### Chapter 5

# Investment Framework in Support of Green Growth

The government of Colombia is determined to ensure that economic growth and environmental protection are mutually supportive. To this end, it is strengthening the institutional capacity of environmental authorities, enhancing the framework for investment in support of green growth, and putting in place "green" investment incentives. Biodiversity being one of the main natural assets of Colombia, the government has developed a framework to both protect and derive economic benefits from it. The government is currently developing a Low Carbon Development Strategy, with the objective of, inter alia, promoting economic growth in sectors associated with lower greenhouse gas emissions. The Strategy also seeks to draw on international financing options, including market mechanisms to attract resources that facilitate low-carbon development; promote the transfer of clean technologies; and enhance Colombia's competitiveness in a global economy increasingly influenced by carbon-intensity standards. A range of incentives is available to companies that voluntarily make investments to improve their environmental performance.

The OECD defines Green Growth as "fostering economic growth and development, while ensuring that natural assets continue to provide the resources and environmental services on which countries' well-being relies. To do this, it must catalyse investment and innovation which will underpin sustained growth and give rise to new economic opportunities" (OECD, 2011). Investment for green growth includes, inter alia, investments in infrastructure, such as water sanitation and distribution, transport, and housing, renewable energies, energy efficiency, and natural resource conservation.

A solid investment framework will, in principle, also provide a good basis for green investment. However, a good investment framework will not necessarily contribute to direct investment in green (or less polluting) activities and operations unless certain elements are also given, i) a strong government commitment, both at international and national levels, to support green growth and promote private investment to support achievement of these goals; ii) policies and regulations that guide investors towards greener investment; iii) the country's institutional capacity to design, implement and monitor green investment policies; iv) incentives for green investment; v) policies supporting private participation in green infrastructure projects; and vi) policies promoting green business conduct. This chapter describes Colombia's s investment framework in these areas, except policies to promote green business conduct, which are discussed in Chapter 3.

### Investment in support of green growth in Colombia - overview

The government has only recently begun to focus on those aspects of the policy framework that need to be strengthened to also attract investment in support of green growth objectives. Encouraging developments in this area include the prominence given to environmental considerations in the National Development Plan 2010-14; the inclusion of environmental provisions in most trade agreements and in investment agreements currently under negotiation; the preparation of an ambitious Low Carbon Development Strategy aimed at ensuring low-carbon economic growth; programs to increase investment in renewable energy; the strong role taken by Colombia in international discussions on developing financial mechanisms for climate change; the existence of incentives and financial mechanisms to promote investment in low carbon technologies and biodiversity conservation; reforms to improve co-ordination among ministries and to strengthen the role of

environmental authorities in horizontal policy processes; and ongoing reforms to improve the framework for private participation in "green" infrastructure.

The development of Colombia's green investment framework also faces a number of challenges. The government needs to allocate sufficient resources to ensure that progress "made on paper" is carried through in practice, for example, to ensure the long-term effectiveness of the environmental licensing system for new investments. In developing and implementing green growth objectives, the government will also need to provide regulatory certainty to investors and ensure that economic and environmental objectives are aligned. The government will also need to make more efforts to encourage companies, both domestic and foreign, to adopt responsible environmental practices, in line with the OECD Guidelines for Multinational Enterprises, and to contribute to the country's green growth objectives. Investment incentives should be targeted to promote improved environmental performance beyond legal requirements, and their effectiveness should be regularly assessed.

### Colombia's commitment to green growth

Colombia does not have a formal "green growth agenda" in place, nor has it developed a specific strategy to attract green investment. However, the current government is determined to ensure that economic growth and environmental policies mutually reinforce each other. To this end, it will strengthen the institutional capacity of environmental authorities – one step being the creation of a new Ministry of Environment and Sustainable Development in September 2011 with increased power and resources. Further steps will include better co-ordination among Ministries, with the creation of an environmental roundtable ("Mesa Ambiental") in which all Ministries will be represented, charged with assessing the environmental impact of public development projects and ensuring that the cost of environmental degradation, which currently is estimated at 3.7% of GDP per year (NDP, citing World Bank data) is reduced by at least 50% by 2014. Furthermore, the government is determined to ensure that economic growth objectives are achieved without increasing the level of the country's greenhouse gas (GHG) emissions.

Colombia has defined key areas for economic development in a range of policy documents, including its National Development Plan (NDP) for 2010-14, and in many of these priority areas environmental considerations play an important role. The five priority development sectors (called "growth locomotives") set out in the NDP include agriculture, housing and "friendly cities", transport infrastructure, mining and energy production, and innovation. The NDP points out that these areas will need to be developed taking into

account environmental sustainability criteria. The NDP also mentions a range of priorities in the areas of environmental sustainability and risk prevention: biodiversity and ecosystem services; integrated water resource management; sectoral and urban environmental management; climate change, vulnerability reduction, adaptation and low carbon development; and good environmental governance.

For the purposes of this analysis, some of the above priorities, including the growth locomotives on transport and energy, and the key areas for sustainability – including biodiversity protection and low carbon development – can be seen as constituting elements of Colombia's "informal" green growth agenda. It would be beyond the scope of this paper to analyse the investment potential and the adequacy of the policy framework for green investment in each of the above areas. This chapter will therefore only provide an overview of the key elements of a policy framework conducive to green investment in place and will give examples of investment measures in support of green growth in specific areas.

### Investment levels required to achieve green growth objectives

Prior to the establishment of goals in the NDP, the government carries out a financial exercise in order to assess the costs of the activities to be included, as well as the expected resources that will be available. The NDP 2010-14 includes an investment plan, which makes a distinction between public and private funding. However, there is no specific indication of the costs linked to ensuring sustainability in achieving the objectives of the growth locomotives or other targets, nor the related investment needs (public or private, domestic or foreign).<sup>2</sup>

Some of Colombia's green growth priorities have a large potential for private investment. Interestingly, while for the accomplishment of the "growth locomotives" (e.g. housing, transport infrastructure, mining and energy production) the government counts on raising a significant share of private funds (189 722 billion Colombian pesos (COP) out of a total estimate of COP 234 397 billion for the period 2011-14) (see Table 4.3 in Chapter 4), all the objectives under the key areas for sustainability are to be funded entirely from public sources.

