European Environment Agency

# European Environment Agency
## Annual Management Plan 2011

**Copenhagen, February 2011**

## EEA in brief

The European Environment Agency (EEA) is a specialised agency of the European Union dedicated to providing objective, reliable and comparable information on all aspects of the environment. The aim of the EEA is to ensure that decision-makers and the general public are kept informed about the state and outlook of the environment. The EEA also provides the necessary independent scientific knowledge and technical support to enable the Union and member countries take appropriate measures to protect and improve the environment as laid down by the Treaty and by successive Community action programmes on the environment and sustainable development. The EEA works in partnership with government departments and agencies, international conventions and UN bodies, the scientific, technical and research communities, private sector and civil society.

The EEA undertakes a comprehensive range of integrated environmental and thematic assessments. These include a five-yearly state and outlook of the environment report, thematic and sectoral assessments, analyses of the effectiveness of policy measures, forward studies and the impacts of globalization on Europe's environment and resources. The EEA is an important source and custodian of up to date environmental data and indicators, and a key provider of environmental knowledge and information services.

The European Environment Agency (EEA) and the European environment information and observation network (Eionet) were established by EEC Regulation 1210/90 on 7 May 1990 (as amended by EC Regulation 933/1999 of 29 April and EC Regulation 1641/2003 of the European Parliament and Council of 22 July 2003). The decision to locate the Agency in Copenhagen was taken in 1993 and the EEA became operational in 1994. Regulation (EC) No 401/2009 of the European Parliament and the Council codified the original founding regulation and its subsequent two amendments without substantive changes; Regulation 401/2009 entered into force on 10 June 2009 repealing Regulations 1210/90, 993/1999 and 1641/2003. The founding regulation sets out a number of tasks (article 2) and priority areas (article 3) for the EEA, which are addressed through its multi-annual and annual work programmes.

The EEA annual work programme 2011 outlined below is the third work programme of the EEA 2009-2013 strategy. It is based on six strategic areas; four covering the thematic work of the EEA, information services and communications, and two covering governance, partnerships and administration of the EEA, as follows:

1. Environmental themes
2. Cross-cutting themes
3. Integrated environmental assessments
4. Information services and communications
5. EEA governance and partnerships
6. EEA internal management and administration

# Index

## I. EEA mission statement, vision and strategic objectives

The European Environment Agency aims to support sustainable development and to help achieve significant and measurable improvement in Europe's environment through the provision of timely, targeted, relevant and reliable information to policy-makers, public institutions and the public.

The EEA vision is to become recognised as the world's leading body for the provision of timely, relevant and accessible European environmental data, information, knowledge and assessments.

The core objective of the EEA 2009 -2013 strategy is to continue to produce European and regional environment–related data and indicator sets, integrated environmental assessments and thematic analyses in order to provide a sound decision basis for the EU and member countries' environmental policies.

**The EEA's 8 key strategic objectives**

1. support the development and implementation of European environment policies and related areas;
2. monitor the effectiveness of environmental policies of EU and member countries of the EEA and in candidate and potential candidate countries;
3. support the monitoring of the EU Sustainable Development Strategy focusing on core environmental issues;
4. undertake integrated environmental assessments and analyses of the 6th Environment Action Programme and EU Sustainable Development Strategy, themes, early warnings and futures studies linked to changes in societal and economic structures;
5. provide access to more regularly updated information and where possible near real-time data, through the shared environmental information system;
6. anticipate new ideas and thinking especially about ecosystem services, resource use and emerging technologies and innovations and behavioural changes;
7. develop new web-based services; and
8. help ensure through effective communications and information services, that environmental thinking be brought into the mainstream of decision-making and the daily lives of European citizens

The annual work programme will be undertaken with Eionet partners (national focal points, national reference centres and European Topic Centres) , co-operating countries and a wide range of partner institutions, including the European Commission's Directorate Generals, government departments and agencies, international conventions and UN bodies, the scientific technical and research communities, private sector and civil society, in order to assure the relevance and quality of the data, information and analyses that we provide.

## II. Key activities for 2011

The 2011 annual work programme is for the third year of the EEA strategy 2009-2013 and is based on an overall budget of 41,285k Euro and 206 staff. The EEA's activity based budgeting is applied via six major environmental themes, ten cross-cutting themes, five areas of integrated environmental assessment and cross-agency programmes. In 2011 it is foreseen that the EEA will be changing its financial and accounting system to the EC developed ABAC.

During 2011, in addition to its regular, ongoing activities and specific work for the Hungarian and Polish presidencies, the EEA will place extra emphasis on four major areas: i) Resource efficiency, the green economy and physical ecosystem accounting; ii) Climate change mitigation and adaptation; iii) Implementation of new ICT to support environmental observation, monitoring, reporting and assessment and iv) Supporting environmental reporting within the European Neighbourhood Policy and the Arctic.

### i) Resource efficiency, the green economy and physical ecosystem accounting

The work programme for 2011 builds on the outcome of the SOER 2010 synthesis relating to natural capital and ecosystem services as the integrating concept for many environmental and sectoral issues. Enabling conditions include resource use and efficiency, policy integration and coherence, eco-innovation, green infrastructure, fiscal reforms, resource accounting, indicators and data.

Resource efficiency refers to how key economic sectors can use natural capital and ecosystem services smartly so as to maximize welfare, minimise wastes and their impacts on ecosystems and people's health, thereby reducing costs and increasing Europe's competitiveness in the global economy.

The EEA is well-positioned to contribute to the resource efficiency policy developments as a result of its ongoing work on biodiversity, terrestrial, freshwater and marine ecosystems, sustainable consumption and production and sectoral indicators, waste and recycling industries, environmental externalities, ecological tax reform and environmental (NAMEA) and ecosystem accounting. The work in 2011 will be undertaken in close cooperation with the Eurostat data centre and the newly formed unit on environmental accounts and climate change.

The EEA's work will address those objectives currently viewed within the area of resource efficiency, including:

- *Improvement of the economy's environmental performance referred to as "eco-efficiency" (or first decoupling),* which is currently assessed by the ratio: value of commodities/ natural resource use. Resources include energy, materials, land and water, including those embedded in international trade.
- *Inter-generational optimisation of non-renewable resource use* in order to maximise the income flow from such limited, depleting resources by means of resource savings and/or substitutions between different resources (the "weak sustainability" paradigm).
- *Improvement of the ratio: value of commodities/ impacts on ecosystems (inland, sea and atmosphere systems).* This "second decoupling" needs to be developed further considering the impacts of resource use (extraction and emissions) on human health, quality of life and on ecosystems (fragmentation, robustness, resilience, biological productivity, biodiversity).
- *Maintenance over time of the living natural capital to continue to supply sufficient quality and quantity economic resources as well as life support* (clean water, clean air, stable climate, food…). Efficiency of resource use in this case refers to the ecosystems' carrying capacity, related to, practices that are respectful of ecosystems' multiple functions and structure.

The 2011 work will include reflection on how these concepts are interlinked and how they can be used in the key discussions around resource efficiency and green economy, including the development of pathways for achieving objectives to 2020

and beyond, building on the outcome of the SOER synthesis and ongoing work across a wide range of areas.

To better inform policy development in this area, the EEA will also provide an overview of resource efficiency indicators across the four objectives identified above, addressing inter alia the trade-offs inherent when objectives are in conflict with each other. Integrated environmental assessment and ecosystem accounting techniques will feature prominently in support of trade-offs analysis.

Targets are also missing in many resource-related policies but are emerging in key areas (e.g. biodiversity/ecosystems). The availability of reliable statistics is another constraint. Whilst for some resources and commodities (eg. energy, metals) data are published regularly and with only a small time delay, for others, such as material flow accounts, the delay is 3-4 years. However, without measurable targets for resource efficiency it will be difficult to drive policy effort and evaluate progress. The EEA will be examining, with members of the Group of 4, how best to address these issues.

This key activity will be covered by activities across all areas of the work programme in order to support strategic objectives 1, 2, 3, 4, 6 and 8.

### ii) Climate change mitigation and adaptation

Combating climate change is on the top of the European Union policy agenda and the EU is therefore working actively for a global agreement to control climate change and is taking domestic action to achieve substantial reductions of greenhouse gas emissions and developing a European strategy for adapting to climate change. The EU has made a unilateral commitment to reduce emissions of greenhouse gases by at least 20% below 1990 levels by 2020 and a conditional offer to move to a 30% reduction. Climate action is also a significant aspect of the Europe 2020 strategy, adopted in 2010, for smart, sustainable and inclusive growth, where the 2020 emission reduction target is included in one of the five headline targets. In 2010 the European Commission created a separate DG for Climate Action – a reflection of the priority given to climate action within the EU.

The binding legislation which ensures that the EU meets its 2020 targets is covered in the 'climate action and renewable energy package' which was agreed by the European Parliament and Council in December 2008 and became law in June 2009.

The 'climate action and renewable energy package', and its implementation, will expand current and add new activities for the EU in the area of climate change mitigation regarding monitoring, reporting and verification - irrespectively of how the international UNFCCC post-2012 negotiations develops.

Given EEA's current strong role in the 'EU Greenhouse gas Monitoring Mechanism Decision' (Decision No 280/2004/EC), its current work assessing progress towards targets and its role as the Climate Change Data Centre in the Go4; the EEA is generally well positioned to support the implementation of key legislative acts related to the 'climate action and renewable energy package' – in particular the new revised EU GHG monitoring mechanism planned for 2011 and the 'Effort Sharing Decision' (Decision No 406/2009/EC).

To achieve the EU's objective of limiting the global temperature increase to 2 °C above pre-industrial levels, global GHG emissions need to stop increasing in the coming decade and be reduced significantly thereafter. However, some climate change is inevitable due to past emissions. To complement mitigation efforts, Europe plans to also develop strategies and actions to adapt to the impacts of

climate change. The EU recognises in this approach that developing countries are among the most vulnerable due to limited financial and technical capacity, and is committed to contributing its fair share in supporting developing countries cope with and adapt to climate change.

The EU has adopted a White Paper in 2009 (further to the 2007 Green Paper), which supports the preparation in 2009-2012 of a comprehensive Adaptation Strategy at the EU level, which then shall be implemented as of 2013. The EU aims at an integrated approach with top-down policy strategies for mainstreaming adaptation into sectoral policies together with bottom-up activities building on adaptive capacities and implementing actions. The White Paper is framed to complement and ensure synergies with actions by Member States and focuses on four pillars to reduce the EU's vulnerability and improve its resilience. The EEA-Eionet, in close cooperation with EC services, is well placed to support the implementation of the Adaptation White Paper and the preparation of the 2011 Communication on mainstreaming adaptation and mitigation into EU policies together with the EU Adaptation Strategy.

The EEA will specifically support strengthening of the knowledge base through:

- use of established indicator sets, analysis of the information and data available on the impacts of and vulnerability to climate change and adaptation actions being undertaken by Member States, regional and local authorities. Identify what additional information and data is needed to fully assess Member States' integration of climate change into EU policy areas;
- further development of methods for regular indicator-based assessments analysis of vulnerability for priority sectors and themes;
- support to the implementation of the EU Clearinghouse on climate change impacts, vulnerability and adaptation and its hosting from 2012 onwards - upgrade EEA data centre and thematic web site accordingly; and
- contribution and federation of user needs towards GMES climate and emergency response services, and a feasibility study on a ClimateWatch service on Eye on Earth.

The EEA will ensure coordination with stakeholders through its participation in the EC Adaptation Steering Group (ASG), the Working Group on Knowledge Base (WG-KB), the Management Group for the development of the Clearinghouse, the Inter-Service Group on Adaptation (ISG) and IPCC relevant working group.

This key activity will be covered primarily by activities in areas 1.1, 1.3, 2.0, 2.1, 2.8, 2.9, 4.0 in order to support strategic objectives 1 and 2 (major contributions), and 3, 4, 5, 6, 7.

### iii) Implementation of new information technology and communications systems to support environmental observation, monitoring, reporting and assessment

Changes in society and major advances in the information technology and communications industry have led to a significant increase in expectations of accessibility, interoperability and speed of delivery of information. In order to meet the growing demand for environmental data and knowledge, the EEA has had to rapidly adapt its own systems and services. This experience has led to a significantly improved capability to deliver its information via a number of services and applications and across a range of platforms. In 2011, the Agency will need to extend its support to the GMES core services, particularly the in-situ

component, INSPIRE and SEIS. It will do this via a range of web services[1] and applications. There will be an enhanced emphasis on cloud computing[2], semantic web[3] & sensor web technology[4], mobile GIS applications and electronic publishing using a range of social media networks and online dissemination channels for different target groups.

By extending the deployment of cloud computing and systems of searchable spatial databases, the EEA and Eionet will be able to significantly improve the sharing, usability and scalability of the existing priority data flows, and build a range of new dynamic spatial services. Using its award winning Eye on Earth platform for, in particular: biodiversity and ecosystems (NatureWatch - to be developed in line with BISE and using the LifeWatch and other similar infrastructures); noise mapping (NoiseWatch); and climate impacts and adaptation (ClimateWatch). These services will use the full range of GMES core services organised within a consistent framework. The aim of these developments will be to provide guaranteed continuous public access to data and information gathered by EEA and other actors, but also to encourage more co-production of knowledge through information exchange, clearing house mechanisms, crowd sourcing and open data. New product line will be introduced including e-books and “apps” for mobile telephones and other devices.

