

Glossary

| | |
|-------------|---|
| ADB | Asian Development Bank |
| AHSG | Ad hoc steering group |
| AoA | Assessment of Assessments |
| AR4 | Assessment Report 4 |
| CAREC | Regional Environmental Centre for Central Asia |
| CBD | Convention on Biological Diversity |
| CEP | Committee on Environmental Policy |
| CIA | Central Intelligence Agency |
| CSR | Corporate Social Responsibility |
| DEWA | Division of Early Warning and Assessment |
| DG | Directorate General |
| DPSIR | Driving forces-Pressures-State-Impacts-Responses |
| EBRD | European Bank for Reconstruction and Development |
| EC | European Commission |
| ECLAC | Economic Commission for Latin America and the Caribbean |
| EEA | European Environment Agency |
| EE-AoA | Europe's environment: An Assessment of Assessments |
| EEB | European Environmental Bureau |
| EECCA | Eastern Europe, the Caucasus and Central Asia |
| EfE process | Environment for Europe process |
| EFTA | European Free Trade Association |
| EIA | Environmental impact assessment |
| Eionet | European Information and Observation Network |
| ENPI | European Neighbourhood Partnership Instrument of the EU |
| EPR | Environment performance review |
| ETC | European Topic Centre |
| EU | European Union |

| | |
|--------------|---|
| EUREAU | European Federation of National Associations of Water and Wastewater Services |
| Eurostat | Statistical Office of the European Communities |
| EUWI | European Water Initiative |
| FAO | Food and Agriculture Organization of the United Nations |
| FAO-Aquastat | FAO's global information system on water and agriculture |
| GDP | Gross domestic product |
| GEA | Greening the Economy with Agriculture |
| GEF | Global Environment Facility |
| GEI | Green Economy Initiative |
| GEO | Global Environment Outlook |
| GGGI | Global Green Growth Institute |
| GHG | Greenhouse gas |
| GIS | Geographic information system |
| GLAAS | Global Annual Assessment of Sanitation and Drinking-Water |
| GMES | Global Monitoring for Environment and Security |
| GRAMED | Global and Regional Assessments of the Marine Environment Database |
| GRDC | Global Runoff Data Centre |
| GRID | Global Resource Information Database |
| GWP | Global Water Partnership |
| HELCOM | Helsinki Commission — Baltic Marine Environment Protection Commission |
| HiTs | Health system profiles |
| IBNET | International Benchmarking Network for Water and Sanitation Utilities |
| ICSD | Interstate Commission for Sustainable Development of Central Asia |
| ICT | Information and Communication Technologies |
| ICWC | Interstate Commission for Water Coordination of Central Asia |
| ICZM | Integrated Coastal Zone Management |
| IHP | International Hydrological Programme |
| IISD | International Institute for Sustainable Development |
| ILO | International Labour Organisation |
| IMF | International Monetary Fund |
| INSPIRE | Infrastructure for Spatial Information in Europe |
| IOC-UNESCO | Intergovernmental Oceanographic Commission of UNESCO |

| | |
|-----------|--|
| IPBES | International Platform of Biodiversity and Ecosystem Services |
| IPCC | Intergovernmental Panel on Climate Change |
| IRWS | International Recommendation for Water Statistics |
| IT | Information technology |
| IWRM | Integrated water resource management |
| JMP | WHO/UNICEF Joint Monitoring Programme |
| JRC | Joint Research Centre |
| KEO | Carpathians Environment Outlook |
| LCA | Life-cycle analysis |
| MDG | Millennium Development Goal |
| MDIAK | Reporting chain: Monitoring — Data — Indicators — Assessments — Knowledge |
| NESDCA | Network of Experts for Sustainable Development of Central Asia |
| NFP | National focal point |
| NGO | Non-governmental organisation |
| OAS | Organisation of American States |
| OECD | Organisation for Economic Co-operation and Development |
| OSCE | Organisation for Security and Co-operation in Europe |
| PEBLDS | Pan-European Biological and Landscape Diversity Strategy |
| PPP | public private partnership |
| RBO | River Basin Organisation |
| REC | Regional Environmental Centre |
| Reportnet | Eionet's infrastructure for supporting and improving data and information flows |
| Rio 2012 | Earth Summit 2012 |
| SCL | Saliency — Credibility — Legitimacy |
| SCP | Sustainable consumption and production |
| SEBI | Streamlining European 2010 Biodiversity Indicators |
| SEEAW | System of Environmental-Economic Accounting for Water |
| SEIS | Shared Environmental Information System |
| SENSE | Shared European National State of the Environment — the EEA/Eionet project for SOER 2010 |
| SIA | Strategic impact assessment |
| SIWI | Stockholm International Water Institute |
| SNA | System of national accounts |

| | |
|-------------|---|
| SoE | State of the environment |
| SOER | Environment state and outlook report |
| SOER 2010 | <i>European environment — state and outlook 2010</i> report |
| TEEB | The Economics of Ecosystems and Biodiversity |
| UK | United Kingdom |
| UN | United Nations |
| UNCSD | United Nation Commission on Sustainable Development |
| UNDP | United Nations Development Programme |
| UNECE | United Nations Economic Commission for Europe |
| UNECE/WGEMA | UNECE's Working Group on Environmental Monitoring and Assessment |
| UNEP | United Nations Environment Programme |
| UNEP-GEMS | United Nations Environment Programme Global Environmental Monitoring System |
| UNEP-WCMC | UNEP World Conservation Monitoring Centre |
| UNESCAP | United Nations Economic and Social Commission for Asia and the Pacific |
| UNESCO | United Nations Educational, Scientific and Cultural Organization |
| UNFCCC | United Nation Framework Convention on Climate Change |
| UNGA | United Nations General Assembly |
| UNICEF | United Nations Children's Fund |
| UNSC | United Nation Statistical Commission |
| UNSD | United Nations Statistical Division |
| USA | United States of America |
| USAID | United States Agency for International Development |
| WBCSD | World Business Council for Sustainable Development |
| WFD | Water Framework Directive |
| WHO | World Health Organisation |
| WISE | Water Information System for Europe |
| WMO | World Meteorological Organisation |
| WRI | World Resources Institute |
| WWAP | World Water Assessment Programme |
| WWC | World Water Council |
| WWDR | World Water Development Report |
| WWF | World Wide Fund for Nature |

