## Reader's guide

**E**nvironment at a Glance presents selected environmental indicators. The report shows the progress that OECD countries have made since 2000 in addressing a range of environmental challenges. These include air and water pollution, climate change, waste management, and the protection of biodiversity and other natural assets.

They build on data provided regularly by member countries' authorities using an OECD questionnaire, and on data available from other OECD and international sources. Some indicators were updated on the basis of international information available in March 2015 and on the basis of comments from national Delegates received by February 2015. Nevertheless, due to delays in the production of environmental data in most countries, the most recent data for many of the parameters examined in this report is 2012.

The indicators in this report are those that are regularly used in the OECD's work and for which data are available for a majority of OECD countries.

#### Framework of OECD work on environmental data and indicators

For more than 30 years, the OECD has prepared harmonised international data and sets of indicators on the environment, assisted countries to improve their environmental information systems. The main aims of this work have been:

- to measure environmental progress and performance;
- to monitor and promote policy integration, in particular, the integration of environmental considerations into policy sectors, such as transport, energy and agriculture, and into economic policies more broadly;
- to help monitor progress towards sustainable development and green growth by measuring the extent of decoupling of environmental pressure from economic growth.

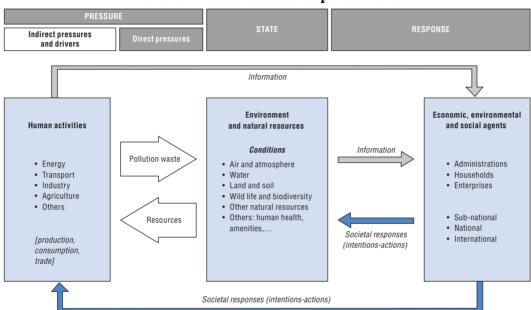
The OECD approach to indicators is based on the view that:

- There is no unique set of indicators; whether a given set of indicators is appropriate depends on its use.
- Indicators are only one tool among others and generally should be used with other information in order to draw robust conclusions.
- OECD environmental indicators are relatively small sets of indicators that have been identified for use at the international level, and should be complemented by national indicators when examining issues at national level.

The programme builds on agreement by OECD member countries:

- to use the pressure-state-response (PSR) model as a common reference framework;
- to identify indicators on the basis of their policy relevance, analytical soundness and measurability;
- to use the OECD approach and adapt it to their national circumstances.

The development of environmental indicators in OECD has been grounded in the practical experience of OECD countries. Their development has benefited from strong support from member countries, and their representatives in the OECD Working Party on Environmental Information. OECD work on indicators also benefits from close cooperation with other international organisations, notably the United Nations Statistics Division (UNSD) and United Nations regional offices, the United Nations Environment programme (UNEP), the World Bank, the European Union (including Eurostat and the European Environment Agency), as well as international institutes.



The OECD Pressure-State-Response model

## Comparability and interpretation

Each indicator presented in the report is preceded by a short text that explains in general terms what is measured and why, and by a description of the concept and definitions underlying the indicator. This is followed by a brief description of the main trends that can be observed. A paragraph on comparability highlights those areas where some caution may be needed when comparing indicators across countries or over time. Issues that cut across the subject areas are described below. An Annex provides additional information and country notes.

The indicators presented here are of varying relevance for different countries and should be interpreted taking account of the context in which they were produced. It should be borne in mind that national averages can mask significant variations within countries. In addition, care should be taken when making international comparisons:

- Definitions and measurement methods vary among countries, hence inter-country comparisons may not compare the same things.
- There is a level of uncertainty associated with the data sources and measurement methods on which the indicators rely. Differences between two countries' indicators are thus not always statistically significant; and when countries are clustered around a relatively narrow range of outcomes, it may be misleading to establish an order of ranking.

No single approach has been used for normalising the indicators; different denominators are used in parallel to balance the message conveyed. Many of the indicators shown in this publication are expressed on a per capita and per unit of GDP basis.

- The population estimates used are based on the SNA notion of residency: namely they
  include persons who are resident in a country for one year or more, regardless of their
  citizenship. The data generally refer to mid-year estimates, and come from the
  OECD Labour Force Statistics (ALFS) (OECD, 2014), "Population projections", OECD Historical
  Population Data and Projections Statistics (database), http://dx.doi.org/10.1787/lfs-lfs-data-en.
- The GDP figures used are expressed in USD and in 2005 prices and purchasing power parities (PPPs). PPPs are the rates of currency conversion that equalise the purchasing power of different countries by eliminating differences in price levels between countries. When converted by means of PPPs, expenditures on GDP across countries are expressed at the same set of prices, enabling comparisons between countries that reflect only differences in the volume of goods and services purchased.
- The data for OECD countries come from the OECD National Accounts Statistics (database), http://dx.doi.org/10.1787/na-ana-data-en, and from the OECD Economic Outlook (OECD, 2014) "OECD Economic Outlook No. 95", OECD Economic Outlook: Statistics and Projections (database), http://dx.doi.org/10.1787/data-00688-en. The data for the world and the BRIICS come from the World Bank ("World Bank Open Data", The World Bank, Washington, DC, http://data.worldbank.org).

