Multiannual Work Programme 2014–2018

Expanding the knowledge base for policy implementation and long-term transitions

European Environment Agency

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Preamble

The Regulation setting up the European Environment Agency and the European Environment Information and Observation Network (Eionet) ([1]) came into force in 1993, with the aim of providing the Community and the Member States, and in particular the European Commission, with the objective information necessary for framing, implementing and evaluating sound and effective environmental policies and for keeping the public properly informed on the state of the environment.

In order to achieve these goals, the EEA undertakes a comprehensive range of integrated environmental and thematic assessments to support environmental policy in Europe. These include five-yearly reports on the state and outlook of the environment, thematic and sectoral assessments, analyses of the effectiveness of policy measures, forward studies, and studies on the impacts of globalisation on Europe's environment and resources. The EEA is an important source and custodian of environment-related data and indicators, and a key provider of environmental knowledge and information services.

The EEA works closely with EU institutions, especially the European Commission (DG Environment, and DG Climate Action in particular, and other DGs relevant for the MAWP), and in partnership with government departments and agencies, international conventions, UN bodies, the scientific community, the private sector, and civil society.

Cooperation with government bodies and research institutions in Eionet plays a key role, representing two decades of investing in the creation and sharing of environmental information across Europe. Continued investment in Eionet, including the European Topic Centres, and with the EEA/Eionet cooperation model at its core, remains a centre point for this Multiannual Work Programme.

The recent five-year evaluation of the EEA confirmed that the EEA and Eionet are well-established and well-functioning structures, delivering comprehensive and reliable outputs. The EEA will follow the recommendations of the evaluation to ensure it continues to be the most effective and efficient solution to providing credible information on the state of the European environment, in line with its mission.

EEA mission statement

The EEA 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 policymaking agents and the public.

([1]) Regulation (EC) No 401/2009 of the European Parliament and of the Council of 23 April 2009 on the European Environment Agency and the European Environment Information and Observation Network (codified version).

Contents

Foreword by the Chairman of the EEA Management Board

I took over the chairmanship of the EEA Management Board shortly before the present Multiannual Work Programme for the period 2009–2013 was adopted, and it now gives me great pleasure to be able to hand over a well-structured, targeted and ambitious new MAWP and a well-functioning EEA.

A lot has changed in the past five years, and this new programme reflects those changes. There are two new policy developments I would like to address here that are particularly important for the Agency's work over the coming five years.

The first of these developments is the European Union's 7th Environment Action Plan, agreed in November 2013. This plan has nine priority objectives for policy action, integrating work across the fields of environment and climate. It lays out a guide over the coming seven years, but it also articulates a vision of Europe in 2050 as a low-carbon, resource-efficient green economy.

The 7th EAP is tremendously important for the EEA. Priority objective 5 of the 7th EAP is to 'improve the knowledge and evidence base for Union environment policy'. This objective, combined with the transition to the green economy envisaged by the 7th EAP, will require better integration of data and better integration of policy areas that were previously considered separate. This is a challenge that the EEA is particularly well-equipped to tackle. The 7th EAP explicitly recognises the Agency's unique abilities in this field, giving the EEA a monitoring and evaluation role, tasking us with the job of assessing the implementation of environmental policy, and assessing progress towards existing 2020 and 2030 targets.

The second major development to influence the Multiannual Work Programme is the EU's multi-annual financial framework (MFF) for the period 2014–2020, the long-term budget for the Union's work over the coming years. Responding to the economic difficulties still facing Europe in the wake of the financial crisis in 2008–2009, the MFF defines a context of diminishing resources for the EU as a whole, a context that will also affect the EEA. The MAWP reflects this by setting out clear priorities for the work of the EEA in the coming years, and emphasising the need for stronger partnerships, not least with the member countries of the European Environment Information and Observation Network, Eionet.

I wish the EEA a successful implementation of this programme.

Dr. Karsten Sach

Foreword by the Chair of the EEA Scientific Committee

The European Environment Agency is a crucial player operating at the interface between science, policy and society. To successfully carry out its mission, the Agency needs to be able to access and process high quality scientific data and knowledge, to stay ahead of developments in environmental sciences, and to identify emerging environmental issues. This is achieved through highly dynamic interactions between the EEA and its formal and informal networks, and through collaboration between the Agency and its Scientific Committee.

The Scientific Committee is composed of environmental scientists with expertise in a range of natural and social science disciplines. Our members have a broad interdisciplinary understanding of environmental challenges, and active connections to scientific networks in Europe and beyond. Our mandate as a Committee is to assist the EEA on scientific matters that affect its work.

In addition to advising the EEA on its day-to-day work, the Scientific Committee is also actively advising the Agency on its strategic direction. We have therefore been extensively involved in the design of this new Multiannual Work Programme 2014–2018. In our view, it is an ambitious and forward-looking strategy. It has the potential to make a major contribution to the implementation of the EU's environment and climate policies, and to the goals of the 7th Environment Action Programme. The MAWP 2014–2018 will also contribute to the development of the systemic understanding needed to achieve long-term transitions towards sustainability in Europe.

There is a growing appreciation that environment and climate issues are by nature systemic and are linked to almost every aspect of our society and economy. This has implications in terms of the nature of the knowledge needed by policymakers and other stakeholders to underpin action. It is therefore important and timely that in this Multiannual Work Programme, the EEA is creating a new work area: 'Assessing systemic challenges'.

In this strategic area, the Agency will map out the essential transformations needed to help Europe make the transition to an environmentally, socially, and economically sustainable society. My colleagues and I on the Scientific Committee consider this work area to be a fundamental pillar of the MAWP.

To accompany the EEA in the implementation of this Programme, a five-year work plan has been developed for the Scientific Committee. It comprises the following five priorities:

1. Providing input on EEA work according to the EEA regulation.

2. Collaborating with the Management Board, the EEA, Eionet, and the European Topic Centres.

3. Contributing to developing the knowledge base for long-term transitions.

4. Supporting the development and implementation of the EEAcademy.

5. Strengthening the links between the EEA and the broader scientific community, the Research and Innovation Directorate General of the European Commission, and Horizon 2020.

These are crucial and exciting times for Europe: the environmental and societal challenges which we face are colossal and urgent, though the socio-economic context may lead some to disregard the challenges. On the positive side, the knowledge and creativity now being deployed to understand the issues and to design solutions is unprecedented. In this context, the EEA is a major asset for Europe, making an essential contribution to the development and uptake of the knowledge base for the transition to sustainability.

It is a great honour for the members of the EEA Scientific Committee to be able to contribute to these undertakings. We look forward to continuing our collaboration with the Management Board, the Executive Director, and the outstanding staff of the Agency.

Dr. Sybille van den Hove

Foreword by the Executive Director

On taking up the post as the Agency's new Executive Director in the summer of 2013, it was clear to me that getting the next Multiannual Work Programme (MAWP) 2014–2018 to respond to Europe's challenges 'right' was an absolute priority. The MAWP builds on nearly two decades of experience at the EEA and is guided by a clear vision on the future of Europe's environmental challenges and the role of the Agency in helping to address these. I am convinced that the MAWP we are presenting underlines our ambition to be a leading actor in the provision of the core information necessary to improve environmental policy performance, while at the same time engaging in the creation of new insights and knowledge that will be necessary to understand and support the more fundamental transitions towards long-term sustainability.

The MAWP gives strategic direction and focus to our ambitions and concrete work over the next five years. It responds to the priorities raised in the EU's Seventh Environment Action Plan (7th EAP), adopted in November 2013. The Agency aims to be an objective, supportive and creative partner in the realisation of the fundamental objective embedded in the title of the 7th EAP, namely 'Living well, within the limits of the planet.' The recognition that Europe needs to ensure quality of life and well-being for European citizens, based on limited natural capital and increasingly fragile ecosystems, is central to the 7th EAP. Rapidly and globally spreading practices of unsustainable production and consumption, with serious impact on the global environment, are adding an additional layer of interconnectedness and complexity, but also responsibility to Europe's ambitions.

The MAWP frames the EEA contribution in three different, but interconnected Strategic areas.

Our *Strategic area 1* focuses on maintaining and even strengthening our work in providing information relating to the range of directives and regulations on environment and climate themes already in place. This will be in direct support to the EU policy implementation agenda. Close coordination with our Eionet partners in the countries and EU institutions will further improve the relevance and timeliness of our work.

The longer time horizon and the more systemic approach are embedded mainly in our *Strategic area 2*. We fully recognise the importance of Europe's 2020 agenda, both in the environmental and climate sphere, and in the framing of socio-economic ambitions. In the next five years the EEA aims to be the reliable source of information on how we are progressing towards the 2020 ambitions, whether they are related for example to biodiversity, climate and energy, or broader aspirations regarding the green economy. This will also include tracking progress in the implementation of the 7th EAP. As this agenda is increasingly expanding its time horizon towards 2025 and 2030, we wish to inform those shaping the agenda with essential knowledge.

Moreover, we want to contribute to Europe's ambition to make the transition towards a low carbon, resource-efficient and ecosystem-resilient society by 2050. At the heart of this agenda lies the interconnected and systemic nature of the objectives. Long-standing problems such as air pollution, climate change, or decreasing biodiversity are all connected to each other and cannot be treated separately. What links these problems are the socio-technical systems that provide us with what it is we expect in modern society: the transport system, the housing system, the energy system, the food system, to name just a few. Fundamental transitions in those core societal systems will be necessary to put us on a credible trajectory towards 2050.

At the EEA we see these ambitions not only as societal challenges, but also as challenges to the knowledge system. A network and co-creation approach to this challenge is therefore central to our *Strategic area 3*. By working with our Scientific Committee, our Eionet partners, colleagues in the EU institutions and the broader European research community, as well as with

international partners, we will engage in a process of knowledge co-creation, necessary to develop the concepts, metrics and assessments in support of the 2050 agenda.

An obvious and equally important fourth Strategic area is our continued commitment to strong EEA administrative, financial and human resource management. This remains an absolute priority and a precondition for everything else we want to realise.

I am fully aware that we will have to reconcile these ambitions with the reality of resource constraints. Budget and staff constraints have guided us in the choices embedded in the MAWP. As a result, we view our MAWP as a positive and focused choice for a future-oriented project. As Executive Director, I am committed to leading an Agency that continues to provide Europeans with the outstanding quality of policy-relevant data and information for which it has become renowned. By drawing upon the continued support of our key stakeholders represented in our Management Board, and by engaging the key European and international networks in which we are a partner, we look forward to delivering fully this five year work programme.

After the short time that I am the EEA Executive Director, I am already able to confirm the excellence of our staff and their commitment to delivering this programme. Together we consider it a privilege to be working on an agenda that could hardly be more motivating than 'Living well, within the limits of the planet'.

Hans Bruyninckx

PART 1: Strategic directions

The developing policy framework

The EU is increasingly formulating its environmental and climate policies with reference to three different timeframes:

- the thematic policies each have their own timelines and deadlines for implementation, reporting and revision; many of them coinciding with the 2014–2018 timeframe of the MAWP;
- EU environmental and sectoral policies and ambitions are also formulated in the perspective of either more comprehensive policies (Europe 2020, 7th EAP), or specific 2020/2030 targets for the environment and climate;
- in addition, the EU has formulated long-term visions and targets, mostly with a 2050 societal transition perspective.

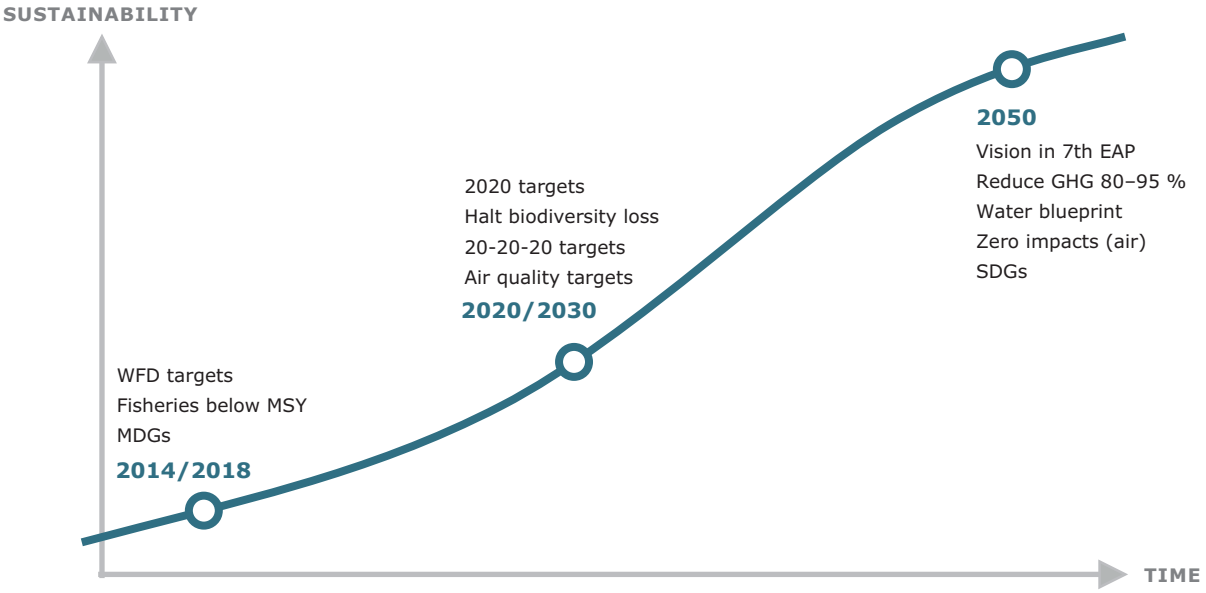
The EEA, through all of its activities and programmes, has the ambition to further contribute to the knowledge base on environmental and climate policies in light of the policies and ambitions of the EU, as they are formulated above. This means that excellence in data provision, indicator development, and reporting on the comprehensive set of thematic policies still constitute the core of our activities. The EEA will also provide the necessary input on the environment and climate to follow up and report on the 2020/2030 agenda(s) of the EU. In addition, and building on the work done in the field of systemic analysis, we have the ambition to contribute to the knowledge base needed to support the EU's stated objectives regarding long-term transitions.

Environment and climate policies have evolved over the years in response to a deepening understanding of the issues. This understanding, as captured by the EEA 'State and outlook' reports, recognises first of all that the environmental challenges we face today do not differ substantially from those of a decade ago. Thus, climate change, loss of biodiversity, unsustainable use of natural resources, and environmental pressures on health, prioritised by the 6th Environment Action Programme a decade ago, remain key issues of concern. While most environment and climate challenges remain, there is also an enhanced appreciation of the links between the different challenges, as well as their interplay with a wide range of global megatrends, all pointing towards the increased complexity of defining, analysing and responding to environmental problems.

This growing understanding is set out in the Environment Action Programme to 2020 (7th EAP) entitled *Living well, within the limits of our planet*. This programme is based on a 2050 vision centred on ecological limits, a circular economy and society's resilience. To move towards this vision, the programme sets out nine priority objectives, comprising three thematic objectives, four enabling objectives, one urban objective, and one global objective. The 7th EAP aims at achieving existing objectives and targets in a mid-term perspective to 2020/2030, with policies such as the Climate and Energy Package 2020 and associated roadmaps; the EU Strategy for Adaptation to Climate Change; Europe 2020 and the Resource Efficiency Roadmap; the Biodiversity Strategy to 2020; and specific legislation for water, waste, air etc. In addition, the 7th EAP promotes new ways of thinking and innovation in order to realise the 2050 vision beyond existing policy targets.

The overall aim is to step up the contribution of environment policy to the transition towards sustainability, understood as a resource-efficient, low-carbon economy in which natural capital is protected and enhanced, and the health and well-being of citizens is safeguarded. The 7th EAP is also the basis for EU involvement in global agendas such as Rio+20, the United Nations Framework Convention on Climate Change, the Montreal Protocol on Substances that Deplete the Ozone Layer, and the Convention on Biological Diversity, as well being the basis for wider European activities, which are increasingly framed in a 2050 perspective.

Long-term transition/intermediate targets



2014–2018 Thematic policies timelines and deadlines

2020/2030 Comprehensive policies (Europe 2020, 7th EAP), or specific targets

2050 Long-term visions and targets with a societal transition perspective

Societal transitions: from efficiency gains towards system change

A number of the fundamental sustainability challenges can until now be characterised as persistent problems. From an environmental perspective this refers to problems related to biodiversity, ecosystem resilience, climate change, desertification, etc. Characteristics of these persistent problems include a high degree of complexity and uncertainty, and an interdependent nature. Our understanding of the driving forces of problems of environmental sustainability has increased significantly and led to a solid knowledge of the socio-technical systems that on the one hand fulfil societal needs (e.g. mobility, housing, and food), yet on the other hand have fundamental environmental externalities.

