

# OECD and Rio+20

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Over the last four decades, the world's population has increased by over 3 billion people, and the world economy has more than tripled. This growth, however, has been unevenly distributed and it has incurred significant costs to the environment. Providing for a further 2 billion people by 2050, and improving the living standards for all, will be challenging. Failure to responsibly manage the natural assets on which life depends under these new pressures will have social consequences, especially for the poor, and can ultimately undermine growth and human development.

Efforts to promote green growth as a new source of growth have been gaining momentum in recent years. The Rio+20 Conference in June 2012 represents a critical milestone in terms of providing impetus to this dynamic, and ensuring that it advances countries' common aspirations towards sustainable development and poverty eradication. The OECD is committed to supporting countries in reaching positive outcomes at Rio+20. For any targets, goals or other commitments agreed at Rio+20, countries will need:

- cost-effective and politically implementable policy measures to achieve them;
- robust indicators and data to help track their progress;
- mechanisms to review progress and provide guidance on any necessary policy adjustments; and
- dedicated platforms and innovative ways to facilitate co-operation at the international level.

The OECD's analysis, indicators, country reports and policy recommendations provide a sound basis to support these efforts. OECD's contribution to Rio+20 will include a global *Environmental Outlook to 2050* and a range of analysis and policy guidance linked to the Green Growth Strategy. Together, these can help ascertain the implications of demographic and economic trends for four key areas of global concern – climate change, biodiversity, freshwater and the health impacts of environmental pollution – and to identify concrete ways in which green growth initiatives can address these to promote sustainable growth and well being.

This note provides information on the deliverables and background material of some of the key areas of OECD work on green growth. Most of the material presented here was submitted to the United Nations Conference on Sustainable Development for the Compilation Document in November 2011.

The OECD sees green growth as a practical and flexible approach for accelerating progress in the economic and environmental pillars of sustainable development, while taking full account of the social consequences of greening the growth dynamic of economies. The focus of green growth strategies is ensuring that natural assets can deliver their full economic potential on a sustainable basis. That potential includes the provision of critical life support services – clean air and water, and the resilient biodiversity needed to support food production and human health.

There is no "one-size-fits-all" prescription for implementing green growth. Greening the growth path of an economy depends on policy and institutional settings, level of development, resource endowments and particular environmental pressure points. Advanced, emerging, and developing countries will face different challenges and opportunities. The OECD is working to identify some of the policy mixes that can help countries in different situations implement green growth in a way that contributes to poverty eradication, employment opportunities, and a strong and sustainable economy.

[www.oecd.org/rio+20](http://www.oecd.org/rio+20)

## Summary of the OECD contribution to and presence at Rio+20

OECD's contribution to Rio+20 will include the *Environmental Outlook to 2050: The Consequences of Inaction* and a range of analysis and policy guidance linked to the Green Growth Strategy. Together, these can help identify the environmental challenges we face and the concrete ways in which green growth initiatives can address these to promote sustainable growth and well being.

The **Green Growth Strategy** identifies the sources of green growth and the range of policies that countries can use to achieve it, including for managing the process of structural adjustment and facilitating employment opportunities. It provides insights on the key issues that will require enhanced international co-operation and the indicators that can help measure progress towards green growth objectives.

The OECD will hold a **side event in Rio** involving Leaders and Ministers to discuss how concrete green growth strategies and policies can help countries to shift their economies to a more sustainable course. The need for differentiated green growth strategies to fit countries' specific conditions will be discussed, and how OECD's green growth toolkit and indicators can be adapted to different socio-economic contexts to help countries advance and measure their own progress.

This side event will be an opportunity for countries to share successful experiences in implementing green growth strategies, and to highlight some of the challenges and how they can be addressed, including through international technology co-operation, financing, investment, and trade. The OECD will also hold side-events on green innovation for tourism, and green growth for developing countries, and will be participating in side events held by partners. In conjunction with the Global Green Growth Institute, an event will be organised at Rio+20 to consult with countries and experts on a preliminary OECD report on "Green Growth and Developing Countries".

The OECD's **national policy surveillance exercises** are increasingly examining green growth issues, as are various thematic and sectoral studies. Emerging insights from this work will be used to highlight some of the lessons learned and policy recommendations of relevance to the discussions at Rio+20. Existing and new work on technology transfer, open trade and investment, and scaling-up and shifting public and private financing will be drawn upon for the OECD input to the discussions, given the significance of these issues for promoting international co-operation for green growth.

OECD work on sustainable development has produced a number of tools and approaches for **measuring sustainable development** and conducting sustainability assessments. Other work has highlighted good governance practices for institutionalizing sustainable development and for national sustainable development strategies, dealing with environmentally-harmful subsidies and the political economy of subsidy reform and sustainable development.

The **Green Growth Knowledge Platform (GGKP)** has been developed in partnership between the Global Green Growth Institute, the OECD, UNEP, and the World Bank. The GGKP is a global network of researchers and development experts that identifies and addresses major knowledge gaps in green growth theory and practice, to help countries design and implement green growth policy. The GGKP can provide practitioners and policymakers with better tools to foster economic growth and implement the commitments that emerge from Rio+20.