### Regulatory and policy framework for green investment

Investors regard uncertain regulatory frameworks as a risk when considering investment options. The current evolving international framework for climate change and other environmental objectives may generate substantial policy uncertainty and financial risk. Investing in new (e.g. low-carbon) technologies and infrastructure may require important

changes in business models and involve investment decisions that lock-in specific technology and infrastructure for the long term. A country's regulatory and policy framework that supports green investment is therefore of crucial importance for investors. Such framework includes the country's position under relevant multilateral environmental agreements, the inclusion of environmental considerations in multilateral and bilateral trade and investment agreements, and the adoption of national plans and regulations that support the country's green growth objectives.

### International commitments in support of green growth objectives

Colombia is a Party to all major international environmental agreements (see Annex C). As a country rich in biodiversity, developments under the Convention on Biological Diversity (CBD) are of particular importance. Over the last years, discussions among the Parties on issues such as business' contribution to conserving biodiversity and the need to attract innovative funding – including private investment – to finance biodiversity conservation have gained importance (Box 5.1).

### Box 5.1. Private investment and biodiversity conservation

Following their assessment that the objectives under the Convention on Biological Diversity had not been achieved due partly to insufficient funding, the Parties adopted a range of decisions in order to mobilise new funds for biodiversity conservation and to raise revenues from biodiversity resources.

In 2009, the Parties adopted a "Strategy for Resource Mobilisation", which includes recommendations to raise private sector funds. Goal 2 of the strategy is to "Strengthen national capacity for resource utilisation and mobilise domestic financial resources for the Convention's three objectives", which includes establishing enabling conditions for private sector involvement, including the financial sector. Goal 4 is to "Explore new and innovative financial mechanisms at all levels", which includes, inter alia, promoting schemes for payment for ecosystem services, biodiversity offset mechanisms, exploring opportunities presented by environmental fiscal reforms including innovative taxation models and fiscal incentives; and opportunities presented by promising innovative financial mechanisms, such as markets for green products, business-biodiversity partnerships and new forms of charity, and to integrate biological diversity and its associated ecosystem services in the development of new and innovative sources of international development finance.

### Box 5.1. Private investment and biodiversity conservation (cont.)

The fair and equitable sharing of the benefits arising out of the utilisation of genetic resources is one of the three objectives of the Convention on Biological Diversity. In 2010, the Parties adopted the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity (known as the Nagoya Protocol on Access and Benefit-sharing).

Source: CBD (www.cbd.int/).

Colombia is a Party to the UN Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol. Under the 2009 Copenhagen Accord, Colombia made preliminary commitments to increase the use of renewable energies for electricity production to 77%, reduce deforestation of the Amazon forest on its territory to 0 by 2020, and to increase the share of bioethanol in the fuel mix by 20% by 2020. It also proposed a range of mitigation actions, including reforestation, subject to financing through carbon market mechanisms. Colombia is part of the so-called Cartagena Group/Dialogue for Progressive Action, an informal grouping, open to all countries that aim for ambitious and comprehensive outcomes in the UNFCCC and that are committed domestically to becoming or remaining "low carbon".

Colombia recently ratified the 2006 International Convention on Tropical Timber and introduced it into national legislation through a law adopted in June 2011. According to the Colombian authorities, this constitutes an important step towards strengthening forestry management in the country and ensuring that forestry resources are exploited within a legal framework.<sup>4</sup>

### Environmental protection in trade and investment agreements

None of the bilateral investment treaties signed by Colombia (see a list in Chapter 4) includes provisions related to the environment or promotion of investment in support of green growth. However, Colombia's new BIT model, which is being used in current negotiations with Turkey, contains a provision relating to the environment (Box 4.4). Colombia is thus joining the small, but increasing, number of countries which include this type of provision in their investment agreements.<sup>5</sup>

On the other hand, environmental issues figure prominently in a number of Free Trade Agreements signed by Colombia or under negotiation, including the trade agreements with the United States, Canada, Chile and the European Union. Negotiations of environmental FTA chapters are underway with Panama, Korea and Turkey.

The FTAs with Canada, the European Union and the United States include co-operation agreements that accompany the main trade agreement to provide for bilateral co-operation in different priority areas regarding environmental protection, such as: risk management; integrated management of water resources; biodiversity conservation; sustainable use of natural resources; restoration of degraded ecosystems; promotion of production and trade in environmentally friendly goods and services; prevention, management and control of water, air and soil pollution, including energy and alternative technologies; integrated solid waste management; integrated management of chemical pollutants and hazardous waste; promotion and strengthening of knowledge management and environmental information; environmental education; forest management; and the use and development of clean technologies.

The provisions on environmental protection in these trade agreements generally include three elements: the Parties' obligation to comply with environmental regulations and improve levels of protection; a co-operative mechanism that contributes to the full implementation of such obligations; and provisions on biodiversity. References to biodiversity are also included in the chapters on intellectual property. Table 5.1 provides an overview of these provisions.

Table 5.1. FTAs negotiated by Colombia which include environmental provisions

Country	Status	Main contents
United States	Approved by Colombia's Congress, pending ratification by the United States	Biodiversity issues are not included in the chapter on Intellectual Property but a letter on Biodiversity and Traditional Knowledge is attached to the agreement. An Environmental Cooperation Agreement was also negotiated to establish an autonomous framework for co-operation activities, not subject to dispute settlement mechanisms of the FTA.
Chile	In force	The chapter contains the three central elements of environmental protection and favours a co-operative approach.
Canada	Negotiated and signed; pending ratification by the Canadian Parliament	The agreement includes commitments to comply with national legislation; a separate Environmental Agreement develops these commitments. It offers a strong framework of co-operation and broad provisions on biodiversity, <i>e.g.</i> on the exchange of information to fight biopiracy.

Table 5.1. FTAs negotiated by Colombia which include environmental provisions (cont.)

Country	Status	Main contents
EU	Negotiated and signed. Ratification procedures have not started yet either in Colombia or in the EU	The agreement recognises that conservation and sustainable use of biodiversity and its components are a key element of sustainable development. It includes language on promoting economic development incentive programmes and processes for the conservation of biodiversity.  There is also reference to Protected Areas as an essential tool for the conservation and sustainable use of biodiversity, and on monitoring national commitments of the Parties on the matter; and on the importance of traditional knowledge and biodiversity, as well as the potential contribution of traditional knowledge and biodiversity to cultural, economic and social development, and the fair and equitable sharing of benefits arising from the use of traditional knowledge and genetic resources.  On climate change, the Parties signalled their resolve to enhance efforts in this field, including through the promotion of national policies and suitable international initiatives to mitigate and to adapt to climate change, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities, and their social and economic conditions. The Parties also agreed to promote trade and investment measures that promote and facilitate access, dissemination and use of best available technologies for clean energy production and use, and for climate change mitigation and adaptation.  On forestry, text was agreed on the promotion of trade in forest products originating from sustainable forest management.
Panama	Negotiations complete, signature pending	The chapter contains the three central elements, and provides for co-operation on biodiversity and access to genetic resources.
South Korea	Under Negotiation	The draft text includes an environmental chapter.