Annexes

Chapter 1

Annex 1.1 Comparing the main elements of the EE-AoA with the Marine AoA

| Building element | Building element | EE-AoA |
|-----------------------|---|---|
| Policy driven process | UNGA's decisions in Resolution 60/30 | Following the 2007 Belgrade environment ministers' conference agreed by the UNECE Committee on Environmental Policy (Oct 2010) and endorsed by the UNECE Executive Committee in Feb 2010 (see Chapter 1, Section 1.1). |
| Reference frameworks | Start-up phase towards a Regular Process for global reporting and assessment of the state of the marine environment | Part of the development of a sustainable Regular Assessment Process of Europe's environment following the reform of the UNECE Environment for Europe (Efe) process and coherently with the establishment of the EU/EEA Shared Environmental Information System (SEIS) and ENPI-SEIS project. |
| Ownership | Expert-based process. A Group of Expert was established by the Ad Hoc Steering Group (AHSG) to undertake the actual work of the AoA with the support of UNEP and the Intergovernmental Oceanographic Commission (IOC) of UNESCO. The Group of Expert included 17 scientists; their work was complemented by other contributing experts as needed. | Participatory process overseen by the UNECE Steering Group on Environmental Assessments specifically set up for the EE-AoA and co-chaired by the EEA and the Kazakh government. Within the guidelines and criteria laid down, the countries had the freedom to decide which information to be input to the process and on the critical appraisal of such information. The writing of the sub-regional modules contributing to the EE-AoA was placed with the relevant Regional Environmental Centers. |
| Scale | Global, with 21 AoA 'regions' (seas or oceans) outlined. | Pan-European, with the following sub-regions (EEA member countries, Central Asia, Caucasus, Eastern Europe, Russian Federation, and Western Balkans). |

| Building element | Building element | EE-AoA |
|-----------------------------|---|---|
| Content | Mono-thematic (marine environment, including socio-economic aspects). | Multi-thematic (water resources and water resource management for 'water and related ecosystems'; green economy and resource efficiency for 'green economy') and multiple topics within each theme. |
| Structure | One module | One pan-European module and four sub-regional modules (Central Asia, Caucasus, Eastern Europe, and Russian Federation) for each of the themes, for a total of ten modules, two at pan-European level (one for water and one for green economy) and eight at regional level (four for water and four for green economy). |
| Guidance | The mandate of the AoA was elaborated by the AHSG at its first meeting in 2006. In brief, the mandate encompasses: (i) assembling information about relevant marine assessments; (ii) undertaking a critical appraisal of such assessments; (iii) identifying a framework and options to build the Regular Process. | The process was developed along guidelines elaborated by the EEA and under the guidance of the Steering Group defining: (i) the conceptual framework of the EE-AoA, including guiding principles; (ii) the main tools for implementation (glossary, guidelines for assessments' selection and prioritisation, templates for assessments' screening, and reporting formats). Tools were adjusted and enriched during implementation. |
| Monitoring and coordination | The AHSG was established to oversee the implementation of the AoA. Coordination was provided by UNEP and IOC-UNESCO. | The process was guided by the UNECE Steering Group on Environmental Assessment. |
| IT infrastructure | The GRAMED (Global and Regional Assessments of the Marine Environment Database), an online fully searchable tool, was developed by UNEP-WCMC as a resource to support the work of the Group of Experts. | The EE-AoA knowledge base portal was established. The portal collates information from existing assessments across the pan-European region, allows online direct contribution from individual countries to the process, and provides all necessary tools for implementation, including analytical instruments. |
| Networking | Through the several UN agencies involved. | Through existing networks (National Focal Points from EEA member and cooperating countries and UNECE/WGEMA Contact Points from Eastern Europe, Caucasus, Russian Federation and Central Asia). |
| Tools for implementation | Use of terms, individual assessment template, regional summary template. | Glossary, virtual library and assessment atlas, country fiches, prioritisation criteria, review template |

Chapter 2

Annex 2.1 Overview of the different organisations responsible for environmental assessments ⁽⁶⁶⁾

| Country | Organisations producing SoE assessments | Statistical yearbook | Water reporting |
|------------------------|--|--|--|
| Albania | Ministry of Environment, Forests and Water Administration | Statistical Service | Ministry of Environment, Forests and Water Administration |
| Armenia | Ministry of Nature Protection | National Statistical Service | Ministry of Nature Protection |
| Austria | Federal Environment Agency | Ministry of Agriculture, Forestry, Environment and Water Management, Statistics Austria | Ministry of Agriculture, Forestry, Environment and Water Management, Federal Environment Agency |
| Azerbaijan | Ministry of Ecology and Natural Resources | State Committee of Statistics | Ministry of Ecology and Natural Resources |
| Belarus | Ministry of Natural Resources and Environmental Protection | National Statistical Committee | Ministry of Natural Resources and Environmental Protection |
| Belgium | Flanders: Flemish Environment Agency (VMM); Walloon: Directorate General for Agriculture, Natural Resources and Environment (DGARNE) | Statistics Belgium, Walloon Institute for Evaluation of Foresight and Statistics (IWEPS) | Flemish Environment Agency, Directorate General for Agriculture, Natural Resources and Environment |
| Bosnia and Herzegovina | Federal Ministry of Environment and Tourism | Federal Office of Statistics | Federal Hydrometeorological Institute |
| Bulgaria | Executive Environment Agency | National Statistical Institute | Ministry of Environment and Water |
| Croatia | Croatian Environment Agency | Croatian Bureau of Statistics | Hrvatske vode |
| Cyprus | Ministry of Agriculture, Natural Resources and Environment | Statistical Service | Water Development Department |

