



Brussels, 15.5.2019
SWD(2019) 181 final

PART 1/2

COMMISSION STAFF WORKING DOCUMENT

**Evaluation of the 7th Environment Action Programme to 2020
"Living well, within the limits of our planet"**

Accompanying the document

**Report from the Commission to the European Parliament, the Council, the European
Economic and Social Committee and the Committee of the Regions**

on the evaluation of the 7th Environment Action Programme

{COM(2019) 233 final}

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1. INTRODUCTION

The 7th Environment Action Programme (7th EAP), which entered into force in 2014 guides European environment policy up to 2020. The Programme was adopted by co-decision, following a change in the legal base; Article 192(3) of the Lisbon Treaty made it a requirement for action programmes to be agreed jointly by the European Parliament and the EU Member States, following a proposal by the European Commission¹. The 7th EAP sets out nine priority objectives for action, reflecting both past successes in tackling environmental pollution and continuing challenges. As discussed below, it fleshed out what needed to be done through a series of sub-objectives and then more detailed actions that the EU and its Member States should take.

The 7th EAP builds on the situation obtaining at the end of the 6th EAP. The final assessment of the 6th EAP concluded that the programme had benefited the environment and provided an overarching strategic direction for environmental policy. Despite these achievements, however, unsustainable trends persisted in the four priority areas identified in the 6th EAP: climate change, nature and biodiversity, environment and health, and natural resources and waste.

The process of agreeing the 7th EAP was important. Based on analysis and stakeholder discussion, the European Commission made a proposal, which was then discussed with the European Parliament and the Council of the European Union (the Council). The subsequent Decision² was thus the product of stakeholders taking a strategic view of: the state of environmental policy; the narrative of how it supports growth and jobs as well as a healthy planet and people's wellbeing; what they jointly wanted to achieve and then, more operationally, of how they wanted to achieve it.

1.1. Purpose of this evaluation

Article 4 of the Decision committed the Commission to evaluate the 7th EAP, taking into account the European Environment Agency's work on the state of the environment and stakeholder consultation. This document fulfills that legal obligation, evaluating the 7th EAP in line with the Commission's Better Regulation Guidelines³.

This evaluation assesses whether the structure and strategic role of the agreed framework for action have helped improve environmental and climate policy in Europe. It builds on the European Environment Agency's work on the state of the environment, the European Parliament's mid-term review⁴, and on evaluations of specific policy areas (water, air, biodiversity, chemicals etc.). In doing so, the evaluation looks at the 7th EAP as a strategic document and asks whether it was the 'right' framework for EU environmental and climate policy-making.

1.2. Scope of the evaluation

The focus of this evaluation is on the strategic role played by the 7th EAP, that is:

¹ "General action programmes setting out priority objectives to be attained shall be adopted by the European Parliament and the Council, acting in accordance with the ordinary legislative procedure and after consulting the Economic and Social Committee and the Committee of the Regions"

² Decision No 1386/2013/EU of the European Parliament and of the Council of 20 November 2013 on a General Union Environment Action Programme to 2020 'Living well, within the limits of our planet'.

³ SWD (2017) 350.

⁴ "Implementation of the 7th EAP – mid-term review", European Parliamentary Research Service, November 2017.

- **Multi-layered approach:** the 7th EAP guides EU environment policy up to 2020 in the light of a long-term vision for where it wants the Union to be by 2050. The 7th EAP sets nine priority objectives to be met by 2020 together with 36 sub-objectives and 60 actions.
- **A dual focus through different types of objectives:** the *three main thematic priority objectives* (preserving our natural capital, turning our economy into a resource-efficient and low-carbon one, and protecting the public from environment-related pressures) are complemented and supported by *four enabling framework objectives* (better implementation, information, investments and integration) and by *two horizontal objectives* (ensuring action in cities and at the global level).
- **Joint responsibility to produce results:** the EU and Member States together agreed to deliver on its nine priority objectives.

Through this evaluation, the Commission is assessing whether this structure is helping the EU and its Member States to deliver on the nine priority objectives, by, for instance, prompting better co-ordinated, more ambitious and more effective action, successfully engaging strategic stakeholders, and contributing to the 2030 Agenda and its Sustainable Development Goals.