## Key areas of OECD work relevant to Rio+20

### I. OECD Environmental Outlook to 2050

Over the last four decades, the world's population has increased by over 3 billion people, and the size of the world economy has more than tripled. This growth, however, has been unevenly distributed and incurred significant cost to the environment. Natural assets have been and continue to be depleted, and the services they deliver have already been compromised by environmental pollution. Providing for a further 2 billion people by 2050 and improving the living standards for all, will challenge our ability to manage and restore those natural assets on which all life depends. Failure to do so will have social consequences, especially for the poor, and ultimately undermine growth and human development of future generations.

The *OECD Environmental Outlook to 2050* focuses on four areas: climate change, biodiversity, water and the health impacts of pollution and asks "What could the next four decades bring us?" Based on model-based projections, it looks forward to the year 2050 to ascertain what demographic and economic trends might mean for the environment if humanity does not manage natural assets with much greater care, and examines how specific policy actions can help to shift these projections to a more sustainable course. Can the planet's resource base support ever-increasing demands for energy, food, water, wood products and other natural resources, and at the same time absorb our waste streams? Or will the growth process undermine itself? How can we balance the environmental, economic and social objectives and secure the life support systems on which all human development depends?

See: [www.oecd.org/env/outlook](http://www.oecd.org/env/outlook)

### II. Selected areas of OECD work on green growth

#### *Green growth country reports*

Building on the general framework developed in the Green Growth Strategy, the OECD is mainstreaming green growth in its national and multilateral policy surveillance exercises to provide policy advice that is targeted to the needs of individual countries. These include the Economic Surveys, Environmental Performance Reviews, Innovation Reviews, and Investment Policy Reviews, as well as the *Going for Growth* annual report and the Green Cities Programme. These analyses will cover advanced, emerging and other economies. Already a number of Economic Surveys and Environmental Performance Reviews have examined selected green growth issues, and can provide some first insights into countries' recent actions to green their economies, for example some recent ones include:

- *OECD Economic Surveys: Russian Federation 2011*, includes a chapter on increasing energy efficiency as a means to achieve greener growth [dx.doi.org/10.1787/eco\\_surveys-rus-2011-en](http://dx.doi.org/10.1787/eco_surveys-rus-2011-en)
- *OECD Economic Surveys: India 2011*, chapter on "Phasing out energy subsidies" [dx.doi.org/10.1787/eco\\_surveys-ind-2011-en](http://dx.doi.org/10.1787/eco_surveys-ind-2011-en)
- *Greening Public Budgets in Eastern Europe, Caucasus and Central Asia* (2011) [dx.doi.org/10.1787/9789264118331-en](http://dx.doi.org/10.1787/9789264118331-en)
- Capozza, I., "Greening Growth in Japan", *OECD Environment Working Papers*, No. 28 (2011) [dx.doi.org/10.1787/5kggc0rpw55l-en](http://dx.doi.org/10.1787/5kggc0rpw55l-en)
- Jones, R. S. and B. Yoo, "Korea's Green Growth Strategy: Mitigating Climate Change and Developing New Growth Engines", *OECD Economics Department Working Papers*, No. 798 (2011) [dx.doi.org/10.1787/5kmbhk4gh1ns-en](http://dx.doi.org/10.1787/5kmbhk4gh1ns-en)
- Carey, D., "Implementing Cost-Effective Policies in the United States to Mitigate Climate Change", *OECD Economics Department Working Papers*, No. 807 (2010). [dx.doi.org/10.1787/5km5zrs4kc6l-en](http://dx.doi.org/10.1787/5km5zrs4kc6l-en)
- *OECD Economic Surveys: Australia 2010*, including a focus on water management. (2010) [dx.doi.org/10.1787/eco\\_surveys-aus-2010-en](http://dx.doi.org/10.1787/eco_surveys-aus-2010-en)
- OECD work on Green Cities: [www.oecd.org/greencities](http://www.oecd.org/greencities)

## Green growth indicators and measurement tools

Developing and implementing framework conditions that promote green growth requires a good understanding of the determinants of green growth and of related trade-offs or synergies. It also requires appropriate information to support policy analysis and to monitor progress.

Monitoring progress towards green growth requires indicators based on internationally comparable data. The report *Towards Green Growth: Monitoring Progress - OECD Indicators* proposes a preliminary set of twenty-five indicators on the basis of existing work in international organisations, and in OECD and partner countries. The proposed set is neither exhaustive nor final, and has been kept flexible so that countries can **adapt it to different national contexts**. It has been structured to capture the main features of green growth:

### Indicators groups and topics covered

1	<b>The environmental and resource productivity of the economy</b>	<ul style="list-style-type: none"> <li>• Carbon and energy productivity</li> <li>• Resource productivity: materials, nutrients, water</li> <li>• Multi-factor productivity</li> </ul>
2	<b>The natural asset base</b>	<ul style="list-style-type: none"> <li>• Renewable stocks: water, forest, fish resources</li> <li>• Non-renewable stocks: mineral resources</li> <li>• Biodiversity and ecosystems</li> </ul>
3	<b>The environmental dimension of quality of life</b>	<ul style="list-style-type: none"> <li>• Environmental health and risks</li> <li>• Environmental services and amenities</li> </ul>
4	<b>Economic opportunities and policy responses</b>	<ul style="list-style-type: none"> <li>• Technology and innovation</li> <li>• Environmental goods &amp; services</li> <li>• International financial flows</li> <li>• Prices and transfers</li> <li>• Skills and training</li> <li>• Regulations and management approaches</li> </ul>
	<b>Socio-economic context and characteristics of growth</b>	<ul style="list-style-type: none"> <li>• Economic growth and structure</li> <li>• Productivity and trade</li> <li>• Labour markets, education and income</li> <li>• Socio-demographic patterns</li> </ul>

### Indicators Database

The OECD has recently launched an online database containing selected indicators for monitoring progress towards green growth to support policy making and inform the public at large. The indicators draw upon the OECD's expertise with statistics, indicators and measures of progress.

The dataset covers OECD countries as well as the BRIICS economies (Brazil, Russian Federation, India, Indonesia, China and South Africa), Argentina and Saudi Arabia from 1990 onwards.

[www.stats.oecd.org](http://www.stats.oecd.org)

In the coming years, the OECD will work with countries to advance the green growth measurement agenda, fill some of the most important information gaps, and contribute to the implementation of the System of Environmental and Economic Accounting (SEEA) in areas relevant to green growth. The aim is to:

- Fill gaps in environmental-economic data at the **industry level**.
- Develop and improve the physical data for key stocks and flows of **natural assets**, including information on **land resources and non-energy mineral resources** that often constitute critical inputs into production.
- Further develop physical data to help improve **material flow analyses**.
- Improve information on **biodiversity**.
- Develop **monetary values** to reflect prices and quantities for (changes in) key stocks and flows of natural assets. Such valuations, even if incomplete and imperfect are required for **extended growth accounting models**, more comprehensive balance sheets and for adjusted measures of real income.
- Produce information on how environmental concerns trigger **innovation** in companies.
- Develop indicators on **environmental regulation** to complement indicators on economic instruments.
- Improve measures on both the objective and the subjective dimensions of **quality of life**, in particular measures of environmentally induced health problems and related costs; and public perceptions.
- Identify a small set of '**headline**' indicators to track central elements of green growth and which are representative of a broader set of green growth issues.

### Further information and key documents

- *Towards Green Growth: Monitoring Progress - OECD Indicators* (2011) [www.oecd.org/dataoecd/37/33/48224574.pdf](http://www.oecd.org/dataoecd/37/33/48224574.pdf)
- Sustainable Manufacturing Toolkit (2011): [www.oecd.org/innovation/green/toolkit](http://www.oecd.org/innovation/green/toolkit)

- Measuring sustainable development, UNECE, OECD, Eurostat (2009): [www.oecd.org/dataoecd/30/20/41414440.pdf](http://www.oecd.org/dataoecd/30/20/41414440.pdf)
- Measuring the Relationship between ICT and the Environment (2009): [www.oecd.org/dataoecd/32/50/43539507.pdf](http://www.oecd.org/dataoecd/32/50/43539507.pdf)
- Better Life Initiative: Measuring Well-being and Progress: [www.oecd.org/measuringprogress](http://www.oecd.org/measuringprogress)

### ***Green growth and developing countries***

To realise global sustainable development, the collective efforts of all nations are needed. Developing countries are particularly important in meeting this objective because these countries will increasingly be sources of economic and population growth, and this will be accompanied by new pressures on the environment and natural resources. Given the importance of natural assets in low-income economies, green growth can help foster more resilient economic growth and better livelihoods for the poor.

OECD is exploring how green growth strategies can be applied in the context of developing countries, taking into account differences in natural resource endowments, levels of socio-economic development, sources of economic growth, and institutional capacity. A preliminary report on ***Green Growth and Developing Countries*** will be part of OECD's contribution to the Rio+20 Conference in June 2012. It will identify promising areas in which green growth objectives could be achieved and the policies, regulations, technology transfer and new market and innovation opportunities that could help to deliver them. The report will recognise the importance of international co-operation and the mutual benefits between the advanced and developing economies in striving for greener growth.

OECD countries make up the main donor countries, and have been working with partner countries to identify **how development assistance can best support sustainable development**. The OECD has been tracking aid for environmental purposes for over a decade. It has used "Rio-markers" to track international public finance flows that support the Rio Conventions on biodiversity, desertification, and climate change. At the same time, OECD also collects data on aid flows to key sectors related to green growth and sustainable development such as energy, water, agriculture and forestry. Recent OECD work includes comprehensive guidance on capacity development for environmental management. It consists of recommendations to help build the necessary capacity for implementing green development policies and facilitating environmental governance, finance and planning in both developing countries and by development support providers.