The 2011 work programme will be undertaken with key partners in industry and the public sector; experiences in 2010 have shown that the EEA is in a position to influence major software developments in the IT industry to the benefit of data providers and users including Eionet and the Agency’s key stakeholders. With Microsoft, the EEA will extend the interoperability of its information and data services across all technology platforms (PCs, servers, mobile phones etc) via Eye on Earth run in the Azure cloud together with its supporting Dallas advanced database. With Esri, the EEA will extend the design and development of Agency’s Eye on Earth and cloud architecture as a means for sharing, analysing, accessing and visualising essential geographic environmental data provided by the 39 Eionet member and cooperating countries in-line with the principles of INSPIRE as well as the Shared Environmental Information System. Standardized templates and layer definitions will be based on the Esri Community Maps initiative.

This key activity will be covered primarily by activities in areas 4.0 and 6.1 in order to support strategic objectives 5, 2 (major contributions) and also 7, 3, 8.

[1] Web services describes a standardized way of integrating data. Data are made available for machine reading without a user interface. EEA will increasingly make its data available via web services for the purpose of wider use of the data and for combining with other data in applications developed by other actors.

[2] Cloud computing is internet-based computing, whereby shared resources, software and information are provided to computers and other devices on-demand. Details are abstracted from the users who no longer have need of expertise in, or control over the technology infrastructure "in the cloud" that supports them.

[3] The Semantic Web is an evolving development of the WWW in which the meaning (semantics) of information on the web is defined, making it possible for machines to process it. The development of the Semantic web will be of crucial importance for the future data, information and knowledge sharing within SEIS and for combining data from different sources.

[4] A Sensor Web is a type of sensor network that is well suited for environmental monitoring. The use of sensor web will allow integration of near real time data into fully automated geographic interpolations and make available for web services and applications.

### iv) Supporting environmental reporting within the European Neighbourhood Policy and the Arctic

The Agency will continue to provide support for the establishment of shared environmental information systems (SEIS) to enable the regular updating of state and outlook environmental reports, assessments and benchmarking within EEA cooperating countries, the European Neighbourhood and adjacent regions including the Arctic, and from 2010 onwards the continuous updating of the EEA's own regular integrated environmental assessment on the state and outlook of Europe's environment.

In light of the European Neighbourhood Programme projects started in 2010, the UNECE Environmental Ministers meeting in Astana in 2011, ongoing activities under Horizon 2020 and the Mediterranean Action Plan, the Arctic and Nordic Councils wish to establish a sustained environmental observation and monitoring capability, a revitalisation of the EU-Russia dialogue on environment, and extensive and very positive bilateral technical agreements with the US federal and Canadian governments, the EEA 2011 work programme involves a series of training workshops, country visits and technical exchanges with a view to establishing strong working relations in each country and agreements to provide near-real-time data flows on air quality, updated water quality estimates and the basis for a series of indicators on water availability, use and efficiency. Links to European environmental policies and data sharing will also be key to activities in the east and south. Eye on Earth will be used as a key, entry point to facilitate a highly cost-effective and rapid approach to streamlining environmental reporting throughout the region.

On the basis of a range of measures, modalities and collaborative partnerships, the EEA will provide guidance in 2011 on the effective use of the SOER 2010 report and assessments under the ENP within international assessments including GEO-5, UNEP's International Resource Panel reports, a European follow-up to TEEB (The Economics of Ecosystem Services and Biodiversity), the European sub-regional follow-up to the Millennium Ecosystem Assessment and the UNGA Regular Process for the Global Assessment of the Marine Environment.

More specifically for the Arctic, the EEA and WHO will prepare an update to the 2004 joint Arctic report on environment and health.

This key activity will be covered primarily by activities in areas 4.0, 5.0 and 5.1 in order to support strategic objectives 2, 4, 1 (major contribution), 5 and 8.

## III. Strategic indicators of EEA performance

The EEA's performance is measured through the environmental management and audit scheme (EMAS), its internal management systems using objectives and measures in a balanced scorecard across four inter-related perspectives: financial, client, business, and learning and growth and through Activity Based Budgeting performance indicators. In 2011, continuous risk management will be fully integrated into the EEA's on-line management system.

**EMAS perspective**
EMAS comprises five main parts: 1) management, 2) environment, 3) communications and human resource management, 4) building operation and 5) common environmental activities. The EEA publishes yearly its environmental statement as part of its annual report documenting the EEA's absolute figures of electricity, heating energy, water and paper consumption, generation of various categories of waste and travel-related CO2 emissions to be off-set.  In addition

EEA runs specific EMAS projects, for example on greening its canteen and catering activities as well as creating organisational sustainability targets to improve its reporting.

**Balanced scorecard**

The EEA maintains a time series of indicators to support its effectiveness across four major areas: financial, client, business and learning and growth. More details on these can be found in the annual reports of the EEA.

*Financial perspective*

Budget
Sound financial management

*Client perspective*

Relevance
Effectiveness
Quality/transparency
Image

*Business perspective*

Data supply chain
Data handling
Publications - timeliness
Internal support - timeliness
Publications produced

*Learning and growth perspective*

Work force
Capability
Motivation

## IV. Annual work programme 2011 PAGE

## 1. Environmental themes (€7.0m)

The EEA supports EU environmental policy by tracking and reporting on the outcomes of the implementation of EU environmental legislation and similar across all EEA member countries. This involves establishing and maintaining reporting mechanisms, building the Shared environmental information system (SEIS) in close collaboration with the European Commission and Eionet, supporting the implementation of Inspire, quality assurance procedures, analytical frameworks and standardised outputs in terms of data sets, indicators and thematic integrated assessments. The work includes, *inter alia*, analyses of the costs of action/inaction, effectiveness evaluations of existing policies and measures, distance-to-target assessments in relation to agreed policy targets and long term reference values, and outlooks for the future in the 2020-2030 perspective.

Over the next period, key policy discussions are likely to focus on post-Copenhagen and Cancun global agreements to mitigate climate change and reduce greenhouse gas emissions and on adaptation; global and European agreement on a post-2010 target policy for halting biodiversity loss; and more specifically for the environment in Europe, support to the implementation of the new EU Air quality directive; the assessment of the first round of river basin management plans and related programmes of measures under the Water framework directive, and support to the implementation of the Marine strategy framework directive in connection with the new Maritime policy.

*General objective across the six environmental themes for 2009-2013*

To support policy development and evaluation within the environmental themes covered by the *acquis communautaire* and related areas by providing timely, relevant data and information, thematic analyses, assessments and methodologies to support the various thematic policy agendas and by carrying out evaluations of the existing effectiveness of policies and outlooks in a 2010-2030 perspective.

In line with the EEA Strategy 2009-2013, in 2011, the specific objectives across the six environmental themes will be to:

- ensure full access, via SEIS, the EEA environmental data centres, (i.e. air, biodiversity, climate change, land use and water) and web services to the quality-assured data needed to support European-level work on indicators and integrated assessments;
- ensure delivery, compatibility and added-value of EEA environmental data and information services within the GMES developments;
- maintain, develop and integrate the core indicators and other relevant indicators into the EEA indicator management system; and
- deliver analyses, thematic assessments and outlooks as a continuous follow-up of SOER 2010, Signals series and towards SOER 2015, in support of the Hungarian and Polish presidencies, the International year of forests, collaboration with WHO on environment and health and preparation of Europe's Environmental Assessment of Assessments.

These specific objectives, as reflected in the following working areas, are also designed to deliver content and information-system support to key activities targeted in 2011, i.e. resource efficiency, climate change, neighbourhood policy.

## 1.0 Air quality (€1.6m)

There are important challenges ahead. The new air quality directive that entered into force in May 2008 will have to be implemented and reviewed in 2013.

The EEA provides assessments of air pollution and increasingly its impacts on human health and the environment. This will include tracking progress towards and providing outlooks for, the achievement of short and long term air quality targets (*inter alia* as defined in EU legislation) based on up-to-date and where possible near-real-time quality assured data and indicators. These assessments support also EU policy making. Further support of EU policy making will take place in relation to the design and implementation of the reporting requirements of the new Air Quality Directive. Additionally as air quality data is a cornerstone of the implementation (including legal enforcement processes) of air quality legislation, EEA plans to continue putting also in 2011 extra focus on its ongoing work on quality and accessibility of air quality data to support this process.

EEA will deliver these outputs and services with the support of its European Topic Centres and in cooperation with Eionet, its air quality national reference centres and the network of national reference laboratories on harmonisation of quality control/quality assurance of air quality monitoring, the UNECE Long Range Transboundary Air Pollution Convention through relevant programmes, centres and task forces, the Group of four, GMES atmospheric services, WHO and a range of scientific, research and societal institutes.

*Air quality SEIS and GMES*
Maintain and improve the air quality components of the EEA European air data centre and the Eye on Earth AirWatch with a focus on collection, management, quality assurance and web presentation of up-to-date and near-real time ambient air quality data and spatial maps. Contribute to the GMES Atmospheric services mainly through provision of in-situ data but also through extending air quality information services to include other near real time key air quality parameters, in particular particulate matter and NO2. Implement the required changes to EEA systems to prepare for the application of the upcoming new reporting requirements for the air quality directives.

*Air quality assessments and indicators*
Report on trends in ambient air quality, on Europe's summer ozone situation (exceedances), on air quality in zones and agglomerations and impacts on human and ecosystem health, based on indicators and targeted assessments. Assess past and future changes in air quality in Europe taking into account the effects of European air pollutant reduction measures as well as other possible parameters such as meteorology and hemispheric transport of air pollutants. Co-chair the joint JRC/EEA Forum of AIR quality MODElers (FAIRMODE) network; produce guidance on the use of models for air quality assessments under air quality directives.

*Noise SEIS and assessments*
Assist the review of the Noise Directive with the Expert Panel on Noise and develop the EEA service for NoiseWatch on Eye on Earth.

## 1.1 Air pollutant emissions (€0.7m)

In 2009, the European pollutant release and transfer register (E-PRTR) was introduced. This was followed in 2010 by, amongst others, negotiations concerning the revision of the UNECE Long-range Transboundary Air Pollution (LRTAP) Convention Gothenburg protocol to abate acidification, eutrophication and ground–level ozone, initiatives to improve the quality of data reported under

the EU National emissions ceilings directive (NEC) and the on-going revision of the Integrated Pollution Prevention and Control (IPPC) directive.

The EEA contributes to these important developments by providing assessments related to emissions of pollutants, including toxic and hazardous pollutants, to air, tracking progress towards, and providing outlooks for, the achievement of targets *inter alia* as defined in relevant EU and international legislation and evaluating the effectiveness of European policies and measures to reduce emissions. The EEA provides up-to-date quality assured data, indicators, emission inventory and data review reports and relevant web sites, via the development and implementation of SEIS, Inspire and the EEA European air data centre.

The EEA will deliver all these with the support of the new European Topic Centre on air pollution and climate change mitigation and in cooperation with Eionet, the UNECE Long range transboundary air pollution convention and with European Commission services, particularly DG ENV, CLIMA, JRC, AGRI, Eurostat and ENER.

*Air data centre activities*
Host the European Commission E-PRTR website and the IRIS database, contributing to associated reporting activities, and maintaining and further developing web applications. Perform the informal review of the E-PRTR dataset covering releases to air and water and off-side transfers of waste as well as a cross-walk between point source data under other reporting obligations (EU ETS, LCP).

Maintain and extend the air pollutant emissions components of the EEA air data centre with a focus on collection, management, quality assurance and web presentation of up-to-date air pollutant emissions data. Support the further development of the European data centres in the context of SEIS and GMES. Prepare and publish the annual European Union LRTAP Convention emission inventory report and NEC Directive Status report. Support the international data QA/QC processes to improve data quality including the annual joint review with UNECE EMEP of national air pollutant emission inventory data reports.

*Air pollutant emissions assessments*
Contribute to EEA assessments concerning air pollutant and industrial emissions including by providing and coordinating emission-related content and analysis and the annual update of indicators on air pollutant emissions. Support cross-cutting EEA assessments investigating the synergies and trade-offs between air pollutant emission and greenhouse gas emission reduction policies, in close collaboration with the EEA's work on climate change mitigation, transport and energy.

*Support to EU and international air pollution mitigation policies and processes*
Provide on-going support to EU and international policy processes including the EU NEC Directive, implementing measures for IED and 2011 review of the E-PRTR Regulation, and associated European Union regulatory committee meetings, and to UNECE LRTAP Convention and PRTR protocol processes as appropriate. Support activities of international networks on air pollutant emissions including co-chairing of the UNECE Task Force on Emission Inventories and Projections (TFEIP). Provide and maintain tools and guidance material to support EIONET countries' reporting under international obligations, including EEA's online publishing of the updated EMEP/EEA Air Pollutant Emission Inventory Guidebook, software tools to support emission inventory compilation and guidance on E-PRTR data validation by member countries.