#### Online data

A database with selected environmental data and indicators is available online and contains longer time series than the publication: http://dx.doi/10.1787/env-data-en. The following is a list of the datasets which are available:

- Greenhouse gas emissions by source: http://dx.doi.org/10.1787/data-00594-en.
- Air emissions by source: http://dx.doi.org/10.1787/data-00598-en.
- Air and greenhouse gas emissions by industry: http://dx.doi.org/10.1787/data-00735-en.
- CO<sub>2</sub> emissions from fuel combustion: http://dx.doi.org/10.1787/co2-data-en.
- Threatened species: http://dx.doi.org/10.1787/data-00605-en.
- Forest resources: http://dx.doi.org/10.1787/data-00600-en.
- Municipal waste: http://dx.doi.org/10.1787/data-00601-en.
- Freshwater abstractions: http://dx.doi.org/10.1787/data-00602-en.
- Freshwater resources: http://dx.doi.org/10.1787/data-00603-en.
- Wastewater treatment: http://dx.doi.org/10.1787/data-00604-en.
- Environmentally related taxes: http://dx.doi.org/10.1787/data-00696-en.

#### **Websites**

- OECD Environmental Data and Indicators: www.oecd.org/env/indicators.
- OECD Environmental Indicators, Country Profiles: www.oecd.org/site/envind.

### **Further reading**

Useful references for "further reading" are available at the bottom of most sections.

For all sections, additional information can be found in:

- OECD (2014), "Green Growth Indicators 2014", OECD Green Growth Studies, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264202030-en.
- OECD (2014), OECD Factbook 2014: Economic, Environmental and Social Statistics, OECD Publishing, Paris, http://dx.doi.org/10.1787/factbook-2014-en.
- OECD (2012), OECD Environmental Outlook to 2050: The Consequences of Inaction, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264122246-en.

## Acronyms and abbreviations

## Signs

The following signs are used in figures and tables:

- ..: not available.
- 0: nil or negligible.
- .: decimal point.
- x: not applicable.

## Country aggregates

OECD America	This zone includes the following member countries of the OECD: Canada, Chile, <sup>1</sup> Mexico and the United States.
OECD Europe	This zone includes all European member countries of the OECD, i.e. Austria, Belgium, the Czech Republic, Denmark, Estonia, 1 Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Poland, Portugal, the Slovak Republic, Slovenia, 1 Spain, Sweden, Switzerland, Turkey and the United Kingdom.
OECD Asia-Oceania	This zone includes the following member countries of the OECD: Australia, Israel, <sup>1</sup> Japan, Korea and New Zealand.
OECD	This zone includes all member countries of the OECD, i.e. countries of OECD America plus countries of OECD Asia-Oceania and countries of OECD Europe.
BRIICS	Brazil, Russian Federation, India, Indonesia, People's Republic of China, South Africa.

Country aggregates may include Secretariat estimates.

#### **Country codes**

AUS	Australia	FRA	France	NLD	Netherlands
AUT	Austria	GBR	United Kingdom	NZL	New Zealand
BEL	Belgium	GRC	Greece	NOR	Norway
CAN	Canada	HUN	Hungary	POL	Poland
CHE	Switzerland	ISL	Iceland	PRT	Portugal
CHL	Chile	IRL	Ireland	SVK	Slovak Republic
CZE	Czech Republic	ITA	Italy	SVN	Slovenia
DEU	Germany	ISR	Israel	SWE	Sweden
DNK	Denmark	JPN	Japan	TUR	Turkey
ESP	Spain	KOR	Korea	USA	United States
EST	Estonia	LUX	Luxembourg		
FIN	Finland	MEX	Mexico	EU	European Union

#### **Abbreviations**

BOD	Biochemical oxygen demand
cap	Capita
CDDA	Common database on designated areas, EEA
CFCs	Chlorofluorocarbons
CH <sub>4</sub>	Methane

<sup>1.</sup> Chile has been a member of the OECD since 7 May 2010, Slovenia since 21 July 2010, Estonia since 9 December 2010 and Israel since 7 September 2010.

Carbon dioxide
Carbon dioxide equivalent
Chemical oxygen demand
Development Assistance Committee, OECD
European Environment Agency
European Monitoring and Evaluation Programme
The United Nations Food and Agriculture Organization
Government budget appropriations on R&D
Gross domestic product
Greenhouse gas
Gross national income
Hectare
Hydrofluorocarbons
International Council for the Exploration of the Sea
International Energy Agency
Intergovernmental Panel on Climate Change
International Standard Industrial Classification
International Union for Conservation of Nature
Million tonnes
Million tonnes of oil equivalent
Cubic meter
Nitrogen
Nitrogen oxides
Nitrogen dioxide
Nitrous oxide
Official development assistance
Phosphorous
Perfluorocarbons
Particulate matter
Fine particulate matter, smaller than 2.5 microns in diameter
Small particulate matter, smaller than 10 microns in diameter
Purchasing power parities
Royal Society for the protection of birds
Sulphur hexafluoride
Sulphur oxides
Sulphur dioxide
Tonne
The economics of ecosystems and biodiversity
Total primary energy supply
Tonne of oil equivalent
microgram
UN Economic Commission for Europe
UN Environment Programme
UN Framework Convention on Climate Change
UN Statistics Division
US dollar
World Conservation Monitoring Centre, UNEP
World database on protected areas, UNEP
World Health Organization
World Meteorological Organization
UN World Water Assessment Programme



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