⁽⁶⁶⁾ In many countries, in addition to the organisations mentioned in this annex, the responsible ministries involve their statistical office, environment agency, water resources institute and/or hydrological service in developing the assessments.

| Country | Organisations producing SoE assessments | Statistical yearbook | Water reporting |
|---|---|---|--|
| Czech Republic | Czech Environmental Information Agency | Czech Statistical Office | Ministry of the Environment — Department of Water Protection |
| Denmark | National Environmental Research Institute | Statistics Denmark | Ministry of the Environment, National Environmental Research Institute, Geological survey of Denmark and Greenland |
| Estonia | Estonian Environment Information Centre | Statistics Estonia | Ministry of the Environment |
| Finland | Finnish Environment Institute | Environmental Administration | Environmental Administration |
| The former Yugoslav Republic of Macedonia | Ministry of Environment and Physical Planning | State Statistical Office | Ministry of Environment and Physical Planning |
| France | Ministry for Ecology, Sustainable Development, Transportation and Housing | Service of Observation and Statistics (SOeS) | EauFrance |
| Georgia | Ministry of Environment Protection and Natural Resources | National Statistics Office | Ministry of Environment Protection and Natural Resources |
| Germany | Federal Environment Agency (with important input from the Federal states) | Federal Statistical Office (with important input from the Federal states) | Federal Environment Agency, Federal Environment Ministry (with important input from the Federal states) |
| Greece | Ministry of Environment, Physical Planning and Public Works | National Statistical Service of Greece | National Technical University of Athens |
| Hungary | Ministry of Rural Development | Hungarian Central Statistical Office | Ministry of Rural Development, Hungarian Central Directorate for Environment and Water, VITUKI |
| Iceland | Ministry for the Environment | Statistics Iceland | Environment Agency |
| Ireland | Environmental Protection Agency | Central Statistics Office | Environmental Protection Agency |

| Country | Organisations producing SoE assessments | Statistical yearbook | Water reporting |
|------------------------------|--|--|---|
| Italy | Ministry for the Environment | Italian National Institute of Statistics | Italian National Institute of Statistics |
| Kazakhstan | Ministry of Environmental Protection | Agency for Statistics | Ministry of Environmental Protection |
| Kosovo under UNSCR 1244/1999 | Environmental Protection Agency | | Water and waste regulatory office |
| Kyrgyzstan | State Agency for Environmental Protection and Forestry | National Statistical Committee | State Committee on Water Resources and Melioration |
| Latvia | Latvian Environment, Geology and Meteorology Centre | Central Statistical Bureau of Latvia | Latvian Environment, Geology and Meteorology Centre |
| Liechtenstein | Liechtenstein National Administration | Office of Statistics | Environmental Protection Agency |
| Lithuania | Environmental Protection Agency | Statistics Lithuania | Environmental Protection Agency |
| Luxembourg | Ministry for the Environment | National Institute of Statistics and Economic Studies of the Grand Duchy of Luxembourg | Administration of water management |
| Malta | Malta Environment and Planning Authority | National Statistics Office | Malta Environment and Planning Authority |
| Moldova | Ministry for the Environment | National Bureau of Statistics | Ministry for the Environment |
| Montenegro | Environmental Protection Agency | Statistical Office | Environmental Protection Agency |
| Netherlands | Netherlands Environmental Assessment Agency | Statistics Netherlands | Netherlands Environmental Assessment Agency |
| Norway | State of the Environment Norway | Statistics Norway | Ministry of Environment |
| Poland | Chief Inspectorate for Environmental Protection | Central Statistical Office | Ministry of the Environment, National Water Management Authority, Chief Inspectorate for Environmental Protection |
| Portugal | Ministry of Environment and Spatial Planning | Statistics Portugal | Water Institute |

| Country | Organisations producing SoE assessments | Statistical yearbook | Water reporting |
|--------------------|--|--|--|
| Romania | Ministry of Environment and Forests | National Statistical Institute | Ministry of environment/water department |
| Russian Federation | Ministry of Natural Resources and Environment | Federal State Statistics Service | Ministry of Natural Resources and Environment |
| Serbia | Ministry for the Protection of the Natural Resources and Environment | Statistical Office | Ministry of Agriculture, Forestry and Water Management |
| Slovak Republic | Ministry of the Environment, Slovak Environmental Agency | Statistical Office of the Slovak Republic | Ministry of the Environment, Water Research Institute, Slovak Hydrometeorological Institute, Slovak Environmental Agency, Public Health Authority of the Slovak Republic |
| Slovenia | Ministry of the Environment and Spatial Planning | Statistical Office of the Republic of Slovenia | Slovenian Environment Agency |
| Spain | Ministry of Environment and Rural and Marine Affairs | National Statistics Institute | Ministry of Environment and Rural and Marine Affairs |
| Sweden | Swedish Environmental Protection Agency | Statistics Sweden | Geological Survey of Sweden |
| Switzerland | Federal Office for the Environment | Federal Statistical Office | Federal Office for the Environment |
| Tajikistan | Committee for Environmental protection | Statistical Agency | State Hydrometeorology Agency |
| Turkey | Ministry of Environment and Urbanisation | Turkish Statistical Institute | Ministry of Forestry and Water Works |
| Turkmenistan | Ministry for the Protection of Nature | State Committee of Turkmenistan on Statistics | Ministry for the Protection of Nature |
| Ukraine | Ministry of Environment and Natural Resources of Ukraine | State Statistics Committee | Ministry of Environment and Natural Resources of Ukraine |
| United Kingdom | Department for Environment, Food and Rural Affairs | Office for National Statistics | Department for Environment, Food and Rural Affairs |
| Uzbekistan | State Committee for Nature Protection | State Statistics Committee | State Committee for Nature Protection |