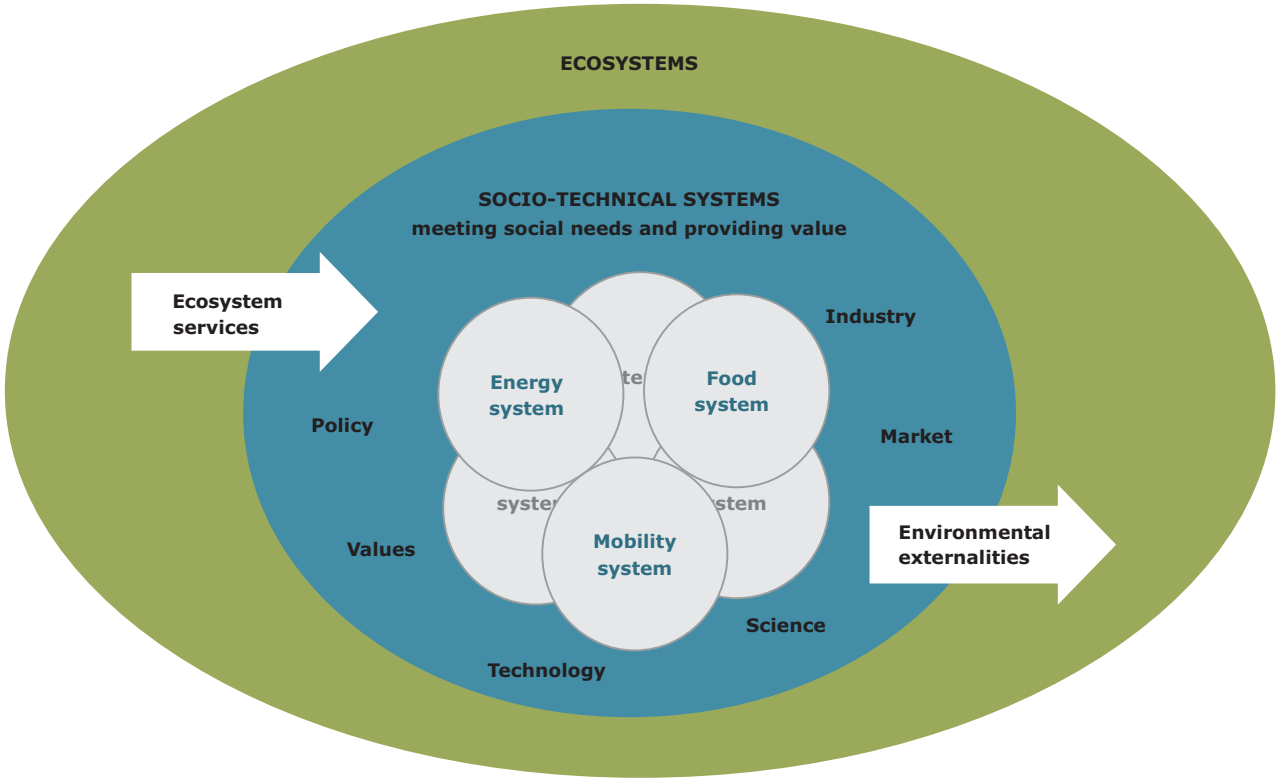
Several decades of policy interventions have largely focused on improving the environmental efficiency of these underlying socio-technical systems, thus leading to 'relative decoupling', the term given to our increasing ability to extract more value and utility from the same amount of resources. Yet by and large, they have not succeeded in reversing the trend of negative environmental externalities.

Sustainability transitions are long-term, multi-dimensional, and fundamental processes of change in socio-technical systems and their interactions with ecosystems towards essentially sustainable modes of production and consumption.

The transition paradigm works with:

- **long-term policy frameworks**, e.g. the EU's 2050 agenda on energy and climate, biodiversity, resource efficiency and green economy;
- **high-level government support**, e.g. support by EU Member States, EU institutions and international organisations across different policy areas;
- **long-term research, innovation and technology programmes** with a variety of participants, e.g. public funding and private sector engagement as embedded in the 2020 budget and Horizon 2020, and well as at Member State level;
- **strong engagement with citizens**, as changes in socio-technical systems have fundamental impacts on citizens.

Living within ecological limits



Progress towards these objectives will be monitored in the context of the Europe 2020 Strategy's regular monitoring process, to which the EEA will contribute with its indicators on environment and climate-related matters. These indicators measure the overall progress towards a resource-efficient European economy and society, and the long-term implications for prosperity, natural capital maintenance, health, and well-being.

The EEA's five-yearly 'European environment: state and outlook' reports (SOER) collate and assess the evidence base needed to both inform the implementation of existing polices (many related to existing 2020 or 2030 policy targets) and facilitate longer-term transition dynamics (towards 2050 ambitions). To better underpin the latter, a stronger, systemic, and long-term perspective will be essential in the EEA's work. SOER 2015 and SOER 2020 will play an important role in this regard, coinciding with the start of a new term of the European Parliament/European Commission and the final evaluation of the 7th EAP, respectively.

Stakeholder expectations of increased support from the EEA to policy implementation and long-term transitions will have to be met within a context of diminishing resources, which will require prioritisation, and an increased focus on stronger partnerships.

EEA strategic response

Role, mission and goals

The EEA, according to its mission, aims to support sustainable development and to help achieve significant and measurable improvements in Europe's environment, through the provision of timely, targeted, relevant and reliable information to policymaking agents and the public.

As acknowledged in the recent independent evaluation, the EEA operates in a complex, multi-level and multi-actor governance setting at EU, national, and global levels. This setting also includes research institutes, businesses, and NGOs. The specific role of the EEA is to support policymaking at the EU level, and to build capacity in member countries, using Eionet as its unique partner to generate two-way flows of quality-assured environmental data and information.

Our understanding of the nature of environmental challenges has evolved in recent decades, requiring corresponding changes to information flows and assessments. Looking ahead at the challenges Europe is likely to face in coming decades, there is a need to accelerate the adaptation of environmental information flows and assessments to better support transition objectives, while maintaining and improving the knowledge base supporting established and developing policies across the policy cycle.

The continuous flow of new and updated scientific insights into environment and climate issues improves the knowledge base for environment and climate policies. Fulfilling its role as an interface between science and policy, the EEA will work closely with DG Research, the Joint Research Centre, and others in seeking to influence activities under the EU Framework Research Programmes (Horizon 2020 and earlier). The Agency also aims to exploit the insights that result from these programmes.

Based on this and the mandate set out in the EEA/Eionet regulation, the key goals of the EEA in the period of the MAWP are as follows:

Key goals

- to be the prime source of knowledge at European level informing the implementation of European and national environment and climate policies;
- to be a leading knowledge centre supporting long-term transition challenges and objectives;
- to be the lead organisation at European level facilitating knowledge-sharing and capacity-building in the field of environment and climate change.

Structuring the response

To secure the knowledge and evidence base for this developing policy framework in line with Priority objective 5 of the 7th EAP, the MAWP is structured around four strategic areas (SA1–4):

Strategic area 1: Informing policy implementation (SA1)

Providing feedback and input to long-established and emerging policy frameworks, objectives, and targets through reporting on progress in recognised environmental themes, including links to those sectors that are the primary sources of environmental pressures, and through reporting on the state of and trends in natural environment systems (atmosphere, oceans, territories) using the DPSIR assessment framework (Driver, Pressure, State, Impact, Response).

Strategic area 2: Assessing systemic challenges (SA2)

Providing support to improving synergies and policy coherence across environmental, economic and social systems by applying established and experimental integrated assessment techniques and prospective analysis, with both a short-term and a long-term perspective. This work supports the long-term vision for 2050 set out in the 7th EAP. It underpins policy initiatives in the Europe 2020 Strategy, including the EU climate and energy package; the Roadmap for moving to a low-carbon economy in 2050; the EU Health for Growth programme; the EU Biodiversity Strategy to 2020; the Roadmap to a Resource Efficient Europe; and the Innovation Union Flagship Initiative.

Strategic area 3: Knowledge co-creation, sharing and use (SA3)

Providing support to the work in the above areas by building and maintaining networks of people and information systems as the basis for sharing and co-creating content, whether that be data, indicators, or assessments, in a transparent manner with other actors at national, European and global levels. Communications, in the broadest sense of the word, will also play a major role in ensuring that information promotes a dialogue with a dialogue with stakeholders and reaches out to the society at large. Targeted information, communication and participation are important instruments for achieving significant and measurable improvement in Europe's environment, responding to emerging challenges and societal developments.

Strategic area 4: EEA management (SA4)

EEA management, administration, and operational services make up a fourth area of work. The guiding principles of this work area are strict adherence to all the principles, rules, and regulations that apply to the EEA, as well as continuous improvement of the efficiency and effectiveness of EEA management. SA4 will ensure the Agency's response to the recommendations formulated in the recent evaluation.

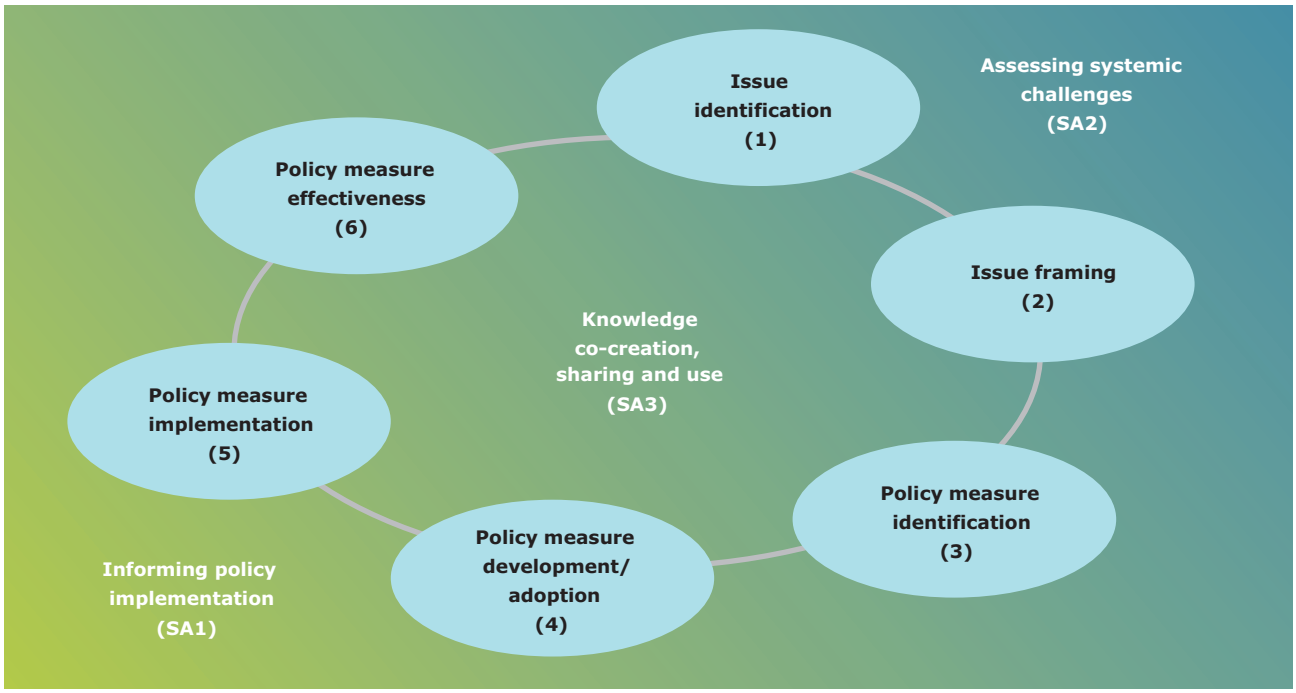
The strategic areas and environment policy

The figure below illustrates how SA1–3 support the different phases of the policy cycle. As can be seen, there is a no clear demarcation between SA1 and SA2, rather a gliding difference in emphasis.

As well as being important areas of work in their own rights, there are thus important synergies between SA1 and SA2. Addressing both aspects in complementary, adaptive, and dynamic ways is essential, as the topics addressed will change over time in their scope, and in the way they relate to overarching issues and long-term objectives. This is depicted in the figure below, reflecting both the role information plays across the policy cycle, and the way that policy attention differs across the cycle.

SA1–3 provide support to several priority objectives of the 7th EAP, and together they support all nine of the priority objectives. More information is given in Part 2.

Strategic areas 1–3 and the policy cycle

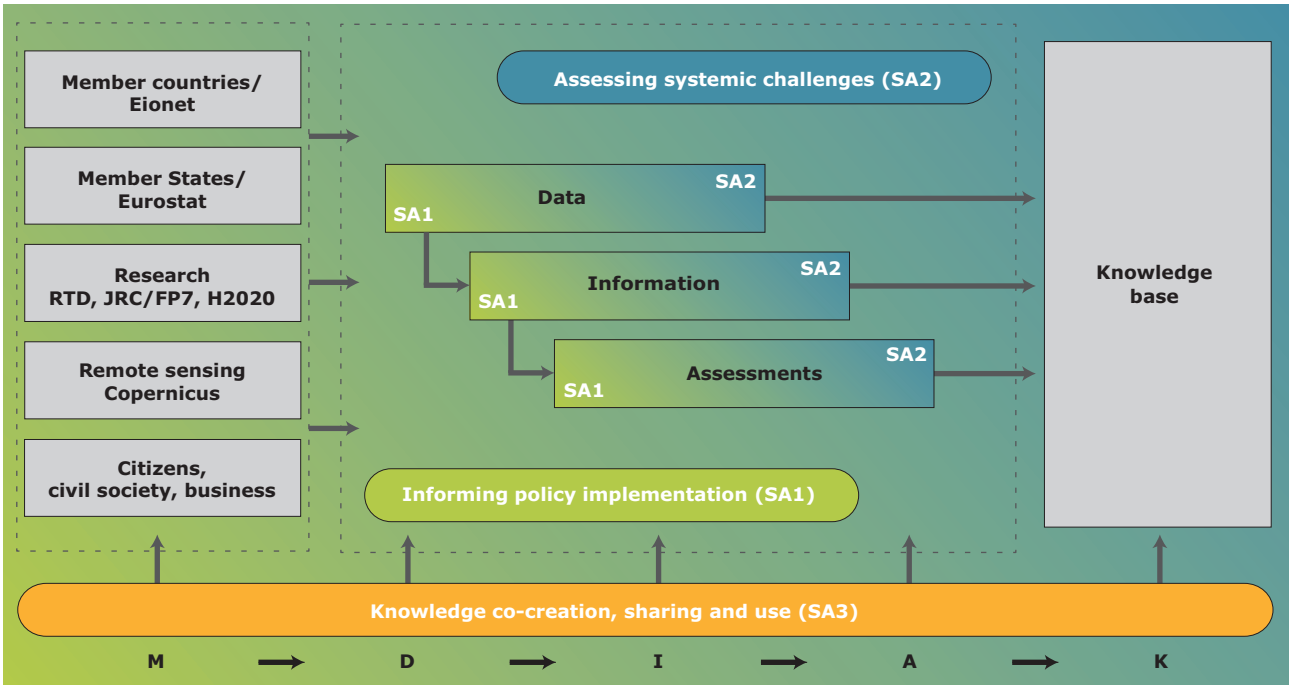


The strategic areas and EEA/Eionet core processes

The figure below illustrates more explicitly how SA1–3 fit within the overall business model of the EEA/Eionet.

As an enabler for the other two strategic areas, it is important to note that SA3's support function stretches along the entirety of the MDIAK chain and across the whole policy cycle. The most obvious example of this is Eionet, which shares the entire business model together with the EEA, as well as being an important source of data and information. Networking, information systems, content-sharing, and communications play a role in all links in the chain. Concrete activities will further exploit synergies and avoid duplication with other major information providers at European level, in particular Eurostat and the Joint Research Centre.

Strategic areas 1–3 and EEA/Eionet core processes



Note: Across the bottom of the figure is the overall process from **M**onitoring (in the broadest sense) through **D**ata, **I**nformation and **A**ssessments to **K**nowledge. This value-adding chain is at the heart of the work of the EEA and Eionet. The figure shows some examples of the diversity of sources of data and information, and indicates major EU programmes and institutions involved in improving the availability of relevant data and information.
Also shown is how data, indicators (in some versions described as information rather than indicators), and assessments flow from the monitoring, and are used to inform policy implementation in SA1, and assess systemic challenges in SA2. Often, activities will serve both strategic areas at the same time, and cross-fertilisation between the strategic areas will add value to the work in both areas.

International dimensions of EEA work

The EEA supports EU engagement in international contexts in a wide range of fields. These activities are embedded in the relevant parts of the MAWP, delivering different types of inputs into the various fora. Highlights include the provision of:

- thematic data and expertise to support the involvement of EEA member and cooperating countries in international conventions and related activities, as described in many areas under SA1 and SA2 (see also tables on pages 18 and 39);

- expertise, data, and assessments to ensure European contributions to global and UN activities, including to UNEP (Global Environmental Outlook, UNEP-Live) and the post Rio+20 activities (in particular on the Sustainable Development Goals, described under SA3.1);

- expertise and capacity-building in networking and information partnerships. This is based on Eionet and SEIS approaches, particularly towards cooperating countries and the European Neighbourhood (described under SA3.7) and towards countries and regions following EU priorities. Involvement in the Global Earth Observation System of Systems (GEO/GEOSS) and the Eye on Earth Network (mentioned under SA3) are included here.