This evaluation involves assessing the link between the structure of the 7th EAP and the actions taken at EU and Member State level, and the progress towards the 7th EAP's objectives. This has involved gathering and analysing evidence about the various policy areas and priority objectives to provide an overview of the state of implementation. Since the evaluation is not an in-depth assessment of EU environmental and climate policy in any particular area, it does not prejudge the results of any other evaluation work⁵.

The 7th EAP covers both climate and environment policy and environment related measures taken under other policies such as agriculture, regional, and research. For the sake of readability, the term 'environment' below is taken to cover both, unless otherwise specified.

2. BACKGROUND TO THE INITIATIVE

2.1. Description of the initiative and its objectives

The 7th EAP, adopted by the ordinary legislative procedure' (co-decision) in November 2013⁶, entered into force in 2014. It sets a framework for action designed to improve the environment, while protecting the well-being of the public and contributing to the EU's objectives of smart and sustainable growth. Building on 40 years of EU environment policy and drawing upon strategic initiatives in the environmental field⁷, the 7th EAP unifies under a shared agenda the commitments of EU institutions, Member States, regional and local administrations and other stakeholders up to 2020 and beyond.

The 7th EAP guides EU environment policy by setting nine priority objectives of equal value to be attained by 2020 (see Figure 1), together with 36 sub-objectives and 60 actions (listed in Annex 4):

Three thematic priorities:

1. to protect, conserve and enhance the EU's natural capital
2. to turn the EU into a resource-efficient, green, and competitive low-carbon economy
3. to safeguard people from environment-related pressures and risks to health and wellbeing

⁵ For more information related to on-going and planned evaluations see: https://ec.europa.eu/info/law/law-making-process/evaluating-and-improving-existing-laws/evaluating-laws/planned-evaluations_en

⁶ Decision No 1386/2013/EU of the European Parliament and of the Council of 20 November 2013 on a General Union Environment Action Programme to 2020 "Living well, within the limits of our planet".

⁷ Including the Resource Efficiency Roadmap, the 2020 Biodiversity Strategy, the Communication on improving delivery of benefits from EU environment services, and the Low Carbon Economy Roadmap.

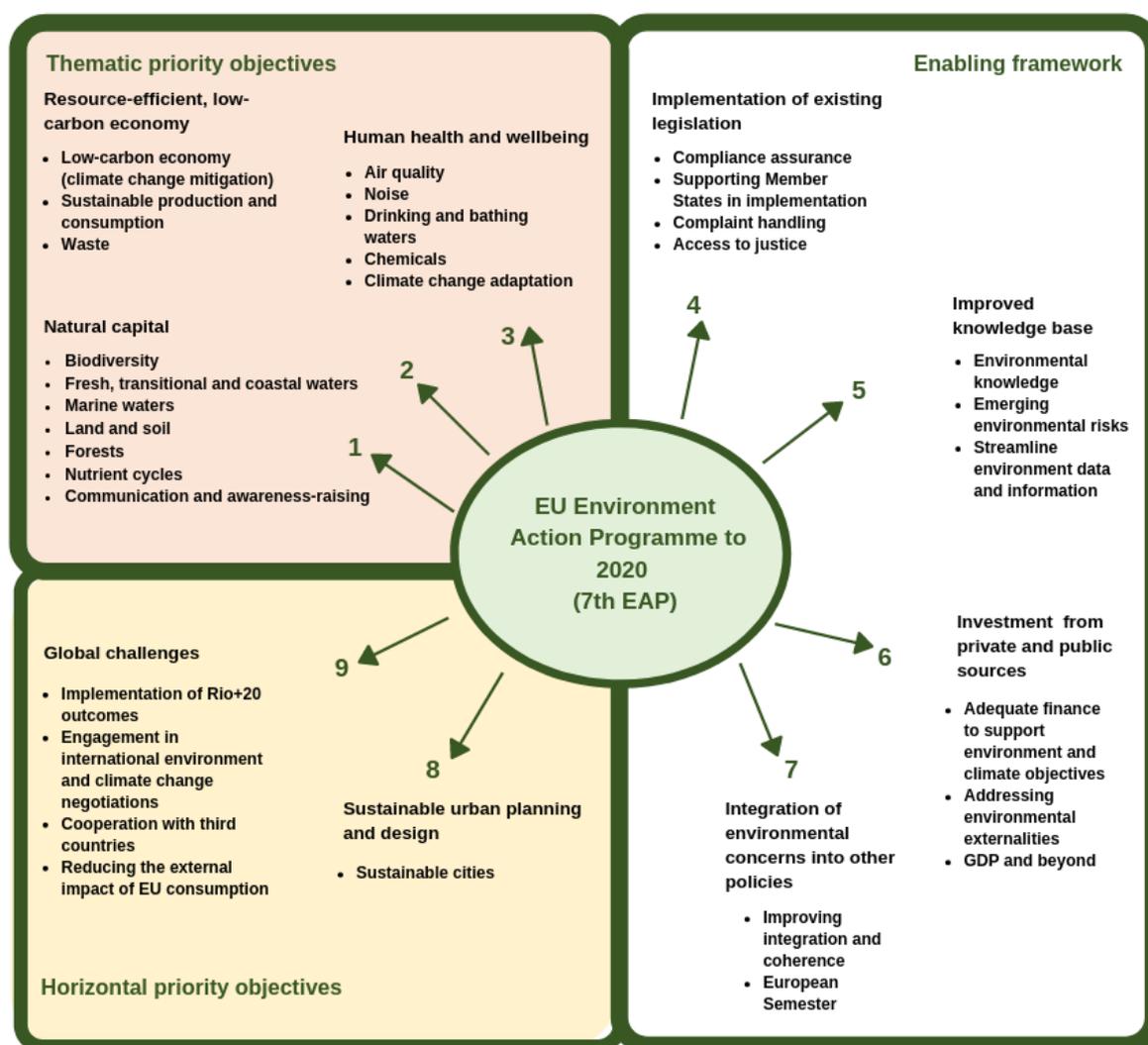
Four so called ‘enablers’ will help Europe achieve these goals:

