

1 **Setting the scene**

This chapter introduces some of the main issues that frame the analysis of and the debate on fossil-fuel subsidies and their reforms. It examines the need to monitor and measure fossil-fuel subsidies, including the difficulty of removing them once they are in place. Subsequently, it looks at drivers of fossil-fuel subsidy reform, including international frameworks such as the Sustainable Development Goals, the Paris Summit on Climate Change and the European Green Deal. Next, it discusses two complementary databases developed by the OECD and IEA to track government support to fossil-fuel production and consumption. The chapter ends with reflections on the COVID-19 crisis and its impact on energy markets and fossil-fuel subsidies.

Why monitor and measure fossil-fuel subsidies?

The debate on fossil-fuel subsidies has gained significant momentum over the past ten years. Governments are now better informed and more aware of the potentially negative fiscal, social, environmental and climate-related impacts of such subsidies on the economy.

Government support to fossil-fuel production and consumption has usually been used with the best of intentions. It generally aims to help the poor and ensure their access to affordable energy; to support rural and industrial development; to create jobs; and to ensure a country's energy security and energy independence. Often, however, end results could be different from intended outcomes.

As with all subsidies, fossil-fuel production and consumption subsidies distort costs and prices and lead to inefficiencies in the economy. Keeping energy prices low encourages more energy consumption. By encouraging use of fossil fuels and discouraging production of low-carbon fuels, such subsidies undermine the development and commercialisation of renewable energy and other alternative technologies. This, in turn, results in increased CO₂ and other greenhouse gas (GHG) emissions, as well as more stranded assets¹. Combustion of fossil fuels leads to higher levels of air pollution and related health problems, which can inflict a high cost on society.

By now it is well-documented that untargeted consumer fossil-fuel subsidies often benefit the rich more than the poor (Javier et al., 2012^[1]). On the production side, fossil-fuel subsidies often go to the largest and most economically powerful recipients, thus increasing profits for well-connected investors or industries. Indeed, lobbying and corrupt practices in the energy sector are ubiquitous.

Once introduced, many subsidy schemes may stay in place for a long time, unreformed and unremoved. As a result, they can become a significant drain on the public budget, leading to a substantial fiscal cost. They can also divert public funding from more urgent social priorities (such as health care or education) or from other cleaner sources of energy.

While fossil-fuel subsidies are popular and politically attractive, they are often difficult to reform or dismantle. Fossil-fuel subsidy reform is highly politicised, requiring high-level support and concerted efforts by the government. It must demonstrate strong political will and a long-term vision to take tough decisions that benefit society as a whole.

Investing time and resources to identify and measure fossil-fuel subsidies and the potential distributional effects of their reform and phase out can be useful. Such efforts may help policy makers make better informed decisions when they need to reform subsidies. Analysis can also help them explain subsidies and their impacts to all stakeholders. This is especially important to segments of the population that may be most negatively affected by the reform.

Fossil-fuel subsidy reform needs to be well-designed and its short and longer-term consequences need to be clearly understood. Experience from many countries shows that targeted support measures aimed e.g. at vulnerable households deliver better results and ensure better energy affordability than untargeted subsidies provided across the board. Transparency and stakeholder dialogue are the cornerstone of subsidy reform (OECD, 2013^[2]). Awareness and understanding of subsidies based on credible data can improve transparency and inform decision making.

Much of the debate on fossil-fuel subsidy reform remains on an international level. The need for identifying and measuring fossil-fuel subsidies is often driven by international processes. Reforming and phasing out fossil-fuel subsidies lies at the heart of combating climate change and achieving net-zero emissions. However, none of the European Union's Eastern Partner (EU EaP) countries included such an objective in its Nationally Determined Contribution prepared for the Paris Summit on Climate Change in December 2015.

As a result of the various negative impacts of fossil-fuel subsidies, their reform was also turned into a Sustainable Development Goal (SDG). SDG 12 (“Ensure sustainable consumption and production patterns”) and the related Target 12.c² and Indicator 12.c.1³ focus on the rationalisation and phase-out of inefficient, economically wasteful and environmentally-harmful fossil-fuel subsidies (United Nations, 2017^[3]). All governments are expected to report on progress in meeting the SDGs, including on the phase-out of fossil-fuel subsidies. Further, subsidies are an important issue in the framework of World Trade Organization (WTO) negotiations. WTO member countries, which includes most EaP countries, have committed to report on subsidies under the Agreement on Subsidies and Countervailing Measures (WTO, 1996^[4]). When reporting on fossil-fuel subsidies within the SDG and WTO frameworks, the EaP countries may wish to use the data and estimates prepared in the current OECD analysis.