The European Environment Information and Observation Network

The European Environment Information and Observation Network (Eionet), created together with the EEA itself in 1993 by the EEA/Eionet Regulation, is a key partner in delivering the MAWP.

Enhanced involvement of Eionet will be sought across the strategic areas in the fields of data flows, indicators, policy effectiveness analysis, integrated assessments, communications, and the use of new analytical methods and technologies. Increasing the value of the knowledge base for the member countries will be a key element; building on better articulation of member countries' needs in the Management Board and Eionet fora.

European Topic Centres (ETCs), key components of Eionet, will continue to play an important role in the chain from data to assessments, supporting the development and maintenance of the knowledge base in all areas of work under SA1, and also parts of SA2.

Meeting stakeholder expectations under diminishing resources

The recent evaluation of the EEA did not identify large scope or potential for efficiency gains. Nevertheless, meeting the challenges is expected to require a combination of:

- **streamlining** — finding ways of carrying out the same activities with fewer resources;

- **innovation** — finding new approaches to meeting existing and new challenges with fewer resources;

- **rationalisation** — discontinuing certain activities and focusing others down.

Priorities for work in the three strategic areas are given in Part 2 of this document, and first-order indications of how resources should be allocated across the strategic areas are given below. These priorities and indications, focusing on core activities, added value and innovation, will guide the concrete definition of activities and allocation of resources in the Annual Management Plans and associated annual budgets of the EEA.

Indicative multiannual budget

Financial resources

The multiannual financial framework 2014–2020 of the European Union sets the conditions under which the EEA must operate in the coming years.

The overall workload of the EEA is seen as relatively stable, although increasing demands from stakeholders are experienced. This determines that the five-year period for the Multiannual Work Programme starts with a nominal freeze in the level of the EEA budget, which has de facto required the EEA to find savings in its administrative and operational budget. Revenue is forecasted with a 1 % increase in the EU core subvention in accordance with the common position taken by the network of European agencies.

Budget (EUR)				
Year	**EU core subvention**	**Non-EU members contribution**	**Total core budget**	**Non-core**
2014	36 309 240	5 373 204	41 682 444	11 000 000
2015	36 672 332	5 400 070	42 072 402	16 000 000
2016	37 039 056	5 427 070	42 466 126	11 000 000
2017	37 409 446	5 454 206	42 863 652	10 000 000
2018	37 783 541	5 481 477	43 265 017	11 000 000

Note: Non-core (multiannual):
Copernicus (EUR 10 000 000 per year);
European Neighbourhood and Partnership Instrument (ENPI) (EUR 6 000 000 in 2015);
Instrument for Pre-Accession (IPA) (EUR 1 000 000 every 2nd year).
All numbers are estimates assuming continued funding at levels similar to previous years.

Human resources

Staff reductions are expected throughout the next five years (other things being equal) as is the case for all EU-bodies. Hence the Multiannual Work Programme has been developed with the assumption that a 5 % reduction in staff numbers will occur between 2014 and 2018.

Throughout the period, the EEA will continue to put emphasis on the development of human resources.

A learning-and-development framework will be implemented to support the achievement of the multi annual work programme objectives based on the following three pillars:

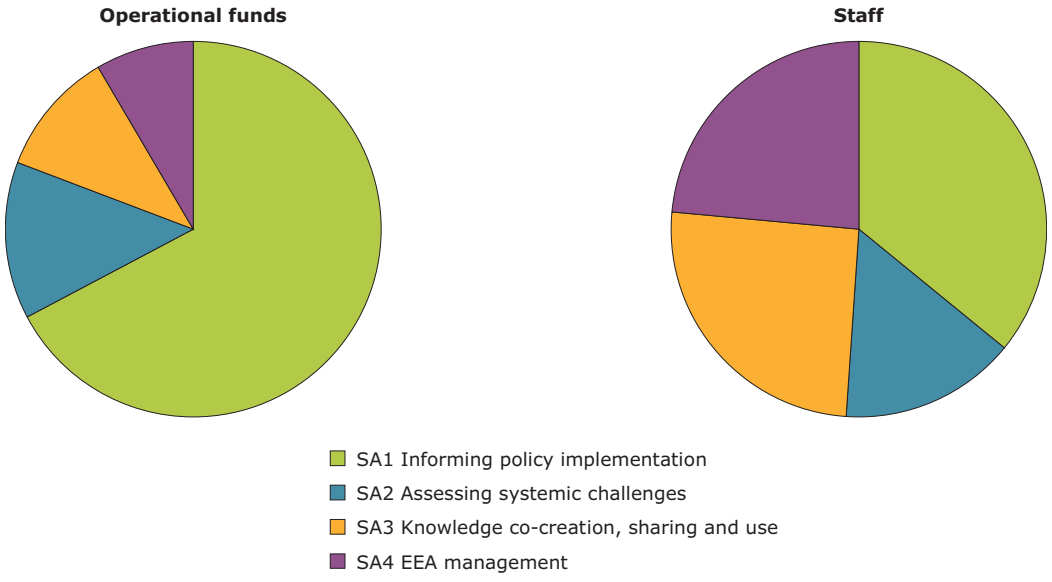
- preserve and nurture scientific excellence;
- learning as a strategic leadership enabler;
- enhance informal learning, collaboration, and knowledge sharing.

Staffing					
Year	**2014**	**2015**	**2016**	**2017**	**2018**
Total statutory staff	205	203	201	199	197

Expenditure

The following figures illustrate the expected relative distribution of operational funds and staff (as Full Time Equivalents — FTE) across the four strategic areas set out in the previous section. Actual allocations of resources are carried out in the annual planning and budget process.

Relative resource allocation across strategic areas



PART 2: Multiannual Work Programme

SA1 Informing policy implementation

Failing to implement environment legislation is estimated to cost the EU economy around EUR 50 billion every year in public health costs and direct costs to the environment (COM(2012) 95 Final). To address this failing, improving and targeting knowledge about implementation is paramount. This means providing knowledge about the expected impacts of environmental policies on the state of the environment, and on the drivers and pressures influencing it. Furthermore, it involves providing knowledge on all administrative and other measures intended to protect and improve it. Better information at national, regional, and local level would allow identification of the main problems and the most appropriate and efficient ways to address them.

The 7th EAP calls for simplifying, streamlining and modernising the collection, management and sharing of environmental and climate change data and information; a greater application of the principle of the Shared Environmental Information System (SEIS) of 'report once, use often' would help streamline information demands and usability. In this context, the Structured Implementation and Information Frameworks (SIIFs), proposed by the European Commission in its Communication on Implementation of EU environmental law (COM(2012) 95 Final), can go a long way to filling gaps in the knowledge base in the Member States.

At national and European level, the EEA and Eionet will ensure a continuous and targeted coverage and flow of data and information on the many correlated themes, and on their inter-linkages in relation to systemic challenges and opportunities for enhanced policy coherence (as reflected for example in the target setting for Biodiversity 2020, the EU Blueprint for Water, the new climate and energy package and the revision of the Thematic Strategy on Air Pollution). With strong support from the European Topic Centres (ETCs) across all areas, the Agency will thus contribute with other partners (ESTAT, JRC, RTD, research bodies, regional and international partners etc.) to filling gaps in the knowledge base in order to help optimise policy responses.

Given the nature of environmental challenges, the principal areas of activity of the Agency all require a continuous, long-term focus. The current policy priorities of: air pollution, climate change, water management, nature protection, land use and natural resources, waste management, noise, coastal and marine protection will be continued throughout the 2014–2018 period (Chemicals are covered under SA2). It is already evident that requests for EEA support in several of these core areas will increase in the coming years.

Such activities and developments also include the need to continue to focus on key economic sectors such as energy, transport, agriculture, and fisheries, which are among the foremost sources of pressures on the environment. EEA indicator and assessment activities, along the DPSIR analytical framework, are already firmly established in these areas and will be enhanced. Resources permitting, other important sectors such as tourism will be covered with the view to informing policy progress and accountability.

Work under SA1 will also provide support to developing cross-cutting policy agendas such as improved management of the nitrogen cycle. SA1.1, 1.2, 1.3, 1.5, 1.6, 1.7 and 1.8 all address aspects of the nitrogen cycle and thus contribute to improving the knowledge base.

The following table maps the specific areas of activity in SA1 to the goals and objectives set out in the priority objectives of the 7th EAP, reflecting as far as possible the specific references in the 7th EAP.

Specific areas of activity in SA1

7th EAP Priority objective (PO)	SA1.1 Air pollution, transport and noise	SA1.2 Industrial pollution	SA1.3 Climate change mitigation and energy	SA1.4 Climate change impacts, vulnerability and adaptation	SA1.5 Water management, resources and ecosystems	SA1.6 Marine and coastal environment and maritime activities	SA.1.7 Biodiversity, ecosystems, agriculture and forests	SA1.8 Urban, land use and soil	SA1.9 Waste and material resources
PO1 To protect, conserve and enhance the EU's natural capital	X	X			X	X	X	X	
PO2 To turn the EU into a resource-efficient, green and competitive low-carbon economy			X		X				X
PO3 To safeguard EU citizens from environment-related pressures and risks to health and well-being	X	X		X	X				
PO4 To maximise the benefits of EU environment legislation	X	X	X	X	X	X	X	X	X
PO5 To improve the knowledge and evidence base for environment policy	X	X	X	X	X	X	X	X	X
PO6 To secure investment for environment and climate policy and get the prices right									
PO7 To improve environmental integration and policy coherence	X		X				X		
PO8 To enhance the sustainability of EU cities								X	
PO9 To increase the EU's effectiveness in addressing regional and global environmental and climate challenges	X	X	X		X	X	X		X

Goal

Improve content, accessibility and use of European-level environmental information by providing policy-relevant feedback to long-established and emerging policy frameworks, objectives, and targets through reporting on progress in recognised environmental themes across the DPSIR assessment chain.

Key objectives

- tailor, harmonise and speed up data-flows (including near-real-time where appropriate), and their integration in information systems for the production of indicators and assessments in order to be relevant and up to date by, in particular, providing targeted technical and methodological assistance to reporting

obligations and information requirements under the legislative processes and related SIIFs;

- timely provision, analysis and dissemination of data sets, indicators and assessments across the policy cycle for the themes and sectors of most relevance for achieving environmental policy implementation and effectiveness analysis at different geographical scales;

- close important information gaps by further developing concepts, analytical methods, and indicators to better understand the inter-linkages between different themes and sectors in support of enhanced policy coherence;

- mainstream new data and information needs through incorporating the outcomes of EU-FP7 and Horizon 2020 research projects, as well as of similar ventures at national and international level;

- continuous active engagement with stakeholders as a policy-science interface across themes and sectors to ensure relevant findings are taken up and used, thereby contributing to the achievement of significant and measurable improvement in Europe's environment.

Key performance indicators

- measurable uptake of EEA findings in policy documents;

- measurable and acknowledged contribution to reporting processes under EU comitology and multi-lateral agreements;

- timely and reliable delivery of annual briefings and workshops, as well as assessments indicators, databases, and information services, based on a timetable agreed with EEA stakeholders.

SA1.1 Air pollution, transport and noise

Objective

To support and inform policy development and implementation in the areas of air pollution, transport and environment and noise by means of data, information/indicators and assessments.

Specifically:

- to collect, process, quality-assure, store, and disseminate historical — and where possible up-to-date (i.e. near-real-time) — data underpinning these policies;
- to support countries with the reporting of data to the European Commission, the UNECE Convention on Long-range Transboundary Air Pollution (CLRTAP), and the EEA;
- to adapt and further develop EEA information systems (e.g. Reportnet, databases, viewers) to accommodate anticipated changes in country reporting;
- to make use of Copernicus atmosphere services to support EEA data and information products on air quality, including near-real-time data;
- to support countries and the European Commission with relevant analyses and compilations of the reported information and with direct policy support;
- to track progress towards, and provide outlooks for, the achievement of targets as defined in relevant EU and international legislation, including the long-term objectives of minimising impacts from air pollution and the decarbonisation of the transport sector;
- to produce integrated and targeted assessments of air pollution, noise, and transport and environment, the impacts on human health, climate change and the environment and the effectiveness and co-benefits of policies and measures in these areas as well as in related environmental areas;
- to increase knowledge and understanding of the inter-linkages between air pollution and climate change, pursuing an integrated approach to promote efficiencies and improved implementation.

Policy context

The review of EU air pollution policy undertaken in 2012–2013 underlines the importance of ensuring coherence with international obligations by 2020, and significantly improving implementation. The 7th EAP sets the target that by 2020 air quality has significantly improved and that noise pollution has significantly decreased. This requires full implementation of both existing and updated EU policy on air quality and on noise, aligned with latest scientific knowledge. Support to EEA member countries, the European Commission, and the LTRAP Convention concerning the implementation of the revised National Emissions Ceiling (NEC) Directive and the amended Gothenburg Protocol will be a priority up to 2018. Addressing the 2025–2030 time horizon and beyond, the review of EU air pollution policy aims to reduce substantially the remaining health and environmental impacts of air pollution.

Achieving the goals set out in the 2011 European Commission Transport White paper 'Roadmap to a Single European Transport Area' will demand more sustainable mobility in the EU, which will contribute to the improvement of air quality and to the reduction of noise pollution. The White Paper also sets a goal of a 60 % reduction in greenhouse gas emissions from transport by 2050 (from 1990 levels).

Carbon dioxide emission targets for new passenger cars and light commercial vehicles are being monitored at EU level by the EEA. An extension to include heavy duty vehicles may be adopted during the period of this Multiannual Work Programme and would require support from the Agency. The Agency may also take on additional reporting work under the Fuel Quality Directive (existing fuel quality monitoring system and possible new reporting on greenhouse gas emissions from transport). The aviation and shipping sectors are also increasingly important in EEA greenhouse gas emissions work.

Performance indicators

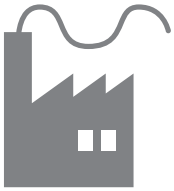
- data reported by EEA member countries collected, processed, quality-assured, stored, and disseminated according to agreed deadlines in a timely manner;

- EEA member countries assisted effectively in their reporting and capacity-building support provided as needed;
- EEA member countries and the European Commission supported in a timely manner with relevant analysis and compilations of reported information and with direct policy support;
- EEA information systems adapted and improved to accommodate changes in reporting and user needs;
- sound, timely, and policy-relevant indicators and assessments, including policy effectiveness assessments, of air pollution, transport and environment and noise, interactions between various environmental areas and policies, and impacts on health, on the environment, climate change and on the economy.

Output from SA1.1

Output	Time frame
Air quality data, statistics, and maps, including maps showing exceedences of thresholds, in support of Air Quality Directives 2008/50/EC and 2004/107/EC, and Implementing Decision 2011/850/EU	Annual
Noise data in support of Environmental Noise Directive 2002/49/EC	Annual
Near-real-time air quality data in support of Implementing Decision 2011/850/EU, and near-real-time noise data	Continuous
Analysis of summer ozone situation in support of Air Quality Directive 2008/50/EC	Annual
City air-quality indicators ranking cities according to air quality state	Annual
EEA Core Set Indicators and other indicators at European and country level on air pollution, air quality, noise and transport and the environment tracking progress towards agreed EU objectives	Annual
Report on status and key trends in air quality in Europe, impacts on health and the environment in support of Air Quality Directives 2008/50/EC, 2004/107/EC	Annual
Country capacity building on model use through the Forum for AIR quality MODelling in Europe, supporting the implementation of Air Quality Directives 2008/50/EC, 2004/107/EC (chaired jointly with the JRC)	Continuous
Air pollutant emissions data and reports on inventories in support of the National Emissions Ceilings Directive 2001/81/EC and the LRTAP Convention and its protocols.	Annual
Update of the EMEP/EEA Air Pollutant Emission Inventory Guidebook (and Eionet capacity-building) published in support of Directive 2001/81/EC and the LRTAP Convention.	2017–2018
Report assessing the integration of environmental considerations into transport policies in Europe (TERM) in support, inter alia, of EC Transport White Paper COM/2011/0044 and of Regulations 443/2009 and 510/2011	Annual
Data on CO_2 emissions from new cars and vans in support of Regulations 443/2009 and 510/2011, and possibly on CO_2 from heavy duty vehicles, as well as reports under the Fuel Quality Directive	Annual
Reports analysing trends, underpinning reasons, interactions between various environmental areas, impacts on health, on the environment and on the economy (including direct costs and costs of inaction), and the effectiveness of policies in the fields of air and noise pollution, and transport and environment	Tbd
Report on status and key trends in noise pollution in Europe, impacts on health and on the environment in support of Environmental Noise Directive 2002/49/EC.	2014, 2017
Eionet workshops and similar	Annual/regular

SA1.2 Industrial pollution



Objective

To support and inform policy development and implementation in the area of emissions from industrial sources by means of data, information/indicators, and assessments.