Annex 2.2 Overview of international organisations involved in environmental assessments

| Country | FAO Water Management | FAO-Aquastat | UNCSD freshwater profile | Water Wiki | GEMS-Water |
|---|----------------------|--------------|--------------------------|------------|------------|
| Albania | x | | | x | |
| Armenia | x | x | | x | |
| Austria | | x | x | x | 2000 |
| Azerbaijan | x | x | | x | |
| Belarus | x | x | | x | |
| Belgium | | x | x | x | 2004 |
| Bosnia and Herzegovina | x | | | x | |
| Bulgaria | x | x | x | x | |
| Croatia | x | | | x | |
| Cyprus | x | x | | x | |
| Czech Republic | x | x | x | x | |
| Denmark | x | x | | x | 2001 |
| Estonia | | x | | x | |
| Finland | | x | x | x | 2002 |
| The former Yugoslav Republic of Macedonia | | | x | x | |
| France | x | x | | x | 2002 |
| Georgia | x | x | | x | |
| Germany | x | | | x | 2002 |
| Greece | | x | x | x | 2000 |
| Hungary | | x | x | x | 2000 |
| Iceland | x | | | x | |
| Ireland | x | x | | x | 2001 |
| Italy | x | x | | x | 2000 |
| Kazakhstan | x | x | | x | |
| Kosovo under UNSCR 1244/1999 | | | | x | |

| Country | FAO Water Management | FAO-Aquastat | UNCSD freshwater profile | Water Wiki | GEMS-Water |
|--------------------|----------------------|--------------|--------------------------|------------|------------|
| Kyrgyzstan | x | x | | x | |
| Latvia | | | | x | |
| Liechtenstein | | x | | x | |
| Lithuania | | x | x | x | 2002 |
| Luxembourg | | | | x | 2000 |
| Malta | x | | | x | |
| Moldova | | | | x | |
| Montenegro | x | | x | x | |
| Netherlands | x | x | | x | 1996 |
| Norway | x | | x | x | 1996 |
| Poland | | x | | x | 2002 |
| Portugal | | x | | x | 2001 |
| Romania | x | x | x | x | |
| Russian Federation | x | x | x | | 2004 |
| Serbia | x | | x | x | |
| Slovak Republic | x | | x | x | 2004 |
| Slovenia | x | | x | x | |
| Spain | | x | | x | 2001 |
| Sweden | | x | | x | 2001 |
| Switzerland | x | | | x | 2003 |
| Tajikistan | x | x | | x | |
| Turkey | | x | x | x | 2003 |
| Turkmenistan | x | x | x | x | |
| Ukraine | x | x | x | x | |
| United Kingdom | | x | x | x | 2003 |
| Uzbekistan | x | x | x | x | |

Note: FAO Water Management country profiles, see the individual countries. Available at <http://www.fao.org/countryprofiles/index.asp?lang=en&iso3=ALB&paia=4>.

FAO-Aquastat available at <http://www.fao.org/nr/water/aquastat/main/index.stm>.

UNCSD freshwater profile (freshwater and sanitation) available at http://www.un.org/esa/dsd/dsd_aofw_ni/ni_indecsdthemprof.shtml#water.

Water Wiki http://waterwiki.net/index.php/Countries#Europe_and_CIS.

GEMS/Water status of participating countries http://www.gemswater.org/global_network/statistical_summary.html.

Annex 2.3 Overview of years in which environmental performance reviews were conducted by OECD and UNECE

| Country | OECD | | | UNECE | |
|---|------------|--------------|-------------|------------|--------------|
| | Latest EPR | Previous EPR | Earlier EPR | Latest EPR | Previous EPR |
| Albania | | | | | 2002 |
| Armenia | | | | | 2000 |
| Austria | 2003 | 1995 | | | |
| Azerbaijan | | | | 2010 | 2003 |
| Belarus | 1997 | | | 2005 | |
| Belgium | 2007 | 1998 | | | |
| Bosnia and Herzegovina | | | | 2010 | 2004 |
| Bulgaria | 1996 | | | 2000 | |
| Croatia | | | | | 1999 |
| Cyprus | | | | | |
| Czech Republic | 2005 | 1999 | | | |
| Denmark | 2007 | 1999 | | | |
| Estonia | | | | 2001 | 1996 |
| Finland | 2009 | 1997 | | | |
| The former Yugoslav Republic of Macedonia | | | | 2011 | 2002 |
| France | 2005 | 1997 | | | |
| Georgia | | | | 2010 | 2003 |
| Germany | 2001 | 1993 | | | |
| Greece | 2009 | 2000 | | | |
| Hungary | 2008 | 2000 | | | |
| Iceland | 2001 | 1993 | | | |
| Ireland | 2009 | 2000 | | | |
| Italy | 2002 | 1994 | | | |
| Kazakhstan | | | | 2008 | 2000 |