4. better implementation of legislation
5. better information by improving the knowledge base
6. more and wiser investment for environment and climate policy
7. full integration of environmental requirements and considerations into other policies

Two cross-cutting priority objectives complete the programme:

8. making the EU’s cities more sustainable
9. helping the EU tackle international environmental and climate challenges more effectively

Figure 1: Structure of the 7th EAP



The enabling framework responds to the underlying barriers to meeting the thematic priority objectives. This is in recognition (from previous EAPs, and particularly the final assessment of the 6th EAP) that, for example, we can achieve clean air quality only if we implement legislation, develop the knowledge base, free up investment, and ensure that environmental concerns are incorporated into ‘other’ areas such as industrial policy and agriculture.

Together with these nine priority objectives, the 7th EAP sets a long term vision until 2050 for current and future environment and climate action, providing a stable and predictable environment for sustainable investment and growth.

*"In 2050, we live well, within the planet's ecological limits. Our prosperity and healthy environment stem from an innovative, circular economy where nothing is wasted and where natural resources are managed sustainably, and biodiversity is protected, valued and restored in ways that enhance our society's resilience. Our low-carbon growth has long been decoupled from resource use, setting the pace for a safe and sustainable global society"*⁸

The 7th EAP drew on the ongoing work of the EEA⁹ on the state of the environment and lessons learned from the final assessment of the 6th EAP¹⁰. It also drew on a long history of environment action programmes (EAPs) going back to 1973 (see Annex 9). These EAPs have evolved in response to the needs of the time, and the accumulated experience in strategic environmental policy. In particular, the first four focused on legislative measures, while subsequent ones reflected the shared responsibility of the various organisations involved, the need for a wider set of cross-cutting measures, and for financial support.

2.2. Intervention logic

The intervention logic of the 7th EAP overall strategic framework, shown in Figure 2, shows support for policies pursued by both the EU and the Member States.