### ***Further information and key documents***

- *Greening Development: Capacity Development for Environmental Management* (2012) [dx.doi.org/10.1787/9789264167896-en](http://dx.doi.org/10.1787/9789264167896-en)
- *Integrating Adaptation to Climate Change into Development Co-operation: Policy Guidance* (2009) [www.oecd.org/env/cc/adaptation/guidance](http://www.oecd.org/env/cc/adaptation/guidance)
- *Natural Resources and Pro-poor Growth: The Economics and Politics*, DAC Guidelines and Reference Series (2008) [dx.doi.org/10.1787/9789264060258-en](http://dx.doi.org/10.1787/9789264060258-en)
- *Environmental Fiscal Reform for Poverty Reduction*, DAC Guidelines and Reference Series (2005) [dx.doi.org/10.1787/9789264008700-en](http://dx.doi.org/10.1787/9789264008700-en)
- Statistics on Environmental Aid: [www.oecd.org/document/59/0,3746,en\\_2649\\_34421\\_46670203\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/document/59/0,3746,en_2649_34421_46670203_1_1_1_1,00.html)

### ***Innovation and technology transfer***

Innovation is key to green growth. It helps decouple growth from natural capital depletion and contributes to economic growth and job creation. Business is the driver of innovation, but governments need to provide clear and stable market signals, for example through carbon pricing. Recent OECD work explores policy actions for the deployment and transfer of new technologies and innovations as they emerge. Some of the key findings include:

- **Investing in energy and environmental R&D is not enough.** Only a small share of the key green growth inventions emerge from energy or environmental R&D. R&D in fields such as chemistry, material sciences and engineering are also important sources of scientific research for green technologies.
- **Carbon and resource prices are essential to stimulate green innovation.** Putting a price on carbon is critical for incremental improvements to clean tech and the take up of low-carbon technologies, but it will not

necessarily lead to breakthrough innovations. Public and private investment in research is also needed, including in emerging and developing economies that may need to adapt existing technologies to their own local context.

- **Emerging and developing economies have opportunities to leapfrog, e.g. by an effective use of ICT.** ICT offers important opportunities for greening growth in countries that are still developing their infrastructure, e.g. in integrating ICT in electric grid systems, and in using ICT to enhance access to information and markets.
- **Not all policies for green innovation cost money.** Removing regulatory barriers to the growth of new firms can help spur entrepreneurship and generate new business models that challenge incumbent firms. OECD's work on innovation has found that young firms account for a large share of patenting.
- **A key factor in facilitating technology transfer is the absorptive capacity in recipient countries.** The higher the level of domestic human capital, the higher the level of technology transfer as well as the positive local spillovers from trade and foreign direct investment. This illustrates the importance of long-term capacity building and education in technical and scientific areas.
- **Technology-neutral domestic policy regimes and international policy co-ordination are important factors for increasing the flow of technologies across borders.** If environmental policy is too prescriptive and unco-ordinated this can result in fragmented technology markets, with the potential market for the innovations induced split across different policy jurisdictions.
- To accelerate the diffusion of innovation, **new mechanisms for enhancing technology transfer to developing countries** are currently being explored e.g. voluntary patent pools and other collaborative mechanisms for leveraging intellectual property. Some good practice already exists but significant scale-up is required. Governments need to underpin such new mechanisms by supporting investments in the required knowledge networking infrastructure, fostering the sharing of public-sector knowledge, and developing guidance and soft rules to underpin these mechanisms.

#### Further information and key documents

- *Fostering Innovation for Green Growth* (2011) [dx.doi.org/10.1787/9789264119925-en](https://dx.doi.org/10.1787/9789264119925-en)
- *Invention and Transfer of Environmental Technologies* (2011) [dx.doi.org/10.1787/9789264115620-en](https://dx.doi.org/10.1787/9789264115620-en)
- *Eco-Innovation in Industry: Enabling Green Growth* (2010) [dx.doi.org/10.1787/9789264077225-en](https://dx.doi.org/10.1787/9789264077225-en)

### **Environmental fiscal reform**

#### **Environmental taxes and other policy instruments**

Green growth will require large scale changes in the behaviour of households, business and governments. Taxes and other market-based instruments are key policy instruments for providing clear and sustained incentives to reduce environmental damage. Businesses need a reasonable degree of certainty that innovation and investment to reduce the scale of environmental damage will be worthwhile. Similarly, a clear and sustained price signal can provide an important incentive for households, for example to reduce their energy consumption or to increase the extent to which they recycle waste. This can be supported by other policy instruments such as information campaigns or the wider use of 'smart' meters for water, gas and electricity. Increased use of environmentally related taxes can also play a role in growth-oriented tax reform by helping to shifting (part of) the tax burden away from more distortive corporate and personal income taxes and social contributions.

For many years, the OECD has been collecting information on, and analysing the environmental effectiveness and economic efficiency of, various instruments used for environmental policy – including looking at how different instruments interact when they are used in combination. Recent analysis also looked at the impacts of environmentally related taxes and similar instruments on innovation activity in firms and households.