| Country | OECD | | | UNECE | |
|------------------------------|------------|--------------|-------------|------------|--------------|
| | Latest EPR | Previous EPR | Earlier EPR | Latest EPR | Previous EPR |
| Kosovo under UNSCR 1244/1999 | | | | | |
| Kyrgyzstan | | | | 2009 | 2000 |
| Latvia | | | | 1998 | |
| Liechtenstein | | | | | |
| Lithuania | | | | 1998 | |
| Luxembourg | 2009 | 2000 | | | |
| Malta | | | | | |
| Moldova | | | | 2005 | 1998 |
| Montenegro | | | | 2007 | |
| Netherlands | 2003 | 1995 | | | |
| Norway | 2011 | 2001 | 1993 | | |
| Poland | 2003 | 1995 | | | |
| Portugal | 2011 | 2001 | 1993 | | |
| Romania | | | | 2001 | |
| Russian Federation | 1999 | | | | |
| Serbia | | | | 2007 | |
| Slovak Republic | 2011 | 2002 | | | |
| Slovenia | 2011 | | | 1997 | |
| Spain | 2004 | 1997 | | | |
| Sweden | 2004 | 1996 | | | |
| Switzerland | 2007 | 1998 | | | |
| Tajikistan | | | | 2011 | 2004 |
| Turkey | 2008 | 1999 | | | |
| Turkmenistan | | | | 2011 | |
| Ukraine | | | | 2007 | 1999 |
| United Kingdom | 2002 | 1994 | | | |
| Uzbekistan | | | | 2009 | 2001 |

Chapter 3

Annex 3.1 Green economy — What does it mean?

Green economy

(Priority area)

Renewable energy**Explanation**

Energy which is naturally replenished and comes from natural resources such as sunlight, wind, freshwater, tides or geothermal heat.

Relevance to green economy

Different parts of the world have a competitive advantage in different renewable energy technologies, depending on geography, climate, etc. In addition, many governments offer subsidies or incentives for renewable energy generation, and there are national/regional renewable energy/greenhouse gas reduction targets that drive investment in this area.

Examples of assessments

- The European Renewable Energy Council reports renewable energy generation and other statistics for EU-27 countries (EREC, 2011).
- In Germany, electricity from renewable sources is supported through a feed-in tariff and electricity from renewable sources is given priority connection to the grid. The Renewable Energy Sources Act aims to increase the proportion of renewable energy sources in total energy supply to at least 30 per cent by 2020 and to continuously increase this proportion thereafter (BMU, 2010).
- The Czech government's most recent national report on electricity and gas industries covers progress in 2009 (The Czech Republic's National Report on the Electricity and Gas Industries for 2009, 2010).
- The UK renewable energy strategy sets out how the sector's role in meeting ambitious greenhouse gas reduction targets (DECC, 2011).

Energy efficiency**Explanation**

Changes in behaviour and technology that lead to reductions in amount of energy required to provide products and services.

Relevance to green economy

As with other aspects of resource efficiency, doing 'more with less' reduces environmental impacts, enhances competitiveness and provides opportunities for growth. Initiatives are often driven by carbon reduction targets or concerns over energy security.

Examples of assessments

- The European Union has a target to reduce annual energy consumption by 20 per cent by 2020 (EC, 2011).
- In Georgia, a review of energy efficiency potential and policy options has highlighted a range of drivers, including potential EU membership and positive impacts on economic and social development (USAID, Georgia, 2008).
- Energy Efficiency in Russia: Untapped Reserve (World Bank/Russia, 2008).
- Energy efficiency in Poland in years 1998-2008 (Central Statistical Office, Warsaw, 2010).

| | |
|-------------------|--|
| Mobility | <p>Explanation The environmental impacts of transport, including air quality, emissions, noise.</p> <p>Relevance to green economy Essentially related to the reduction in pollution of different media, which has beneficial impacts on health, welfare and productivity.</p> <p>Examples of assessments</p> <ul style="list-style-type: none"> • 51 out of the 56 UNECE member countries are Parties to the 1979 Convention on Long-range Transboundary Air Pollution. A 2010 Review presents progress to date in implementing the Convention across the UNECE region (CEIPT, 2010). • The Netherlands has assessed the Traffic emissions of carbon and organic carbon (PBL, 2009). • Annual Report of Air Pollution 2009 (Greece, Ministry of Environment, Energy and Climate Change). • Trends in Air Quality in Germany (Umweltbundesamt, For our Environment, 2009). |
| Industry | <p>Explanation Emissions, waste and resource use from industrial production and processes.</p> <p>Relevance to green economy Relative reductions in emissions and waste are associated with efficiency improvements, innovation, improved environmental quality and public health benefits.</p> <p>Examples of assessments</p> <ul style="list-style-type: none"> • Steady as she goes: Norway's strategy for environmentally friendly growth in maritime industry (Norwegian Ministry of Trade and Industry, 2007). • Study of municipal waste management in Hungary 2010 (KVVVM, 2010). |
| Innovation | <p>Explanation Any change that renews or improves a product or process.</p> <p>Relevance to green economy Environmental or eco-innovation is now widely used as a means of reducing the environmental impacts from economic activity.</p> <p>Examples of assessments</p> <ul style="list-style-type: none"> • The OECD has developed a workstream on the links between eco-innovation in industry and green growth, with examples from a number of member countries (OECD, 2011a). • Innovation for a Green Economy — Environment and Technology: A win-win story (EPA, Ireland, 2009). • Environmental Technologies and Eco-Innovation in the Czech Republic (CENIA, 2009). |