Specifically:

- to support countries and companies with existing and future requirements for reporting data on industrial sources to the European Commission and the EEA;
- to manage efficiently and effectively the annual data-flows related to the Fluorinated Greenhouse gases (F-Gases) and Ozone Depleting Substances (ODS) Regulations;
- to support the European Commission and countries by performing data QA/QC activities, preparing summary reports and supporting the respective policy processes. To support the annual EU submission on ODS to the Montreal Protocol;
- to deliver targeted indicators and cross-cutting assessments identifying the environmental, health, and economic impacts of pollutant releases from industrial facilities to air, water, soil, and in waste, including studies assessing the effectiveness of industrial emissions mitigation policies, costs of pollution from industrial facilities and identifying co-benefits of policy measures in these areas;
- to identify opportunities for consolidation and streamlining across these and related reporting processes (together with the European Commission, member countries and other partners).

Policy context

The implementation of existing and forthcoming environment policy frameworks addressing industry will be a key challenge for the EU and EEA member countries in the years to come, as well as for the respective economic operators in the sectors concerned. These policies include the Industrial Emissions Directive (IED), the Large Combustion Plants (LCP) Directive, the ODS and F-Gas regulations, the EU Emissions Trading System (ETS), the European Pollutant Release and Transfer Register (E-PRTR) and the UNECE PRTR Protocol, the EU CO_2 and Cars/Vans Regulation, and the Waste Framework Directive.

The IED required transposition into national legislation by Member States by early 2013. It will replace the Industrial Pollution Prevention and Control (IPPC) Directive and five other sectoral directives (including the Waste Incineration Directive). The IED defines the framework for permitting, monitoring and reporting of large industrial facilities across all environmental issues. The Large Combustion Plant Directive will only be repealed by the IED from the beginning of 2016.

In its 2013 report addressing the E-PRTR, the European Commission identified a number of potential actions to further strengthen the implementation of the E-PRTR, which will also require close support from the EEA in the coming years. The F-Gas Regulation and the Regulation on CO_2 emissions from new passenger cars and vans are undergoing revision and are likely to generate new data streams. On F-gases, EU Member States also have to fulfil reporting obligations under the UNFCCC, where the new Monitoring Mechanism Regulation (MMR) establishes a clear link to the data collected under the F-Gas Regulation.

Supporting the European Institutions, EU and EEA member countries and industry throughout these various implementation processes will be a core activity over the coming years. This area of work also offers scope for consolidation and streamlining of reporting in support of the enhanced focus on implementation.

Performance indicators

- data reported by EEA member countries (and/or economic operators) collected, processed, quality-assured, stored, and disseminated according to agreed deadlines in a timely manner;
- EEA member countries and industry assisted effectively in their data reporting towards the European Commission, international bodies, and the EEA; reporting consolidated and streamlined where possible; support for capacity-building provided as needed;

- EEA information systems adapted and improved to accommodate changes in reporting and user needs;
- EEA member countries and the European Commission supported in a timely manner with relevant analysis and compilations of reported information and with direct policy support;
- sound, timely, and policy-relevant indicators and assessments, including policy effectiveness assessments, of industrial pollution and impacts on the environment, health and economy and of co-benefits of policy measures undertaken in these areas.

Output from SA1.2

Output	Time frame
E-PRTR data in support of EU participation in the UNECE PRTR Protocol and the OECD PRTR Task Force	Annual
Facility data reported under the LCP Directive	2015, 2018
Reports on fluorinated greenhouse gas production and sales, and on EU exports and imports in support of the F-Gas regulation	Annual
Reports on ozone-depleting substances and preparation of national statistical factsheets on ODS production and consumption in support of the ODS regulation. Preparation of the EU submission under the Montreal protocol	Annual
EEA Core Set of Indicators and other relevant indicators on industrial releases to air, water, soil, and waste transfers; production, sales and emissions of fluorinated gases; and production and consumption of ODS	Annual
Assessments of the effectiveness of industrial policies in reducing releases of pollutants and of the subsequent impacts on the environment, health and economy, including assessment of co-benefits of policy measures undertaken in these areas	Regular
Technical support to the European Commission on developing reporting protocols and on streamlining the collection and reporting of industrial emissions data under IED, ETS, E-PRTR, etc. with national GHG and air pollutant emission inventory reporting	Continuous
Eionet workshops and similar	Annual/regular

SA1.3 Climate change mitigation and energy

Objective

To support and inform policy developments and implementation in the areas of climate change mitigation and energy by means of data, information/indicators and assessments.

Specifically:

- to support strengthened, streamlined, and quality-assured monitoring, reporting, and verification activities and associated outputs;
- to deliver timely, policy-relevant assessments of drivers and progress towards 2020 targets, policy effectiveness, cost of pollution, technology developments and analyses of synergies and trade-offs between policy areas;
- to support countries with the reporting of data to the European Commission and the EEA (as well as to the UNFCCC under the second commitment period of the Kyoto Protocol);
- to increase knowledge and understanding of inter-linkages between air pollution and climate change, pursuing an integrated approach to promote efficiencies and improved implementation.

Policy context

Since the Copenhagen Accord and the Cancun Agreements, the objective of keeping the global average temperature rise to less than two degrees (compared to pre-industrial temperatures) is internationally recognised. The UNFCCC guides global policy developments on mitigation and adaptation. A new global framework, to be implemented from 2020, is foreseen to be agreed in 2015. For the second commitment period under the Kyoto Protocol (2013–2020), the EU has taken on an emissions reduction commitment in line with its domestic target of cutting emissions by 20 % of 1990 levels by 2020. The reduction commitment will be fulfilled jointly by the EU, its 28 Member States, and Iceland.

The EU climate and energy policy landscape is changing in response to Europe's longer-term decarbonisation commitments and due to energy security and competitiveness considerations. The 2009 EU Climate and Energy package and the 2012 Energy Efficiency Directive set the frame for the EU 20-20-20 policy targets for 2020 regarding greenhouse gas emissions, renewable energy, and energy efficiency. These targets are also headline indicators of the Europe 2020 Strategy, where progress is assessed during the European Semester.

The EU Climate and Energy package covers a range of inter-linked pieces of legislation to help deliver the EU 2020 targets, including: the EU Emission Trading System (EU ETS), the Effort Sharing Decisions, the Renewable Energy Directive, the Carbon Capture and Storage Directive, the CO_2 and cars/vans Regulations, the Fuel Quality Directive, and the revised EU GHG Monitoring Mechanism Regulation and associated implementing legislation.

In 2013, discussions on the development of a 2030 framework for EU climate mitigation and energy policies began. The outcome of these discussions, in combination with the foreseen 2015 policy framework under the UNFCCC, will set the scene for developments in policy and implementation in the years to come.

The EU multiannual financial framework (MFF) increases the share of resources for climate change mitigation and adaptation to at least 20 % of the overall EU budget.

Performance indicators

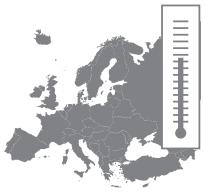
- data reported by EEA member countries collected, processed, quality-assured, stored and disseminated according to agreed deadlines in a timely manner;
- EEA member countries assisted effectively in their reporting, and capacity-building support provided as needed;
- EEA member countries and the European Commission supported in a timely manner with relevant analysis, compilations of reported information, and direct policy support;
- EEA information systems adapted and improved to accommodate changes in reporting and user needs;

- sound, timely, and policy-relevant indicators and assessments, including policy effectiveness assessments, on past and future effects and/or combined sets of policies and measures in the fields of climate change mitigation and energy.

Output from SA1.3

Output	Time frame
Assistance to the European Commission and EU Member States in form of data, reports, and assessments under the EU GHG Monitoring Mechanism Regulation	Annual
Assessment of progress by EU and EEA member countries towards meeting GHG emissions, energy efficiency and renewable energy targets, including progress towards EU 2020 headlines targets and support to the European Semester	Annual
Ex-post policy-effectiveness evaluation in the context of the Emission Trading System and the Effort Sharing Decision	Tbd
European Union greenhouse gas inventory (for year-2) to the UNFCCC and the Kyoto Protocol	Annual
Support to the Commission with the preparation of inventory-associated reports related to the transition from the Kyoto Protocol's 1st commitment period to the 2nd commitment period	2014–2016
Approximated complete EU GHG Inventory for year-1 ('the proxy')	Annual
Quality-assured GHG inventory information and co-ordination of annual and comprehensive inventory reviews for the compliance cycle under the Effort Sharing Decision and Article 19 of the Monitoring Mechanism Regulation. Contributing to UNFCCC reviews of the EU	Annual
EU greenhouse gas and energy datasets, including Policies and Measures (PAMS) and projections	Annual
Support to the Commission with the preparation of the report on the application of the EU ETS Directive (as required under Article 21)	Annual
Assessments of the environmental and health benefits of energy efficiency, including good practice on implementation. Assessments of potential future technological developments in the energy sector and their environmental and climate effects	Regular
Assessments of the potential impacts, benefits and environmental pressures of different shares of renewable energies in different sectors, including interactions and trade-offs between sectors and associated external costs	Regular
Assessments of inter-linkages, synergies, and trade-offs between climate and air pollution mitigation policies — including short lived climate forcers, sectoral dimensions, externalities, and costs	Regular
Further methodological reports on accounting methods for different greenhouse gases and air pollutants (including territorial, consumption, and production methods)	Tbd
EEA Core Set Indicators and other relevant indicators on climate change mitigation and energy, including links to other relevant sectors	Annual
Participate in and contribute to EU activities within UN meetings on climate change (UNFCCC, IPCC, IMO, ICAO)	Continuous
Eionet workshops and similar	Annual/regular

SA1.4 Climate change impacts, vulnerability and adaptation



Objective

To support and inform policy development and implementation in the area of climate change impacts, vulnerability, and adaptation by means of data, information/indicators, and assessments.

Specifically:

- to provide up-to-date information and indicators on impacts, vulnerability, and adaptation to climate change (including disaster risk reduction), and to provide access to Copernicus climate change information services in the European Climate Adaptation Platform, Climate-ADAPT;
- to support the implementation of the EU Climate Change Adaptation Strategy, including maintaining Climate-ADAPT and steering its development together with the European Commission;
- to support countries with the reporting of data to the European Commission and the EEA;
- to help policymakers plan and implement transnational, national, and sub-national (in particular cities) adaptation policies, and also to help monitor their implementation;
- to support the development and monitoring of adaptation policies in the EU by addressing, with appropriate partners where needed, topics such as costs and benefits of adaptation; green infrastructure and spatial planning, transport and energy systems; and indicators for monitoring and evaluating adaptation actions implemented by the private sector.

Policy context

International negotiations under the UNFCCC aim for a new global policy framework by 2015 building on the Fifth Assessment Report of the Intergovernmental Panel on Climate Change published in 2013/2014. The UN International Strategy for Disaster Risk Reduction Hyogo framework for action is also relevant since countries increasingly aim for synergies between strategies and policies addressing disaster risk prevention and climate change adaptation.

The EU multiannual financial framework (MFF) increases the share of resources for climate-related action to 20 % of the overall EU budget. The Commission published the EU Adaptation Strategy in April 2013. By 2014, the Commission intends to have developed an adaptation preparedness scoreboard, identifying key indicators for measuring Member States' level of readiness. The 2013 revision of the Monitoring Mechanism Regulation includes reporting on adaptation by Member States. The EU Adaptation Strategy explicitly mentions the further development of the European Climate Adaptation Platform Climate-ADAPT as the 'one-stop shop' for adaptation, and highlights the need for a strategy to address knowledge gaps.

The Commission also has proposed changes to EU civil protection policies, addressing disaster risk reduction. In 2017, the Commission will assess whether adaptation action being taken is sufficient, and will report on the state of implementation of the strategy and propose its review if deemed appropriate.

EEA member countries are at different stages in developing and implementing their adaptation strategies. Most EEA member countries have voluntarily submitted information to Climate-ADAPT on their national strategies and plans, assessments, climate services, priority sectoral actions, and local actions.

Various EU-funded research projects have contributed to preparations for a Copernicus climate change service, due to be presented by the Commission in 2014. Many national climate services are also emerging in the context of the Global Framework for Climate Services. Furthermore, many relevant EU-funded research projects and Interreg and Life+ projects will be finalised by 2013/2014 and new projects will be launched under funding sources such as Horizon 2020. The EEA will make use of the outcomes of these services and projects in its work on climate change adaptation.

Performance indicators

- EEA member countries supported in an effective and timely manner in their development and implementation of national adaptation strategies;
- EEA member countries assisted effectively in their reporting to the EU, and capacity-building support provided as needed;
- EEA member countries and the European Commission supported in a timely manner with relevant analysis, compilations of reported information, and direct policy support;
- EEA information systems (Climate-ADAPT) adapted and improved to accommodate changes in reporting and user needs, increased user uptake;
- sound, timely, and policy-relevant indicators and assessments, including assessments of policy preparedness/effectiveness and/or combined sets of polices and measures, in the fields of climate change impacts, vulnerability, and adaptation.

Output from SA1.4

Output	Time frame
Assessment of climate change impacts and vulnerability	2016
Updated and improved indicators of climate change impacts and vulnerability	Annual
Analysis and assessment of national and sub-national adaptation policies (first in 2014, and regularly thereafter) contributing to the development by the European Commission of the adaptation preparedness scoreboard.	2014 (tbd afterwards)
Further assessment report on adaptation in Europe by way of follow-up to 2013, developed in close connection with work on analysis of national and sub-national adaptation polices	2016
Updated and improved European Climate Change Adaptation Platform Climate-ADAPT	Continuous
Assessment of climate change impacts and adaptation in cities (scoping in 2014)	Tbd
Assessment of impacts of natural hazards (economic, human health, ecosystems) (scoping in 2014)	Tbd
Assessment of climate change adaptation and transport systems, including analysis of member country actions	2014
Support to EU activities within UN meetings on climate change and disaster risk reduction (UNFCCC, IPCC, UN Office for Disaster Risk Reduction (ISDR) Europe, World Health Organisation (WHO) Europe, and the Environmental Protection Agencies (EPA) Network)	Continuous
Eionet workshops and similar	Annual/regular

SA1.5 Water management, resources and ecosystems

Objective

To support and inform policy development and implementation in the area of water management, resources and ecosystems by means of data, information/indicators and assessments.

Specifically:

- to collect, process, quality-assure, and disseminate relevant data underpinning freshwater related policies;
- to support countries with the reporting of data to the European Commission and the EEA;
- to further develop the Water Information System for Europe (WISE) so that it: better supports the implementation of water-related policies, links to marine policies, and accommodates changes in country reporting;
- to track progress towards — and provide outlooks for — the achievement of targets as defined in relevant EU legislation, including the objective of achieving good ecological status in Europe's water bodies;
- to assess the state of Europe's water resources and ecosystems and the effectiveness and co-benefits of policies and measures in these areas as well as in related environmental areas.

Policy context

The EU Blueprint to Safeguard Europe's Water Resources, adopted in 2012, outlines actions that concentrate on better implementation of current water legislation, integration of water policy objectives into other policies, and filling gaps in particular as regards water quantity and efficiency. Integration by — and across — the agriculture, energy, industry, transport, and utilities sectors, as well regional development policy alongside with water economics, will play a critical role in realising sustainable water management.

Key policy objectives up to 2018 are the achievement of the objectives of 'good status' under the Water Framework Directive, including Member State delivery of the second River Basin Management Plans, the implementation of basic measures under the other water directives (Urban Waste Water Treatment, Drinking and Bathing Water Directives and the Nitrates Directive), as well as the Flood Management Plans due by 2015.

Strong ties exist between the Water Framework Directive (WFD), the Habitats and Birds Directives, and the Marine Strategy Framework Directive (MSFD) with regard to the management of land-based activities that affect transitional, coastal, and inland waters and the protection of freshwater species and habitats. Having failed to halt biodiversity loss by 2010, the EU has recently adopted the 2020 Biodiversity Strategy, which includes among its targets the need to improve the knowledge on the state of freshwater ecosystems, the services provided by them, and their monetary values. This is to be achieved by 2014 for their mapping and assessment, and by 2020 for their valuation in terms of ecosystem capital accounting.

Integration of the objectives of the WFD is also vital in the development of the Common Agricultural Policy, Rural Development Policy, Adaptation to Climate Change Strategy, and the respective energy and transport policies.