Source: Colombia, Ministry of Environment, Housing and Territorial Development.

# National plans and policies in support of green investment Biodiversity conservation

Biodiversity is an important natural asset for Colombia (Box 5.2). The government has developed a framework to both protect and derive economic benefits from it, including its 1996 National Biodiversity Policy. A new National Policy for Integrated Management of Biodiversity and Ecosystem Services is currently under discussion. The new policy will offer potential for innovation related to biodiversity conservation, regulate ecosystem services and explore new financing options for biodiversity conservation, including by encouraging companies to incorporate biodiversity conservation activities as an integral part of their productive activities.

An important instrument to promote biodiversity-related investment is the CONPES document 3697 setting out a policy "for the commercial development of biotechnology based on the sustainable use of biodiversity". Its main objective is to create economic, technical, institutional and legal conditions to attract public and private resources for development of companies and products based on sustainably used biodiversity, specifically from biological

### Box 5.2. Economic benefits from biodiversity in Colombia and key challenges

Colombia possesses a unique variety of ecological, climatic, biological and ecosystem components. It is listed as one of the world's "megadiverse" countries. With only 0.7% of the surface of the planet, it harbours approximately 10% of the world's species. It also has one of the world's most diverse ecosystems and is ranked among the world's richest countries in water resources. This varied richness provides a unique opportunity to implement sustainable development initiatives.

There are few figures available on economic benefits generated from biodiversity in Colombia. These include revenues of USD 23 million in 2007 from sales of aromatic and medicinal plants and USD 6.2 million per year from sales of ornamental fish. Ecotourism activities represent 2.2% of GDP and 380 000 direct jobs.

Some of the main threats to the conservation of biological diversity include population migration due to internal conflicts, agricultural development, habitat degradation and fragmentation, growth of invasive species, general pollution dynamics and climate change. A considerable part of the country's natural ecosystems has been transformed for agriculture, primarily in the Andean and Caribbean regions. It has been estimated that almost 60% of forest in the Andean Region and approximately 90% of the dry forests in the Caribbean region and the inter-Andean valleys have disappeared.

A major challenge to biodiversity conservation is the continued development of the resource extraction sector in Colombia, mining, oil and gas being among the most important growth sectors of the economy and the first destinations of FDL.

Source: Colombia, Ministry of Environment, Housing and Territorial Development, Etter, A. et al. (2008).

and genetic resources and their derivates. The policy also recommends: improving institutional capacity for the commercial development of biotechnology; designing a package of economic instruments to attract public and private investors to develop products based on sustainable use of biodiversity resources; and reviewing and improving the legal framework on access to genetic resources, especially related to biotechnological and phytotherapeutic products.

The 2001 National Forestry Development Plan (Plan Nacional de Desarrollo Forestal, PNDF – Document CONPES 3125) aims to strengthen the national forest policy. The PNDF offers a strategic view of national forest management for the next 25 years, beyond the duration of government mandates. It is based on the participation of actors involved in the management of forest resources and ecosystems; implementing strategies and programmes related to zoning,

conservation, and restoration of ecosystems; management and use of forest ecosystems and the adoption of a value chain view in the process of commercial reforestation, industrial development and trade of forest products. It also describes the institutional and financial resources required for its implementation, for example, so-called "forestry incentives certificates", aimed at stimulating private investment in reforestation projects (see Table 5.2 on green incentives below).

### GHG emission reduction

GHG emissions in Colombia are relatively low (0.37% of total emissions), partly because the largest source of energy used for electricity generation is hydropower (see Box 5.3). The government is currently developing a Low Carbon Development Strategy, with the objective, according to the Colombian authorities, "to promote economic growth in Colombian sectors with low emissions associated with greenhouse gases and avoid the 'carbonisation' of the Colombian economy". The Strategy also seeks to draw on international financing options, including market mechanisms, to attract resources to facilitate low-carbon development in productive sectors; promote the transfer of technology; prevent future non-tariff and border barriers to exports; and to enhance Colombia's competitiveness in a global economy increasingly influenced by carbon-intensity standards. The government plans to formulate low carbon strategies for six sectors (industry, agriculture, mining, energy, waste and transport) by 2013.

A high priority for Colombia is adaptation to climate change. Awareness of the country's high vulnerability to climate change has risen, as the country has been severely hit by climate-change related extreme weather events, notably during the 2010-11 La Niña period. The National Development Plan 2010-14 highlights the need for industry to put in place sectoral adaptation plans. These plans are yet to be developed.

The government adopted in 2001 Law 697 regulating the promotion of a rational and efficient use of energy, and adopted a range of measures to mobilise investment in energy efficient technologies. These initiatives failed to engage the private sector, owing partly to a lack of sectoral and financial sector experience, insufficient information about best practices in other countries and the perception of high risk (CTF, 2010). In June 2010, the Ministry of Mining adopted the Indicative Action Plan 2010-15 to develop the "Programme of Rational and Efficient Use of Energy and Other Forms of Non-Conventional Energy" (PROURE). The Programme aims to contribute to ensuring a full and timely energy supply, support the competitiveness of the Colombian economy, protect consumers and promote the use of non-conventional energy in a sustainable way, consistent with environmental and natural resource protection objectives. One goal is to increase the non-conventional energy sources' share in the total energy mix up to

### Box 5.3. Colombia's GHG emissions and potential for reduction

Colombia emitted 180 Mt Co2e in 2004, with emissions coming from agriculture (38%), energy (37%), land use and forestry (14%), waste (6%) and industrial processes (5%). Colombia ranks 40th in the world and 6th in Latin America in terms of total GHG emissions (48th and 5th, respectively, in terms of emissions from the energy sector).