### 1.2 Biodiversity (€1.7m)

The work undertaken by the EEA in 2010 during the UN International Year of Biodiversity needs consolidation and further implementation to support the post-2010 EU and international policies: the European Biodiversity Baseline, the establishment of a number of measurable sub-targets and biogeographical / Natura 2000 processes; streamlining of indicators (SEBI); BISE (Biodiversity Information System for Europe); and various UN related activities on the marine environment, desertification, land degradation and deforestation, economics of ecosystems and biodiversity (TEEB); and, the shaping of the International platform on biodiversity and ecosystem services (IPBES). Thus, biodiversity remains a top priority in 2011 (see also other Cross-cutting themes 2.2 and 2.7). The EEA's work in biodiversity is also an important element in the resource efficiency work and supports the neighbourhood policy through the SEBI developments.

In close cooperation with the DG ENV Coordination Group on Nature and Biodiversity, all the above developments require an integration and reinforcement of the biodiversity component into other reporting requirements within the water, marine strategy and Inspire framework directives, SEIS and GMES activities, as well as links to potential new climate change, energy, fisheries, soil, agriculture, and forest policies (see 2.0, 2.1, 2.2, 2.4, 2.6, 2.7 and 2.8). The European policy frameworks relevant to biodiversity and ecosystem services – e.g. Biodiversity strategy and Nature Directives, Common Agricultural Policy, Common Fisheries Policy, Territorial Cohesion – are the main drivers for these activities.

*Monitoring, data flows and information systems*
Develop, as an important follow-up action to the Biodiversity 2010 Baseline, within the CGBN and under the Go4 Biodiversity, a thorough gap-analysis in monitoring the state of Biodiversity, linking it closely to the IPBES European developments on science-policy interface. Exploring the potential use of the GMES initial operations on land and the in situ component is included here (see 4.0).

Assist DG ENV in the preparation and implementation of a "new Biogeographic process" with MS to support the overall target on conservation status of species and habitats, including the setting of biogeographical objectives and guiding the management and restoration of the Natura2000 network and in general conservation activities. In this context, secure the reinforcement of the EUNIS habitat classification, namely its marine component, as a tool to support MSFD implementation, in conjunction with relevant partners (e.g. EMODNET) (see 1.4. and 1.5).

Provide contributions within the forthcoming Strategy on Invasive Alien Species by EC towards an early warning system.

Expand existing services and tools as part of the Biodiversity Information System for Europe (BISE) as a key priority.

*Indicators and assessments*
Evaluate, with special relevance for SEBI indicators, requirements for new indicators, reporting methodologies and guidance, providing scientific support for implementation of Nature directives, namely its Natura2000 network, post-2010 biodiversity action plans and targets.

Prepare an assessment report on protected areas, including Natura2000 but also CDDA, to support the 20th anniversary of the Habitats Directive; this work, completed with other activities, contributes also to policy developments on Green Infrastructure. Undertake related assessments of species, habitats, protected

areas, ecosystems and landscapes at EEA level and beyond (linked to 2.2 and 2.7 and in support of 3.1-2).

### 1.3 Climate change mitigation and greenhouse gas emissions (€1.3m; see also related work in 1.1, 2.0, 2.1, 2.8, 2.9)

In 2011 the EEA will expand its 2010 activities to support the implementation of key EI legislations in the climate mitigation areas, monitor and assess progress towards achieving EU greenhouse gas emission policy targets (e.g. Kyoto Protocol and 2020 targets), evaluate the effectiveness of EU and national climate change mitigation policies and measures, and support the development of long term climate change mitigation strategies.

The EEA will use data, information and indicators collected from EU and EEA Member countries relevant legislation on climate mitigation and further develop the EEA climate change data centre. The EEA will do this with the support of the European Topic Centre on Air pollution and Climate change Mitigation (ETC/ACM) and in close cooperation with Eionet, and European Commission services, particularly DG CLIMA, JRC and Eurostat.

*Climate change mitigation data centre activities*
Carry out activities related to annual greenhouse gas inventories under the EU GHG Monitoring Mechanism Decision (MMD), the UNFCCC and the Kyoto Protocol, as part of the EC GHG inventory system and in close cooperation with DG CLIMA, JRC and Eurostat. This includes compilation of the EU inventory, support to the review processes of EU and member country inventories, support to Member States in reporting their inventories to the UNFCCC in accordance with agreed guidelines and support to the improvement of national inventory systems where appropriate.

Support the improvement of emission inventory information using GMES services as well as describing the potential use of UNFCCC GHG emission inventories as input to GMES services.

Strengthen the EEA proxy GHG emission inventory process and associated analysis on Member State and sectoral levels, in particular within the framework of the Europe 2020 strategy and its specified timelines, while enhancing cooperation with Eurostat and JRC.

Maintain and further develop the EEA climate change data centre in relation to climate mitigation related elements such as data viewers or member country profiles.

Support Member States in reporting their climate mitigation policies and measures (PAMs) under the EU MMD and the UNFCCC and improve the quality of the EEA PAMs database, in close collaboration with ongoing EEA activities on air emissions, energy and transport.

Develop an EU ETS database allowing for interpretation of the CITL data.
Provide technical support regarding reporting on fluorinated greenhouse gases and ozone depleting substances in accordance with Regulations: 842/2006 and 1005/2009.

*Climate change mitigation assessments*
Report on progress in Europe towards policy targets under the UNFCCC and its Kyoto Protocol, as well as towards EU 2020 commitments and, in that context,

assess the effectiveness of climate change mitigation policies and measures to achieve these targets.

Assess future global GHG concentrations under various emission scenarios taking into account emission trends in EU and non-EU countries, interaction of air pollution and climate mitigation policies and the effect of abatement of short-lived greenhouse gases.

Support DG CLIMA with the development of an indicator to follow the functioning of the carbon market for the third trading period (2013–2020).

*Support to EU and international climate change mitigation policy*
Support the implementation of the Europe 2020 strategy where appropriate and of the climate and energy package. In that context, support potential streamlining of reporting to harvest synergies between the Europe 2020 strategy, the Effort Sharing Decision (ESD) and the upcoming revised EU MMD.

Prepare the necessary arrangements, in close cooperation with DG CLIMA and Member States, which will allow the EEA to conduct an appropriate EU-internal review of Member States GHG inventories in 2012 under the ESD, while preparing for the forthcoming annual ESD review and compliance cycle.

Support the further development and implementation of the revised MMD, and further define EEA's future role and responsibilities.

Support the development of the two regulations on monitoring and reporting (M&R), and verification and accreditation (V&A). Assist in the peer review and in the further development of reporting obligations on the implementation of the EU ETS Directive (under Art. 21).

Enhance collaboration with the European Maritime Safety Agency on data collection, monitoring and reporting options for maritime emissions in the context of the revised EU MMD.

Analyse the potential impacts of post-2012 international MRV frameworks on climate mitigation reporting by EU and Member States.

### 1.4 Freshwater (€1.2m)

As the Water Framework Directive (WFD) reaches its first implementation phase with the reporting of the first cycle of the River Basin Management Plans the EU freshwater policy enters into a phase of evaluation. With respect to Commission activities this will culminate in 2012 in the "EU Blueprint for water" that will combine WFD objectives, water management issues more broadly - in the context of climate change adaptation policies as well (see 2.1). The EEA delivers key elements to this process, which also contribute to the overarching objective of resource efficiency and green economy; main foci are, for instance, on structural aspects of water management and hydro-morphological issues in the context of the green infrastructure (see 1.2).

EEA work on environmental accounting (see 3.3) and vulnerability (see 2.1) will be key to developing the policy-relevant analysis; sectoral demands on water and the associated depreciation of natural capital are important in the evaluation of environmental values and benefits also understanding arguments of disproportionate costs. Work on water accounts relies on co-operation and input from Eurostat.

*Monitoring, data flows and information systems*
Deliver with Go4 partners on the next phase in the WISE implementation plan 2010-2015, with the view to increasing the dissemination, viewing and information exchange, Main goal is to enable a step-change towards a pilot activity to support the 2012 EU Blueprint for water. Effective linkages with related thematic information systems such as BISE, JRC European Drought observatory, CHM climate change adaptation.

Update the EEA priority data flows, enabling the maintenance of core set indicators, baseline assessments and the publication of the reporting data on bathing water and UWWTD as integrated part of the water data centre.

*Indicators and assessments*
Upgrade core set indicators to cover resource efficiency and water management aspects (incl. water scarcity and drought, water pricing and costs of services). Produce water asset accounts (for UN-SEEA) as a central element relevant to the objectives and needs of the WFD, in close cooperation with Eurostat and the NAMEA water activities.

Work on sources, impacts and measures on hazardous substances, using were possible work provided by the European Chemicals Agency, leading to a 'chemicals and water' report.

Undertake a cross-sectoral 'water economics' assessment of utilities, industry and agriculture, with a view to integration into ecosystems accounts in 2011.

*European waters report 2012*
Deliver the work plan and the annotated outline of the 2012 EEA report, in coordination with the Commission's 1st WFD progress report. This includes an analysis of state and pressure information from 1st River Basin Management Plans and an evaluation of the results in the context and perspective of the EEA's SOE related information.

Produce water quality assessment based on the continuous update of the water data centre information that provides a closer analysis of the extent to which other water related directives (UWWTD, Bathing, Drinking and Nitrates Directive) can and have contributed to the achievement of good (ecological, chemical, quantitative) status of water bodies. This should lead to the establishment of a baseline of the current achievements.

### 1.5 Marine (€0.5m)

With the Marine Strategy Framework Directive (MSFD) advancing in its implementation, the EEA work further complements Member States initial assessments in supporting an ecosystem-based management of the European Regional Seas – reflected by increasing demands in marine resources. The EEA's involvement in providing marine assessments is a key part of defining the marine data exchange and improving the provision of data and indicators. The first 'initial/baseline assessments' under the MSFD, which are focused on the characteristic, pressures and impacts as well as socio-economic aspects of the marine environment, are only to be reported by Member States in 2012. Until then assessments need to both cover the effectiveness of Water Framework Directive implementation in transitional and coastal waters and help map the current situation so that the impacts of future management efforts can be assessed.

Key elements in the further development of WISE-Marine will be the continuation of existing Eionet priority data flows in the marine environmental area; the information from the European marine observation and data network (EMODNET) to improve access to sectoral information; the GMES marine core service; and, information from new sources, such as the web-based European atlas of the seas (MARATLAS -see 2.4), operational oceanographic products as well as information from regional seas conventions and other international organisations.

*Monitoring, data flows and information systems*
Deliver new data, indicators and analytical methods for marine/maritime integrated assessments via the Water Information System for Europe as WISE–Marine, which implementation plan is being finalised, as a structural and closely interlinked part of the existing WISE that ensures links to EMODNET.

Establish streamlined reporting in support of the initial assessment of the Marine environment in Europe under MFSD (based on descriptors adopted in 2010 for good environmental status), drawing on assessments provided by the regional sea conventions.

Regular update of the EEA transitional, coastal and marine waters priority data flows and core set indicators including further information on biological elements derived from the Water Framework Directive inputs on coastal waters, marine biodiversity and climate change impacts;

*Indicators and assessments*
Conduct a detailed assessment of the state of and pressure on transitional and coastal waters from the 2010 River Basin Management Plan for the EEA contribution to the report under Art.18 WFD.

In support of the post-2010 Biodiversity strategy focus on marine biodiversity, marine habitat mapping and marine invasive species; test ecosystems accounting methodology in this context and explore work on overseas territories (see 2.2).

## 2. Cross-cutting themes (€7.1m)

Demand for cross-cutting integrated analyses is growing in recognition of rapidly changing realities and growing uncertainties. Europe's consumption and production patterns, their influence on climate change and biodiversity, how they are served by ecosystems around the world, and how these patterns might be adapted in the face of change, are clearly in focus. The requirement for connected information on all these processes is growing as a result. In a globalised economy where individuals, businesses and governments can exert a global reach, often with unintended consequences and rapid non-linear changes, many different types of policy can affect the resilience of the natural environment and the resources it provides whether on land or at sea.

*General objectives for 2009-2013*
The first objective is to build on the achievements of the 2004–2008 strategy with respect to the methods and analyses needed to generate cross-cutting assessments such as spatial analysis, impact indicators and vulnerability mapping, outlooks and scenarios, policy effectiveness evaluations, economics. The second objective is to put these methods to work more explicitly across a range of cross-cutting themes in this strategic area such as sectoral integration, land use conflicts, adaptation to climate change, sustainable consumption and production and maritime, territorial and cohesion policies. The third objective is to

pay special attention to issues that are priorities for ecosystems assessments, IPCC 5th Assessment report and sustainable development and Millennium Goals progress reports. The fourth objective is to build alliances and capacities within our networks to undertake such cross-cutting analyses and assessments within the context of SEIS.