Performance indicators

- data reported by EU Member States and EEA member countries collected, processed, quality-assured, stored, and disseminated according to the agreed deadlines in a timely and reliable manner; additional data reporting flows (UWWTD, Drinking Water Directive) established in line with the SIIF developments and additional data flows (NiDi) evaluated and established if possible;
- EEA member countries assisted effectively in their reporting, and capacity-building support provided as needed;
- EEA member countries and the European Commission supported in a timely manner with relevant analysis and compilations of reported information and with direct policy support;
- EEA information systems adapted and improved to accommodate changes in reporting and user needs: full operation of WISE 2.0 achieved, linking with BISE and Climate-ADAPT, on the basis of the WISE Implementation plan 2013–2015, with all relevant upgrades and in

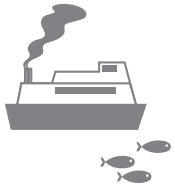
full agreement with EU partners in WISE (ENV, ESTAT, JRC);

- sound, timely, and policy-relevant methodologies, indicators, and assessments, including policy effectiveness analysis, in particular of WFD 2nd River Basement Management Plans and other water-related policies, applying environmental accounting methodologies and ecosystem (services) approaches.

Output from SA1.5

Output	Time frame
Upgrade of WISE to WISE 2.0 to establish an improved, consistent, common data structure for information pertaining to all water directives, enabling cross-cutting assessments of climate change, land use, and biodiversity. WISE 2.0 includes in particular the development of a more decentralised system, including Reportnet, in line with the SIIF concept and SEIS principles. This will first be developed in the Urban Waste Water Treatment Directive (UWWTD) area, and later in other water directives and the WFD as feasible	2015 then regular
Maintain and develop all relevant water data and indicators to provide the knowledge base for the better implementation of water policies and EEA SOE information (in cooperation with Commission services and countries). This will include new data-handling and reporting streams under the UWWT and Drinking Water directives at the earliest date possible. At a later stage, and after a feasibility study, reporting under the Nitrates Directive might also be included into EEA reporting mechanisms	Regular
Assessment of the results of the 2nd River Basin Management Plans and integrated reports on the status and pressures affecting Europe's waters (in cooperation with Commission services)	2018
Cross-assessments of the implementation of the Urban Waste Water Treatment Directive, the Nitrates Directive and the Bathing Water Directive. This will start with combining aspects of the UWWTD and Nitrates Directives in the annual Bathing Water report, gradually working towards an integrated report, as the data and information structure under the SIIFs develop	2015 and gradually more integrated in the following years
To support the Blueprint, the Biodiversity Strategy 2020, the Climate Adaptation Strategy, and the EU Resource Efficiency Roadmap. Work towards integrated assessments, including socio-economic aspects and environmental accounts, building on water-asset accounts and water balances. WFD targets and objectives are the key elements for ecosystem assessments and related services (including economics, in particular 'payments for ecosystem services')	Regular
Development of indicators of water-related resource efficiency to support the EU Resource Efficiency Roadmap and the European semester process	Annual
Eionet workshops and similar	Annual/regular

SA1.6 Marine and coastal environment and maritime activities



Objective

To support and inform policy development and implementation in the area of marine and coastal environment and maritime activities by means of data, information/indicators and assessments.

Specifically:

- to collect, process, quality-assure, and disseminate data and information underpinning marine-related policies reflecting an ecosystem-based approach to management of the marine environment;
- to support countries with the reporting of data and information to the European Commission and the EEA in fulfilment of their reporting obligations;
- to develop and implement a marine component of the Water Information System for Europe (WISE), which is based on the principles of SEIS. Its objective is to support the implementation of marine-related policies and country reporting and to disseminate information to stakeholders and the public;
- to make use of Copernicus marine services to support the EEA data and information products on air quality including near-real-time data;
- to track progress towards — and provide outlooks for — the achievement of targets as defined in relevant EU legislation, including the objective of achieving Good Environmental Status in European marine waters by developing indicators relevant to the eleven descriptors of the Marine Strategy Framework Directive, as well as on socio-economic perspectives of human activities at sea that use or can impact the marine environment;
- to assess the state of the marine environment ecosystems and environment and its ecosystems, the nature and scale of the anthropogenic pressures they are subject to, the socio-economic consequences of continued environmental degradation, and societal options for responding to these challenges.

Policy context

The aim of the EU Marine Strategy Framework Directive (MSFD) is to protect more effectively the marine environment across Europe's seas. The Marine Directive aims to achieve Good Environmental Status (GES) of EU marine waters by 2020, and to protect the resource base upon which marine-related economic and social activities depend. The directive enshrines in a legislative framework the ecosystem approach to the management of human activities having an impact on the marine and coastal environment — hence strong ties with EU Common Fisheries and Integrated Maritime Policies — integrating the concepts of environmental protection and sustainable use. Strong ties also exist to the Water Framework Directive, the Habitats and Birds Directives, the proposed directive establishing a framework for maritime spatial planning and integrated coastal management, and other relevant EU legislation with regards to the management of land-based activities that affect transitional, coastal and marine waters, and the protection of coastal and marine species and habitats. In order to further promote sustainable use of coastal zones and the marine environment, the Commission recently adopted a draft proposal for a directive establishing a framework for maritime spatial planning and integrated coastal management. The EU has also recently adopted the 2020 Biodiversity Strategy, in which the need to map and assess the state of marine ecosystems and the services and values provided by them is one of the targets (cf. Target 2, Action 5).

Performance indicators

- data reported by EEA member countries collected, processed, quality-assured, and disseminated according to the agreed deadlines in a timely and reliable manner;
- EEA member countries assisted effectively in their reporting, and capacity-building support provided as needed;
- EEA member countries and the European Commission supported in a timely manner with relevant analysis and compilations of reported information and with direct policy support;

- EEA information systems adapted and improved to accommodate changes in reporting and user needs: the marine component of WISE established;
- sound, timely and policy-relevant indicators and assessments, including policy effectiveness analysis, building on agreed frameworks related to integrated marine/maritime assessments including socio-economic perspectives and ecosystem (services) approach.

Output from SA1.6

Output	Time frame
Develop and deliver the marine component of WISE in partnership with Eionet, EU Member States, Regional Sea Conventions, and ICES. Specific activities include: - supporting MSFD reporting processes, through development and maintenance of reporting mechanisms for Member States; - supporting enhanced coherence and consistency of MSFD assessments and monitoring programmes. This will be achieved through development and implementation of data requirements, standards, and data flows, in accordance with MSFD Art. 19(3); - establishing links to the European Commission Marine Knowledge initiative (EMODnet) and the Copernicus marine service, as well as to relevant research initiatives	2014 then regular
Support to the work under the Common Implementation Strategy of the Marine Strategy Framework Directive, the 2020 Biodiversity Strategy, the proposed directive on establishing a framework for maritime spatial planning and integrated coastal management, and related policies	Regular
Indicators for transitional, coastal, marine environment, maritime activities including fisheries, and climate change impacts on the marine environment, in order to support the implementation of the MSFD, in partnership with Eionet, Regional Sea Conventions and ICES	Annual/regular
Thematic marine assessments: - Marine Baseline assessment to support the implementation of the MSFD and preparation of an update post-2018; - Marine Protected Areas assessment; - other thematic assessments	2014; 2017
Marine components to support European and Member State ecosystem assessments in support of activities under the 2020 Biodiversity Strategy	2014, 2015 (and 2020)
Harmonised data on marine Natura 2000 sites and other protected areas, together with an assessment of their ecological coherence	Regular and assessment in 2018
Shared European contributions to UN Regular process for marine assessments and UNESCO-International Oceanographic Data and Information Exchange (IODE) project on interoperable coastal atlases	2014–2018
Marine Litter Watch based on citizen science and supporting MSFD requirements	Continuous
Eionet workshops and similar	Annual/regular

SA1.7 Biodiversity, ecosystems, agriculture and forests

Objective

To support and inform policy development and implementation in the area of biodiversity and ecosystems (natural capital), including agriculture and forests ecosystems, by means of data, information/indicators and assessments.

Specifically:

- to collect, process, quality-assure and disseminate data and information on genes, species, habitats and ecosystems to support the Birds and Habitats Directives, the EU Biodiversity Strategy and related multilateral, regional and global policy agreements;
- to assist the European Commission and the Member States with the reporting of data towards the implementation of the nature directives;
- to further develop EEA and shared information systems, in particular the Biodiversity Information System for Europe (BISE), in support to the above;
- to use biodiversity and ecosystems data, information, and knowledge to inform and support the assessment of the implementation of related (agriculture, forests) and cross-cutting policy objectives (ecosystem-based management, water, marine, urban, regional) through topic assessments to track progress towards the achievement of biodiversity targets as defined in relevant EU and international policies through relevant indicators and assessments;
- to assess the status and trends of terrestrial and marine biodiversity, as well as pressures and possible impacts of measures related to biodiversity and ecosystems in relevant legislative instruments and policies (CAP and rural development, Forestry Strategy, and complementary to work in the areas on water and marine);
- to make use of Copernicus land-monitoring services to support the bio-physical mapping and assessments of ecosystems and their services.

Policy context

EU Biodiversity policy up to 2020 focuses on the Biodiversity Strategy (Commission Communication*: Our life insurance, our natural capital: an EU biodiversity strategy to 2020* (COM(2011) 244)) that follows on from the 2006 Biodiversity Action Plan. This new strategy to halt the loss of biodiversity and ecosystem services in the EU by 2020 is in line with global commitments made in Nagoya in October 2010, in the context of the Convention on Biological Diversity and its set of twenty global targets on which progress should be evaluated at EEA level.

The EU Biodiversity Strategy to 2020 contains six main (interconnected) targets, and 20 actions. The six targets cover:

- Full implementation of EU nature legislation to protect biodiversity
- Better protection for ecosystems, and more use of green infrastructure
- More sustainable agriculture and forestry
- Better management of fish stocks
- Tighter controls on invasive alien species
- A bigger EU contribution to averting global biodiversity loss.

The strategy sets the 2020 headline target of halting the loss of biodiversity and the degradation of ecosystem services in the EU by 2020, and the vision of protecting and restoring biodiversity and the ecosystem services it provides by 2050.

Performance indicators

- data reported by EEA member countries and other sources collected, processed, quality-assured, stored and disseminated according to the agreed deadlines in a timely and reliable manner;
- EEA member countries and Commission assisted effectively in their nature directives reporting activities, and capacity-building support provided as needed;

- EEA member countries and the European Commission supported in a timely manner with relevant analysis and compilations of reported information within a direct policy context;

- EEA information systems developed according to the policy needs as emerging from the nature directives, the EU Biodiversity and Global Biodiversity strategies. To this end, full development and implementation of BISE (linking to other systems — e.g. WISE and Climate-ADAPT — as appropriate);

- develop indicators and assessments based on sound, timely, and policy-relevant methodologies, including needs from policy effectiveness analysis, in particular concerning the mid-term review of the Biodiversity Strategy to 2020 and sub-global/regional ecosystems assessments, as well in support to policy-science interface platforms at European and global levels (IPBES).

- establish relevant partnerships with major operators in biodiversity monitoring, data gathering, and agriculture and forests ecosystems data and observation networks, in order to reinforce information provision as well as assessment capacities.

Output from SA1.7

Output	Time frame
Upgrade and maintain BISE to support the implementation of the EU and global Biodiversity Strategies and broad expert public communication	Launch May 2014 then regular
Improved expert information systems on species and habitats and links to taxonomic services (EUNIS) with data producers-organisations and projects (e.g. Catalogue of Life, GBIF, LIFE Watch)	2014
Prepare Natura 2000 datasets, sufficiency assessments and Union lists according to EU legislation, support bio-geographic seminars towards good conservation status while supporting other pan-European designation processes	Annual
Analysis of the state, trends and conservation status of individual species and habitats, as required under the reporting of the Habitats and Birds Directives. Advice on streamlining the Water and Marine Directives, based on the experience with articles 12 and 17	2014–2015 (every 6 years)
Contribute to EEA indicator frameworks, including the core set, streamlined European biodiversity indicators (SEBI 2020), agri-environment indicators (AEI), to monitor progress towards the EU and global Biodiversity Strategy targets	2014 and regular
Contribute to bio-physical mapping and assessments of ecosystems and their services, and related processes under the Biodiversity Strategy to 2020, and related actions based on produced data/information (restoration, green infrastructure, no net loss, natural capital accounting)	2014–2020
Assess the impacts on biodiversity of agriculture and forests based inter alia on High Nature Value (HNV) concepts applied to farmland and forest as contributions to target 3 of the EU Biodiversity Strategy	2015 (and 2020)
Adapt the EU2010 Biodiversity Baseline to inform the mid-term review of the Biodiversity Strategy to 2020 (baseline associated to the outputs above)	2015
Reinforced cooperation with global and regional key partners including the Council of Europe (e.g. on data reporting by Contracting Parties to the Bern Convention on Emerald sites) and IUCN (e.g. on EU Red lists of species and invasive species)	Annual
Targeted contributions to and participations in relevant European and global processes contributing to Biodiversity governance, i.e. UN Convention on Biological Diversity, Sub-global ecosystems assessments and International platform for biodiversity and ecosystems (IPBES)	Regular
Eionet workshops and similar	Annual/regular

SA1.8 Urban, land use and soil

Objective

To support and inform policy development and implementation in the area of urban, land use, and soil by means of data, information/indicators, and assessments.

Specifically:

- to inform on the status of land and trends in the territorial (space as a resource) and socio-economic (the multiple functional uses of land and soil) dimensions from environmental and quality of life perspectives;
- to produce geo-spatial datasets, methodologies, and assessments, and inform implementation of cross-cutting policy objectives, such as urban integrated monitoring and assessment, coherent and sustainable approaches to land use, land-related resource efficiency including land take monitoring, green infrastructure, and ecosystem accounting;
- to assess environmental problems and issues from a spatial and territorial perspective such as: loss of habitats, fragmentation, degradation of ecosystems, urban sprawl, land use conflicts, territorial imbalances and changes in the urban-rural balance, soil imperviousness, risks to economic infrastructure, green infrastructure potential, etc.;
- to deliver further integrated analysis of the main drivers of land use change and soil degradation, and their effects of on e.g. carbon sequestration, multiple ecosystems services, efficient use of resources;
- to make use of Copernicus land monitoring services and Urban Atlas data to secure 'land cover' as a basic spatial data layer to inform trends on Europe's natural resources (change monitoring);
- to maintain and develop the European integrated data platform for spatial and thematic assessments in operative partnership with key actors (EC services, Copernicus, ESPON, etc.);
- to assist countries in their implementation of, in particular, the EU no-net loss of land objective (EU Resource Efficiency Roadmap) and mapping of ecosystems and their services (Biodiversity Strategy to 2020);
- to inform on related interactions (resource dependencies, impacts) with economic sectors such as agriculture, forest management, tourism and with regional planning policies (infrastructure management & development).

Policy context

There is a growing policy focus on land- and soil-related societal and environmental challenges, with considerations towards setting targets to deal with some land and soil pressures, as well as a vision of where the EU should stand in terms of land and soil management by 2020 and beyond. Already, the EU Roadmap to a Resource Efficient Europe sets up the following milestone on land and soil: 'By 2020, EU policies take into account their direct and indirect impact on land use in the EU and globally, and the rate of land take is on track with an aim to achieve no net land take by 2050; soil erosion is reduced and the soil organic matter increased, with remedial work on contaminated sites well underway'. This is in line with EU contributions to the Rio+20 target 'land degradation neutral world'.

Recently, the European Green Infrastructure and Climate Change Adaption Strategies, in their respective scope, place spatial structure of natural and semi-natural areas (but also other environmental features) at the core of multiple services to societies and economies. Urban areas, regions, and cities belong to such structures; the benefits of stronger urban-rural cooperation, through efficient multi-scale land use and planning, brings better management of natural resources (e.g. water supply, flood control) and provision of services (e.g. public transport, health). Correlatively, the EU Biodiversity Strategy to 2020, specifically the action to map and assess ecosystems and their services (see SA1.7), calls on making use of analysis and synthesis of land, soil and ecological information. In addition, the 7th EAP formulates a clear demand for urban, land use and soil information analysis in the spatial context in view of the sustainable cities and natural capital priorities.

All these elements together link with the implementation of the EU territorial cohesion policy, and contribute to improving the monitoring of territorial trends, as requested by the EU Territorial and Urban Agenda to 2020.

Performance indicators

- EEA member countries and the European Commission supported in a timely manner with relevant analysis and compilations of information, and with direct policy support;
- EEA information systems adapted and improved to accommodate changes in reporting and user needs: integrated data platform for spatial and territorial thematic assessments operational and maintained;
- sound, timely and policy-relevant indicators and assessments, including policy effectiveness analysis, of urban areas and sustainable cities, land-use dependent economic sectors, and land- and soil-related resource efficiency.