#### Further information and key documents

- "Interactions Between Emission Trading Systems and Other Overlapping Policy Instruments", General Distribution Document, Environment Directorate (2011) [www.oecd.org/dataoecd/11/51/48188899.pdf](http://www.oecd.org/dataoecd/11/51/48188899.pdf)

- *Taxation, Innovation and the Environment* (2010) [dx.doi.org/10.1787/9789264087637-en](http://dx.doi.org/10.1787/9789264087637-en)
- *Ensuring Environmental Compliance: Trends and Good Practices* (2009) [dx.doi.org/10.1787/9789264059597-en](http://dx.doi.org/10.1787/9789264059597-en)
- OECD/EEA instruments database: [www2.oecd.org/ecoinst/queries/index.htm](http://www2.oecd.org/ecoinst/queries/index.htm)

## Fossil fuel subsidies

Reforming or eliminating inefficient support for the consumption or production of fossil fuels can contribute to achieving these economic and fiscal objectives, while also helping to tackle environmental problems like climate change. At the global level, reforming fossil-fuel subsidies would contribute to curbing emissions of greenhouse gases such as CO<sub>2</sub> by removing major incentives to produce or use such fuels. At the country level, reforming fossil-fuel support would also help reduce public spending and increase tax revenues, thereby improving fiscal balances. It could free up scarce government resources for other priorities, such as protecting vulnerable households, stimulating employment creation, or helping to address climate change at home or in developing countries.

Building on previous OECD work on environmentally harmful subsidies, four main areas of work on fossil fuel subsidies are underway:

- Development of a methodology for identifying and estimating producer and consumer energy subsidies, based on the Producer and Consumer Subsidy Estimates used by the OECD in other sectors, such as agriculture.
- Preliminary estimates of fossil fuel subsidies in OECD countries, to complement work by others – such as the IEA – to estimate subsidies in developing and emerging economies.
- Modelling-based analysis of the economic, trade, and GHG emission impacts of phasing-out fossil fuel subsidies.
- Advice and recommendations on the phase-out of fossil fuel subsidies, especially on how to address social or competitiveness impacts, drawing lessons learned from experiences with country subsidy reforms.

In addition, some of the Economic Surveys and Environmental Performance Reviews that OECD regularly produces of OECD and emerging economies include sections on fossil fuel subsidy reform to assess country progress and provide targeted advice for reforms.

### Further information and key documents

- *OECD Environmental Outlook to 2050: The Consequences of Inaction* [www.oecd.org/environment/outlookto2050](http://www.oecd.org/environment/outlookto2050)
- "An update of the G20 Pittsburgh and Toronto Commitments", joint report by IEA, OPEC, OECD and World Bank on fossil-fuel and other energy subsidies, prepared for the G20 Meeting of Finance Ministers and Central Bank Governors (Paris, 14-15 October 2011) and the G20 Summit (Cannes, 3-4 November 2011) [www.oecd.org/dataoecd/21/11/49090716.pdf](http://www.oecd.org/dataoecd/21/11/49090716.pdf)
- *Inventory of Estimated Budgetary Support and Tax Expenditures for Fossil Fuels* (2011) [dx.doi.org/10.1787/9789264128736-en](http://dx.doi.org/10.1787/9789264128736-en)
- Burniaux, J-M. and J. Chateau, "Mitigation Potential of Removing Fossil Fuel Subsidies: A General Equilibrium Assessment", *OECD Economics Department Working Paper* No. 853 (2011) [dx.doi.org/10.1787/9789264128736-en](http://dx.doi.org/10.1787/9789264128736-en)
- *OECD Economic Surveys: Mexico 2011*, includes a focus on energy subsidies [dx.doi.org/10.1787/eco\\_surveys-mex-2011-en](http://dx.doi.org/10.1787/eco_surveys-mex-2011-en)
- *OECD Economic Surveys: India 2011*, includes a chapter on phasing out energy subsidies [dx.doi.org/10.1787/eco\\_surveys-ind-2011-en](http://dx.doi.org/10.1787/eco_surveys-ind-2011-en)
- *OECD Economic Surveys: Indonesia 2010*, includes a chapter on phasing out energy subsidies [dx.doi.org/10.1787/eco\\_surveys-idn-2010-en](http://dx.doi.org/10.1787/eco_surveys-idn-2010-en)

## **Green growth and enabling change in consumer behaviour**

Developing growth strategies that encourage greener practices requires a good understanding of the determinants of household and consumer environmental behaviour. Recent work based on periodic surveys of more than 10 000 household across selected OECD countries and five areas (energy, food, transport, waste and water) offers new insights on the challenging question of what policy measures really work to enable change in consumer behaviour. Related work on the environmental claims made by business on their products identifies measures that governments and other stakeholders can take to enhance the value and effectiveness of such claims for consumers.

### Further information and key documents

- *Greening Household Behaviour: The Role of Public Policy* (2011) [dx.doi.org/10.1787/9789264096875-en](https://dx.doi.org/10.1787/9789264096875-en)
- "Environmental Claims: Findings and Conclusions of OECD Committee on Consumer Policy", (2011) [www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DSTI/CP\(2010\)16/FINAL&docLanguage=En](http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DSTI/CP(2010)16/FINAL&docLanguage=En)
- *Consumer Policy Toolkit* (2010) [dx.doi.org/10.1787/9789264079663-en](https://dx.doi.org/10.1787/9789264079663-en)

### **Investment for green growth**

Green growth will require a shift in both public and private investments, with the limited public funds available carefully targeted and accompanied by the right policy frameworks to help leverage private financing.