Hydropower has an average share of 78% in Colombia's total electricity production. Other renewable energy sources participate only marginally in the country's energy mix. Wind accounts for less than 1% of energy production. Some biomass generation plants have been successfully implemented, but at a small scale. The remaining sources, which account for nearly 20% of electricity generation, are thermal (natural gas and coal) and, to a lesser extent, diesel (especially in regions which are not connected to the national grid). GHG emissions from the power sector account for 8.5% of total emissions

Energy consumption is divided as follows: transport (38%); industry (27%); households (22%); agriculture and mining (5%); and the commercial and household sectors (5%).

As Colombia's economy keeps growing, GHG emissions will increase, particularly since new energy sources will be coal-based (Colombia has abundant coal reserves and has to diversify away from hydropower due to its high vulnerability to floods and water shortages, linked to El Niño events).

According to the Clean Technology Fund (CTF), the two areas with the greatest potential for emission reductions which have been identified as ready for the scaling up of investment, are the transport sector and energy-efficiency. The CTF estimates the potential for emission reductions in transport at around 56 Mt  $\rm CO_2e$  over the 20-year lifetime of the programme (2030). Addressing the efficiency potential in electricity and thermal end-use across all sectors of the economy would lead to combined emission reductions of 228 Mt  $\rm CO_2e$  over 20 years.

Source: Colombia, Second National Communication to the UNFCCC (2004), Clean Technology Fund (2010).

5%, composed of 4% use of biomass and biofuels for heat and transport applications and the remaining 1% for electricity. The Programme has received financial support from the World Bank and the Inter-American Development Bank under the Clean Technology Fund (see Box 5.5).

Technical standards, such as energy efficiency standards for electric appliances and vehicles, and codes, such as building codes, are recognised as useful tools to promote improved environmental performance and encourage

investments.<sup>8</sup> Colombia has not made use of the full potential of these tools, and only a few environmental standards and codes are in place. One example is regulation (Laws 693 of 2001 and 788 of 2002) establishing the compulsory content of biofuels in gasoline, which has boosted investment in biofuel production. The government is currently working on the technical regulation of energy for social housing and on defining the specifications to certify sustainable buildings under the Colombian Environmental Label. It is also developing a Green Building Code that aims to improve energy efficiency in buildings and could lead to increased investment in relevant technologies (Box 5.4). The housing sector is one of the country's five economic locomotives under the National Development Plan.

### Box 5.4. Colombia's future Green Building Code

Colombia is currently developing a Green Building Code, with the assistance of the IFC, to mitigate the environmental impact of the construction sector. This sector grew at a rate of 16% in 2009, 33% in 2010, and 70% between July 2010 to July 2011, building approximately 4 million square meters a year. The government has set a target of 1 million houses, primarily affordable housing, to be built over the next four years.

The objective of developing a Green Building Code is to reduce GHG emissions at the national level by 11% in the construction sector in the next 5 years after project completion, by promoting energy efficiency and water conservation in the use of new buildings.

The Green Building Code is expected to be enacted at the end of 2013. The project has three components:

- 1. To create national regulations that set the standards and incentives for developers to "build green" across the country. As most of the projected construction growth in the next 15 years will be focused on low income housing, the project will include a capacity building component to provide support to the private sector (developers) building low income housing to introduce green building practices to this type of projects, such as passive design and low cost technology, amongst other practices available for large projects to take advantage of economies of scale.
- 2. To strengthen the local technical capacities in the private sector (e.g. national and regional developers) in areas such as passive design, green materials and constructive systems.
- To design and implement an advocacy strategy on green building issues:
   Training activities will be held to promote competition on green building and disseminate information about incentives.

Source: IFC, internal note (2011).

## Other elements of Colombia's green investment framework Investment principles and protectionist measures

As described in Chapter 1, Colombia applies key investment principles, such as non-discrimination and transparency. This also applies to green investment, where no restriction to foreign investment exists.

So far, none of the measures taken by Colombia in support of green growth has been seen as being protectionist or discriminating against foreign investors.

## Intellectual property rights to facilitate transfer of green technologies and know-how

The government is aware of the importance of granting adequate protection to intellectual property rights (IPRs) in order to attract investments that will improve the country's technological capacity to deal with environmental challenges and help, inter alia, to support the transition to a low carbon economy. 9 It also acknowledges the importance of efficient IPR protection to enable the country to allow for adequate benefit sharing of assets, such as genetic resources and their derivatives, and traditional knowledge. In accordance with Andean Decisions 391 of 1996 (Common Regime on Access to Genetic Resources) and 486 of 2000 (Common Regime on Industrial Property), intellectual property rights granted on creations or inventions developed from the use of biological and genetic resources and their derived products or the associated traditional knowledge of indigenous and local communities may be conditioned on compliance with legislation on access and benefit sharing. For example, with respect to patent applications on inventions developed from biological or genetic resources, Colombia requires disclosure of the origin and proof that the resources were obtained legally.

On the other hand, Colombia has indicated that, as a developing country, it considers it should benefit from measures facilitating the transfer of clean technologies from developed countries. Thus, in the context of Multilateral Environmental Agreements, Colombia has defended the need to address treatment of barriers to access to environmental technology, e.q. for adaptation and mitigation to climate change, in a way that takes into consideration the needs, priorities and capacities of developing countries, and effectively materialises commitment to technology transfer. Colombia has been participating in the Global Technology Needs Assessment project for climate change (TNA) led by UNEP, which aims to identify and analyse technology needs in Colombia in order to prioritise technologies that can contribute to mitigation and adaptation goals. The project also aims to identify and to propose strategies in order to create enabling frameworks for the development and transfer of technologies. The TNA project includes improvement and strengthening of the national framework for investment in R&D for climate change adaptation and mitigation technologies.

### Removing administrative barriers to investment

As described in Chapter 4, the government has made significant efforts to reduce administrative procedures related to private, including foreign, investment. These efforts also apply to procedures under the Ministry of Environment, Housing and Territorial Development, which has developed a Window for Environmental Procedures (Ventanilla Integral de Trámites Ambientales en Línea, VITAL): a single, centralised national system that channels users' requests and applications to the relevant environmental authority. Another mechanism is the Information System of Environmental Licensing (SILA), which provides on-line information during the licensing process. These measures have helped to reduce the time required for obtaining an environmental licence from an average of 130 weeks to under 18 weeks. This was achieved despite the important increase in the number of applications for environmental licences from about 4 500 in 2005 to more than 37 000 in 2010.