The European Green Deal (EC, 2019^[5]) – the new EU growth strategy – sets a number of policy initiatives with the aim of making Europe climate neutral by 2050. Some of the main measures in the Green Deal include removing subsidies for fossil fuels and shifting the tax burden from labour to pollution, while considering social implications. The coronavirus pandemic has not diverted the European Union and its member states from their 2050 goal, but they will need to address the impact of COVID-19 on carbon pricing which can generate revenues to help finance green recovery measures. Carbon pricing can work hand-in-hand with green stimulus to promote clean investment and spending, and support a successful, long-term recovery (Pilichowski and Saint-Amans, 2020^[6]). The European Union is also committed to reinforcing its support to the EaP countries to reduce fossil-fuel subsidies.

Fossil-fuel subsidy reform could be easier under international peer pressure and with access to lessons from other countries. The EaP countries could and should profit from these opportunities to push forward reforms in their countries.

OECD contribution to tracking down fossil-fuel subsidies

Over the years, the OECD has extensively analysed government support measures in both member countries and key emerging G20 economies (Brazil, the People’s Republic of China, India, Indonesia, the Russian Federation, South Africa). Recently, the OECD and the International Energy Agency (IEA) launched two mutually exclusive but complementary online databases on government support to fossil-fuel production and consumption.⁴ These databases are meant to be updated every other year.

The IEA and the OECD quantify fossil-fuel subsidies in different ways. The IEA applies the price-gap approach to estimate subsidies to consumers of coal, oil, natural gas and electricity. This measures the difference in the price of a specific energy carrier on domestic and international markets. For its part, the OECD uses a bottom-up approach. This involves constructing an inventory of policies supporting the production and consumption of energy, quantifying the value of support under each of them and then aggregating the numbers.

The OECD inventory addresses a broader range of measures, including many that do not directly reduce consumer prices below world market levels. It uses a broad concept of support that encompasses direct budgetary transfers and tax expenditure. These provide a benefit or economic advantage to fossil-fuel producers or consumers, either in absolute terms or relative to other activities or products.

In 2018, following both the OECD and IEA methodologies, the OECD Secretariat prepared an “*Inventory of Energy Subsidies in the EU’s Eastern Partnership (EaP) Countries*” (hereafter “the EaP Inventory”). The EaP Inventory covered the six countries in the region – Armenia, Azerbaijan, Belarus, Georgia, Republic of Moldova (hereafter “Moldova”) and Ukraine, and was prepared as part of the “Greening Economies in the EU’s Eastern Neighbourhood” Project, funded by the European Union.

The EaP Inventory (OECD, 2018^[7]), which covered 2010-15, was the first comprehensive and consistent record of energy subsidies in the region. The study provided quantitative estimates of government support made available to producers and consumers of coal, oil and related petroleum products and natural gas. It also accounted for electricity and heat generated on the basis of these fossil fuels. Further, the report briefly analysed public support allocated to energy-efficiency measures and renewable energy sources in the EaP countries. It also discussed the energy pricing and taxation policies that underpin the analysis of energy subsidies.

The 2018 analysis showed that while energy systems in the EaP countries had been reformed and restructured significantly, energy subsidies continued to play an important role in their energy policies. In 2010-15, all EaP countries supported fossil-fuel production and consumption. Most fossil-fuel subsidies aimed to benefit residential consumers. To that end, regulated energy prices set at below-market levels were the most important form of a subsidy in the EaP region. The bulk of subsidies went to natural gas. This was not surprising given that natural gas has dominated the energy mix in these countries for many years. It has also been used to generate electricity and heat.

Following this work, the OECD Secretariat decided to include information on existing fossil-fuel support measures in the EaP countries in the OECD-IEA fossil-fuel subsidies database. The inclusion of the EaP countries in this database is an important milestone in achieving transparency. It also recognises the efforts of the EaP governments to disclose information on government support volumes that go to the energy sector in these countries.

The impact of the COVID-19 crisis on energy markets and fossil-fuel subsidies

The COVID-19 crisis hit all countries hard with the health pandemic leading to a socio-economic crisis. All governments, as their first priority, sought to save the lives of their country's people and prevent their economies from sinking into a deep recession. To soften the consequences of this double crisis, governments have put in place recovery packages to support households and businesses.

The coronavirus pandemic has had a strong impact on global energy markets, contributing to a collapse in the price of oil, as well as lower prices for other fossil fuels. Global shutdowns of economic activity in 2020 led to sharply reduced energy consumption and lower energy-related GHG emissions.