Little is known about the magnitude of the contribution of foreign direct investment (FDI) to green growth at a time when strategies for achieving greener growth are high on the policy agenda in many countries. OECD work aims to document efforts to define and measure green FDI, investigates the feasibility of different definitions, and identifies investment policy restrictions to green FDI.

At the same time, as part of the Organisation's broader work on engaging the private sector in support of a low carbon future, the OECD surveys responsible business practices addressing climate change and driving the shift to a low-carbon economy. It summarises policies, regulations and other instruments in support of greener growth, and analyses corporate responses to these drivers.

Ahead of the Rio+20 Conference in June 2012, the OECD has partnered with a range of organisations – the UN Conference on Trade and Development (UNCTAD), the Climate Disclosure Standards Board (CDSB) and the Global Reporting Initiative (GRI) - in a project designed to support greater consistency of approach to the demand for and supply of corporate climate change-related information. The timing for this project is right, as climate change disclosure is still developing, and countries are not yet completely locked-in into a specific regulatory path. It follows up to OECD's previous work on the *Transition to a Low Carbon Economy* and the *Guidelines for Multinational Enterprises*, updated in May 2011, which encourage enterprises to disclose environmental information to high quality standards.

### Further information and key documents

- "Defining and Measuring Green FDI: an Exploratory Review of Existing Work and Evidence", *OECD Working Paper on International Investment* No. 2011/2 (2011) [dx.doi.org/10.1787/5kg58j1cvcvk-en](https://dx.doi.org/10.1787/5kg58j1cvcvk-en)
- "The role of pension funds in financing green growth initiatives" *Working paper on Finance, Insurance and Private Pensions* (2011) [dx.doi.org/10.1787/5kg58j1wdjd-en](https://dx.doi.org/10.1787/5kg58j1wdjd-en)
- *Transition to a low-carbon economy: public goals and corporate practices* (2010) [dx.doi.org/10.1787/9789264090231-en](https://dx.doi.org/10.1787/9789264090231-en)
- Private Sector Participation in Water Infrastructure: OECD Checklist for Public Action (2009) [www.oecd.org/daf/investment/water](http://www.oecd.org/daf/investment/water)
- *Environment and the OECD Guidelines for Multinational Enterprises: Corporate Tools and Approaches* (2005) [dx.doi.org/10.1787/9789264009394-en](https://dx.doi.org/10.1787/9789264009394-en)
- OECD Guidelines for Multinational Enterprises [www.oecd.org/daf/investment/guidelines/](http://www.oecd.org/daf/investment/guidelines/)
- OECD work on investment for green growth: [www.oecd.org/daf/investment/green](http://www.oecd.org/daf/investment/green)

### **Ensuring freedom of investment for green growth and preventing protectionism**

International investment is a vital source of finance and a powerful vector of innovation and technology transfer as countries seek to promote green growth. Work at the OECD on "Harnessing Freedom of Investment for Green Growth" addresses how the international investment policy community can help countries achieve green growth. It underscores the importance of continued monitoring by governments of their investment treaty practices with regard to environmental goals. It is also important that new environmental measures observe key international law principles such as non-discrimination (creating a level playing field for domestic and international investors). International investment arbitration is assuming a growing role in resolving disputes involving environmental issues, placing special responsibility on the investment policy community to ensure the integrity and competence of arbitral tribunals and to improve their transparency.

The Freedom of Investment Roundtable (FOI)<sup>1</sup> hosted at the OECD also addresses concerns expressed by some countries that investment could be affected if the green growth policy agenda were captured by protectionist interests. However, to date, none of the 42 OECD and emerging economies that report regularly to the Roundtable about investment measures have reported overt discrimination against non-resident or foreign investors in relation to environmental policy. Nonetheless, vigilance is encouraged. Environmental policy measures that appear to be neutral may potentially involve de facto discrimination or create barriers to trade which constrain development. Some environment-related state aids (such as grants, loan guarantees or capital injections for individual firms), may potentially pose risks to competition. The FOI Roundtable will continue to monitor investment measures to ensure that they are not used as disguised protectionism.

#### Further information and key documents

- “*Harnessing Freedom of Investment for Green Growth*” (2011) [www.oecd.org/document/0/0,3746,en\\_2649\\_34887\\_47721600\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/document/0/0,3746,en_2649_34887_47721600_1_1_1_1,00.html).