In line with the EEA Strategy 2009-2013, the 2011 annual work programme builds on the outcome of the SOER 2010 synthesis relating to natural capital and ecosystem services as the integrating concept for many environmental and sectoral issues. Enabling conditions include resource use and efficiency, policy integration and coherence, eco-innovation, green infrastructure, fiscal reforms, resource accounting, indicators and data, which all following working areas contribute too. These objectives support the legislative and work programme of the European Commission for 2011 that includes a roadmap to a resource efficient Europe, and a Communication on a low carbon economy 2050 (with a focus on Energy and Transport) to implement Europe 2020 objectives.

## 2.0 Climate change impacts (€0.3m)

EEA work on climate change impacts is strongly integrated with work in the area of biodiversity (1.2), freshwater (1.4), marine (1.5) and environment and health (2.3). An update of the 2008 report on *Impacts* is foreseen for publication in 2012.

At the global level the IPCC further developed in 2010 the scope and content of their next Fifth Assessment Report (AR5) which will be finalized in 2014. EEA will use the process for AR5 to improve its own assessments. Furthermore EEA intends to contribute in particular to the chapter on Europe in the report from the IPCC WGII (Working Group II: Impacts, adaptation and vulnerability).

The implementation of the EU Clearinghouse on climate change impacts, vulnerability and adaptation started in 2010 (EC DG CLIMA); EEA contributes to this process (see also work area 2.1) and is being tasked to coordinate it as from 2012.

The new ETC on climate change, impact, vulnerability and adaptation will come into force as from January 2011.

*Climate change impacts*
Update key indicators on climate change impacts, observed and projected, using results from major international, EU and national research programmes in the IMS and promote dissemination.

Prepare for a 2012 indicator-based report on climate change impacts in Europe (update from 2008).

*GMES climate change*
Stimulate initiatives for hindcasting Europe's climate in partnership with ECMWF, EUMETNET and JRC.

Support the development of a possible future GMES climate contribution, other climate change services and the GMES emergency response by providing information on users needs from EEA perspective, including the implementation of EEA GMES project on coordination in situ data.

Develop ClimateWatch on Eye on Earth.

## 2.1 Vulnerability and adaptation (€1.2m)

Following on from the 2009 White Paper on adaptation the Commission intends to publish a Communication on mainstreaming of climate change adaptation (and mitigation) into EU policies by early 2011. In this context, several European countries have performed vulnerability assessments and started to prepare and/or adopt national adaptation plans or frameworks and also some regions have done so. EEA maintains an overview of these assessments and plans to support sharing of good practices on climate change vulnerability methods and adaptation actions, which is essential to improve such plans, at national, sub-national and local level, also involving the business community. The EU Clearinghouse on CC impacts, vulnerability and adaptation addresses these needs.

The 2009 Commission Communication on disaster risk prevention calls for improving and better sharing of data in the context of the EU civil protection mechanism. The EEA 2010 report on impacts of natural disasters highlights the lack of data at EU level.

IPCC, in close collaboration with the UN International Strategy for Disaster Reduction (ISDR), started in 2009 a report on "Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation" to be published in mid/end 2011. EEA intends to use information from this report.

The above activities rely to a large extent on the work of the new ETC on climate change impacts, vulnerability and adaptation, to come into force as from January 2011.

*EU Clearinghouse on climate change adaptation*
Support the development of the scope and the preparation of a prototype EU Clearinghouse on CC impacts, vulnerability and adaptation by early/mid 2011 and the inclusion of information on climate change vulnerability assessments and adaptation action/strategies, hazard and disaster data and information in close collaboration with DGs CLIMA, ENV and JRC (see also 2.0.) and EC Working Group.

Ensure appropriate links between the Clearinghouse and existing other EU information systems (e.g. WISE, BISE, JRC Floods alert system and Drought Observatory), consistent with SEIS and INSPIRE.

*Climate change adaptation and disaster risk assessments*
Integrate scoping work (vulnerability of ecosystems, water resources; impacts, vulnerability and adaptation in coastal areas and in the cryosphere; cost of adaptation actions and guidance principles) into relevant EEA assessment products (i.e. ecosystems, coastal, cities and Horizon 2020) and Signals 2012.

Support the improvement of hazard and disaster data and explores options to include data on past disasters into the GMES Emergency service, whilst using GMES information for the assessment of the effects of climate change on disasters and the effects of disasters on the environment over long time period (decades).

Support/participate in various networks including the DG ENV working group on biodiversity and climate change; the EPA Network interest group; the EU Council Expert Groups on Science and on Adaptation under UNFCCC; relevant IPCC plenary and expert meetings; WHO meetings related to the WHO climate change

and health strategy; disaster risk reduction networks (UNISDR platform on DRR).

*Methodologies for vulnerability, disaster risk and adaptation*
Develop methods for mapping and analysis of vulnerability and adaptation to climate change and natural/technological disasters in close collaboration with JRC and Member States, with a focus on coastal areas/systems and rivers including floods.

Contribute to the development and implementation of the JRC European Database of Vulnerabilities for Urban Areas.

Develop methods for analysing costs of adaptation.

## 2.2 Ecosystem assessments (€1.0m)

The MA framework guides EEA activities, including the European ecosystem assessment (EURECA) to be produced by 2012 in close cooperation with EC services and countries. EURECA can help add strong economic arguments for action and financing within the environment policy arena (e.g. from Life+, Natura 2000 towards European green infrastructure), as well as capture the attention of other stakeholders by increasing awareness of the importance of public goods (economic, social, environmental) from ecosystems. The most relevant policy frameworks in Europe relevant are post-2010 biodiversity policies, Nature Directives, Common Agricultural Policy, Common Fisheries Policy, Energy Policy, Territorial Cohesion – all will have a strong focus in EURECA activities. EURECA will also support capacity building in Eionet, the global Rio+20 agenda in 2012 as well as potentially Europe's contributions to IPBES (and TEEB).

EURECA will be underpinned analytically by the development and implementation of ecosystem accounts, integrated environmental assessment and decision support tools (Quickscan – see 3.2) that facilitate discussions on possible future policy priorities using what-if scenarios and other techniques. Work on QuickScan as well as environmental assessments and accounts will be highly integrated and will therefore be carried out in close coordination with Eurostat, the JRC, DG Environment and other Commission services as well as the European Space Agency, GMES, national and research organisations. Cooperation on the international scene will be continued with UN Statistics Division and World Bank and on Quickscan with key players such as the World Resources Institute.

The breadth of the ecosystem approach means that work in 2.2 needs to be developed in close interaction with other work areas, in particular 1.3, 1.4, 2.5, 2.6, 3.0, 3.3 and 3.4.

*Ecosystem accounting*
Implement simplified ecosystem capital accounts in Europe and co-author with the World Bank Volume 2 of the revision of the UN System of Integrated Environmental and Economic Accounting (SEEA).

*Ecosystem assessments*
Begin developing a European ecosystem assessment in cooperation with European partners and member countries. Provide support to decision makers on future policy options using the Quickscan (see 3.2) tool and integrated assessment approaches for key policy priorities and produce assessments on the trade-offs between selected ecosystem services and their economic and social implications.

*Capacity building*
Start an exchange of information with Eionet on ecosystem assessment methods, practices and outcomes at country, European and global levels including links to the MA follow-up process.

### 2.3 Environment and health (€0.1m)

Environmental quality and the link to human health is one of the priorities of the 6th Environment Action Programme. Integration of environment and health (E&H) concerns into the EU strategic policies and programmes was highlighted in relevant Council conclusions[5]. The conclusions underline the need for early action on E&H problems and the benefits of preventive and precautionary measures, and development of tools for anticipating, preventing and responding to potential threats from emerging and re-emerging issues (e.g. nanotechnology), and to strengthen the involvement of relevant stakeholders through partnerships across sectors at all levels. It also calls for gathering information on environmental determinants with positive health impacts, such as bio-diverse environments, non-motorized means of transport and housing conditions. These and other policy considerations (eg REACH) served as a backdrop for the environment and health assessments produced for the SOER2010.

Due to the nature of the E&H theme, work will be strongly linked with integrated assessments on other cross-cutting themes (e.g. CC impacts and adaptation, SCP, spatial planning and mobility, ecosystem services), as well as thematic areas (e.g. air, freshwater, biodiversity). In 2011 EEA work will focus on deepening the SOER2010 outcomes through partnerships and cooperation with many stakeholders (including the Commission services, European Agencies, WHO Europe, and expert networks in countries) is crucial for gathering/exchanging data, information, and knowledge. Special attention will be given to building assessments collaboration with Eionet, JRC and WHO, further supporting INSPIRE and strengthening the evidence base on the benefits of ecosystems for human health.

*Assessments*
Improve E&H assessments building on the outcome of the SOER Synthesis with particular focus on the Arctic (with WHO) and the benefits of ecosystems for human health (link to 2.2).

*Capacity building*
Collaborate with Eionet to improve further information flows between countries in line with SEIS principles and SOER2010 experiences, and strengthen collaboration with JRC.

### 2.4 Maritime (€0.4m)

The maritime work - which is closely related to marine integrated assessments (see 1.5), the sea-land interface (see 2.6) and the EEA ecosystem assessment (see 2.2) - provides information on the developments, trends and outlooks of the main drivers of maritime economies. Special focus needs to be put on the spatial planning in coastal and marine areas and its analysis. Information on economic aspects of marine and maritime assessments is crucial and will be further

[5] Council Conclusions on Environment and health, 2842nd Environmental Council meeting Brussels, 20/12/07

developed in cooperation with Commission Services and Member States, for which new data, indicators and analyses are necessary.

The continued participation of EEA in EMODNET, operated via the Water Information System for Europe (WISE-Marine), should help to provide the most efficient reporting processes in the maritime area and with this prevent any double reporting also with existing and upcoming data flows under the MSFD, as explicitly wished from Member States. These activities will enhance cooperation between sectors and the environmental area and help connect information at its source, linking the relevant institutions and organisations to provide online and shared access to the necessary data, to support maritime spatial planning, coastal zone management and state of the environment reporting.

Finally, EEA intends to explore the coverage of the EU overseas maritime area in relevant environmental assessments.

*Data flows and information systems*
Advance the maritime geospatial reference data set input to WISE-Marine to complement thematic transitional, coastal and marine data collection, which is relevant to WISE-marine and MSFD implementation (e.g. MARATLAS development EUSeaMap) and information / indicators on ICZM (OurCoast project of DGENV).

Analyse results of ESTAT scoping work on maritime statistics and all five EMODNET preparatory actions to ensure relevant input for maritime information. Provide support to new preparatory actions and follow the new EU maritime surveillance activities.

*Indicator and assessments*
Undertake work to update the EEA coastal assessment report for 2011/2012 including, with a focus on coastal regional and spatial planning. Track, analyse and inform on progress and effectiveness of maritime spatial planning.

Develop the marine/maritime ecosystem assessments under EURECA including the conceptual framework for environmental accounting of Maritime Space.

Explore feasibility for assessing environmental maritime issues for EU overseas territories, in particular biodiversity and climate change issues (see 1.2 and 2.0).

## 2.5 Sustainable consumption and production (SCP), resource efficiency and waste (€1.4m)

The Europe 2020 strategy for smart, sustainable and inclusive growth highlights “resource efficient Europe” as one of seven EU flagship initiatives. A resource efficient Europe will require that European countries take responsibility and action regarding the use of resources and environmental impacts related to consumption and production activities within and outside Europe. Sustainable waste management and waste prevention is an integrated part of this responsibility across the life-cycle.

SCP is a vital tool towards a resource efficient green economy. The development of a global framework of programmes on SCP to be agreed in 2011 is important in this regards. In the EEA, SCP and green economy are increasingly seen as two sides of the same coin.

In 2011, the EEA will continue to reinforce cooperation with Eionet and strengthen the knowledge base through further development and use of SCP and resource efficiency indicators, environmental accounts and integrated assessments. There will be a continuing focus on the high pressure areas of housing, food, mobility and tourism/recreation. EEA work in this area will continue in close cooperation with DG Environment, the JRC, Eurostat, the OECD and UNEP.

*Support the European Commission road map on resource efficiency*
Expand, with Eionet and others, the knowledge base on resource efficiency policies in European countries, populate the framework of SCP and resource efficiency indicators, use integrated environmental and economic accounts to analyse potentials for a green economy in Europe, and prepare an assessment of the life-cycle environmental impacts of housing activities in Europe (link to 2.2 and 3.3).

*SCP integrated assessments and outreach*
Update 2010 assessments on consumption and the environment and on resources and waste with new data and knowledge and ensure involvement of stakeholders in SCP, green economy and resource efficiency assessments with a particular focus on Rio+20 (link to 3.3).

*Waste data, indicators and assessments*
Support Eurostat on the waste data centre and relevant reporting under waste directives, and continue assessments of transboundary movements of waste, progress towards prevention and recycling targets and the role of waste prevention, reuse, recycling and recovery in a resource efficient green economy.