| | |
|--|--|
| Environmental Impact Assessment / Strategic Impact Assessment (EIA/SIA) | <p>Explanation Environmental or strategic impact assessment.</p> <p>Relevance to green economy These policymaking tools are widely used to measure the environmental impacts of a decision or policy change.</p> <p>Examples of assessments</p> <ul style="list-style-type: none"> • UNEP manual on integrated environmental assessment and reporting (UNEP, 2008). • The 1991 Espoo Convention on EIA in a Transboundary Context applies to all UNECE members. It sets out obligations to assess the environmental impact of activities at an early planning stage and to consult each other on projects that have a significant adverse environmental impact across boundaries (UNECE, 2006). |
| Governance | <p>Explanation Institutional arrangements, multilateral agreements, etc.</p> <p>Relevance to green economy The structures, institutions and governing bodies that are required to develop, implement and enforce the policies designed to move towards a green economy.</p> <p>Examples of assessments</p> <ul style="list-style-type: none"> • The Changing Wealth of Nations (World Bank, 2011). • Beyond Rio+20: Governance for a Green Economy (International Institute for Sustainable Development, 2011). • Environmental Governance in the Context Of Green Growth In Eastern Europe, Caucasus and Central Asia: Main Policy Conclusions (OECD, 2011b). |
| Corporate social responsibility (CSR) and environmental reporting | <p>Explanation All voluntary and self-regulating mechanisms in the private sector designed to ensure active compliance with spirit of the law, ethical standards, and international norms.</p> <p>Relevance to green economy The triple bottom line of people, planet and profit is the axiom most commonly identified with CSR and environmental reporting. It includes actions that encourage a positive impact through activities on the environment, consumers, employees, communities, stakeholders and other.</p> <p>Examples of assessments</p> <ul style="list-style-type: none"> • In Greece, the Hellenic network for CSR seeks to promote the concept of CSR and visibility to both the business and the social environment, with a view to achieving balanced and sustainable earnings growth (Hellenic Network for Corporate Social Responsibility, 2011). • Reporting environmental information in annual reports: Analysis of legal requirements in the Nordic countries (Norden, 2008). • Carbon Disclosure Project, a forum for measuring and disclosing greenhouse gas emissions, water use and climate change strategies (Carbon Disclosure Project, 2011). |

| | |
|-------------------------------|---|
| Futures and scenarios | <p>Explanation Vulnerability, opportunities, competitiveness and migration.</p> <p>Relevance to green economy These are emerging or future issues that will impact, either positively or negatively, on the ability of a country or region to develop a green economy.</p> <p>Examples of assessments</p> <ul style="list-style-type: none"> • The pan-European environment: glimpses into an uncertain future (EEA, 2007). • In Ireland, Future Skills Needs of Enterprise within the Green Economy identifies 6 sub-sectors as having business/employment growth potential, including renewables and green ICT applications (Expert Group on Future Skills Needs, 2010). • Baltic 21 Triennial report (Baltic 21, 2009). • EEA megatrends 2010 report, analysis of 11 global megatrends, with links to Europe's priority environmental challenges, and reflections on possible implications for policymaking (EEA, 2010). |
| Mining | <p>Explanation Extraction of valuable minerals or other geological, non-renewable material from the earth.</p> <p>Relevance to green economy Virtually any material that cannot be grown or created artificially has to be mined, creating potential negative impacts on the environment.</p> <p>Examples of assessments</p> <ul style="list-style-type: none"> • UNDP programme for pioneering a green economy is supporting the transformation of abandoned mines in Balkans as eco-tourism hubs (UNDP, 2011). • Mining and environment in the Western Balkans (Environment and Security Initiative, 2011). |
| Resource efficiency | |
| Use of natural capital | <p>Explanation Forestry, agriculture, urbanisation and other human activities leading to use and degradation of land, soil, water and biodiversity.</p> <p>Relevance to green economy Natural capital can be used more efficiently (resource efficiency), but it can also be degraded, leading to reduced welfare and environmental legacy issues such as pollution.</p> <p>Examples of assessments</p> <ul style="list-style-type: none"> • GLOBE international natural capital initiative (Globe International, 2011). • The Economics of Ecosystems and Biodiversity: Mainstreaming the Economics of Nature (2010) (TEEB, 2010). • UK National Ecosystem Assessment (UK NEA, 2011). • Resource consumption of Germany — indicators and definitions (Umweltbundesamt, 2008). • Natural resource consumption of Finnish households (Finland's environmental administration, 2008). • Forests and Climate Change in Eastern Europe and Central Asia (FAO, 2010). |

| | |
|---|--|
| <p>Water efficiency</p> | <p>Explanation Per unit reductions in the amount of water used in industrial, rural and urban areas.</p> <p>Relevance to green economy Doing 'more with less' reduces environmental impacts, enhances competitiveness, gives opportunities for growth. Initiatives are often driven by carbon reduction targets or concerns over energy security.</p> <p>Examples of assessments</p> <ul style="list-style-type: none"> • The efficient use of water in agriculture in Central Asia has been supported by the World Bank. The work recognises that water availability is a major challenge and that agriculture in the region is dependent on irrigation (World Bank, 2009). • The efficiency of the water supply in Croatia (Institute for Public Finance, 2008). • Food and drink sector Federation House 2020 commitment (FHC2020, 2009). |
| <p>Life-cycle analysis (LCA)</p> | <p>Explanation Full account of environmental impacts of producing, supplying, consuming and disposing of a good or service, whether these are within national borders or elsewhere.</p> <p>Relevance to green economy Broadens the interpretation of resource to bring in consideration of environmental impacts prior to production (beginning with raw material extraction) and following consumption (to disposal).</p> <p>Examples of assessments</p> <ul style="list-style-type: none"> • Guidelines for social life cycle assessment of products (UNEP, 2009) (The Dutch sustainable trade initiative seeks to mainstream the social and ecological sustainability of commodity supplies from emerging markets to the Netherlands and Western Europe. It includes analysis of the life cycle impacts of a range of goods, including timber, cocoa and tea (IDH, 2011). • Life cycle analysis applied to first generation biofuels consumed in France (Ministry of Agriculture, 2010). |