#### ***Green growth sectoral studies: energy, food and agriculture, water***

It is important to understand the implications of green growth for key sectors and themes such as energy, food and agriculture, and water. The key message from OECD sector-specific work to date is that, over the longer term, greening these sectors can reinforce environmental sustainability, economic growth and social well-being. Indeed, green growth is essential to meet the energy, food and nutrition, and water and sanitation requirements of future generations. Some of the priority areas where coherent action is required include:

- **Increase productivity in a sustainable way.** If resources are used more efficiently throughout the supply chain, production can be increased to meet the demands of an expanding population with changing dietary and consumption habits while natural resources are used sustainably and natural capital is conserved. Higher priority needs to be given to research, development, innovation, education and information.
- **Ensure that well functioning markets provide the right signals.** Prices that reflect the scarcity value of natural resources will contribute to greater efficiency. Economically inefficient and environmentally harmful subsidies should be phased-out. The Polluter Pays Principle needs to be enforced through charges and regulations. Incentives should be provided for maintaining biodiversity and environmental services.
- **Establish and enforce well-defined property rights.** Over-exploitation can result when marine resources, land and forests lack clearly defined rights and ownership.
- **Address the political economy of reform.** Ensuring involvement by all relevant stakeholders and phasing-in policy reforms will be important for successful implementation. Addressing the distributional and competitiveness aspects of policy reform to meet green growth objectives is essential. A multi-level approach integrating international, national and local decision-makers and stakeholders can help identify challenges and formulate coherent policy responses.

#### Further information and key documents

- OECD, IEA, *Green Growth Studies: Energy* (2011) [dx.doi.org/10.1787/9789264115118-en](http://dx.doi.org/10.1787/9789264115118-en)
- *Green Growth Studies: Food and Agriculture* (2011) [dx.doi.org/10.1787/9789264107250-en](http://dx.doi.org/10.1787/9789264107250-en)
- OECD work on green growth for food, agriculture and fisheries [www.oecd.org/agriculture/greengrowth](http://www.oecd.org/agriculture/greengrowth)
- *Meeting the Challenge of Financing Water and Sanitation: Tools and Approaches*, OECD Studies on Water (2011) [dx.doi.org/10.1787/9789264120525-en](http://dx.doi.org/10.1787/9789264120525-en)
- *Water Governance in OECD Countries: A Multi-level Approach*, OECD Studies on Water (2011) [dx.doi.org/10.1787/9789264119284-en](http://dx.doi.org/10.1787/9789264119284-en)
- OECD work on Water: [www.oecd.org/water](http://www.oecd.org/water)

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<sup>1</sup> The OECD-hosted Freedom of Investment Roundtable is an intergovernmental forum that brings together OECD member and non-member governments from around the globe at regular meetings. It helps governments design better policies to reconcile openness to international investment with legitimate regulation in the public interest.

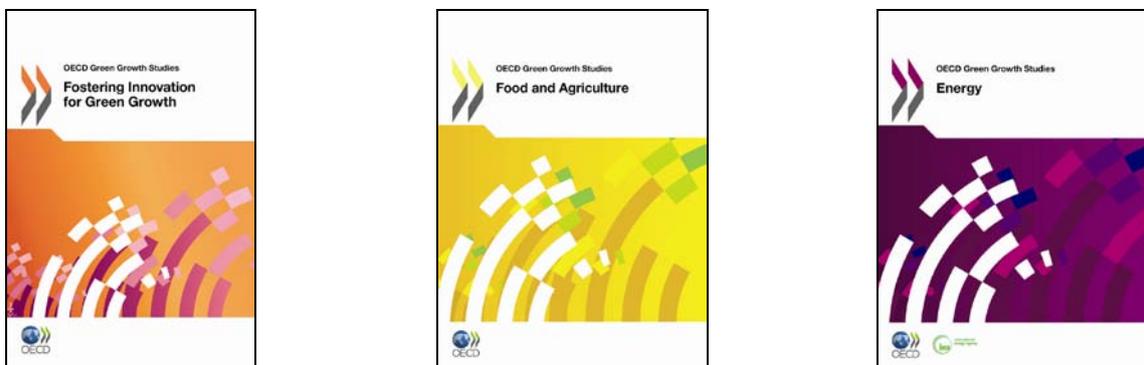
## Green Growth Strategy Documents

In May 2011, the OECD Green Growth Strategy was welcomed by governments from over forty developed and emerging economies as a useful tool for expanding economic growth and job creation through the sustainable use of natural resources, efficiencies in the use of energy, and valuation of ecosystem services.

Towards Green Growth, Towards Green Growth: Monitoring Progress: OECD Indicators and Tools for Delivering on Green Growth form this Strategy. All of these reports and Towards Green Growth: A Summary for Policy Makers (in ten languages) are available from [www.oecd.org/greengrowth](http://www.oecd.org/greengrowth)



## OECD Green Growth Studies



For more information on the OECD Green Growth Strategy, see: [www.oecd.org/greengrowth](http://www.oecd.org/greengrowth)

or email: [greengrowth@oecd.org](mailto:greengrowth@oecd.org)

### International Green Growth Dialogue (IGGD)

Join the discussion on the secure website: <https://community.oecd.org/community/greengrowth>

To register, please email your contact details to: [greengrowth@oecd.org](mailto:greengrowth@oecd.org). Registered users will receive a regular newsletter on green growth topics.