*Support to national, EU and global SCP policy processes*
Support the European Commission and Member States on the review of the SCP Action Plan, and global UN SCP policy processes towards Rio+20, including through providing analyses on retailers and the environment and on consumption behaviour and the environment.

### 2.6 Land use (€1.5m)

Work in this area supports a number of policy areas including: climate change adaptation policies, water assessment report in 2012, green infrastructure Communication, and EU territorial action plan and resource efficiency policy. The consolidation of methodologies for spatially representative assessments represents a key task. Link with this effort is the validation of analysis/decision support tool (QuickScan, see 3.2) for informing on the spatially explicit environmental dimension of policy trade-offs.

These activities harvest on the EEA's know-how with GMES-Land services (update of Corine land Cover in particular) and the Land Use Data Centre (LUDC), in close cooperation with the Group of 4. LUDC will be the operational geospatial data node required for intertwining the requirements of all thematic areas, supporting water management issues (see 1.4), biodiversity (fragmentation, connectivity - see 1.2), environment & health (see 2.3), noise exposure and impacts (EU Environmental Noise Directive) (see 1.0), transport & mobility (see 2.9), Urban Audit and land change modelling.

The developments above aim also to support EEA work on vulnerability mapping (see 2.1) and the simplified ecosystem accounts (priority on carbon, biomass and water) as well as valuing the large-scale water accounts for the UN-SEEA Handbook revision (see 1.4 and 3.3).

*Spatial data and information systems*
Upgrade the reference layers in the Land use Data Centre (LUDC). Work in liaison with other ETCs to populate / collect relevant multi-targeted attributes, water accounting, SEBI and biodiversity targets plus the first developments in vulnerability mapping. The current reference layers will be, where possible, continued to be extended to eastern and southern regions to facilitate the envisaged developments in strategic areas 3 and 4.

Revise the structuring/organisation of new data in LUDC, with special regard to landscape ecology, modelling and ecosystem accounting. The support to green infrastructure is a priority (see 1.2). This aim at providing the basis for land use modelling and forecast trends analysis to ecosystem analysis and other projections through the QuickScan tool developments (see 3.2).

Develop further implementation of data flows and information to support resource efficiency indicators for land management and soils, consolidating cooperation with JRC on soil monitoring projects, with a view to improving observations and data integration (e.g. soil functional mapping) essential for analysing drought and erosion and complete water and carbon accounting.

Deepen analysis of CORINE land cover 2006 and other GMES land monitoring product and contribute to their updating process.

*Spatial and territorial indicators and assessments*
Prepare the spatial integrated assessment of hydro-systems status required by the 2012 report on water.

Support DGREGIO and ESPON in the development of territorial indicators, with special attention to “Regions 2020 Strategy” as well as the EU Territorial State and Perspective 2011 document coordinated by the Hungarian EU Presidency.

### 2.7 Agriculture and forestry (€0.5m)

Food security, energy supply, resource and landscape management and green growth will be key challenges for the post-2013 EU Common Agriculture Policy. In parallel, the policy discussions on updating the EU Forest Strategy and Forest Europe’s (successor name of MCPFE, gathering 46 countries) debate during the UN 2011 International Year of Forests, all point at the sustainable development of forests.

The EEA is developing an ecosystem perspective for agriculture and forest areas in response to these future challenges, such as reflected in the EU 2020 vision for resource efficiency. The EEA’s work is developed within a broader regional development perspective and landscape potential, centred on high natural value agriculture and forestry. This links with the post-2010 Biodiversity Strategy and the cohesion policy reform, which are key as allocation of public money according to returns in social and ecological value and services requires differentiation and targeting – both spatially and in terms of practices.

A revised and streamlined European and international institutional cooperation within these sectors (e.g. OECD on indicators and agri-env policy analysis, FAO, DG AGRI and Eurostat on data sources, info on third countries e.g. for the pan-European assessments, but also with JRC, MCPFE – now forest Europe) as well as the regional perspective (e.g. Mediterranean and Alpine) is foreseen.

*Agriculture/forestry assessments and indicators*
Develop indicators with an agriculture and forest component contributing to resource efficiency, building on potential proposals for sub-targets within the EU post-2010 Biodiversity strategy and EU 2020 Vision. Update accordingly the agri-environment indicators (IRENA operation with Eurostat, DG AGRI, JRC and DG ENV) and maintain HNV farmland analysis & maps in close collaboration with JRC.

Contribute to green infrastructure and landscape potential assessments.

Co-prepare an up-date of the 2008 EEA report on Forests to be published in 2012 as a joint EEA-JRC publication, which covers the range of ecosystem functions within the prospects of climate change.

Develop targeted information actions and key European messages within the UN International Year of Forests in 2011 context, in cooperation with relevant international institutions and processes (FAO, UNECE, FOREST EUROPE, Group of 4).

Follow-up and contribute to EU processes on forest monitoring (together with Data Centre on Forest run by JRC and MCPFE Forest type monitoring – Ministerial Conference in June 2011).

Analyse forestry and forest management related developments in Europe and internationally, including UN/REDD+, LULUC(F), linking to GMES land related core services and scoping links into BISE.

### 2.8 Energy (€0.4m)

Energy policy plays a central role in combating climate change while at the same time ensuring a secure supply of energy in Europe. Energy production and consumption (including renewable energy such as bioenergy) has substantial impacts on human health and the environment (including emissions of air pollutants, waste generation, oil spills).

In November 2008, the European Commission took initiatives to increase energy solidarity among Member States, to stimulate investment in more efficient, low-carbon energy networks and to secure sustainable energy supplies in the EU. A package of energy efficiency proposals for key areas, such as reinforcing energy efficiency legislation on buildings and energy-consuming products were also adopted. In December the European Parliament and the European Council reached agreement on a target of increasing the share of renewables in energy use to 20 % by 2020.

The EEA will contribute by providing data, indicators and integrated assessments of how changes in the energy sector influence climate change and affect human health and the environment; analyses of costs and benefits and tracking progress towards meeting policy targets and their environmental effectiveness. The analysis will, where possible, go beyond the year 2020 and the 20% targets (renewables, greenhouse gases and energy efficiency).

*Energy assessments and indicators*
Report on energy and the environment based on country data and information submitted to Eurostat and other Commission services, EEA, IEA and UNEP. Continue to develop data flows and indicators for resource efficiency. Assess environmental implications of the transition to a low carbon, resource efficient

economy via good practice case studies focusing on energy sector with emphasis on the role of renewable energy and energy efficiency.

*Renewables*
Undertake research on the economics of renewables, including (but not limited to): externalities of production and use, including the supply chain, water use, social impacts, etc. Elaborate a scoping study on the environmental impacts of wave and tidal technologies and potential implications for/of environmental legislation in the field of marine environment. Follow up on renewable national allocation plans particularly to assess the potential for bioenergy across the EU-27 member states in meeting the 20% target by 2020.

### 2.9 Transport (€0.3m)

Transport is an integral element in most of the activities that together form the gross domestic product. Transport volumes grow more or less in parallel with the economy. The transport sector influences a number of environmental issues and is for some of those a main contributor to the impacts. Climate change, air pollution and noise nuisance are the most prominent. Even if the growth in emissions of greenhouse gases from the transport sector has slowed recently, projections for the future foresee a notable growth if no additional mitigating measures are implemented.

In addition to greenhouse gas mitigating measures EU and its Member States must also implement further measures to meet the air quality standards and manage environmental noise. A large share of the population is expected to be exposed to noise levels that are above the target values recommended by WHO.

Furthermore transport growth increases the pressure for infrastructure expansion creating or augmenting the intrusion in landscape and has a negative impact on biodiversity.

In response to the increasingly ambitious greenhouse gas emission targets there is a need to develop sector specific targets. To ensure the ancillary benefits these targets should cover all the main aspects of a ‘sustainable transport system’ and its use. EEA is already contributing to this debate and will continue to do so. All work will be done in close collaboration with the work areas climate change mitigation, air quality, noise, energy, land use, scenarios and sustainable consumption and production.

*Vehicle Fleet Monitoring*
Support DG CLIMA with the establishment and maintenance of the registry under Regulation EC 443/2009 on CO2 emissions from passenger cars.

*Transport Assessments and Indicators*
Develop, maintain and streamline the transport and environment TERM indicators as basis for assessments of the impacts of transport on human health, biodiversity and the environment, tracking of progress towards environmentally related policy targets for transport and develop data flows and indicators for resource efficiency. Work on trajectories towards a sustainable transport system with emphasis on energy efficiency and sustainable mobility especially climate friendly mobility management like mobility centres, local busses and innovative ideas regarding public transport, measures to encourage cycling and to adopt fleets to alternative fuels and e-vehicles.

## 3. Integrated environmental assessment (€3.1m)

Integrated environmental assessment is increasingly important for policy making. Consequently the EEA is receiving more and more requests to contribute to different integrated assessments. The EEA also has the responsibility of using and reviewing integrated assessment approaches and methodologies and assessing the knowledge gained in their implementation to strengthen practice in this area.

A continuing challenge facing the EEA and Eionet will be how to use and keep updated SOER 2010 elements so as to contribute efficiently to other regional, pan-European and global assessments. The increasing number of integrated assessments being requested to support different processes can often be overlapping, covering common geographical units or patterns, yet compete for the same resources. Analysing the environmental status of these diverse yet interconnected areas requires improved coordination.

Another challenge for integrated environmental assessments is how to improve their relevance, usefulness and effectiveness for decision and policy making. Three elements are identified on which to focus; 1) a better understanding of what it means to make decisions under risk, uncertainty, complexity and ignorance; 2) providing economic analyses to help put environment into the heart of economic decision making and 3) an increased emphasis on providing forward looking information and strategic futures.

The major integrated assessment exercises of the EEA are also used to promote better organisation and implementation of data and information gathering and communication. The SOER 2010 process, in particular, is a vehicle for further embedding SEIS principles and web communication approaches in EEA reporting processes.

*General objectives for 2009-2013*
Over the five year strategy the first objective was to deliver in support of EU policy objectives a 5-year report in 2010 and to consolidate the foundations (especially through SEIS and a long-term integrated assessment strategy) for delivering more efficiently future assessments including those for different geographical units. For this, a long-term integrated assessment strategy will be developed covering the ongoing 5-year reporting cycle and other geographical and issue orientated assessment needs. This will support improved planning and linkage of the different assessments, help and turn potential overlaps into synergies and enable them to be used as building blocks for the 5-year reporting process delivering in 2010, 2015 etc. The second objective is to improve the effectiveness of the assessments by developing knowledge on decision making under risk, uncertainty, complexity and ignorance, making economic analysis and developing strategic futures.

### 3.0 Strengthening integrated environmental assessment (€1.9m)

2011 will be a year of intense activity focussed on disseminating SOER 2010, reviewing SOER 2010, supporting the 2011 UNECE Environment Ministers meeting, preparing for RIO+20 and beginning preparations for SOER 2015.

*SOER2010 follow-up*
Disseminate the results and methods of the SOER broadly to networks interested in such approaches and outcomes, evaluate the SOER2010 activity and design

processes for regularly updating SoE information in close cooperation with ETCs and Eionet.

*Integrated assessment methods*
Review EEA indicators, support a wide range of strategic external indicator initiatives, (e.g. EU2020 Strategy and GDP and Beyond) and begin to develop a user manual that documents processes and methods for SOER2015.

*Assessments*
Further develop methodological approaches and analysis of coherence between environmental and sectoral policies, ecosystem services (see 2.2) and support work on pathways to a Green Economy (see 3.3).

### 3.1 Regional and global assessment (€0.2m)

The Assessment of Assessments (AoA) methodology, applied to environment, is an important development aiming to ensure that the state of the European environment kept under continuous review. This activity also aims to support the streamlining of environmental assessment activities across Europe and promote the SEIS principles to the EU neighbours and beyond. The process builds upon experience acquired with the production of the Marine assessment of assessment endorsed by UNGA in 2009.

A first AoA output will be produced in 2011 and presented at the UNECE Environment Ministers meeting in Astana, Kazakhstan. Other relevant assessment processes include the Mediterranean Horizon 2020 and the Arctic (ref 2.3), the Alpine Convention and other ecological or territorial units, e.g. the recent EU Baltic region strategy.

*Mediterranean*
Continue building up a regular reporting process for the Mediterranean countries to support in particular Horizon 2020.

*Arctic*
Continue preparing specific tailor-made assessments on the state of the Arctic, including the joint WHO EEA report on environment and health.

*Europe's Environment Assessment of Assessments*
Report to be prepared for the 2011 UNECE Environment Ministers meeting.

*Other Assessments*
Continue cooperation with Alpine Convention on SEIS (Alps regional node), indicators and assessments. Contribute to the International Resource Panel report on water efficiency and lead on report covering methodologies and data and information on water quantity, quality and efficiency. Contribute to UNEP's 5th Global Environmental Outlook (GEO-5) as coordinator for European contributions. Coordinate EEA contributions to Rio+20 assessments for 2012.