## Institutional capacity to design and implement green investment policies

The multi-dimensional and cross-sectoral nature of climate change and other environmental concerns requires strong coherence across policy areas and between different government levels and agencies. In addition to a mix of policy instruments to support green growth and reduce the environmental impacts of development and investment activities, governments should lower the cost and increase the efficiency of the various forms of administration that affect investment. Support to green investment also requires adequate human resources for designing and implementing innovative policies aimed at leveraging private funds.

### Inter-ministerial co-operation in the design of green investment policies

According to some sources, in Colombia, co-ordination among Ministries in developing and implementing policies and regulations has not also proceeded smoothly in the past. A lack of clarity in the scope of competences of various authorities has also sometimes affected investors. A mining company, for example, obtained the right from the mining authorities to explore and eventually exploit minerals in an area, but the subsequent environmental licence, which is a legal requirement in order to ensure the appropriate environmental management and control of mining activities, was not granted on the basis that the proposed project was incompatible with the ecosystem's and environmental services' conservation requirements.

In recent years, the government has worked to enhance co-operation between ministries in order to better co-ordinate environmental, economic and investment policies and to increase regulatory certainty for investors. As a result of the above conflict, for example, the Ministries of Mining and of Environment, Housing and Territorial Development worked together to elaborate a list of protected areas in which all mining activity was banned, thus reducing conflicting decisions and increasing certainty for potential investors.

The key institution charged with ensuring coherence among policies is the Council for Economic and Social Policies (CONPES), the highest national planning body advising the government on economic, social and environmental aspects. The CONPES co-ordinates and directs the agencies responsible for economic and social policies through the study and approval of general policy documents. These documents harmonise economic, social, environmental and investment aspects to ensure that strategies and action plans are comprehensive and contribute to the sustainable development of the country. For example, the design of a Low Carbon Development Strategy currently under way is based on CONPES document 3700 of 2011 on climate change. All ministries are involved in the design of the policy which will include, among its key elements, mechanisms to attract international funding and the transfer of technologies needed to adapt to climate change

The National Development Plan also recognises the importance of co-operation between ministries. It provides for Strategic Environmental Assessments to be carried out across the development of the so-called "growth locomotives" and provides for the creation of "environmental units" within most ministries, in order to ensure that environmental issues are effectively taken into account in the development of sectoral and economic policies. The decision, in September 2011, to create a separate Ministry of Environment and Sustainable Development, with new attributions and powers in developing horizontal projects, will further strengthen inter-ministerial co-operation.

Other co-ordination mechanisms include so-called "environmental agendas" between the Ministry of Environment, Housing and Territorial Development and other ministries, outlining areas of common interest. Since November 2007, seven inter-ministerial environmental agendas have been signed between the Ministry of Environment, Housing and Territorial Development and the Ministries of Agriculture and Rural Development; National Defence; National Education; Transport; Social Protection; Trade, Industry and Tourism; Mining and Energy. Among the main subjects of common interest are biodiversity protection; integrated water management; cleaner production and consumption; climate change; hazardous waste management; and air protection.

A Committee, composed of representatives from the Ministries of Environment, Housing and Territorial Development; Transport; Finance and Public Credit; Trade, Industry and Tourism, and the National Planning Department, was charged with assessing the need to reduce the tariff on natural gas, electric and hybrid light vehicles. The Ministry of the Environment also participated in the design of tax incentives to promote investments in environmental technologies and in the development of a system of green soft-loans for small and medium enterprises by the National Development Bank (Bancóldex).<sup>13</sup>

## Involvement of stakeholders in the design and the implementation of green investment policies

The country's legal and constitutional framework enables citizens' participation in the design of policies, through both formal and informal mechanisms. The government has put a range of mechanisms in place to consult with stakeholders, including enterprises, on the development of environment and investment policies. One mechanism is the National Environmental Council composed of representatives from government, business associations, academia, NGOs and ethnic minorities, among others. Its main function is to advise on the adoption of environmental policies and on measures to harmonise environmental regulations and decisions with the implementation of development projects. Another consultation body is the Technical Advisory Council of Policy and Environmental Regulations composed of representatives of public and private universities and stakeholders from the manufacturing, agriculture, mining and hydrocarbons sectors.

### **Investment incentives**

#### Incentives to promote green investment

Colombia has few economic instruments in place to discourage environmentally damaging activities and to encourage improved environmental performance. Among the first category, there is a fee for water use and discharge of effluents. Colombia does not have a carbon tax in place. It does not take part in any GHG emissions trading scheme, nor intends to do so in the near future. The authorities argue that the sources of the country's GHG emissions are not the most suitable ones for cap and trade schemes since they come mainly from the transport and agricultural sectors.

On the other hand, Colombia grants a range of incentives (tax benefits, such as exclusions, exemptions and discounts, as well as grants or subsidies) to companies that voluntarily make investments in activities that are beneficial for the environment. All incentives are available to foreign and domestic investors alike. These benefits are summarised in Table 5.2. The Ministry of Environment is also currently working on regulations to grant tax incentives (VAT exemption and income tax deductions) for investments in equipment and monitoring systems to promote energy efficiency (motors, cleaner vehicles) and non-conventional energy sources, such as biomass, wind, solar, geothermal.

Table 5.2. Green investment incentives in Colombia

Purpose of the incentive	Type of benefit	Beneficiaries
Environmental protection in general	Exemption from sales tax	Imports of machinery or equipment intended for recycling and waste processing, purification, wastewater treatment, air emissions, solid waste or basic sanitation and equipment for environmental monitoring and control.
	Exemption from sales tax	Purchase of equipment for installing and operating systems to control and monitor compliance with environmental regulations and standards.
	Income tax deduction	Investments in environmental control and improvement; the deduction cannot exceed 20% of net income. Investments made at the request of an environmental authority to mitigate environmental impacts of an activity under an environmental permit cannot be deducted
Biodiversity conservation	Income tax exemption (until 2022)	Revenues from ecotourism services.
	Deduction from income tax	Reforestation activities (articles 83, 157, 173 y 253 Tax Statute).
Reforestation <sup>1</sup>	Forestry Incentive Certificate	The purpose is to promote investment in new plantations for conservation purposes; 50% of the cost for foreign species, 75% for native species.
Low carbon development	Exemption from sales tax	Imports of machinery and equipment for the development of projects or activities that are exporters of certified carbon emission reductions
	VAT exemption	Purchase of technologies to reduce GHG emissions. This incentive only applies to projects registered under the UNFCCC or proven to be negotiated in the voluntary carbon markets.
	Income tax exemption (until 2018)	Revenues generated by sales of electricity produced from wind resources, biomass or agricultural residues, up to a period of 15 years. At least 50% of the resources obtained by the sale of these certificates must be invested in social welfare work.
	Tariff reduction (from 15% to 5%)	Imports of natural gas, electric and hybrid buses and trucks.
Production of biofuel	Exemption from global Surcharge Tax and/or Value Added Tax	Production of biofuel to be sold in the domestic market.
	VAT exemption (until 2015)	New oil palm plantations.
	Income tax reduction; exemption from capital goods tariffs for projects with export potential	Production of agro-industrial biofuels (applies only to free trade zones).