Output from SA1.8

Output	Time frame
European integrated data platform for spatial and thematic assessments	2014–2018
Assessments of resource efficiency in relation to land take, land recycling, and virtual land use in Europe and third countries, supplemented by direct assessment of imperviousness (soil sealing) change	2015–2016
Integrated land assessments based on land multi-functionality concepts to support planned land use and soil policy targets; maintain and develop related map-based indicators. This will contribute to ecosystems mapping and assessments	2014–2015
Evaluation of the direct and indirect impact of EU policies on land and soil use in the EU and globally	2015–2018
Assessments of green infrastructure (GI) and other alternatives to 'grey' infrastructure focusing on the multiple functions, benefits, and services that GI can provide (2017 EU progress report on Green Infrastructure Strategy)	2014–2017
Indicators and assessments of urban areas and sustainable cities, integrating environmental and socio-economic information, and addressing the resource efficiency targets	2014–2015
Datasets and indicators to track sustainability trends, and the environmental and territorial impacts of land use-dependent economic sectors (agriculture, forest management, tourism)	2014–2018
Eionet workshops and similar	Annual/regular

SA1.9 Waste and material resources

Objective

To support and inform policy development and implementation in the area of waste and material resources by means of data, modelling, information/indicators and assessments, in close cooperation with Eurostat.

Specifically:

- to monitor and assess progress towards implementation of EU waste policies, covering the whole waste hierarchy, through hosting and using the European reference model for waste;
- to support the Commission and the countries in their efforts to implement the waste acquis, through indicators and assessments of waste management and prevention;
- to provide analyses of material resource flows, including primary and secondary (waste) resources within Europe and to and from Europe;
- to provide information and knowledge on policies on waste and material resource management in European countries, in light of stated long-term goals of shifting from waste management to materials management.

Policy context

Existing waste-related EU directives contain many waste policy targets and objectives to be met by EU member states in the period 2014–2020. Progress towards them varies significantly throughout the EU, and the European Commission has therefore chosen waste as a focus area for better implementation in Member States, and has asked the EEA to support this objective through a pilot project focused on municipal solid waste for the period 2012–2014.

The EEA supports waste policy implementation further, for example through helping the Member States to create national waste prevention programmes by December 2013. The objective of these programmes is to present a coordinated approach to waste prevention, delineating targets, indicators, benchmarks, and policies, and aiming to decouple the impacts of waste generation from economic growth.

The EU Roadmap to a Resource Efficient Europe proposes a new pathway to action on resource efficiency, with a process involving all key stakeholders, to discuss and agree on indicators and targets by the end of 2013 that can then serve as the basis for continued implementation and improvement from 2014 to 2020. The roadmap defines various waste milestones to be achieved by 2020, including full implementation of waste policies, absolute reduction of waste generation, using waste as a resource, and phasing out landfill. It specifies that the European Commission will review existing waste targets in 2014. The 7th EAP confirms these milestones and calls for a move towards a green and circular economy, in line with the 2050 vision for a resource-efficient Europe and applying concepts such as life-cycle thinking, cradle-to-cradle, and industrial symbiosis (see illustration on green economy, circular economy and resource efficiency). At the global level, waste is expected to be further prioritised as waste output and global competition for material resources continue to increase.

In this context, efficient use of energy and materials and waste prevention are seen as crucial to maximise returns from scarce resources and to support the security of resource supplies. Accordingly, in some European countries 'waste management strategies' have become embedded in — or have evolved into — broader resource strategies that address the upstream and downstream dimensions of resource management.

Performance indicators

- information on national waste and material resource policies, and accounts and databases on material resource flows, use and efficiency, updated in a timely and reliable manner;
- EEA member countries assisted effectively in their reporting on waste management, waste prevention and material resources, and capacity-building support provided as needed;
- EEA member countries and the European Commission supported in a timely manner with relevant analysis and compilations of information and with direct policy support;
- EEA information systems adapted and improved to accommodate changes in reporting and

user needs in line with EU waste and material resource policy developments;

- sound, timely, and policy-relevant indicators and assessments, including policy effectiveness assessments, of status, trends and progress on waste policy implementation, including waste prevention programmes.

Output from SA1.9

Output	Time frame
Review of member countries' waste prevention programmes according to the EEA mandate described in the Waste Framework Directive	Annual
Assessments of progress in countries towards implementation of waste policies and the effectiveness of different measures, focused on priority waste streams in line with the outcome of the 2014 review of waste policies and using, inter-alia, the European reference model for waste	Regular
Indicators on waste and material resources, including new indicators developed under the Resource Efficiency Roadmap	Annual
Integrated environmental and economic accounts and databases, with material flows and associated environmental pressures, including on climate change	Regular
Catalogue of material resource efficiency policies, objectives, targets and indicators in countries and at the EU level	2015, 2018
Eionet workshops and similar	Annual/regular

SA2 Assessing systemic challenges

One of the overarching challenges in environmental policymaking, as was concluded in the SOER 2010, is to respond to the unprecedented change, interconnected risks, and increased vulnerabilities the European environment faces. The many links between environment and climate challenges and their underlying driving forces point towards increasing complexity, and have resulted in an appreciation of the human-induced systemic risks and vulnerabilities that threaten long-term ecosystem resilience.

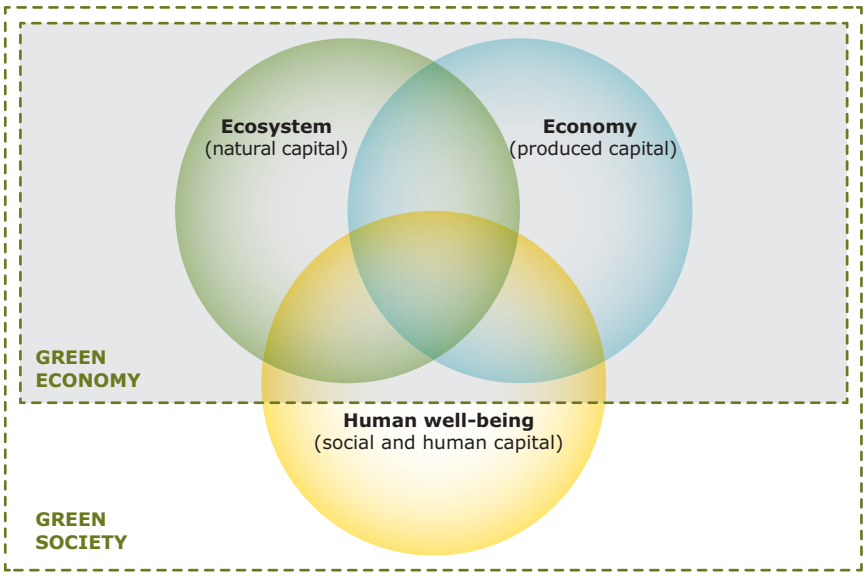
At the core of responding to systemic risks is a stimulation of a fundamental transition to a green economy ([2]) — as called for, for example, in the Roadmap to a Resource Efficient Europe, the Low Carbon Economy Roadmap, the Energy Roadmap, the EU's climate policies, and the 7th EAP.
A transition to a green economy and society requires proper consideration of the interplay between socio-economic and environmental factors, and an understanding of the linkages between environmental trends, emerging issues, associated uncertainties, and the resulting systemic risks.

Assessing these systemic risks to support the transition to a green economy is the focus of SA2, with the five-year 'state and outlook of the environment' reports (SOER) and annual indicator reports being the vehicles for drawing together all the relevant threads of knowledge developed through the activities in SA1 and SA2.

The policy focus on a transition to a green economy reflects its importance as a key environmental priority, and the need to provide a path to renewed economic growth and job creation in response to the current severe environmental and economic crises facing Europe and longer-term prospects. In its simplest form, the overarching policy concept of a green economy recognises that ecosystems, the economy, and human health and well-being, and the related types of capital they represent, are intrinsically linked.

For future policy target identification in a green economy setting, it is appropriate to consider more fundamentally the relationship between the three pillars of the green economy (where both the economy and the society are constrained by environmental limits) and what this means in the context of sustainable development. Targets can then be set and indicators established to

Green economy and green society



([2]) This is a much broader concept than the Environmental Goods and Services Sector (EGSS) of the current economy, also known as the 'green sector'. EGSS is a heterogeneous set of producers of technologies, goods, and services that measure, control, restore, prevent, treat, minimise, research and communicate about environmental damages to air, water and soil, as well as problems related to waste, noise, biodiversity and landscapes and resource depletion.

measure the extent to which these boundaries are respected.

Against this backdrop, the EEA, in partnership with others and with ETC support, will continue to ensure that the environmental dimension is properly addressed in the broad green economy (and green society) agenda. This includes reflections on emerging challenges and pathways to the future that can facilitate the inclusion of environmental considerations such as ecosystem resilience and discussions about societal transition and governance models.

Assessing these interplays is the overarching focus of SA2, and as such, SA2 aims to support especially Priority objectives 1–3 and 5 of the 7th EAP (see indicative table below). Furthermore, work under SA2.4 supports the evaluation of the 7th EAP, as stated in the 7th EAP itself.

Goal

To assess systemic challenges in the context of short-, medium- and long-term transitions, and to signal opportunities for (re)framing/recalibrating environmental policy to facilitate transition towards a more sustainable society in Europe.

Key objectives

- provide integrated assessments across thematic areas with a view to signal synergies including further opportunities for policy coherence;
- provide prospective analyses to signal emerging issues both at European and global scales;
- provide knowledge and analysis to assess progress made towards fundamental transitions embedded in long-term EU policy objectives.

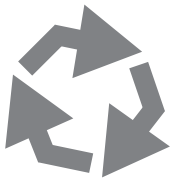
Key performance indicators

- prompt delivery of SOER 2015 and annual indicator reports 2014–2018;
- measurable recognition in the processes for evaluations of the 7th EAP;
- stimulation of foresight-orientated discussions about transitions to a more sustainable society in Europe.

Specific areas of activity in SA2

7th EAP Priority objective (PO)	SA2.1 Resource-efficient economy and the environment	SA2.2 Environment, human health and well-being	SA2.3 Megatrends and transitions	SA2.4 Sustainability assessments and SOE reporting
PO1 To protect, conserve and enhance the EU's natural capital				X
PO2 To turn the EU into a resource-efficient, green and competitive low-carbon economy	X		X	X
PO3 To safeguard EU citizens from environment-related pressures and risks to health and well-being		X		X
PO4 To maximise the benefits of EU environment legislation		X		X
PO5 To improve the knowledge and evidence base for environment policy	X	X	X	X
PO6 To secure investment for environment and climate policy and get the prices right	X			X
PO7 To improve environmental integration and policy coherence				X
PO8 To enhance the sustainability of EU cities				X
PO9 To increase the EU's effectiveness in addressing regional and global environmental and climate challenges	X			X

SA2.1 Resource-efficient economy and the environment



Objective

To monitor progress and identify opportunities to improve the environment in Europe, and indirectly other regions of the world, in accordance with a circular economy perspective.

Specifically:

- to carry out assessments of production systems, consumption and lifestyle patterns, and new business models;
- to develop and implement indicators based on integrated environmental and economic accounts, including input-output tables, ecosystem capital accounts, and other concepts and methods such as life-cycle thinking and analysis.

Policy context

A circular economy is ultimately about producing and consuming products and services rather differently from current practices and creating a more resilient environment, society and economy in the process. By assessing how products and services are designed, made, sold, used, re-used and recycled we can determine how to get the maximum value from them, both in their use and at the end of their life. In essence, it is about an economic model where environmental pressures or wastes are minimised to as close to zero as feasible. Concepts such as industrial ecology, industrial symbiosis, cradle-to-cradle and systems-thinking characterise the issue of circular economy and are the focus of activities in Europe through EU Framework Research Programmes.

The EU's 2011 Roadmap to a Resource Efficient Europe prioritises improving resource efficiency, achieving sustainable consumption and production, phasing out harmful subsidies, and 'getting the prices right'. It feeds into the Europe 2020 Strategy, which promotes sustainable growth via a 'more resource-efficient, greener, and more competitive economy'. The 7th EAP also focuses on these areas in particular via Priority objectives 2 and 6 ('to turn the EU into a resource-efficient, green and competitive low-carbon economy', and 'to secure investment for environment and climate policy and get the prices right') and through the concept of the circular economy. There is a need to apply the 'polluter pays' principle more systematically, as market-based instruments, like taxes, can contribute to correct market failures and provide incentives for more environmentally-friendly consumption and production patterns.

EEA work in this area should also be understood within and contribute to the broader context of global activities, most notably follow-up to Rio+20 and its focus on sustainable development goals, green economy and a 10-year framework of programmes on SCP; and through the integrated implementation of the revised UN System of Environmental and Economic Accounting (SEEA) in Europe through the European Strategy on Environmental Accounting led by Eurostat. The SEEA includes modules that straddle the DPSIR framework, from material flows (D) to NAMEA ([3]) (P), to experimentation on ecosystem accounting (SI), to environmental taxes and expenditures (R). Integration across the modules will enable the production of new indicators with Eurostat in support of resource efficiency, 'GDP and beyond', and the Europe 2020 annual semester policy processes. Such indicators in turn will support analysis of externalities, including possible negative effects on human health at the macro-economic level, as the basis for their internalisation in the transition to a green economy in Europe.

Performance indicators

- timely and reliable delivery of annual briefings and workshops, as well as assessments, indicators, accounts and databases based on timetables agreed with EEA stakeholders;
- measurable uptake of EEA concepts, indicators, and analyses for circular economy into the mid-term reviews of the 7th EAP and the Resource Efficiency Roadmap, as well as into more specific policy processes, including the EU product design and consumption policies.

([3]) National Accounts Matrix for Environmental Accounting.

Output from SA2.1

Output	Time frame
Briefing on progress towards a circular economy in Europe using established indicators and results from relevant research activities	Annual
Delivery of EEA indicators in support of the scoreboard being implemented under the Roadmap to a Resource Efficient Europe	Annual
Production of environmental composite index for Europe under the 'GDP and Beyond' policy process and in cooperation with Eurostat and JRC (*)	Annual
Regular participatory processes with business and other stakeholders exploring options for wider uptake of sustainable business models enabling a circular economy	Annual
Capacity building and networking with Eionet through the NRCs on SCP and resource use (and possible future NRCs on environmental economics)	Continuous
Workshops with selected countries on opportunities for environmental fiscal reform	Tbd
Integrated accounts, indicators, and databases across DPSIR on circular economy trends	Regular/annual

Note: (*) Scope, expectations, and working conditions for this activity to be clarified in discussions with relevant Commission services.

SA2.2 Environment, human health and well-being

Objective

To provide data, information and assessments on environmental pressures on and risks to human health and well-being, contributing also to the development of a broader framing of environment and human health interactions.

Specifically:

- to assess human exposure to chemicals and other environmental stressors, including air and water pollution and noise, soil contamination and climate change;
- to contribute to the EU Information Platform on Chemical Monitoring (IPCHEM);
- to develop a common conceptual framework with Eionet for assessing environmental risks to health and well-being in a green economy;
- to identify risks and analyse uncertainties in line with the principles of precaution and prevention;
- to analyse the benefits of lifestyle changes for reducing exposure;
- to identify emerging issues.

Policy context

The 7th EAP has as one of the three main priority objectives to safeguard citizens from environment-related pressures and risks to health and well-being. It also announces an EU strategy for a non-toxic environment supported by a comprehensive chemical exposure and toxicity knowledge base — the Information Platform on Chemical Monitoring (IPCHEM). The need to reduce health inequalities linked to environmental factors (as well as to social and economic factors) — a central theme in EU health policy — is also explicitly recognised in the EU 2020 Strategy.

Furthermore, the 7th EAP considers that new and emerging issues arising from chemicals and rapid technological developments that outpace policy, such as endocrine disrupting substances, nano-materials, unconventional energy sources, carbon capture and storage, and electromagnetic waves, pose risk management challenges and can give rise to conflicting interests, needs and expectations. A systematic approach to environmental risk management is advocated to improve the EU's capacity to identify and act upon technological developments in a timely manner, while providing reassurance to the public. The EEA's work on 'late lessons from early warnings' is highly pertinent in this respect, as is work under SA1.1, 1.4, 1.5 and 1.6 on air and water pollution, noise, and climate change impacts.

'GDP and Beyond' is the most established policy process in the EU, addressing well-being through the development of indicators and other metrics. The concrete targets to step up resource efficiency, as formulated in the Roadmap to a Resource Efficient Europe, are also relevant to health and well-being, particularly regarding natural resources providing for basic human needs, such as food, energy, water, and materials (including chemicals). The EC framework of Responsible Research and Innovation (RRI) and the Horizon 2020 programme are also relevant, where human health and environmental concerns may provide incentives for innovation, for example in land use, improvement of building construction, efficient mobility, and energy saving.

Work on environmental risks to human health and well-being will also link or contribute to global processes such as the WHO Environment & Health process, the UN 10-year programmes for SCP, and the UN SDGs. Themes of relevance to these processes include 'health and population', 'chemicals and waste', 'food security, nutrition, sustainable agriculture', and 'water and sanitation'.

Performance indicators

- timely and reliable delivery of annual briefings and workshops as well as assessments indicators, accounts, and databases based on a timetable agreed with EEA stakeholders;
- measurable uptake of EEA concepts and analyses for environmental risks to human health and well-being into the mid-term reviews of the 7th EAP and the Resource Efficiency Roadmap, as well as into other policy processes, such as the global Sustainable Development Goals and the WHO Environment & Health process;
- measurable progress with Eionet on the development of a common conceptual framework for assessing environmental risks to health and well-being in a green economy.