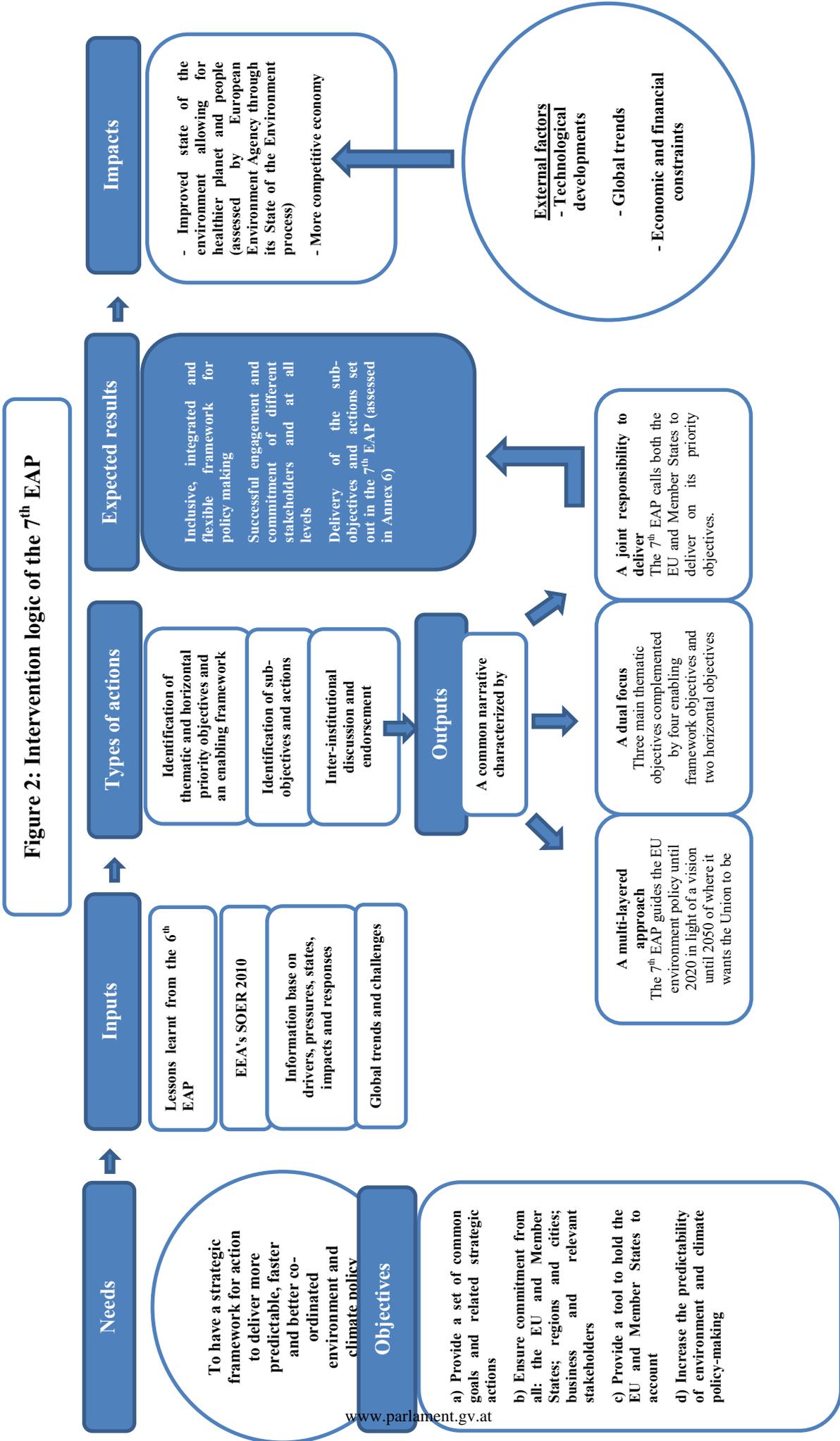
- Objectives should lead to results: the four objectives set out in the intervention logic are challenging to assess by themselves. One of the ways of assessing them is to see if the expected results materialised. There is a particular focus on the extent to which the 7th EAP's nine priority objectives and their sub-objectives and actions were achieved (considered in Annex 6 in detail, while Section 3 looks at the extent of their ongoing implementation).
- Results should lead to impacts: the state of the environment should be improved if the 7th EAP's nine priority objectives and their sub-objectives and actions are achieved. This is seen in the 'impacts' section of the intervention logic, and is monitored by the European Environment Agency as part of its 'state of the environment' process (see Section 3 below).

Hence, this evaluation looks at both the four objectives in the intervention logic and at the extent to which the priority objectives, sub-objectives and actions because have been achieved. Whilst the focus of this evaluation is on the structure of the 7th EAP, the structure does not exist in isolation. The only way to assess whether the objectives of the intervention logic are being achieved is to assess the extent to which the priority objectives and their sub-objectives and actions have been achieved, leaving the environment in a better condition.