<sup>1.</sup> An incentive is also in place for forestry conservations, but its application is currently suspended due to lack of resources.

Source: Colombia, Ministry of Environment, Housing and Territorial Development.

There is no mechanism in place to systematically assess the impact or success of incentives and subsidies in achieving environmental objectives, but some information is available regarding certain incentives. For example, according to the authorities, in the period 2002 to July 2011 the government granted incentives for an amount of COP 327 billion for the purchase of equipment and machines for environmental pollution prevention and control and environmental monitoring, which generated investments in the order of COP 1.8 billion.

A 2005 study by ECLAC evaluated the application of tax benefits for environmental management and investments in Colombia. It highlighted the difficulties in implementing these benefits, due, inter alia, to a very significant lack of intergovernmental co-ordination, and the fact that the incentives were granted without any monitoring of the actual environmental benefits resulting from the investments. On the other hand, the study considered that the incentives served to recognise the efforts by investors to comply with applicable environmental laws. In light of the conclusions and recommendations of the study, the Ministry of Environment has improved the procedures and mechanisms to certify private environmental investments. According to the authorities, recent analysis has shown that the VAT exemption for environmental investments has had a positive and statistically significant impact in the manufacturing sector, in particular as regards limiting air and water pollution.

There is no mechanism in place to systematically assess the potential negative environmental effects of investment incentives, and only anecdotal evidence is available on incentives that seem to conflict with the government's green growth objectives. According to the government, there is evidence that in at least one case an investment incentive has had perverse effects. The 2001 Mining Code promoted mining activity and provided tax exemptions on investments in mining, which resulted in the rapid growth of the sector, generating conflicts with land use and ecosystem protection in several regions. The Low Carbon Development Strategy currently being developed will include an analysis of measures which are in conflict with the objectives of the strategy.

#### Financial incentives

The government has taken some initial steps to strengthen financial support to investments in low carbon activities. For example, *Bancóldex*, the National Development Bank, has recently put in place a system of "soft" green loans, open to all companies, but especially targeting SMEs, to provide support for investment aimed at preventing and mitigating environmental damages and monitoring environmental performance. <sup>15</sup> *Bancóldex* also has a programme in place with the city of Bogotá to support micro, small and medium enterprises in improving their environmental performance.

A special environmental credit line, co-ordinated by the National Centre for Cleaner Production and Environmental Technologies, is also in place to support cleaner production projects, including investment in cleaner technologies. Depending on the level of environmental improvement achieved, up to 25% of the initial investment is reimbursed. According to the government, this system has had excellent results and additional funds were re-injected, with the support of the Swiss government.

Colombia has been very successful in leveraging funds under the Clean Development Mechanism established under the Kyoto Protocol. It has a portfolio of 154 approved projects, with a total annual emissions reduction potential ( $CO_2$  ton/year) of ca. 21 million (Table 5.3).

Table 5.3. Colombia and the Clean Development Mechanism

Total of CDM projects in the national portfolio	154
Annual emission reduction potential (CO <sub>2</sub> tons/year)	20 935 440
Nationally approved projects	66
Projects registered with the UNFCCC	32
Projects involving sale of emission reduction certificates (ERCs)	10

Source: Colombia, Ministry of Environment, Housing and Territorial Development

The government has also benefitted from funding mechanisms put in place by national and international donors, such as a USD 90 million facility by the Inter-American Development Bank to support loans to energy efficiency, cleaner production and renewable energy projects (see Box 5.5).

## Box 5.5. Multilateral financial support for low carbon development

The Clean Technology Fund (CTF) is one of the two funds established under the Clean Investment Fund. The CTF seeks to fill a gap in the international architecture for development finance available at more concessional rates than standard terms used by the Multilateral Development Banks (MDBs) and at a scale necessary to help provide incentives to developing countries to integrate nationally appropriate mitigation actions into sustainable development plans and investment decisions. Through the CTF, countries, the MDBs, and other partners agree upon country investment plans for programmes that contribute to the demonstration, deployment and transfer of low carbon technologies with significant potential for greenhouse gas emissions savings.

## Box 5.5. Multilateral financial support for low carbon development (cont.)

The CTF Colombia Investment Plan proposes funding to the country in two sectors: urban transport and energy efficiency. The Investment Plan was developed in co-operation with the IBRD, the IDB and the IFC, to support the low carbon objectives contained in Colombia's National Development Plan.

In June 2011, the IDB approved a USD 90 million facility to support on-lending to energy efficiency, cleaner production and renewable energy projects through Colombian financial institutions. The facility's first utilisation is a transaction with Bancolombia in collaboration with the IFC and the CTF. The approved project with Bancolombia marks the first ever "green" risk sharing guarantee, not only in Colombia, but also in the region of Latin America. The project will support Bancolombia's programme of loans to small and medium enterprises and corporations that seek to adhere to higher environmental standards. Further technical assistance to Bancolombia will support internal capacity building, energy efficiency audits and knowledge creation.

Source: IDB, www.idb.org; Clean Technology Fund (2010).

The National Development Plan highlights the win-win opportunity to access international funds, in particular for forest conservation under the REDD+ mechanisms. The government is taking an active part in international initiatives related to developing financing mechanisms and leveraging funds for climate action. For example, it participates in the Forest Carbon Partnership Facility (FCPF) process to develop criteria to establish a market platform to pay for emission reductions in the forestry sector.<sup>16</sup>

Colombia also participates in the Partnership for Market Readiness (PMR), a World Bank initiative to build capacity in developing countries to develop new market-based instruments to fight climate change. It is one of the eight pilot countries that each received an initial grant of USD 350 000 in July 2011 to help design, pilot and eventually implement market-based instruments for GHG mitigation.<sup>17</sup>

#### Other incentives

The government considers that, as a large purchaser of goods and services, it has an important role to play in promoting greener production and consumption, and has introduced in the NDP the target to increase green procurement at the national and regional levels by 10%. As part of this process, which draws on UNEP's project on strengthening capacity for sustainable public procurement in developing countries, the government (through CONPES,

in co-operation with the Ministry of Environment, Housing and Territorial Development) is currently developing a set of guidelines to improve the policy framework to promote sustainable procurement. At present, the main barrier to green procurement is the legal framework (Laws 80 of 1993 and 1150 of 2007, General Statute of Public Procurement) under which procurement decisions are based only on economic aspects.