### 3.2 Decision support (€0.5m)

There is growing scientific awareness that environmental, ecological and health issues are more complex, multi-causal and inter-connected than was previously understood. Systems science, non–linear dynamics and threshold phenomena are characteristics of most environmental issues, such as climate change; ecosystems health; biodiversity loss; and health priorities (cancer, respiratory, neurological, and endocrine mediated diseases). Timely responses by governments, and increasingly by civil society, to perturbations in such complex ecological and biological systems involve taking action on lower strengths, and

sometimes different types, of evidence, (e.g. relevant knowledge rather than precise data), if the precautionary prevention of harm is the goal.

Public and stakeholder participation is increasingly recognized as a component of effective decision making on issues that arise from complex ecological, biological and social systems. Such decisions need to be taken in light of a broader knowledge base, in part derived from public participation, supported by increased awareness of the effectiveness and consequences of previous actions, or inactions, on emerging issues and early warnings.

*Late Lessons*
Launch the Late Lessons 2 report on the precautionary principle and science-policy interface and disseminate widely and produce a final draft of Late Lessons 3 report focused on fast developing technologies and their implications for the governance of innovation.

*Knowledge partnerships*
Explore the use of traditional knowledge and citizen science to support the management of natural capital and ecosystem services and more strategically strengthen the EEA's knowledge partnerships in this and other areas.

*Tool-box for decision-making*
Respond to institutional demands and needs of decision-support toolbox and fast track accounting in natural resources efficiency and capital maintenance domains; apply QuickScan to assess ecosystems and ecosystem services in green infrastructure context (see 1.2 and 2.2).

*Dissemination of research in areas of complexity*
Update previous EEA work on managing complex systems in the face of systemic risks and uncertainties, focusing on the dissemination of scientific knowledge and research results in this regard.

### 3.3 Economics (€0.3m)

The economic component of environmental analysis and evaluations is getting stronger as reflected in the further development of methods such as ex-ante-type cost of policy inaction, impact assessments and integrated analysis, and ex-post evaluations. Market-based instruments are increasingly recognised as potentially cost-saving tools, and environmental tax and subsidies reform can help reconcile environmental, fiscal and social objectives.

The outcome of the SOER synthesis with its emphasis on long term transition to a green economy through resource efficiency and other means will be the starting point for developing pathways analysis on the enabling conditions for a green economy to 2050. Such an outcome aims to support post-6$^{th}$ EAP European discussions and global discussions in Rio +20.

*Green Economy*
Prepare a draft assessment of pathways to a Green Economy in Europe linked to a wide range of activities across the work programme including a core analysis that links resource efficiency, environmental accounting, externalities and ecological fiscal reforms;

*Ecological Fiscal Reform*
Continue raising awareness of the potential for ecological fiscal reform to support transition to a Green Economy through events with interested countries and the development of a knowledge base on the web;

*Environmental externalities*
Improve analysis of the external effects on the environment for a range of pressures and impacts on air, water and land from agriculture and transport policies.

### 3.4 Strategic futures (€0.2m)

During the next 3 years of the EEA Strategy 2009-2013, work in this area will continue to focus on the forward looking component of major EEA assessments; comparisons of outputs from scenarios and forward looking studies produced by others and methods for decision making in conditions of complexity, increased risk and uncertainty; the expansion of the Environmental Information Systems applying SEIS principles; capacity building with Eionet, and the development of adequate methodological approaches that allow for a better integration of uncertainty, complexity risk, and stakeholder participation in forward looking assessments.

*Capacity building*
Undertake comparisons of forward looking studies and methods and how the results can support policy processes, and foster the use of such approaches within the EIONET, through the National Reference Centres on Forward Looking Information and Scenarios – FLIS, and other interested networks.

*Assessments*
Further develop the mega trends assessment begun under the SOER2010 for Rio+20, publish and disseminate results of cooperation with ENVSEC and OSCE on inter alia resource security issues and contribute to the Assessment of Assessments process for the UNECE Ministerial meeting in Astana.

## 4. Information Services and Communications (€9.9m)

The demand for easy to understand up-to-date information has grown significantly. This demand comes from both political decision makers and from European citizens, who increasingly request full transparency of information from public bodies. On the other hand, researchers, policy analysts, experts or NGOs, and also informed citizens, request more and more detailed in-depth data and information. Alongside this development, the rapid evolution in new information technologies provides us with tools to communicate more effectively. Work in this area will focus on building the Shared Environmental Information System (SEIS); shaping strategic messages; communicating effectively with target groups and evaluating our impact.

*General Objectives for 2009-2013*
To reach as broad an audience as possible, the EEA will work more closely with institutional networks throughout Europe and with international and national media. The aim is to build a shared environmental information system for Europe to support sustainable development and the achievement of significant and measurable improvement in the environment, and to promote EEA strategic messages in a pro-active, responsive way and contribute to political and public agendas. This depends on effective two-way communication, engaging in dialogue with target groups to understand their information needs and to give the right information at the right time, so it has most impact.

## 4.0 Infrastructure, data and information services (€5.7m)

The EEA together with Eionet will continue to collaborate with the European Commission on the development of a Shared Environmental Information System (SEIS) and related activities. The Group of 4 (DG Environment, Eurostat, Joint Research Centre and EEA) will continue amongst others to develop the European Data Centres as part of the implementation of SEIS. Six EEA European Topic Centres will continue to support the EEA on European data products and information services.

SEIS country visits have been organised by Eionet and EEA to assess the needs and current state-of-play of today's national information systems that will eventually become information nodes of SEIS as a decentralised information system. These visits will continue in 2011, both within the EEA member and cooperating countries and as part of the outreach into the European Neighbourhood Programme.

The EEA together with Eionet is continuing to support the preparation of the Inspire directive 2007/2/EC implementing rules through participation in thematic working groups, user requirements surveys and consultation on selected use cases for data specification development for Annex II and III datasets.

Together with Microsoft and Esri, EEA is developing a range of cloud applications and services. Eye on Earth is a key EEA platform within the overall SEIS framework to deliver mobile, user-friendly, two-way sharing of environmental data and other environmental information with key stakeholders, the general public and the scientific community. The platform provides access to environmental data and information provided by the European Environment Agency and enables dialogue between members of the public of the public and the EEA. It utilises Bing maps, cloud computing and other functionality based on a broad range of hardware and software.

Through its partnership with Esri, the EEA will extend the design and development of Eye on Earth and cloud architecture as a means for sharing, analysing, accessing and visualising essential geographic environmental data provided by the 39 Eionet member and cooperating countries in-line with the principles of INSPIRE as well as the Shared Environmental Information System. Standardized templates and layer definitions will be based on the Esri Community Maps initiative.

The overall objective is to continue the modernisation of the current environmental information system towards a network of decentralised data and information services providing online access to environmental data from global to local level and improving quality and the timeliness of information. EEA and Eionet will continue to work together with the European Commission and other international stakeholders to develop the system. EEA will achieve this by building further on the systems and tools developed for reporting (Reportnet), the emerging initiatives related to e-Government, Inspire, GMES and the Global Earth Observation System of Systems (GEOSS). SEIS principles will be applied for moving towards web-based state of the environment reporting.

A major challenge in 2011 will be to strengthen SEIS in EEA countries and extend SEIS to South and East neighbouring countries of the EU as part of the ENPI project.

*ICT development and maintenance and new infrastructure*

Maintain and further develop a high quality platform for continuous (24/7) ICT services for networking, data collection/sharing and public web access, including further enhancement and maintenance of the Reportnet tools and further extension of the SENSE methodology for sharing data and information based on SEIS principles.

*Shared Environmental Information system*

i) Data and indicator management
Maintain the EEA Data Service, including updating European datasets, and quality control and quality assurance of Eionet data flows. Update the EEA Indicator Management System on the basis of a needs review, and coordinate the regular updating and further development of the EEA core set and other indicator sets. Coordinate the production of maps and graphs for EEA assessment reports.

ii) Management of thematic services
Manage the services and common aspects of the five thematic Environmental Data Centres in close collaboration with the Group of Four. Support the development of thematic applications such as WISE plus marine, Corine Land Cover, Natura2000, GHG and EUNIS, and clearinghouses for biodiversity and the post-2010 Biodiversity Action Plan, and for climate change impacts, vulnerability and adaptation.

iii) Spatial data infrastructure
Manage and update the geospatial data hosted by EEA, in compliance with the Inspire directive and corresponding implementing rules.

iv) Inspire implementation
Support the European Commission and Member States in the implementation of Inspire rules related to annex II and III data specifications and related services in close collaboration with Eionet.

v) SEIS coordination
Develop SEIS and its implementation plan in close collaboration with the Group of 4 and Eionet, and implement SEIS components as defined in the European Neighbourhood Programme assistance project to ENP South and East neighbours.

*Eye on Earth*

Develop and maintain web-based and mobile data and information services for two-way communication of data and other information with key stakeholders, the scientific community and the general public on environmental issues.

### 4.1 GMES/GEOSS (€0.6m)

The Council of Ministers adopted the regulation on the GMES programme and its initial operations (2011-2013). The aim of the regulation is to contribute to the establishment of GMES as an operational programme, and to provide additional funds for its initial operations enabling a gradual build-up of capabilities until 2013, as well as to put into place the necessary structures for the governance of the programme.

The EEA is developing an innovative and sustainable framework for open access to in-situ data for GMES services through the GMES In-Situ Coordination (GISC) project funded by a FP7 grant agreement for €3.0m with DG ENTR for the period 2010-2012. The goal of the GISC project is to stimulate open access to all relevant in-situ data for operational GMES service provision by resolving the issues which are barriers for cost effective and sustainable data provision. Data for operational GMES services must be available in terms of required quantity, quality, coverage, timeliness, accessibility, and intellectual property rights.

The EEA has been identified as the organisation that should plan for the GMES Initial Operations land services (GIO Land) i.e. the pan-EU land cover services and its local component, starting in 2011. A budget delegation agreement between the EC and the EEA will be put in place to cover the GIO Land activities 2011-2013 of an amount of €20.0m. Eionet and EEA have also been identified as key players for the assessment of user needs for GMES initial operations.

The EEA is a participating in close cooperation with DG RTD and JRC in the implementation of the Global Earth Observation System of Systems (GEOSS) 2005-2015. The purpose of GEOSS is to achieve comprehensive, coordinated and sustained observations of the Earth system, in order to improve monitoring of the state of the Earth, increase understanding of Earth processes, and enhance prediction of the behaviour of the Earth system. GEOSS will meet the need for timely, quality long-term global information as a basis for sound decision making.

i) GMES in-situ coordination (GISC)
Establish and maintain a consistent overview of requirements, taking account of synergies, gaps, overlaps, constraints on priorities and other issues such as intellectual property right obstacles, infrastructure and architecture needed for sustainable data provision.
Develop a collaboration framework between countries, the Commission, European and intergovernmental bodies, particularly observation networks, GMES implementation groups and other relevant stakeholders and users, to engage in the delivery of GMES in-situ requirements.
Demonstrate in-situ coordination role in practice through securing quick wins for data relevant to pilot services.

ii) GMES Initial Operations Land (GIO land)
Develop an annual implementation plan for the continental and the local component of the GMES land monitoring services based on an agreed work plan defined by the European Commission and the GMES Programme Committee.
Manage the implementation of the land component of the GMES Initial Operations (GIO), with particular emphasis in 2011 on the continental component including the link to the global land cover monitoring initiative and global forest mapping.

iii) GMES and GEOSS coordination

Support the GMES governance structures including the GMES User forum.
Coordinate federation of user requirements, particularly in relation to the GMES core services and climate change.
Contribute to the implementation of the Global Earth Observation System of Systems (GEOSS) within the Group on Earth Observation (GEO) initiative i.e. on data sharing and sustainability of environmental monitoring and observing systems.

## 4.2 Strategic communication (€3.6m)

EEA's strategic communication focuses on the goals set out in the EEA Communication Strategy and the EEA Strategy 2009-2013.

The EEA will serve its primary target audiences of European decision- and policy-makers and influencers, while also reaching as broad an audience as possible. This will include enhanced efforts to research, and create relationships based on two-way dialogue with, potential users of our information to better understand and meet their needs and expectations for the right information at the right time, thereby maximizing value and impact.

Specific thematic communication strategies will increasingly be used in 2011 to support the environmental reporting within the four key activities in this year's work programme (see chapter I page 4). We will increase the use of new and publicly available technologies and reporting instruments, e.g. satellite data (GMES), web services, feedback instruments, tailor-made for our target audiences.

*EU Institutions*
The EEA will integrate its communication initiatives with the environmental agendas of the European Commission, European Parliament and the Presidency-in-office of the Council of Ministers. We will also expand our outreach to cover other (non-environmental) sectors engaged in policy-making that affects the environment, to meet their needs for environmental information. The EEA will work closely with its institutional networks (e.g. NRCs for communication) and with other environmental communication networks throughout Europe (e.g. Europe Direct, DG COM).