Output from SA2.2

Output	Time frame
Implement a web forum and briefings that further develop the knowledge base of the 2001 and 2013 Late Lessons reports in support of risk-management policies regarding new technologies, chemicals and human health impacts	2014, regular updates thereafter
Deliver contributions and other support to IPCHEM, and assess the potential for a greener chemicals sector in a green economy	Continuous
Develop a common conceptual framework with Eionet for assessing environmental risks to health and well-being in a green economy building on work with Eionet under Article 5 of the EEA Regulation	2015
Develop methods and indicators for describing environmental risks to human health and well-being in partnership with WHO, OECD and EU research activities	2014, 2016, 2018
Run workshops aimed at capacity building with the Eionet and with relevant partners (e.g. WHO)	Annual
Publish a 1st European Environmental Risks to Human Health and Well-being assessment report in cooperation with Eionet	2018

SA2.3 Megatrends and transitions

Objective

To measure, monitor and report on long-term trends and long-term sustainability transitions based on established policy visions to 2050 and using appropriate methods and key indicators.

Specifically:

- to explore and support transition pathways to the future with forward-looking assessments;
- to reflect on global megatrends to identify possible risks, emerging issues, and challenges for a transition towards a sustainable society;
- to facilitate the inclusion of environmental considerations into discussions of long-term societal transition and governance models.

Policy context

Europe and the world face challenges of great complexity, uncertainty, and dynamism, and if society is going to make the transition to a more sustainable path, policymakers need to understand these challenges and their long-term implications better. Strengthening institutional capacity significantly at all levels of governance and performing relevant, credible, and scientifically-sound forward-looking assessments are essential in this regard.

Europe is bound to the rest of the world through numerous systems — environmental, economic, social, political, cultural — enabling a two-way flow of materials and ideas. Europe contributes to global environmental pressures and accelerating feedbacks through its dependence on fossil fuels, raw materials and other imports. Conversely, transformations elsewhere increasingly affect Europe; both directly as in the case of environmental change, or indirectly, for example through intensified socio-economic pressures.

Many of these changes are inter-linked and likely to unfold over decades. They can significantly affect Europe's resilience in the long term, but can also offer unique opportunities for action. But effective measures require new ways of thinking and innovation beyond existing policy targets, as well as better information and better understanding of a highly complex and evolving situation.

The most relevant European policy frameworks are those with a time horizon beyond 2020, i.e. the broader EU mid-term (2020/2030) and long-term (2050) policy targets and ambitions, in particular, the transition towards a green, low-carbon economy/society in which key sectors are transformed, natural capital is protected and enhanced, and the health and well-being of citizens is safeguarded.

Global agendas such as Rio+20, the United Nations Framework Convention on Climate Change, and the Convention on Biological Diversity have similar objectives and time horizons.

Performance indicators

- timely delivery of megatrend and FLIS updates;
- measurable recognition and/or uptake of results by stakeholders, such as uptake by member countries and relevant Commission Services.

Output from SA2.3

Output	Time frame
Global megatrends assessments that address key social, technological, economic, environmental and political developments, their inter-linkages and implications for Europe. In partnership with Eionet and relevant EU bodies (e.g. European Commission BEPA)	2014, 2018–2019
Develop in partnership with transition networks and others, methodologies for assessing transition pathways using research and other findings as relevant	Ad-hoc
Further developed web-based platform on Forward Looking Information and Services (FLIS) in order to strengthen institutional capacity in a transparent and efficient way by sharing experiences, information and (co-creation of) knowledge within the network (FLIServices) in close cooperation with Eionet and relevant Commission services	Continuous
Improved capacity within NRC FLIS in developing and using forward-looking information in policymaking, via regular meetings, tailored workshops and webinars, training courses, hands-on sessions, the use of the FLIServices, and possibly country collaborations through contracts under Article 5 of the EEA Regulation	Regular

SA2.4 Sustainability assessments and state of the environment reporting

SOER 10 15 20

Objective

To keep under review the state of, trends in, and prospects for the environment in Europe in order to inform environmental strategies and policies, including sustainable development policies and goals, with a comprehensive and integrated knowledge base.

Specifically:

- to produce SOER 2015;
- to initiate work on SOER 2020;
- to produce annual indicator reports;
- to support the pan-European 'Environment for Europe' process, in particular the next ministerial meeting planned for 2015/2016, as appropriate.

Policy context

Previous five-year state of the environment and outlook reports (SOER) produced by the EEA have repeatedly confirmed that environmental policy in the European Union and its neighbours has delivered substantial improvements to the state of the environment. At the same time, however, SOER 2010 concluded that major environmental challenges remain, which will have significant consequences for Europe if left unaddressed.

What differed in 2010, compared to previous EEA state of the environment and outlook reports, was an enhanced understanding of the links between environmental challenges combined with unprecedented global megatrends. This has allowed a deeper appreciation of the human-made systemic risks and vulnerabilities that threaten ecosystem and societal resilience, and insight into the shortcomings of governance. The report concluded along four main lines: enhanced policy implementation and integration; increased resource efficiency; dedicated management of natural capital and ecosystem services; and transition to a green economy. The current series of annual indicator reports (2012–2014) are analysing further the prospects for transition to a green economy. These need to be understood in long-term visions and objectives (2050 and beyond).

The main EU policy links for SOERs and indicator reports are anchored in the regulation establishing the EEA, and in the requirements for input put forward in the 7th EAP. For the latter, the 7th EAP states that the 'evaluation [of the programme] shall be based, inter alia on the basis of the European Environment Agency's report on the State of the Environment'.

In addition, the sustainability assessments and SOE reports provide a basis for European input to a wide range of international policy processes, such as the Environment for Europe process or UNEP's Global Environment Outlook (2017) or the foreseen UN Sustainable Development Goals (up to 2015 and beyond).

Performance indicators

- timely publication of a report on the state of, trends in, and prospects for the environment in Europe in 2015 and evaluation of its utility;
- timely annual publications of indicator reports relevant to the transition to a green economy/society in Europe;
- appropriate support to the next ministerial meeting under the Environment for Europe process (to be decided);
- measurable uptake of EEA concepts, information, and indicator-based assessments in the evaluation of the 7th EAP.

Output from SA2.4

Output	Time frame
SOER 2015	2015
Planning and scoping for SOER 2020	2018
Environmental indicator report	Annual
Support for the pan-European Environment for Europe process	2015/2016

SA3 Knowledge co-creation, sharing and use

Knowledge is increasingly co-created, shared, and used in networks. These networks are characterised by their flexibility in terms of membership, roles assumed, goal orientation, type of knowledge created, shared or used, etc. Once the knowledge is created, it becomes a flow of information within the network. Regarding information and knowledge flows within these networks, different partners or actors assume different roles: they can be initiators of networks or of knowledge (co-)creation, nodes in the network (important actors that determine the 'what' and the 'how' of knowledge flows), hubs (where knowledge is actually exchanged), or switches (which means that they determine what sort of knowledge flow is actually 'turned on' or not).

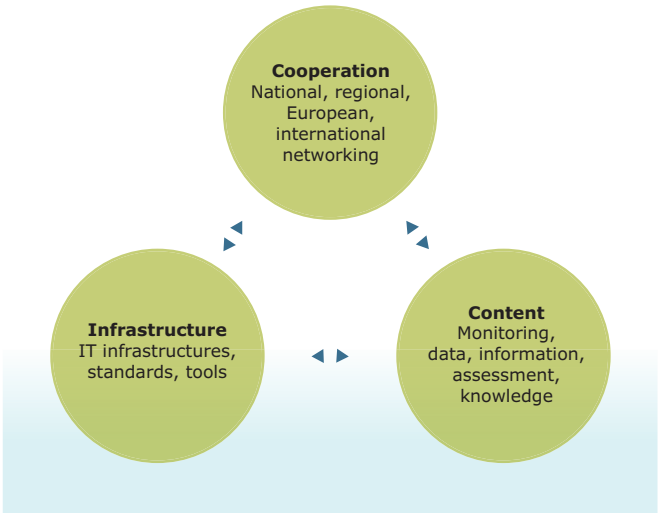
It is important for the EEA to know strategically what sort of role it wants to play at any given time in the knowledge-creation and use communities in which it participates (and there are very many of them). It is in addition important not to look at these roles as fixed positions. One characteristic of networks in the network society is their flexibility. It is therefore important for the EEA to assess its different roles with a sharp eye, especially given likely future resource constraints. A flexible and strategic vision on our role as initiator, node, hub or switch is important to continue playing our role in networks of knowledge co-creation, sharing and use.

Strengthening the integration of EEA and Eionet activities, including capacity building, remain central to the 2014–2018 strategy. An integral part of this is a deepening of Eionet via an enhanced collaboration and integration between member country and EEA activities following the principles of a Shared Environmental Information System (SEIS) serving the needs of national as well as EU actors. Furthermore, networking will focus as well on enhancing partnerships beyond Eionet in support of the needs of SA1 and SA2.

Providing information to the public in accordance with Directive 2003/4/EC on public access to environmental information is also central to activities in this area.

Adoption of the EEA/Eionet model and SEIS principles at regional/pan-European and international/global level can ensure coherence at all levels and also help streamlining efforts at national level. Consequently, and taking into account the fast developments in information systems and related technologies, links and synergies will need to be strengthened and further explored with initiatives such as the EU Digital Agenda, the European Earth Observation Programme (Copernicus), the Global Earth Observation System of Systems (GEO/GEOSS), UNEP live, the Eye on Earth network, and other key initiatives related to data and information sharing.

The Eionet cooperation model



The EEA will further enhance and focus its outreach capacities, responding to emerging challenges and societal developments. Societal trends such as changes in the ways people access information, networking, and co-creation of knowledge are influencing the way the EEA is asked to work and communicate.

Work under SA3 will aim to ensure a total quality management approach to the work of the EEA, supported by internal auditing, environmental management of the Agency's own activities, IT infrastructure and services, facilities management, library and documentation management, and the production of publications.

Work in SA3 is strongly linked to Priority objective 5 of the 7th EAP: To improve the knowledge and evidence base for environment policy, and through that to all other priority areas. Priority objective 9: To increase the EU's effectiveness in addressing regional and global environmental and climate challenges, is of special relevance to SA3, not least in the framework of UNEP assessments and the post Rio+20 process.

Goal

To be the authoritative European environment node and hub, and a key initiator within networks of knowledge co-creation, sharing and use.

Key objectives

- ensure the quality, availability and accessibility (based on SEIS principles) of data and information needed to support SA1 and SA2;
- actively communicate data, information and knowledge to policymakers, the public, research communities, NGOs, businesses, and regional and international processes, including those of the UN and its specialised agencies;
- promote information governance as a driver of public empowerment and behavioural change.

Key performance indicators

- metrics to measure the active participation of Eionet (Priority data flows, meetings participation, engagement in preparation and review of EEA products and services);
- online availability of EEA data and information products and services (99 % up-time);
- impacts of communication efforts (based on media-monitoring tools).

SA3.1 Networking and partnerships

Objective

To improve the sharing of data, information and assessments at European, national and global levels together with Eionet, and to broaden cooperation with stakeholders and networks beyond Eionet.

Specifically:

- to strengthen cooperation with EEA member and cooperating countries;
- to develop and maintain stable cooperation with regional and global bodies promoting Eionet and SEIS approaches;
- to widen and deepen the European knowledge base by developing communities of practice and engaging in partnerships with stakeholders beyond Eionet, such as business and research communities, civil society organisations (CSOs), and initiatives concerning lay, local and traditional knowledge and citizen science;
- to establish the European Environment Academy (EEAcademy) as the central framework encompassing mutual capacity-building and knowledge-sharing activities to support work under SA1 and SA2, involving the EEA, Eionet, Scientific Committee, Commission services and others.

Policy context

Work in this area is very much concerned with the development and implementation of SEIS, and will support efforts to improve policy implementation by promoting the concept of networking and actual engagement in relevant networks.

It links to Priority objective 5 of the 7th EAP regarding the establishment of a knowledge and evidence base to support policymaking and implementation, including better use of institutions or bodies specialising in adapting scientific knowledge for public policy. It also provides contributions to regional and global processes based on the Eionet model and SEIS principles in relation to Priority objective 9, under which a particular area of focus will be supporting countries and the EU in the context of UNEP assessment work and the follow up to Rio+20.

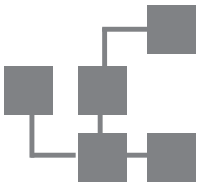
Performance indicators

- strengthened cooperation and communication within Eionet and between Eionet and the EEA, Management Board, and Scientific Committee;
- increased satisfaction of the member countries with Eionet as a means to streamline data and knowledge sharing;
- increased relevance of EEA/Eionet outputs to member countries;
- SEIS extension and regular reporting in the pan-European region established as part of SOE-online with a view to inform SOER 2015;
- EEA/Eionet indicators and knowledge incorporated in EU contributions to UNEP and post-Rio+20 processes;
- becoming a node and a hub in a policy-relevant network on long-term transitions;
- growing contributions from stakeholders beyond Eionet;
- EEAcademy established by 2016.

Output from SA3.1

Output	Time frame
Revised Eionet functional structure fitting the needs of the new MAWP	2014
Monitoring of member country satisfaction with Eionet cooperation	Regular
Member and cooperating country contributions (data, information, etc.) to SOER 2015 (Part C) and to SOE-online	2014–2018
New and strengthened partnerships with stakeholders beyond Eionet	2014–2018
Data and information from neighbourhood countries etc. in SOE-online	2014–2018
Support to the EU and EEA member countries in the context of UNEP assessments and the post-Rio+20 process	Continuous

SA3.2 Technical systems development



Objective

To ensure that EEA IT systems continually meet the needs of the organisation, enabling it to efficiently implement its work programme.

Specifically:

- to support supply services (collection of data);
- to support networking (knowledge management);
- to support workflows (planning, automation, quality management);
- to support development of final products and public services (reports, web sites, public data and information services);
- to strengthen the infrastructure for data and information sharing both at the EEA and in the Eionet member countries, taking into account the SEIS and INSPIRE developments.

Policy context

The IT platform will continue to evolve in line with the principles of SEIS and will contribute to the full implementation of the INSPIRE Infrastructure for Spatial Information in Europe by 2019. The activities will support the Open Data Strategy of the EU 2020 digital agenda, and ensure compliance with the Århus Convention.

All developments covered by SA3.2 support the core processes of the EEA and Eionet. The tools are designed to support the collection of the data that are covered under SA1 and then used in EEA products and services. This also includes all tools to support networking and information exchange.

In line with EEA data policy, all data compiled by the EEA are considered a public good and, where possible, will be made fully, freely and openly available for others to use. The tools and platforms ensure that there is full traceability from the products of the Agency back to the data used to underpin the assessments.

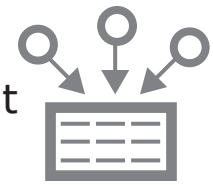
Performance indicators

- Reportnet tools efficiently supporting fulfilment of reporting requirements;
- networking tools efficiently supporting knowledge management and appreciated by networking partners;
- high user satisfaction with the Indicator Management System;
- spatial data infrastructure compliant with Inspire by 2018;
- usability of EEA website rated high and increased number of visitors every year;
- SOE-online tools fulfilling their role in continual update of SOE information after SOER 2015.

Output from SA3.2

Output	Time frame
The Reportnet suite of tools, including new tools for new reporting requirements	2014–2018
Near-real-time data collection tools, compliant with Inspire	2014–2018
Indicator Management System	2014–2018
Eionet portal and related networking tools (Forum, Eionet directory, Planner, etc.)	2014–2018
Spatial data infrastructure, compliant with Inspire	2014–2018
SOE-online tools compliant with the SEIS principles	2015+
The EEA website and modernised workflow for publishing	2014–2018
Thematic websites (EUNIS, BISE, E-PRTR, Climate-ADAPT, Natura 2000 etc.)	2014–2018

SA3.3 Monitoring, data and information management



Objective

To ensure the availability, quality, accessibility and sustainability of monitoring, data, and information needed for the knowledge base, supporting environment and climate policies.

Specifically:

- to maintain and improve efficiency of existing data flows, QA/QC processes, indicator management and maps and graphs production, and to provide free and open access to online data and information services (SOE-online) in accordance with the EEA data policy;
- to monitor international demands for environmental data and their streamlining and maintenance of the reporting obligations database;
- to create relevant new data flows and QA/QC procedures based on user needs;
- to improve the timeliness of European data including near-real time;
- to manage the EEA European Environmental Data Centre and maintain relevant European reference datasets together with Eurostat and JRC;
- to access data from non-Eionet sources e.g. remote sensing, industry, utilities, etc.;
- to foster the development and management of a Shared Environmental Information System (SEIS), and a European Spatial Data Infrastructure based on the Inspire Directive;
- to support the European Commission in the further implementation of the Inspire Directive for building a European Spatial Data Infrastructure, including monitoring and reporting on progress;
- to coordinate the contribution of the EEA to the implementation of the European Union Earth observation and monitoring programme Copernicus;
- to identify and articulate EEA and Eionet user needs for Copernicus monitoring services;
- to raise awareness and to support user uptake of Copernicus data and information services within Eionet;
- to contribute to the Group on Earth Observations (GEO) on the development, maintenance and coordination of in-situ observing networks, data sharing and other components;
- to facilitate connections between Copernicus, GEOSS, and Eionet, especially in the domain of data sharing, support-user uptake, and in relation to communities of practice;
- to ensure European data and information are available at the global level e.g. UNEP-Live and the Eye on Earth network.