One of the planned reforms is to introduce other criteria in procurement decisions, including sustainability aspects. The government is currently preparing pilot projects to increase capacity for sustainable procurement in eight public agencies, with the aim of establishing sustainable procurement plans in each of these agencies and using these examples to train other government agencies. The reform will also include better information gathering and monitoring under the system in place to monitor and control public purchases. The reform will also promote the use of Colombia's Environmental Label to help boost purchases of eco-labeled products.

In addition, under the National Development Plan, the government has earmarked part of the tax revenues from natural resource exploitation to fund innovation in science and technology, including sustainable development projects, such as GHG emissions reduction in the private sector.

### Private sector participation in green infrastructure

All countries must continually develop new infrastructure and upgrade and replace existing one. Choices of infrastructure will lock-in the environmental performance of countries (e.g. their GHG emission and water consumption patterns) and their pollution abatement capacity (e.g. in the wastewater treatment sector) over the medium to long term. Private investment in infrastructure can be essential to reach the scale of investment needed in a country, and bring in the necessary expertise and efficiency gains. Because infrastructure projects, including those in support of green growth, involving the private sector are complex, adequate framework conditions and institutional capacity are required to effectively manage them.

The Colombian government is aware that private, including foreign, investment is needed to achieve the country's infrastructure needs over the next years. <sup>18</sup> For example, according to the NDP, in the transport sector, private investment is expected to cover COP 18 931 billion of the total estimated COP 44 550 billion needed; and in housing and territorial development, COP 73 314 billion, out of COP 95 208 billion. The NDP also stresses that infrastructure development must take into account environmental considerations. However, there are no estimates available of the share of private investment needs linked to "green infrastructure".

There are no specific mechanisms in place that govern private participation in "green infrastructure" either, but the government has conducted a few initiatives to boost public-private partnerships (PPPs) in the construction of infrastructure, including green infrastructure. One area in which PPPs are relatively widespread is in infrastructure related to ecotourism. Modalities include agreements between the authorities managing national parks and private operators, and ecotourism partnerships with local community organisations. For example, the agency managing national parks requires that private or communal operators conform with bioclimatic architecture criteria for adaptations and new infrastructure development, which includes taking into account specific environmental criteria, such as the climate, geographical location, fauna and flora. For example, buildings must use local materials, fit into the landscape, ensure traceability of timber used and include waste water treatment installations. <sup>20</sup>

A key area for further infrastructure development in Colombia is transport. In addition to energy efficiency, the Climate Technology Fund Investment Plan for Colombia considers that transport is one of the areas which present important opportunities for GHG mitigation. The government developed the National Urban Transport Policy in 2003, under which large and medium-sized cities were to benefit from the implementation of Integrated Mass Transit systems (SITMs) and Strategic Public Transport Systems, respectively. For the SITMs, the government has already spent USD 1 billion since the programme began and plans to invest over USD 1.7 billion by 2016. According to the government, private investment in the SITMs is close to USD 1.1 billion (constant prices of 2009), including building of parking zones, garages, and other facilities; purchase of the transport fleet, technological systems for fleet control, security and cashing systems for the SITM stations; and maintenance of stations, fleet, technological systems and administrative facilities.

Colombia has some experience in private sector development in infrastructure projects funded under the Clean Development Mechanism (CDM). Several transport projects are currently registered with the UNFCCC as CDM projects, including the Integrated Mass Transport Systems for Bogotá (TransMilenio) and the electric transport system "Metro Cable" in Medellín. <sup>21</sup> The GHG emissions reduction potential of the TransMilenio project comes from the use of new and larger buses with greater fuel efficiency per passenger than existing buses, combined with a modal shift towards greater use of public transport. Co-benefits are reduced traffic and accidents, and improved air quality (Clapp, C. et al., 2010). The government sees these projects as successful examples of private public partnerships. It also recognises that the development of green transport infrastructure projects with private participation is considerably lagging behind, and expects that the recent reforms undertaken by the government to improve the framework for

private participation in infrastructure (including through better design of projects, clearer allocation of risks and a more streamlined regulatory framework) will also help make investment in green infrastructure more attractive to domestic and foreign investors.

#### Notes

- The OECD report Towards Green Growth (OECD, 2011) includes a Communication by the Freedom of Investment (FOI) Roundtable on "Harnessing freedom of investment for green growth". The communication sets forth findings of FOI Delegates on the role of international investment in supporting the realisation of countries green growth objectives.
- 2. There are no figures available on the amount of domestic private green investment in Colombia, nor on current or past green FDI flows. Collecting this kind of data is still a challenge for governments from both developed and developing countries. The difficulties in defining and measuring green FDI, and possible avenues for future research are described in Golub, S., Kauffmann, C. et al., 2011.
- 3. http://unfccc.int/files/meetings/cop\_15/copenhagen\_accord/application/pdf/colombiacphaccord\_app2.pdf.
- 4. According to WWF, the ease of illegal sourcing of wood, weak governance, inefficient institutions and lack of transparency in granting permits have largely outgrown incentives for legal sourcing in Colombia (WWF, 2010).
- 5. According to recent research by OECD, only 6.5% of BITs contain references to the environment (Gordon, K., Pohl, J., 2011). These provisions focus on a limited number of themes (e.g. general environmental references in preambles, right to regulate in the environmental policy area, and not lowering environmental standards for the purpose of attracting investment), rather than on promoting "green investment".
- 6. In addition to the Low Carbon Development Strategy under preparation, Colombia has already some programs in place which can support it transition to a low carbon economy: The REDD National Strategy (2009) constitutes a national initiative to reduce GHG emissions from deforestation and degradation. The National Adaptation Plan (2011-14) has as its main objective to integrate and co-ordinate sector, community and territorial institutional management and planning for the identification and implementation of climate change adaptation measures.
- $7.\ www.minminas.gov.co/minminas/downloads/UserFiles/File/ENERGIA/URE/Resol-Proure-180919-01-06-2010.pdf.$
- 8. See for example OECD (2005) and UNDP (2011).
- 9. An overview of Colombia's intellectual property rights regime is provided in Chapter 4.
- 10. www.siac.gov.co/.
- 11. See for example, ECLAC (2005) and Resources for the Future (2005).
- 12. Other examples include CONPES document 3697 of 2011 on a policy for the commercial development of biotechnologies based on sustainable use of biodiversity, and document 3242 of 2002, establishing an institutional strategy for the sale of environmental services and climate change mitigation. A list of environment-related CONPES documents is available at www.humboldt.org.co/iavh/investigacion/politica-y-legislacion/item/135-documentos-conpes.