*Media and PR*
The EEA will maintain and continue to develop its core network of journalists across Europe, update the media database, organise and improve dissemination of EEA outputs, organise media briefings with selected journalists and ensure visibility of the Agency at environmental exhibitions and events in line with the activities and projects described across the work programme. Special media efforts will be made for the following key reports: Signals, TERM, Europe's Environment – Assessment of Assessments report and the GHG emissions reports.

*Signals 2011*
Earth 2050: Globalisation, Environment and You are key words. Signals will combine messages from SOER2010 Synthesis and SOER Part A. The introduction opens by describing the impacts of the Icelandic Volcano locally and globally. The impacts illustrate the system and global nature of the systems at the heart of our society. We then discuss some of the main themes of Signals 2011: People, Consumption, Resources. Each of the main chapters will end with a two page 'Facts' section using Part A data, graphs and text.

*Public awareness raising and events*
Efforts will be continued to raise environmental awareness and the profile of the EEA through direct interaction with the public, as well as through collaboration with various players and networks. This will include participation in international, national and local events, events related to the Hungarian and Polish EU presidencies and specific EEA events (out-of-house, in-house or on the web).

*Meeting information needs*
In line with the EEA Communication Strategy, we will continue to ensure that EEA further establishes itself as a key place for European citizens requiring information on the environment. We will continue to network with information centres from stakeholders, international organisations and EPAs in EEA member countries and beyond. During 2011 the EEA will develop further its use of social media networking methods and mobile services to deliver information via a range of platforms and systems.

*Website*
The website is EEA's key communication channel. its identity, user-friendliness and navigation will continue to be improved, with a focus on the EEA homepage and thematic websites. Particular attention will be given to layout and design, content management and editing to enhance the look and feel of the website. The use of EEA web-tailored products such as briefings and multimedia will be enhanced to maximise outreach and the impact of EEA messages. Audiovisuals will be produced regularly.

*Communicating with youth*
Communication with younger audiences will be strengthened through EEA's main messages. Various outputs suitable for youth and for broader education purposes will be produced. In addition to outreach in schools, the links we established in 2009 with broader educational and training (life-long learning) networks will be further consolidated. The EEA will also link its information to relevant educational processes (e.g. UN Decade for Education on Sustainable Development, UNECE ESD Strategy, EU Education and Training 2010 Work Programme).

*Internal communication*
To strengthen the internal communication the "Come and communicate" seminars will be complemented by a broader teambuilding project for staff to reflect the rapidly changing EEA (integrating new tasks, welcoming new staff).

*Translations*
The EEA will continue to support its communication strategy and working environment by translating wherever appropriate its publications, products and services, using a variety of institutions associated with Eionet and the European Community and digital tools.

## 5. EEA governance and partnerships (€2.1m)

This area of work addresses the formal governance activities with the EEA management board, scientific committee and Eionet partners as well as the coordination of relations with the various partners and networks with whom we work to help develop our work programme and achieve our mission. Many of the activities and relationships are laid down in the EEA regulation; others are being

developed as our work programme evolves and the needs for networking and partnerships with a broader range of actors relevant to the development of environmental policy and its implementation become clear.

*General objectives for 2009 – 2013*
The EEA aims to provide efficient and effective support to its management board, bureau and scientific committee to ensure that they are well informed for their decision making and advisory duties. The EEA also aims to further develop its relationships with Eionet and other partners/networks in Europe and internationally to ensure the economic, efficient and effective delivery and use of policy relevant information on Europe's environment and Europe's impact on the global environment.

## 5.0 Governance and country network support (€1.2m)

The growing recognition of the Agency as a key provider of timely, targeted, reliable and relevant environmental data in Europe requires an increased attention to its governance and network support. We will continue to sustain and strengthen the cooperation with our main clients and partners in the countries which are part of Eionet and beyond.

The increasing number of partnerships and international activities the EEA is involved in will necessitate consolidating further the close relations with the members of the EEA Management Board, the Scientific Committee and the NFP/Eionet group. To facilitate this, the EEA will continue to strengthen the smooth administration of the stakeholders meetings and regular contacts with them, as well as ensure their involvement in the provision of advice and decision-making in respectively the strategic scientific and operational development of the EEA work programme.

With regard to the cooperation with countries from the West Balkan region, the EEA will continue in 2011 through the IPA (Instrument for Pre-Accession) Programme funded by DG Enlargement to further strengthen the national networks and harmonise their work with the EEA processes in order to prepare the grounds for their future EEA membership. We will also need to be ready to respond to countries beyond the current Eionet seeking participation in the EEA work programme, possibly as a first step towards membership.

To meet the demands and expectations of all countries participating in Eionet, support SEIS implementation within the countries and improve mutual understanding of EEA and national activities, EEA will also continue to build up its networking and contacts with the national Eionet partners, including West Balkan countries, through further development of EEA country desk officer activities, reinforced by the enhanced network coordination group, re-organised and re-focussed Eionet workshops (following a review in 2010) and increased networking activities by all staff across the Agency.

Regarding cooperation with the EU neighbour countries (both East and South) under the European Neighbourhood Policy and with the Russian Federation under the Strategic Partnership (financially assisted by the European Neighbourhood Policy Instrument: ENPI), the Agency since 2010 is promoting, the gradual extension of SEIS principles to these regions through the development of activities and networking. A four year project was commenced in 2010 through a contract with DG AIDCO to implement SEIS related activities in the ENP regions with a focus on Horizon 2020 priorities with ENP South countries. The work in 2011 will build further on the previous cooperation and on the findings gathered

in the 2010 inception phase. It will focus on the use of tools, concepts, experience and knowledge developed within EU and EEA to improve the quality and availability of data, information, assessments and reporting from and about these countries as well as to build capacities in these areas at national level.

*Management Board and Bureau*
Provide of secretariat support for up to three Management Board meetings, three Bureau meetings and an annual MB seminar.

*Scientific Committee*
Provide of secretariat support for up to three Scientific Committees and Scientific Committee member participation in other meetings and events.

*Extended Eionet coordination and support*
Provide of secretariat support for up to three NFP/Eionet meetings and other NFP working group meetings.

*Country desk officers*
Provide of support/coordination of EEA activities with countries, NFPs and ETCs including the EEA Country Desk Officer network.

*Cooperation with European neighbourhood countries*
Coordinate and implement the various SEIS components as defined in the ENPI-SEIS assistance project to ENP South countries, ENP East countries and the Russian Federation.

### 5.1 European and international cooperation and networks (€0.9m)

The EEA works through an increasing number of partnerships and networks to improve its own capacities and capabilities and to support others in their endeavours. These range from European to International and across the science-policy bridge.

At the European level, the EEA will continue to work for mutual benefit with networks such as the network of Heads of the European Environmental Protection Agencies (EPA Network) and Heads of European Nature Conservation Agencies (ENCA Network) as well as the Directors Meeting for Environment Statistics and Accounts (DIMESA) coordinated by Eurostat. The EEA will also continue to provide the secretariat for EPA Network as requested.

Based on EEA's EMAS experience over the past 6 years (see 6.1) the Agency will develop a network of environmental organisations belonging to Eionet to promote more resource-efficient and greener public administrations. The vision is to help public authorities in adopting a systematic approach to managing their impacts on the external environment through networking, exchange of good practices, training and capacity building.

The EEA has the mandate to be active in the dissemination of information on the results of relevant environmental research and to do this in a form which can best assist policy development. Together with various international and European Community bodies, Eionet and the Scientific Committee, efforts will be made to establish a networking structure in order to be able to maintain links to the research and scientific community, disseminate and utilise the results, particularly information and data, from research activities at international, European and national levels, in a more systematic way.

In order to better perform its mandate and assess the main environmental threat in a transboundary and global context, the EEA is working with a wide range of international and regional bodies and organisations as well as with bodies in countries beyond its membership. Of particular relevance are the partnerships which the EEA has built over the years with the UN and its specialised agencies and other regional bodies (especially UNEP and UNECE). In 2011, EEA intends to consolidate its cooperation with these key international and regional players.

With the support of Eionet partners, EEA will continue to systematically promote to other countries in Europe and beyond, its networking model, the SEIS principles, as well as standards, methodologies and tools applied in the EU and EEA area. The EcoInformatics initiative contributes to this especially in the North-American region.

Throughout the strategy, specific attention will be given to regional networking in the Mediterranean region and the East (see 5.0) and with the Arctic. With Russia, cooperation will be continued under the EU-Russia Environment Dialogue. Cooperation will be strengthened with the conventions and institutional bodies of the Alps, Danube, Carpathians, Caspian and Central Asia.

*European networks, research and academic institutions*
Contribute to ENCA Network meetings and relevant interest groups and to DIMESA. Develop a network of environmental organisations to promote more resource-efficient and greener public administrations. Develop cooperation and links with a network of research bodies, academic institutions and projects of the EU Research Framework Programme, to support more systematic use and dissemination of information.

*EPA Secretariat and networks*
Contribute to the EPA Network meetings and interest groups as member agency and support the EPA secretariat hosted at the EEA.

*Cooperation with regional bodies and international organisations*
Maintain and develop partnerships and cooperation with regional bodies linked to Europe and with international and UN bodies to support the work programme in particular: the Arctic Council, CAREC, Caspian Sea Secretariat, CEDARE, OECD, OSCE, the REC, UNECE, UNEP and UNEP/MAP and WHO.

*Cooperation with bodies in countries beyond Europe*
Continue the dialogue with Central Asian countries under the EU-Central Asia Strategy. Continue cooperation with Russia under the EU-Russia Environment Dialogue. Strengthen collaboration with US-EPA and other North-American environmental bodies under *inter alia* the EcoInformatics initiative. Exchange information and experiences with other countries, organisations and networks beyond Europe, especially with ESCAP, ASEF and ASEAN, and with bodies in Brazil, Canada, China, India, Japan, South Africa.

*Cooperation with UNEP on environmental change*
Continue collaboration with UNEP and ESA on the Atlas of environmental change and community action in Europe.

## 6. EEA internal management and administration (€12.1m)

EEA staff and management activities, quality control of processes, products and services, administrative and building services are brought together under one

strategic area in the EEA Strategy 2009-2013. This is to help ensure that core horizontal activities are planned, implemented, monitored and reported on more coherently and consistently to ensure the economic, efficient and effective delivery of the EEA's operational work programme and as part of the sound financial management and data protection required for all EU Community bodies.

The EEA ensures that it has the necessary skills and expertise to provide this infrastructure and deliver its operational work programme through the recruitment of appropriately qualified staff and the tailored training and development of all staff. Expertise in multi-disciplinary working and management as well as in communication remains a high priority for 2011.

The EEA premises and IT infrastructure in Copenhagen are maintained and developed so that staff can work effectively and meetings run efficiently and comfortably even when the buildings are at full capacity.

In 2011 the EEA will ensure that it manages its physical resources and reflects closely on the value and need for travelling prior to organising meetings and missions so as to minimise the negative impacts on the environment and increasingly set an example for other organisations to follow.

*General objectives for 2009-2013*
The Agency aims to provide economic, efficient and effective management and administration of its work programme and resources, financial and human, through a total quality management approach to planning, execution, monitoring, control and reporting of activities based on a balanced scorecard, and through the recruitment, skills training and competency development of staff.

### 6.0 EEA operations (€6.5m)

This area of the work programme includes general management activities covering preparation of the five-year strategy and annual work programmes, management of the EEA by the senior management team to deliver the current strategy, line management using the EEA Career Development Cycle, management of operational and cross-EEA activities and general support for these activities and staff training and development. All staff are involved in this work area, to achieve the coordination and communication needed to ensure the quality, efficiency and effectiveness of the EEA's work. Internal communications with staff through the Staff Committee and staff meetings are included here.

Efforts to improve the internal communication will be strengthened. The focus will be on both short and long term objectives. Short term objectives include ongoing communication activities enabling staff to work together and engage in activities across their usual working areas; long term objectives address strategic communication issues involving analyses, forward looking initiatives and involvement of staff across the agency.

### 6.1 Quality Management and operational services (€3.0m)

The Agency strives towards excellence and outstanding results and continuously works towards improved data and information quality as well as for increased efficiency and effectiveness. To this end, a number of management and control systems and operational services have been implemented, of which many are covered by this heading.

The Agency will continue to evaluate whether the information and key messages set out in its products and services reach designated target groups, assess their added value to the target groups and provide feedback to EEA staff. We will continue to regularly monitor the media, policy documents and reports, and scientific publications for quotes and other references and use this knowledge to improve outreach and impact. The efficiency will be measured using key performance indicators, mainly drawn from the output of the data gathered in the for the Agency's Balanced Scorecard.

The new IT strategy will be implemented, in order to make use of advances in recent advances in technology and better support the development of the SEIS, and the Agency's Business Continuity Management system will be put into full operation.

*Environmental management system (EMAS)*
Continue to strive towards minimizing the EEA's environmental impacts and run the EEA as a carbon neutral organisation, making use of carbon offsetting as needed.

*Quality management and system documentation*
Maintain the QMS as the main tool for monitoring the quality of EEA products and services, including evaluating their impacts on an ongoing basis and to feed into the five-yearly external evaluations of the EEA.