## Forthcoming OECD work on green growth

### 2012

- OECD Green Growth Studies: Compact City Policies: A Comparative Assessment
- OECD contribution to the Rio+20 conference
- Green Growth and Environmental Governance in Eastern Europe, Caucasus, and Central Asia
- Financing Green Growth in Cities
- Investment Policy Reviews: Colombia, Tunisia and Jordan
- OECD Studies on Water: Water, Energy and Agriculture: Towards Policy Coherence
- Redefining "Urban": A New Way to Measure Metropolitan Areas
- Southeast Asia Innovation Review
- OECD Studies on Environmental Innovation: Energy and Climate Change Policy and Innovation: Bending the Trajectory
- Green Cities: New Approaches to Confronting Climate Change: OECD Workshop Proceedings
- Environmental Performance Reviews for Slovenia and Germany
- Green Growth and Biodiversity
- OECD Urban Policy Reviews, Korea 2012
- Doing More With Less: Sustainable Materials Management
- Global Ports and Urban Development
- Employment Outlook 2012 (includes a chapter on green growth)
- Material Resources, Productivity and the Environment
- International Cooperation for Climate Change Innovation: A Problem Shared is a Problem Halved
- The Production of Renewable Energy as a Regional Development Policy in Rural Areas
- Green Growth Indicators Database
- Environmental Performance Reviews for Mexico, Italy, Austria
- Household Behaviour and Environmental Policy: Lessons from the Second Household Survey
- OECD-FAO Agricultural Outlook 2012-2021
- Environmental Performance Review: South Africa
- Green Growth and Developing Countries
- OECD Studies on Water: Water and Green Growth
- Improving the Effectiveness of Green Local Development Initiatives
- Economic Surveys: China 2012 (including a chapter on green growth)
- Innovation policy platform
- Policy Framework for Low-Carbon, Carbon-Resilient Investment: The Case of Infrastructure Development
- Developing Effective Models of Urban Environments to Address the Challenges of Sustainability and Climate Change
- Improving the Environmental Effectiveness and Economic Efficiency of Environmental Regulation

### 2013

- Greening Development: A Review of the International Modalities for Climate Change Finance
- Green growth case studies, including Kitakyushu, Stockholm, Abu Dhabi
- GG Indicators Metropolitan Database
- Cities and Green Growth
- Effective Carbon Prices
- Green Finance and Investment - The Case of Climate Change

Governments looking to design and implement green growth policies and move towards a green economy now have a new source of information and assistance. The Green Growth Knowledge Platform (GGKP) is a joint initiative of the Global Green Growth Institute (GGGI), the Organisation for Economic Co-operation and Development (OECD), the United Nations Environment Programme (UNEP), and the World Bank that will identify and address major knowledge gaps in green growth theory and practice, to help countries design and implement green growth policy.

The OECD is proud to be a part of the GGKP, which will improve local, national, and global economic policy-making around the world by providing analysis of the various synergies and tradeoffs between the economy and the environment. It will complement other efforts by emphasizing policy instruments that yield local environmental co-benefits while stimulating growth.

"Governments seeking to re-ignite growth after the crisis should harness innovation, investment and entrepreneurship to drive the shift to greener economies. We must intensify our efforts to move towards green growth to preserve natural capital and reduce pollution. It will be essential to avoid path dependency by breaking old habits of consumption and investing in new technology and infrastructure. We welcome the Green Growth Knowledge Platform as an essential means of facilitating collaboration among our four institutions, to provide governments with the best possible tools to achieve green growth."  
- OECD Secretary-General Angel Gurría, GGKP press release, January 11, 2012

At the inaugural GGKP conference in Mexico on January 12-13 2012, the GGKP's constituent organisations, together with leading scholars, development practitioners, and policy makers from around the world, examined the most pressing knowledge gaps for green growth and discussed the GGKP's programmatic priorities. The conference looked at the following themes:

- economic framework for green growth
- ecosystem resilience
- employment
- human behaviour
- infrastructure and urban development
- innovation
- natural resource management
- trade
- welfare measurement



In light of the key knowledge gaps identified, the GGKP decided to kick-start new work streams for three issues related to green growth, which will leverage the work being done by the GGKP's partners, including its first Affiliated Program, the European Climate Foundation's initiative on "Green Growth Best Practices initiative".

1. Technology and innovation
2. Trade and competitiveness
3. Welfare measurement and performance indicators

The GGKP emphasises a practical orientation for research and insists that the best policy can only emerge from close collaboration among scholars, practitioners, and policy makers. All research and knowledge-sharing activities will operate with an understanding that the green growth and green economy policy mix will vary according to country-specific circumstances, thereby necessitating a menu of policy options and toolkits. Moving forward, the GGKP will organise new research programs around a handful of priority themes, as well as cultivate a dynamic global community of green growth researchers and practitioners.

The GGKP intends to expand its scope of activities and network by building partnerships. Organisations carrying out - or interested in supporting - research in areas related to green growth and green economy should sign up to the GGKP email list via their website.

[www.greengrowthknowledge.org](http://www.greengrowthknowledge.org)

contact: [greengrowthkp@gmail.com](mailto:greengrowthkp@gmail.com)

\*Left to right: Gloria Grandolini, Country Director, Colombia and México, World Bank; Mario Molina, President, Centro Mario Molina; Angel Gurría, OECD Secretary-General; Juan Elvira Quesada, Minister of Environment and Natural Resources (SEMARNAT); Demían Sanchez Yeskett, Chief of Staff, Office of President Calderon; and Jose Antonio González Anaya, Vice-Minister of Revenue, at the official launch of the GGKP.