- 13. www.bancoldex.com/contenido/contenido.aspx?catID=339&conID=2914.
- 14. The 2001 Mining Code was recently declared to be unconstitutional by the Constitutional Court and will be replaced by a new Law.
- 15. www.bancoldex.com/.
- 16. The Forest Carbon Partnership Facility (FCPF) is a global partnership dedicated to REDD+ (reducing emissions from deforestation and forest degradation, conservation, sustainable management of forests and enhancement of forest carbon stocks), www.forestcarbonpartnership.org/fcp/node/11.
- 17. The other countries are Chile, China, Costa Rica, Indonesia, Mexico, Thailand, and Turkey. Each country will develop a "Market Readiness Proposal" that will detail their plans; Colombia will focus on the transport sector. In addition, with financial support from the Global Environment Facility (GEF), Colombia is working on designing and implementing a Mechanism for Voluntary Mitigation of Greenhouse Gas Emissions which aims to strengthen capacities for the development of voluntary mitigation projects and to facilitate trade with nationally produced Verified Emissions Units (VERs) through the creation of a market platform. This initiative is expected to promote the formulation and implementation of corporate climate change strategies which include measuring, reducing and offsetting of GHG emissions through purchases of national VERs. http://wbcarbonfinance.org/.
- 18. Chapter 4 provides an overview of the policy framework for private participation in infrastructure.
- 19. Key policy documents governing concessions for eco-tourism are the "Development of Ecotourism Policy", the Guidelines for Communitarian Ecotourism, and the CONPES document 3296 "Private Participation in National Parks", on the development of ecotourism service concessions.
- 20. Examples of public-prívate partnerships can be found in the National Parks of Otún-Quimbaya, and Amacayacu. See www.parquesnacionales.gov.co.
- 21. Other Mass Transit Systems registered as CDM projects exist in the cities of Cali, Barranquilla and Cartagena.

### References

Convention on Biological Diversity (CBD) (2010), The Jakarta Charter on Business and Biodiversity.

CBD (2010), Business and Biodiversity. Guide to COP 2010.

Clapp C. et al. (2010), "Cities and Carbon Market Finance. Taking stock of cities' experience with Clean Development Mechanism (CDM) and Joint Implementation (JI)", OECD Environment Working Papers, No. 29.

Clean Technology Fund (2010), Investment Plan for Colombia.

Colombia, Ministry of Environment, Housing and Territorial Development (2010), Colombia. CDM Portfolio 2010.

Economic Commission for Latin America and Caribbean (ECLAC) (2005), "Evaluación de la aplicación de los beneficios tributarios para la gestión e inversión ambiental en Colombia", www.eclac.org/publicaciones/.

- Etter, A. et al. (2008), C. McAlpine and H. Possingham (2008), Historical Patterns and Drivers of Landscape Change in Colombia Since 1500: A Regionalised Spatial Approach, Annals of the Association of American Geographers.
- Golub, S., C. Kauffmann and P. Yeres (2011), "Defining and Measuring Green FDI: An Exploratory Review of Existing Work and Evidence", OECD Working Papers on International Investment, No. 2011/2.
- Gordon, K. and J. Pohl (2011), "Environmental Concerns in International Investment Agreements: a survey", OECD Working Papers on International Investment, No. 2011/1.
- Government of Colombia (2010), "Plan Nacional de Desarrollo (2010-2014)" (National Development Plan, available in Spanish only).
- Latin American Trade Network (LATN), 1999, "El medio ambiente en los acuerdos regionales: Precedentes o hechas aislados?", Brief 7.
- OECD (2011), Towards Green Growth, www.oecd.org/greengrowth.
- OECD (2010), Transition to a Low Carbon Economy: Public Goals and Corporate Practices, OECD, Paris.
- OECD (2008), Economic Aspects of Adaptation to Climate Change. Costs, Benefits and Policy Instruments, OECD, Paris.
- OECD (2005), Environment and the OECD Guidelines for Multinational Enterprises, OECD, Paris
- Resources for the Future (2005), Assessment of Colombia's National Environmental System (SINA).
- United Nations Development Program (UNDP) (2010), "Financial Sustainability of Protected Areas in Latin America and the Caribbean: Investment Policy Guidance".
- United Nations Environment Program (UNEP) (2010), "Are you a green leader? Business and biodiversity: making the case for a lasting solution".
- World Bank (2009), "Low Carbon, High Growth. Latin American Responses to Climate Change", http://siteresources.worldbank.org/INTLAC/Resources/17619\_LowCarbonHighGrowth\_English\_PDF.pdf.
- World Economic Forum (WEF) (2009), "Green Investing. Towards a Clean Energy Infrastructure".



### From:

### **OECD Investment Policy Reviews: Colombia 2012**

### Access the complete publication at:

https://doi.org/10.1787/9789264167742-en

### Please cite this chapter as:

OECD (2012), "Investment Framework in Support of Green Growth", in *OECD Investment Policy Reviews: Colombia 2012*, OECD Publishing, Paris.

DOI: https://doi.org/10.1787/9789264167742-7-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 and any 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.

You can copy, download or print OECD content for your own use, and you can include excerpts from OECD publications, databases and multimedia products in your own documents, presentations, blogs, websites and teaching materials, provided that suitable acknowledgment of OECD as source and copyright owner is given. All requests for public or commercial use and translation rights should be submitted to rights@oecd.org. Requests for permission to photocopy portions of this material for public or commercial use shall be addressed directly to the Copyright Clearance Center (CCC) at info@copyright.com or the Centre français d'exploitation du droit de copie (CFC) at contact@cfcopies.com.