*Internal audit and control*
Strengthen the existing risk management structures to improve the EEA's planning and decision making processes.

*Data protection*
Develop further procedures in line with the Data Protection Regulation and recommendations of the European Data Protection Officer, including maintenance of an inventory of relevant data processing operations;

*Facilities management*
Provide efficient and creative working environment for EEA staff and its visitors.

*IT infrastructure and services*
Provide IT infrastructure, support and technical developments for the EEA's internal management, networking and public systems.

*Document management*
Operate and further improve the Agency's Document Management System.

### 6.2 Administrative services (€2.6m)

Administrative services cover human resource management, budget planning, implementation and reporting/accounting, legal services, internal administrative and IT systems, logistics and building support.

To provide many of these services in line with the staff and financial regulations, the Agency has adopted a range of on-line systems either provided by the Commission or developed in-house. They include systems for management planning, budget and financial control, accounting, inventory control, human resource management and time registration. In addition, an advanced intranet is maintained providing online access to information required for internal management and administration of the EEA. All these systems are kept under

review and adapted or replaced as appropriate. In 2011 it is likely that the budget and accounting system will be replaced by the newest version in place in the European Commission.

# V. EEA 2011 budget outline

The annual budget of the EEA follows a clearly defined cycle consisting of two main phases. The first phase is a specification of the budgetary needs as part of the European Commission's budgetary preparations (formerly known as Preliminary Draft Budget - PDB). This is transmitted to the budgetary authorities for approval in a second phase – i.e. the European Council and the European parliament, at which point the final budget envelope is approved.

## Revenue

The revenue consists mainly of a subsidy from within the Community budget and contributions from other EEA member countries (Switzerland, Turkey and the European Economic Space agreement - covering the participation of Norway, Iceland and Liechtenstein).

These two constituting elements form the core budget for EEA.

| REVENUES | 2011 |
|---|---|
| | Budget Forecast |
| **1 REVENUE FROM FEES AND CHARGES** | |
| **2. EUROPEAN COMMUNITY SUBSIDY *** | 35 957 000 |
| **3 THIRD COUNTRIES CONTRIBUTION (incl. EFTA and candidate countries)** | 5 328 302 |
| **TOTAL REVENUES** | 41 285 302 |

* of which EUR 851.673 from assigned revenue in the EU budget (2009 surplus amounts repaid in accordance with Article 16 of the framework Financial Regulation for the bodies referred to in Article 185 of the Financial Regulation constitute assigned revenue (Article 18(1)(f) of the Financial Regulation)

## Expenditure

The draft budget includes three main titles that divide expenditures into three categories: staff expenditure, infrastructure and operating expenditure.

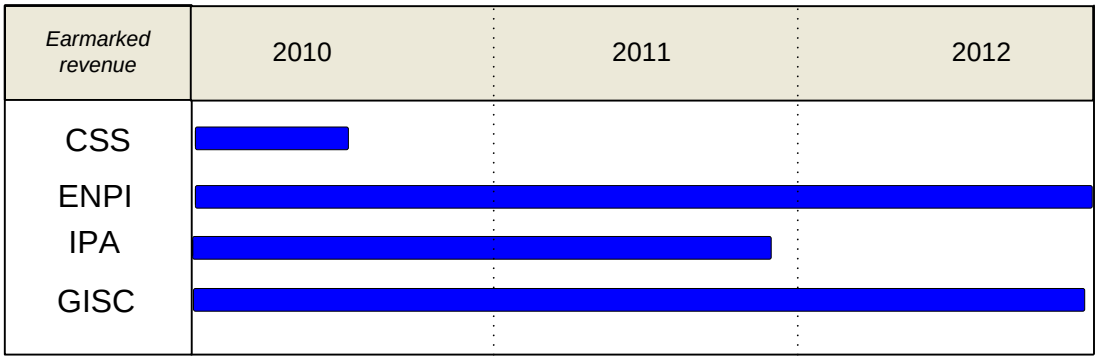
| **EXPENDITURE** | **Preliminary draft Budget 2011** |
|---|---|
| 1 STAFF | **23,778,000** |
| 1 1 STAFF IN ACTIVE EMPLOYMENT | 21,928,000 |
| 1 2 EXPENDITURE RELATED TO RECRUITMENT | 120,000 |
| 1 3 MISSIONS AND DUTY TRAVEL | 950,000 |
| 1 4 SOCIOMEDICAL INFRASTRUCTURE | 775,000 |
| 1 6 SOCIAL SERVICES | 5,000 |
| 2 ADMINISTRATIVE EXPENDITURE | **3,933,500** |
| 2 1 RENTAL OF BUILDINGS AND ASSOCIATED COSTS | 3,006,000 |
| 2 2 MOVABLE PROPERTY AND ASSOCIATED COSTS | 221,000 |
| 2 3 CURRENT ADMINISTRATIVE EXPENDITURE | 479,500 |
| 2 4 ENTERTAINMENT AND REPRESENTATION EXPENSES | 12,000 |
| 2 5 EEA GOVERNANCE | 205,000 |
| 2 6 ENVIRONMENTAL MANAGEMENT OF THE AGENCY | 10,000 |
| 3 OPERATING EXPENDITURE | **13,573,802** |
| 3 3 RESOURCES | 11,795,000 |
| 3 3 1 Operational support | 750,000 |
| 3 3 2 IT, publications, translations and communications | 3,630,000 |
| 3 3 3 European Topic Centres | 7,415,000 |
| 3 4 / 3 5 / 36 STRATEGIC ACTIONS | 1,778,802 |
| **TOTAL EXPENDITURE** | **41,285,302** |

## External assigned revenue

The EEA has apart from the annual budget that funds the annual management plan other revenue sources. In the tables below are the current external assigned revenue sources listed and the ir duration (multiannual).

External assigned revenue is characterised by being associated with contracts defining, often to great detail, the work to be carried out. Hence external assigned revenue is also referred to as “earmarked” revenue.

| Revenue source | ENPI | GISC | IPA |
|---|---|---|---|
| Revenue (EUR) | 5 746 500 | 2 999 999 | 1 200 000 |




ENPI: Towards a Shared Environmental Information System (SEIS) in the European Neighbourhood (four and a half years duration).

GISC: GMES in-situ data under the FP7 space theme with an EEA grant (three years duration).

IPA: Instrument for Pre-Accession (two years project duration).

## VI. List of acronyms and abbreviations

| | |
|---|---|
| ABAC | Accrual Based Accounting |
| ASEAN | Association of Southeast Asian Nations |
| ASEF | Asia-Europe Foundation |
| ASEM | Asia – Europe Meeting |
| AZURE | The name of a Microsoft cloud–computing platform |
| BAP | Biodiversity Action Plan |
| BISE | Biodiversity Information System for Europe |
| CAFE | Clean Air for Europe |
| CAP | Common Agricultural Policy |
| CAREC | Central Asia Regional Environmental Centre |
| CBD | Convention on Biological Diversity |
| CEDARE | Centre for Environment & Development in the Arab states and Europe |
| CEHAPE | Children's Environment and Health Action Plan for Europe |
| CLRTAP | Convention on Long-range Transboundary Air Pollution |
| COP | conference of the parties |
| CORINE | Coordination of Information on the Environment |
| DG | Directorate General |
| DG AIDCO | Directorate-General EuropeAid Co-operation Office of the European Commission |
| DG COM | Directorate General for Communication of the European Commission |
| DG ENV | Directorate General for Environment of the European Commission |
| DG SANCO | Directorate General for Health and Consumer Protection of the European Commission |
| DIMESA | Directors' meeting for environmental statistics and accounts |
| E&H | Environment and health |
| EAP | Environment Action Programme |
| EBD | environmental burden of disease |
| EC | European Commission |
| ECDC | European Centre for Disease Prevention and Control |
| ECMWF | European Centre for Medium-Range Weather Forecasts |
| ECRINS | European Catchment and Rivers network System |
| EEA | European Environment Agency |
| EEAC | European Environment Advisory Committee |
| EEC | European Economic Community |
| EFTA | European Free Trade Association |
| EHIS | Environmental Health Information Services |
| EIONET | European environment information and observation network |
| EMAS | Eco-Management and Audit Scheme |
| EMEP | European Monitoring and Evaluation Programme |
| EMEP SB | Steering Body of the European Monitoring and Evaluation Programme' under the Convention on Long-range Transboundary Air Pollution |
| EMODNET | European Marine Observation and Data Network |
| ENEA | European Network of Environmental Authorities |
| ENP | European Neighbourhood Policy |
| ENPI | European Neighbourhood Policy Instrument |
| EPA | Environmental Protection Agency |
| EPER | European pollutant emission register |
| E-PRTR | European Pollutants Release and Transfer Register |
| ESA | European Space Agency |
| ESCAP | UN Economic and Social Commission of Asia and the Pacific |
| ESD | Education for sustainable development |
| ESPON2013 | European observation network for territorial development |
| Esri | The name of a Geographic Information System software |
| ETC/ACC | European Topic Centre on Air and Climate Change |
| ETC/ACM | European Topic Centre on Air pollution and Climate change Mitigation |

| | |
|---|---|
| ETC/BD | European Topic Centre on Biological Diversity |
| ETC/RWM | European Topic Centre on Resource and Waste Management |
| ETC/WTR | European Topic Centre on Water |
| ETR | environmental tax reform |
| ETS | Emissions Trading Scheme |
| EU | European Union |
| EUCC | European Union Coastal Conservation |
| EUNIS | European Nature Information System |
| EURECA | European Ecosystem Assessment |
| Eurostat/ESTAT | Statistical Office of the European Communities |
| GDP | gross domestic product |
| GEO | Global Environment Outlook |
| GEO | Group on Earth Observations |
| GEOSS | Global Earth Observation System of Systems |
| GHG | greenhouse gas |
| GHS | Globally Harmonized System |
| GMES | Global Monitoring for Environment and Security |
| GMOs | Genetically modified organisms |
| HELCOM | Helsinki Commission - Baltic Marine Environment Protection Commission |
| ICT | Information and Communication Technology |
| IEA | International Energy Agency |
| IHPA | International HCH and Pesticides Association |
| IMS | Indicator Management Systems |
| INSPIRE | Infrastructure for Spatial Information in Europe |
| IOMC | Inter-Organization Programme for the Sound Management of Chemicals |
| IBPES | International science-policy platform on biodiversity and ecosystem services |
| IPCC | Intergovernmental Panel on Climate Change |
| IPPC | Integrated Pollution Prevention and Control |
| IRENA | Indicator reporting on the integration of environmental concerns into agricultural policy (in this context) |
| JRC | Joint Research Centre (European Commission) |
| LIFE | EU Financial Instrument for the Environment |
| LRTAP | Long-range Transboundary Air Pollution |
| MA | Millennium ecosystem Assessment |
| MAP | Mediterranean Action Plan |
| MED POL | Pollution monitoring and assessment programme - Mediterranean region |
| MMD | EU GHG Monitoring Mechanism Decision |
| NAMEA | National Accounting Matrices including Environmental accounts |
| NEC | National Emission Ceilings |
| NESIS | Network to enhance a European Environment Shared and Interoperable Information System |
| NFP | National Focal Point |
| NGO | Non-governmental organization |
| OECD | Organisation for Economic Cooperation and Development |
| OSCE | Organisation for Security and Co-operation in Europe |
| OSPAR | Convention for the Protection of the Marine Environment of the North-East Atlantic |
| PAMs | Policies and measures (under the Kyoto protocol) |
| PRELUDE | PRospective Environmental analysis of Land Use Development in Europe |
| PRTR | Pollutant Release and Transfer Register |
| QMS | Quality Management System |
| REACH | Registration, Evaluation, Authorisation and Restriction of Chemicals |
| REC | Regional Environmental Centre |
| RTD | Research and Technological Development |
| SCOUT | Sustainable Consumption and OUTlook and scenarios for Europe |
| SCP | sustainable consumption and production |

| | |
|---|---|
| SD | sustainable development |
| SDS | safety data sheets |
| SEBI | Streamlining European Biodiversity Indicators |
| SEIS | Shared Environmental Information System for Europe |
| SOER | The European Environment – State and outlook |
| TEEB | The Economics of Ecosystems and Biodiversity |
| TERM | Transport and environment reporting mechanism |
| UN | United Nations |
| UNCSD | United Nations Commission on Sustainable Development |
| UNDP | United Nations Development Programme |
| UNECE | United Nations Economic Commission for Europe |
| UNEP | United Nations Environment Programme |
| UNEP/MAP | Mediterranean Action Plan |
| UNFCCC | United Nations Framework Convention on Climate Change |
| UNGA | United Nations General Assembly |
| UN SEEA | "Handbook of National Accounting: Integrated Environment and Economic Accounting" published by UN |
| USEPA | The US Environmental Protection Agency |
| WCMC | World Conservation Monitoring Centre |
| WFD | Water Framework Directive |
| WHO | World Health Organisation |
| WISE | Water Information System for Europe |
| WTO | World Trade Organisation |