| | |
|---|--|
| Environmental accounting | <p>Explanation Valuation of natural capital and financial instruments such as green taxes, trading schemes, charges and levies.</p> <p>Relevance to green economy Environmental accounting tools are used to bring non-market (environmental) goods and services into decision-making, providing incentives to producers and consumers.</p> <p>Examples of assessments</p> <ul style="list-style-type: none"> • Use of economic instruments in environmental policy (UNEP, 2004). • Environmental statistics and accounts in Europe (Eurostat, 2010). • The EU Emissions Trading System is a cornerstone of the EU's policy to combat climate change and its key tool for reducing industrial greenhouse gas emissions cost-effectively. It is the first and biggest international scheme for the trading of greenhouse gas emission allowances, the EU ETS covers some 11 000 power stations and industrial plants in 30 countries (EC, 2010a). |
| Sustainable consumption and production (SCP) | <p>Explanation Reducing environmental impacts while improving or maintaining economic outputs.</p> <p>Relevance to green economy Generally takes a broader life cycle approach than other interpretations of resource efficiency.</p> <p>Examples of assessments</p> <ul style="list-style-type: none"> • The European Commission has a number of examples of green public procurement, including an energy self-sufficient primary school in Malta and green city administration vehicles in Slovenia (EC, 2010b). • Time for action: towards sustainable consumption and production in Europe (EEA, 2008). • Sustainable Consumption: Examples from Germany (Umweltbundesamt, 2006). • Getting more and better from less — Proposals for Finland's national programme to promote SCP (Committee on Sustainable Consumption and Production, 2005). |
| Tourism | <p>Explanation The greening of the travel and tourism sector.</p> <p>Relevance to green economy Green tourism creates opportunities for new jobs, resource efficiency and poverty reduction.</p> <p>Examples of assessments</p> <ul style="list-style-type: none"> • Turismo de Portugal Sustainability Report 2009 (MEID, 2009). |

Note: The two priority areas 'innovation' and 'mining' were added by the EEA.

Annex 3.2 Key aspects of assessments in priority areas

Green economy

(Priority area)

Renewable energy**Number and frequency of assessments**

A large number of assessments produced at least annually (some more frequent)

Size and type of assessments

Range from high-level (e.g. per cent of total energy from renewables) to detailed breakdown of energy by type (heat, transport, electricity) and technology (e.g. wind, wave, biomass)

Main developments

Assessments in this area have been increasing rapidly in number, level of detail and frequency. Goals and targets are often defined.

Basis of assessments

Generally based on comprehensive and audited data provided by government and/or private sector

Geographical aspects

All countries covered but most comprehensive in Northern and Western Europe. Balkans and new EU Member States more patchy.

Energy efficiency**Number and frequency of assessments**

Most assessments look at the background to or scope for energy efficiency

Size and type of assessments

Range from short overview assessments and factsheets to detailed long-term strategies, with consideration of progress, barriers, opportunities, etc.

Main developments

Increasingly linked to wider resource efficiency, behaviour (sustainable consumption), green growth (economic growth without increasing GHG emissions or air pollution) and life-cycle analysis

Basis of assessments

Past consumption based on energy consumption time series data. Future consumption based on international comparisons, technological changes, GDP growth, etc.

Geographical aspects

Well established in most areas, with increasingly detailed assessments from Western Balkans and new EU Member States

Innovation**Number and frequency of assessments**

Very few and far between, often led by pan-regional organisations

Size and type of assessments

Ad-hoc

Main developments

Linked to economic recovery and growth (Lisbon agenda). Generally applied to 'traditional' areas, e.g. transport, energy

Basis of assessments

Identification of opportunities for GDP growth and job creation

Geographical aspects

Poor coverage in all areas

| | |
|-----------------|--|
| Mobility | <p>Number and frequency of assessments Good number of annual and <i>ad-hoc</i> assessments</p> <p>Size and type of assessments Range of high-level strategies, annual progress reports and action plans</p> <p>Main developments Most focus on transport (modes, behaviour, road pricing, integrated transport systems, etc.) and air pollution (especially links to emissions and climate change)</p> <p>Basis of assessments Mostly air quality measurements (with comprehensive range of indicators) and transport patterns (e.g. freight demand, car use). Very little on noise</p> <p>Geographical aspects Focused on heavily developed countries</p> |
| Industry | <p>Number and frequency of assessments Good number of annual and <i>ad-hoc</i> assessments</p> <p>Size and type of assessments Breakdown of waste types (e.g. hazardous, non-hazardous) and pollution sources (Assessments on emissions are generally part of energy sector reports, where industry is one of many sectors).</p> <p>Main developments Increasingly considering solutions and policy responses, e.g. domestic waste charging, separation systems. Also life cycle, cradle to grave assessments and new opportunities, e.g. waste as renewable energy source</p> <p>Basis of assessments Robust and comprehensive data from industrial sectors</p> <p>Geographical aspects All areas well covered</p> |
| EIA/SIA | <p>Number and frequency of assessments Very few</p> <p>Size and type of assessments Undertaken by pan-regional bodies and often applied to transboundary issues</p> <p>Main developments Compliance with International conventions (especially re transboundary issues) and guidance from European Commission and others</p> <p>Basis of assessments Questionnaires completed by participating countries</p> <p>Geographical aspects All countries covered by legislation and using EIA, but very few specific assessments</p> |