Policy context

The activities will support the objectives of the 7th EAP, i.e. to improve the evidence base for environment policy, and framed in line with the Inspire Directive, SEIS, the Commission Communication on Implementation 'Improving the delivery of benefits from EU environment measures: building confidence through better knowledge and responsiveness', Europe 2020 and Horizon 2020, and experience gained in the application of the Directive on public access to environmental information.

Performance indicators

- at least 90 % average scoring Eionet data flows by 2018;
- annually updated European datasets online within three months of deadline for national deliveries;
- annually updated indicator assessments online within three months of data publications;
- European environmental data regularly updated in global environmental datasets.

Output from SA3.3

Output	Time frame
Online, regularly-updated European environmental datasets	Annual
EEA data services (archive, catalogue, view, download, transform)	Continuous
Report on Eionet priority data flows	Annual
SOE-online content management (indicators, maps, graphs, data), including GEMET	Continuous
European environmental data contributions to global initiatives	Continuous

SA3.4 Communication, outreach and user analysis

Objective

To inform and engage in dialogue with key stakeholders and other users of EEA outputs around key messages and corporate communications.

Specifically:

- to ensure that EEA messages are heard and understood by main stakeholders and to help inform environment and climate policies and broader discussions on transitions to the long-term vision for 2050 as laid down in the 7th EAP;
- to be a proactive, principal source of reliable and timely information on environment and climate change in Europe, contributing to attitudinal and behavioural change;
- to ensure stronger engagement, continuous dialogue, and effective interaction with audiences in order to achieve adequate responses to societal changes and evolving stakeholder needs;
- to identify and exploit synergies with the communication activities of the European Commission and EEA member countries;
- to monitor the effectiveness of EEA communication and other outreach activities.

Policy context

The policy context for EEA communication activities will be the 7th EAP, together with the Climate and Energy Package 2020 and associated roadmaps, the EU Strategy for Adaptation to Climate Change, Europe 2020, the Resource Efficiency Roadmap, Horizon 2020, the Biodiversity Strategy to 2020, and specific legislation for water, waste, air etc.

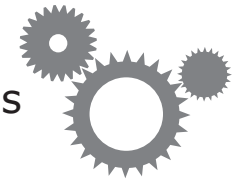
Performance indicators

- the EEA's findings are communicated regularly and objectively, providing full and easy access to information, respecting the EEA's corporate identity and corporate design, using relevant channels and appropriate frequency;
- input to EU and national environment agendas is provided, key stakeholders are engaged with the EEA in dialogue and networking; activities are aligned to priorities of the EU and EEA member countries;
- specific target audiences are known and addressed as directly as possible with appropriate measures; new audiences and tools are identified in response to societal changes.

Output from SA3.4

Output	Time frame
Strategic communication (thematic communication plans, adapted channels, tools and products, networking, EEA-internal communication, evaluation)	Continuous
Web content (thematic and corporate pages)	Continuous
Media relations (press communications, responses to media enquiries including interview and article requests, media monitoring)	Continuous
Social media relations (social media posts, dialogue activities, infographics)	Continuous
Public awareness (public enquiries, exhibitions, conferences and events, competitions, visiting groups)	Continuous
Publications/audiovisuals (Annual report, Signals, audiovisual products, studies)	3–7/year
Editing of EEA assessments, messaging, fact sheets, policy briefs, presentations, speeches	Continuous
Dissemination of EEA products in print and online, newsletters	Continuous

SA3.5 Quality management and operational services



Objective

To provide high-quality operational support to the running of the EEA, including quality and environmental performance management.

Specifically:

- to manage, evaluate and improve the quality of EEA processes and outputs;
- to manage, evaluate and improve EEA performance under the EMAS scheme;
- to provide independent, objective auditing and consulting services designed to add value and improve the operations of the Agency;
- to provide the IT infrastructure and services, facilities management services, document management services, and library services needed for efficient delivery of the work programme;
- to manage the publication process, with increased emphasis on integrated web and paper publications.

Performance indicators

- core processes documented in accessible and consistent formats and QMS better integrated with other management systems and EMAS. Proof of improved processes recorded;
- completed verifications and publication of annual verified environmental statement. Recertification achieved;
- relevant and timely reporting, advice and recommendations provided to the ED and EEA management;
- stable and user-friendly IT systems available throughout the year (99 % uptime) and satisfaction level in the EEA job satisfaction survey kept at the same high level as in previous years;
- satisfaction level for facilities management services in the EEA job satisfaction survey kept at the same high level as in previous years;
- high percentage (aiming at 100 %) registration of documents and records that meet the criteria for registration;
- staff provided with requested access to databases, books and periodicals (within the limits of the available budget);
- timely production of the reports due for publication.

Output from SA3.5

Output	Time frame
Quality statement	Annual
Environmental statement	Annual
Internal audit capability (IAC) activity report	Annual
Report of the Executive Director to the Discharge Authority	Annual
Overview of IT systems	Annual

SA3.6 Copernicus operational services

Work in this area depends on the final provisions of the proposed Copernicus Regulation and is conditional on non-core funds being allocated to the EEA for the operational Copernicus services.

Objective

To contribute to the implementation of the Copernicus programme.

Specifically:

- to implement the land-monitoring service to provide information in support of the global-to-local environmental monitoring of biodiversity, soil, water, forests and natural resources;
- to deploy and use Copernicus services relevant for EEA and Eionet activities;
- to support coordination and harmonisation of the collection and provision of in-situ and reference data for the operational services.

Policy context

Copernicus is a programme to be delivered under the Europe 2020 Strategy for smart, sustainable and inclusive growth. Under Priority objective 5 of the 7th EAP, Copernicus is identified as a system that can provide spatial information and support streamlining and common approaches for the provision of information in support of environmental and climate policies, both at national and European level. Copernicus will focus on six operational services, i.e. atmosphere, marine, climate change, land, emergency and security. The EEA has been successful in establishing initial operations for the land service and the initial framework for in-situ coordination, and is foreseen to be included in future Copernicus work plans, and potentially also in other services. However, the inclusion of the activities related to Copernicus in the Multiannual Work Programme 2014–2018 are conditional, depending on the adoption of the proposed Regulation (COM(2013) 312) establishing Copernicus.

Performance indicators

- time span between satellite data acquisition and derived land cover data reduced to one year;
- Copernicus services online and available with at least 99 % uptime.

Output from SA3.6

Output	Time frame
Land-cover data on changes in artificial surfaces, forest areas, agricultural areas, wetlands, water bodies	Regular from 2015 onwards
High-resolution land-cover data for Urban Atlas, European riparian zones, Natura 2000 and coastal zones	Regular from 2015 onwards
Archive, catalogue, view and download services for Copernicus land monitoring	Continuous
Access to in-situ data and reference data for Copernicus services	Continuous

SA3.7 Capacity building in West Balkan and European Neighbourhood countries

Work in this area is conditional on non-core funds being allocated to the EEA for these activities.

Objective

To improve the knowledge base for environment policy in the entire pan-European area and the Mediterranean based on SEIS principles.

Specifically:

- to further integrate the West Balkan countries in all EEA/Eionet activities;
- to establish regular exchanges of environmental data and information with European Neighbourhood countries in priority fields;
- to further develop capacity in both regions to report on the state of the environment based on shared data and indicators, in line with SEIS principles and the MDIAK concept. More broadly to reinforce EEA's input to SEIS implementation and better environmental governance in the countries through maintaining partnerships with relevant regional bodies and international organisations.

Policy context

Capacity-building in the West Balkans and the European Neighbourhood supports the following EU policies:

- the EU policy framework for the stabilisation and association process in the West Balkans;
- Union for the Mediterranean and the Horizon 2020 Initiative on depollution of the Mediterranean Sea;
- The Eastern Partnership (launched in May 2009) and the SEIS Flagship Initiative;
- EU-Russia Partnership for Modernisation (launched during the first meeting of the EU-Russia Permanent Partnership Council in Helsinki, October 2006);
- re-enforced commitment of the EU Member States in the Black Sea and the Mediterranean to cooperating on the implementation of the MSFD, WFD, and ecosystem development approach.

Performance indicators

- integration of West Balkan countries in EEA/Eionet activities and products;
- strong performance of West Balkan countries in priority data flows;
- annual data flows for ENP countries for a set of regional indicators linked to the Horizon 2020 process for the south, and the 'Environment for Europe' process for the East.

Output from SA3.7

Output	Time frame
Maintenance and further development of Eionet structures in the West Balkan countries and ensuring their contribution to main EEA outputs (data flows, reports, web products, etc.)	Continuous
Establishing a regular data flow process for the ENP partner countries in line with on-going Eionet practice	Continuous
ENP countries input to major EEA products/services	Continuous

SA4 EEA management

EEA's management activities and horizontal administrative services are brought together under SA4 to ensure that the core horizontal activities are planned, implemented, monitored and reported in a coherent and consistent way to facilitate efficient and effective delivery of the EEA work programme and sound financial management.

The activities covered by SA4 comprise governance (support to Management Board, the Bureau and the Scientific Committee), the overall management (strategic and line management) and administrative services (human resource management, financial management and legal services).

Goal

Excellence in delivering the work programme.

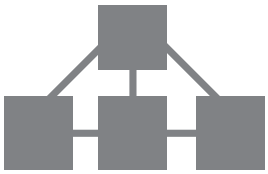
Key objectives

Provide efficient and effective management and administration of the Agency's work programme and resources (financial and human).

Key performance indicators

- Work programme delivered
- Positive outcome of the next five-year external evaluation of the EEA (2018).

SA4.1 Governance and management



Objective

To lead and manage the EEA effectively and efficiently in line with stakeholder expectations.

Specifically:

- to provide efficient support to the Management Board, Bureau, and Scientific Committee to ensure that they are well informed for their respective decision making and advisory duties;
- to sustain and strengthen the cooperation with these main stakeholders and others, such as the European Commission, European Parliament and member countries;
- to prepare a five-year multiannual work programme and annual work programmes and manage the EEA to deliver each year's work programme;
- to manage the Agency staff as framed by the EEA Career Development Cycle;
- to communicate actively internally to ensure coordination and transparency in delivering the work programme;
- to provide logistical support to the next five-year external evaluation of the EEA.

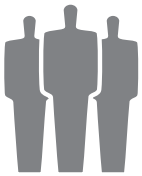
Performance indicators

- timely delivery of documents and other contributions to the Management Board, Bureau and Scientific Committee. Smooth running of their respective meetings;
- well executed planning, drafting and stakeholder consultation of the annual work programmes adhering to the agreed deadline;
- 95 % agreed development plans and appraisals completed according to deadlines as specified in internal guidelines;
- on average, 10 days/year are used per staff member for development of competencies (including language training);
- positive outcome of the next five-year external evaluation.

Output from SA4.1

Output	Time frame
Annual work programmes	Annual
Multiannual Work Programme 2019–2023	2018
Annual report	Annual
Five-year evaluation	2018

SA4.2 Administration



Objective

To provide high-quality administrative support to the running of the EEA.

Specifically:

- to maintain high quality services (support, advice and guidance) to Agency staff in the areas of personnel management, human resource development, resource management, corporate (administrative, financial and management) systems, procurement, financial transactions and accounting to enable the EEA to efficiently deliver its work programme;
- to ensure that the Agency has the necessary skills and expertise to deliver the work programme through recruitment of appropriately qualified staff and the tailored training and development of all staff under the EEA learning and development framework;
- to deliver input to the budget life cycle; draft budget (European Commission); budget (EEA Management Board); final accounts and annual activity report (EEA Management Board and budgetary authorities); and discharge process (European Parliament).

Performance indicators

- satisfaction level in the EEA job satisfaction survey is kept at the same high level as previous years, and a minimum of serious observations/recommendations from audits received;
- staff competency development activities to support the delivery of the work programme are planned and executed in accordance with the EEA learning and development framework;
- EEA budget, procurement plan and accounts published within the deadlines as set out in the Financial Regulation.

Output from SA4.2

Output	Time frame
Annual activity report	Annual
EEA budget (including amendments) published in Official Journal	Annual
Annual accounts	Annual
Procurement plan	Annual

List of acronyms

Acronym	Full name
AEI	Agri-Environmental Indicators
AMP	Annual Management Plan
BISE	Biodiversity Information System for Europe
CAP	Common Agricultural Policy
CC	Climate Change
Copernicus	Previously known as GMES (Global Monitoring for Environment and Security) European Earth Observation Programme
CSI	Core Set of Indicators
DG CLIMA	The European Commission's Directorate-General for Climate Action
DG ENTR	The European Commission's Directorate-General for Enterprise and Industry
DG ENV	The European Commission's Directorate-General for Environment
DPSIR	Driving forces — Pressures — State — Impacts — Responses
EAP	Environment Action Programme
EC	European Commission
EEA	European Environment Agency
EFQM	(formerly known as the European Foundation for Quality Management) is a non-profit membership foundation based in Brussels
Eionet	European Environment Information and Observation Network
EMEP	European Monitoring and Evaluation Programme
ENP	European Neighbourhood Policy
ENPI	European Neighbourhood Partnership Instrument
EP	European Parliament
EPA	Environmental Protection Agency
E-PRTR	European Pollutants Release and Transfer Register
ETS	Emissions Trading Scheme
ETC	European Topic Centre
ETC/ACM	ETC on Air Pollution and Climate Change Mitigation
ETC/BD	ETC on Biological Diversity
ETC/CCA	ETC on Climate Change Impacts, Vulnerability and Adaptation
ETC/ICM	ETC on Inland, Coastal and Marine Waters
ETC/SCP	ETC on Sustainable Consumption and Production
ETC/SIA	ETC on Spatial Information and Analysis
EU	European Union
EU 2020 Targets	Ref: A resource-efficient Europe — Flagship initiative of the Europe 2020 Strategy
EUNIS	European Nature Information System

Acronym	Full name
Eurostat/ESTAT	Statistical Office of the European Communities
Fairmode	Forum of Air Quality Modellers in Europe
FLERMONECA	Forest and Biodiversity Governance, Including Environmental Monitoring; Component of the Regional Environment Programme for Central Asia (EURECA); supports the sustainable use and management of natural resources in Central Asia
FLIS	Forward-Looking Information and Services
GBIF	Global Biodiversity Information Facility
GEO	Group on Earth Observations
GEOSS	Global Earth Observation System of Systems
GHG	Greenhouse gas
GIO	GMES/Copernicus Initial Operations
Horizon 2020	International initiative to tackle pollution in the Mediterranean by 2020
HNV	High Nature Value
Interreg	Innovation and Environment Regions of Europe Sharing Solutions
IPBES	International Science-Policy Platform on Biodiversity and Ecosystem Services
IPCC	Intergovernmental Panel on Climate Change
IPCHEM	Information Platform for Chemicals Monitoring (formerly Chemicals Data Centre)
ISDR	International Strategy for Disaster Reduction
JRC	Joint Research Centre (of the European Commission)
LRTAP	Long-range Transboundary Air Pollution
MAES	Mapping and Assessment of Ecosystems and their Services in Europe
MDG	UN Millennium Development Goals
MS	Member States
MSFD	Marine Strategy Framework Directive
MSP	Maritime Spatial Planning
MSP ICM	Maritime Spatial Planning and Integrated Coastal Management
MSY	Maximum Sustainable Yield
Natura 2000	EU-wide network of nature protection areas established under the 1992 Habitats Directive
NEC	National Emission Ceilings
NFP	National Focal Point
NGO	Non-governmental organisation
NRC	National Reference Centre
ODS	Ozone Depleting Substances
OECD	Organisation for Economic Cooperation and Development
OSCE	Organisation for Security and Co-operation in Europe
QA/QC	Quality Assurance/Quality Control
SCP	Sustainable consumption and production
SDI	Spatial Data Infrastructure
SDGs	Sustainable Development Goals

Acronym	Full name
SEBI	Streamlining European Biodiversity Indicators
SEIS	Shared Environmental Information System for Europe
SENSE	Shared European National State of the Environment
SIIFs	Structured Implementation and Information Frameworks
SoE	State of Environment
SOER	'State and outlook of the environment' report
SO_2	Sulphur dioxide
TERM	Transport and Environment Reporting Mechanism
UN	United Nations
UNECE	United Nations Economic Commission for Europe
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
WISE	Water Information System for Europe
WFD	Water Framework Directive
WHO	World Health Organization

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