivalent.

*Published July 2012 - Price €120*

### ■ Energy Statistics of Non-OECD Countries, 2012 Edition

This publication offers the same in-depth statistical coverage as the homonymous publication covering OECD countries. It includes data in original units for more than 100 individual countries and nine main regions. The consistency of OECD and non-OECD countries' detailed statistics provides an accurate picture of the global energy situation for 2009 and 2010. For a description of the content, please see *Energy Statistics of OECD Countries* above.

*Published August 2012 - Price €120*

### ■ **Energy Balances of Non-OECD Countries, 2012 Edition**

A companion volume to the publication *Energy Statistics of Non-OECD Countries*, this publication presents energy balances in thousand tonnes of oil equivalent and key economic and energy indicators for more than 100 individual countries and nine main regions. It offers the same statistical coverage as the homonymous publication covering OECD countries, and thus provides an accurate picture of the global energy situation for 2009 and 2010. For a description of the content, please see *Energy Balances of OECD Countries* above.

*Published August 2012 - Price €120*

### ■ **Electricity Information 2012**

This reference document provides essential statistics on electricity and heat for each OECD member country by bringing together information on production, installed capacity, input energy mix to electricity and heat production, input fuel prices, consumption, end-user electricity prices and electricity trades.

*Published August 2012 - Price €150*

### ■ **Coal Information 2012**

This well-established publication provides detailed information on past and current evolution of the world coal market. It presents country-specific statistics for OECD member countries and selected non-OECD countries on coal production, demand, trade and prices. This publication represents a key reference tool for all those involved in the coal supply or consumption stream, as well as institutions and governments involved in market and policy analysis of the world coal market.

*Published August 2012 - Price €165*

### ■ **Natural Gas Information 2012**

A detailed reference work on gas supply and demand, covering not only the OECD countries but also the rest of the world. Contains essential information on LNG and pipeline trade, gas reserves, storage capacity and prices. The main part of the book, however, concentrates on OECD countries, showing a detailed gas supply and demand balance for each individual country and for the three OECD regions, as well as a breakdown of gas consumption by end-user. Import and export data are reported by source and destination.

*Published August 2012 - Price €165*

### ■ **Oil Information 2012**

A comprehensive reference book on current developments in oil supply and demand. The first part of this publication contains key data on world production, trade, prices and consumption of major oil product groups, with time series back to the early 1970s. The second part gives a more detailed and comprehensive picture of oil supply, demand, trade, production and consumption by end-user for each OECD country individually and for the OECD regions. Trade data are reported extensively by origin and destination.

*Published August 2012 - Price €165*

### ■ Renewables Information 2012

This reference document brings together in one volume essential statistics on renewables and waste energy sources. It presents a detailed and comprehensive picture of developments for renewable and waste energy sources for each of the OECD member countries, encompassing energy indicators, generating capacity, electricity and heat production from renewable and waste sources, as well as production and consumption of renewable and waste products.

*Published August 2012 - Price €110*

### ■ CO<sub>2</sub> Emissions from Fuel Combustion, 2012 Edition

In order for nations to tackle the problem of climate change, they need accurate greenhouse gas emissions data. This publication provides a basis for comparative analysis of CO<sub>2</sub> emissions from fossil fuel combustion, a major source of anthropogenic emissions. The data in this book are designed to assist in understanding the evolution of the emissions of CO<sub>2</sub> from 1971 to 2010 for more than 140 countries and regions by sector and by fuel. Emissions were calculated using IEA energy databases and the default methods and emissions factors from the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories*.

*Published November 2012 - Price €165*

## Two Quarterlies

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### ■ Oil, Gas, Coal and Electricity, Quarterly Statistics

This publication provides up-to-date, detailed quarterly statistics on oil, coal, natural gas and electricity for the OECD countries. Oil statistics cover production, trade, refinery intake and output, stock changes and consumption for crude oil, NGL and nine selected oil product groups. Statistics for electricity, natural gas and coal show supply and trade. Import and export data are reported by origin and destination. Moreover, oil as well as hard coal and brown coal production are reported on a worldwide basis.

*Published Quarterly - Price €120, annual subscription €380*

### ■ Energy Prices and Taxes

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