| | |
|---|---|
| <p>Governance</p> | <p>Number and frequency of assessments Very few</p> <p>Size and type of assessments Strategic think pieces or proposals by pan-regional bodies</p> <p>Main developments Futures and scenarios (e.g. vulnerability of poorer regions to environmental degradation and loss of natural capital), opportunities arising from improved environmental protection and the socio-economic effects of migration due to climate change and other factors</p> <p>Basis of assessments Generally based on in-depth but <i>ad-hoc</i> reviews of national institutional arrangements</p> <p>Geographical aspects Focused on emerging or transitional economies</p> |
| <p>CSR and environmental reporting</p> | <p>Number and frequency of assessments Large number of regular and <i>ad-hoc</i> assessments</p> <p>Size and type of assessments Large variation from public and non-public organisations</p> <p>Main developments Often at cutting edge, with integrated assessments coming to the fore</p> <p>Basis of assessments Generally based on primary data from industry or trade associations</p> <p>Geographical aspects Most coverage in Northern and Western Europe</p> |
| <p>Futures and scenarios</p> | <p>Number and frequency of assessments Very few specific assessments, though most assessments consider future challenges</p> <p>Size and type of assessments A range, from high level to in-depth and from different regional, national and non-public bodies</p> <p>Main developments Climate change, migration Regional organisations often talk about developing new partnerships and extending geographical scope</p> <p>Basis of assessments Often trend-based, but increasingly focused on forecast and complex probabilistic scenarios (e.g. for climate change)</p> <p>Geographical aspects Good coverage in all regions</p> |

| | |
|-------------------------------|---|
| Mining | <p>Number and frequency of assessments Reasonably comprehensive</p> <p>Size and type of assessments Range of organisations involved, including regional, national and non-public bodies</p> <p>Main developments Increasingly concerned with rehabilitation following mine closure (e.g. contaminated water, tailings management)</p> <p>Basis of assessments International good practice principles</p> <p>Geographical aspects Focused on countries with significant ongoing mining industries, or with legacy issues</p> |
| Resource efficiency | |
| Use of natural capital | <p>Number and frequency of assessments Comprehensive assessments are largely limited to occasional, high-level and international issues</p> <p>Size and type of assessments Mainly strategic documents and think pieces at global level, and sector focused (e.g. forestry) at national level</p> <p>Main developments Increasingly recognised as a means of bringing environmental assets into mainstream decision-making and improving protection of natural resources. Terminology still evolving, with some assessments including finite natural resources (e.g. oil)</p> <p>Basis of assessments Robust and comprehensive time series data on material stocks and flows in key sectors</p> <p>Geographical aspects Content of assessments largely reflects extent of primary industry in country (e.g. forestry, mining, fishing)</p> |
| Water efficiency | <p>Number and frequency of assessments Increasing in number but <i>ad-hoc</i> rather than planned or programmed</p> <p>Size and type of assessments Mainly sector based (most on industrial or domestic consumption, less in rural areas) and varying in level of detail</p> <p>Main developments Consider broader issues (availability, affordability, appropriate water pricing). Increasingly interested in water footprint (embedded water) and re-use</p> <p>Basis of assessments Lots of reports from environment agencies, private and third sectors covering water use, stress, abstraction, efficiency, etc.</p> <p>Geographical aspects Most common in water scarce and well-developed countries</p> |

| | |
|--|---|
| <p>LCA</p> | <p>Number and frequency of assessments Very few and far between. Often rather narrow and specific (e.g. recycling or minimising waste)</p> <p>Size and type of assessments Application of LCA to specific sectors, products or topics</p> <p>Main developments Still developing methodologies and guidelines for assessing LCA (e.g. carbon and water footprint of imported products)</p> <p>Basis of assessments Bottom-up approaches based on consumption and production patterns for products and services</p> <p>Geographical aspects Poor coverage in all areas</p> |
| <p>Environmental accounting</p> | <p>Number and frequency of assessments Very sparse, mainly focused on high-level concepts and principles</p> <p>Size and type of assessments Mainly regional national attempts to stimulate debate</p> <p>Main developments Some sectors (e.g. forests) better understood and covered than others (e.g. soil). Largely focused on developing metrics, e.g. through ecosystem services approach</p> <p>Basis of assessments Based on economic value of different sectors, plus flows of raw or processed material, also material imports and exports, domestic material consumption per GDP</p> <p>Geographical aspects Poor coverage in all areas</p> |
| <p>SCP</p> | <p>Number and frequency of assessments Gradually increasing in number and range</p> <p>Size and type of assessments Cover both regional and national</p> <p>Main developments Driven increasingly by national sustainable development strategies and programmes, and focused on specific themes or areas (e.g. public procurement). Also decoupling resource use (e.g. energy, material extraction) and environmental pressures (e.g. CO₂) from economic growth, ecological footprint</p> <p>Basis of assessments Generally case study based but including various indicators (e.g. production and consumption by sector, resource consumption, number of companies with ISO 14001 and ISO 9001 certification)</p> <p>Geographical aspects Least well developed in Western Balkans, Eastern Europe, Caucasus and Central Asia</p> |

| | |
|----------------|---|
| Tourism | Number and frequency of assessments Relatively few and infrequent assessments Size and type of assessments Generally national, but some regional assessments (e.g. OSPAR Commission) Main developments Impacts of tourism on environment (e.g. landtake, demand for water, erosion) Basis of assessments Mix of regular, time-series data (e.g. number of establishments and bed spaces, arrivals by country) and project-based info Geographical aspects Focused on countries with established tourism sectors |
|----------------|---|