Global energy demand in 2020 fell by 4%, the largest decline since World War II and the largest-ever absolute decline (IEA, 2021^[8]). Oil and coal were hit particularly hard with demand dropping through the year by almost 9% and 4%, respectively. Demand for natural gas dropped by only 2%. While demand for all other fuels declined, use of renewable energy increased by 3% in 2020. This was largely due to more electricity generation from solar photovoltaics and wind, which grew by 12% and 23%, respectively.

As a result of the decline in energy demand, global CO₂ emissions decreased by 5.8% in 2020, which was called the largest-ever such decline in history (IEA, 2021^[8]). However, demand for coal, oil and gas is expected to recover with the economy. Consequently, global energy-related CO₂ emissions are projected to rebound in 2021 and grow by 4.8%. This expected significant increase in emissions emphasises the need for further decarbonisation efforts and investments in cleaner and more resilient energy infrastructure.

As lockdown measures and travel bans led to a significant decline in global demand for energy, oil prices fell to unprecedentedly low levels. In March 2020, crude oil prices fell below zero for the first time in recorded history before recovering to more than USD 60 per barrel in April 2021.

The combination of low consumption and low oil prices wreaked havoc in energy markets. According to the IEA, oil and gas producers may have lost between 50% and 85% of their income in 2020. Lower oil prices are particularly damaging for countries that rely heavily on export revenues from oil production and whose public budgets depend on high oil prices.

The collapse in the price of oil at the beginning of the crisis led to lower prices of other fossil fuels as well. Sustained low oil prices could seriously damage gas producers that rely on linked contracts. However, low gas prices could facilitate switching to this fuel in industrial sectors that typically rely on coal use. These sectors range from steel and cement production to heating and electricity generation. The coronavirus pandemic led to a 25% decline in coal prices, making more of the industry unprofitable just as it faces severe criticism for its environmentally damaging effects (Wilson, 2020^[9]).

Against the backdrop of relatively low fuel prices in 2020, COVID-19 negatively affected new energy investments in the energy sector. (IEA, 2020^[10]) notes that “the speed and scale of the fall in energy investment activity in the first half of 2020 is without precedent”. However, investments in renewables were a notable exception. They amounted to USD 359 billion in 2020, a 7% increase compared to 2019 levels (IEA, 2021^[11]). The longer-term impact on investments will depend on the nature and speed of the economic recovery, as well as the differing responses of global policy makers to this challenge.

While the coronavirus pandemic had a visibly negative impact on the prices of fossil fuels, it also disrupted the supply of renewable energy equipment and technology. Though short-lived, the economic shutdown in the People’s Republic of China in early 2020 led to disruption in the supply of solar panels, which are mainly produced in that country and exported globally. The combination of low fossil-fuel prices and serious economic difficulties could incite countries to review their investments in energy efficiency and renewable support schemes, particularly where these weigh significantly on government budgets (Wilson, 2020^[9]).

When fossil-fuel prices are at historic lows, governments can seize the moment to phase out fossil-fuel subsidies. On the one hand, in a low-price environment, consumption subsidies are easier to reduce and countries could use this opportunity to reform them. On the other, when prices are low it is oil and gas producers that ask governments for help.

Low prices coupled with the pandemic lead to a different environment where citizens and companies may be less likely to object to the phase-out of subsidies. For example, citizens and companies may recognise that retaining subsidies will reduce the government’s ability to provide for other urgent needs such as health care and economic stimulus. The crisis could thus offer an opportunity for governments to reallocate fiscal means to essential public services.

However, rolling back fossil-fuel subsidy reforms once oil prices are rising again would undermine reform. By the time the relevant reform packages are designed and ready for implementation, prices have often recovered. This makes it difficult to pursue successful reform.

Instead of using the low oil price argument, reform would be better discussed in the context of two other factors. First, reform could support the fight against climate change. Second, it could finance green stimulus measures by aligning traditional stimulus with climate objectives.

Governments that choose to phase out fossil-fuel subsidies should do so while considering their country’s circumstances. The poorest are already suffering under the pandemic. Maintaining or better targeting support to them would likely reduce resistance to an overall fossil-fuel subsidy reform and also mitigate inequality effects. To retain citizen support for subsidy reform after the pandemic ends, governments should maintain visible improvements to health and other public services.

As governments move from the immediate emergency rescue phase into the stimulus and recovery stage, they have a real opportunity to make recovery packages greener. The phase-out of fossil-fuel subsidies together with carbon pricing and fuel taxation can help align price signals with and generate revenue for green recovery packages, as well as finance crisis-related debt.

References

- EC (2019), *Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions – The European Green Deal*, 11.12.2019, COM(2019) 640 Final, European Commission, Brussels, https://ec.europa.eu/info/sites/info/files/european-green-deal-communication_en.pdf. [5]
- IEA (2021), *Global Energy Review 2021*, IEA, Paris, <https://www.iea.org/reports/global-energy-review-2021>. [8]
- IEA (2021), *World Energy Investment 2021*, IEA, Paris, <https://www.iea.org/reports/world-energy-investment-2021>. [11]
- IEA (2020), *World Energy Investment 2020*, IEA, Paris, <https://www.iea.org/reports/world-energy-investment-2020>. [10]
- Javier, F. et al. (2012), “The unequal benefits of fuel subsidies: A review of evidence for developing countries”, *World Development*, Vol. 40/11, pp. 2234-2248, <https://doi.org/10.1016/j.worlddev.2012.05.005>. [1]
- OECD (2018), *Inventory of Energy Subsidies in the EU's Eastern Partnership Countries*, Green Finance and Investment, OECD Publishing, Paris, <https://www.oecd.org/env/inventory-of-energy-subsidies-in-the-eu-s-eastern-partnership-countries-9789264284319-en.htm>. [7]
- OECD (2013), *Analysing Energy Subsidies in the Countries of Eastern Europe, Caucasus and Central Asia*, OECD Publishing, Paris, https://www.oecd.org/env/outreach/EHS%20report_20%20August%202013_ENG.pdf. [2]
- Pilichowski, E. and P. Saint-Amans (2020), “COVID-19 and the climate crisis: Combining green budgeting and tax policy tools for a better recovery”, OECD Environmental Focus blog, <https://oecd-environment-focus.blog/2020/10/29/covid-19-and-the-climate-crisis-combining-green-budgeting-and-tax-policy-tools-for-a-better-recovery/>. [6]
- United Nations (2017), *Work of the Statistical Commission Pertaining to the 2030 Agenda for Sustainable Development, 71/313 General Assembly 71st session*, UN General Assembly, Geneva, <https://undocs.org/A/RES/71/313>. [3]
- Wilson, A. (2020), “Impact of coronavirus on energy markets”, *At a Glance*, No. PE 649.372, European Parliamentary Research Service, Brussels, [https://www.europarl.europa.eu/RegData/etudes/ATAG/2020/649372/EPRS_ATA\(2020\)649372_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/ATAG/2020/649372/EPRS_ATA(2020)649372_EN.pdf). [9]
- WTO (1996), *Agreement on Subsidies and Countervailing Measures*, World Trade Organization, Geneva, https://www.wto.org/english/docs_e/legal_e/24-scm_01_e.htm. [4]

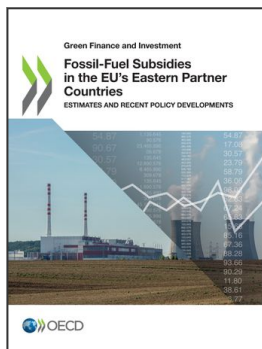
Notes

¹ Stranded assets are physical assets recorded on a corporate balance sheet whose investment value cannot be recouped and must be written off. Their loss of value can be due to regulatory rulings that mean they cannot be exploited, changing trends in the market that renders them redundant, or obsolescence caused by superior technology.

² 12.c Rationalize inefficient fossil-fuel subsidies that encourage wasteful consumption by removing market distortions, in accordance with national circumstances, including by restructuring taxation and phasing out those harmful subsidies, where they exist, to reflect their environmental impacts, taking fully into account the specific needs and conditions of developing countries and minimizing the possible adverse impacts on their development in a manner that protects the poor and the affected communities (United Nations, 2017^[3]).

³ 12.c.1 Amount of fossil-fuel subsidies per unit of GDP (production and consumption) and as a proportion of total national expenditure on fossil fuels (United Nations, 2017^[3]).

⁴ For more information see: <https://www.oecd.org/fossil-fuels/countrydata/>.



From:
Fossil-Fuel Subsidies in the EU's Eastern Partner Countries
Estimates and Recent Policy Developments

Access the complete publication at:
<https://doi.org/10.1787/38d3a4b5-en>

Please cite this chapter as:

OECD (2021), "Setting the scene", in *Fossil-Fuel Subsidies in the EU's Eastern Partner Countries: Estimates and Recent Policy Developments*, OECD Publishing, Paris.

DOI: <https://doi.org/10.1787/3b059c74-en>

This work is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of OECD member countries.

This document, as well as any data and map included herein, are 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. Extracts from publications may be subject to additional disclaimers, which are set out in the complete version of the publication, available at the link provided.

The use of this work, whether digital or print, is governed by the Terms and Conditions to be found at <http://www.oecd.org/termsandconditions>.