⁸ Decision No 1386/2013/EU, para. 1 of the Annex.

⁹ European Environment Agency, "The European environment – state and outlook 2010" (SOER 2010).

¹⁰ COM(2007) 225 final.



2.3. Baseline

Unless otherwise specified for this evaluation, the counterfactual scenario used as a baseline is that there is no EAP, and that policies were developed and applied without any overall strategy. In other words, after the 6th EAP came to an end, it was not replaced by another EAP. This has the advantage of providing a clear point of comparison, and enables questions to be asked about whether the structure was right.

In some areas, however, comparison is also made with the 6th EAP. For example, the evaluation questions take account of the structural changes between the 6th and 7th EAP (see below for a discussion of the changes). The review of the 6th EAP and the Impact Assessment of the 7th EAP provide a strong evidence base and a clear view of the situation at the start of the 7th EAP. The section below explains this pathway.

2.3.1 Pathway from the 6th to the 7th EAP

The final assessment of the 6th EAP fed into the definition of the 7th EAP, shedding light on the challenges and opportunities ahead. The final assessment of the 6th EAP showed that a framework for action with a shared agenda and narrative enables the EU to capitalise on synergies between different policies, and to guide future developments of environmental and climate policy in a coherent and concerted way. A shared framework offers predictability for business, thus enabling better and sustainable investments.

However, the European Environment Agency's State of the Environment Report for 2010 stated that, despite progress in some areas, the EU was not on track to achieve any of its environmental targets. Europe's natural capital, biodiversity and ecosystems were still being degraded and depleted; global and European cuts in greenhouse emissions were far from sufficient to keep average world temperature increases below 2 °C and severing the link between natural resources and economic growth remained a challenge. Air pollution, exposure to multiple pollutants and chemicals and the effects of climate change severely threatened human well-being and health.

In this light, the Impact Assessment for the 7th EAP¹¹ identified and assessed three priorities needing strategic action:

- Protecting, conserving and enhancing the EU's natural capital
- Turning the EU into a resource efficient and more competitive low-carbon economy
- Safeguarding people from environment-related pressure and risks to health and wellbeing

The final assessment of the 6th EAP showed that it was less effective as a common framework than it might have been because of:

- Failure to implement it appropriately
- Lack of a sound knowledge base for policy making
- Lack of right incentives for environment and climate action
- Lack of policy coherence and integration

¹¹ SWD (2012) 398

Recognising the multidimensional nature of environmental and climate policy, the 6th EAP also stressed the importance of complementing actions building on the strategic role of cities in triggering transformative actions at local and regional level with a comprehensive global approach.

3. IMPLEMENTATION AND STATE OF PLAY

Since its adoption in November 2013, the 7th EAP provided a basis on which the European Commission could organise its environmental policy work.

At the start of his mandate, the Environment Commissioner Karmenu Vella stated in his September 2014 hearing with the European Parliament that he intended to focus on implementing the 7th EAP. Accordingly, the 7th EAP priorities continued to form the backbone of the Commission's environmental work. For example, in DG Environment:

- The DG's policy directorates are structured in line with the 7th EAP objectives, with staff resources allocated to those objectives.
- The strategic planning and annual management plans are based on the 7th EAP structure and entirely consistent with it.
- Separate procedures, such as the environment implementation review¹², are based on the structure of the 7th EAP. The bi-annual reviews identifying the main shortcomings in implementation in each Member State have provided significant input into the policy area assessments and the final evaluation of the 7th EAP.
- DG Environment has been monitoring the implementation of the 7th EAP since the programme's adoption in November 2013. Annual stock-taking has fed into the assessments of the 32 policy areas in Annex 6.

Whilst the structures and work of DG Environment and DG Climate Action are most clearly linked to the 7th EAP commitments, the same principle holds for other Commission DGs with policies that touch on the environment (e.g. agriculture).

The Commission is not, of course, the sole organisation responsible for implementing the 7th EAP. Most Member States have an environmental strategy, and whilst these differ considerably, they are often clearly linked with the objectives of the 7th EAP, and none are inconsistent with these objectives. The various players concerned are thus interlinked by a consistent web of intentions, which continues to develop.

3.1. *Assessment and scoring*

Annex 4 lists the sub-objectives and actions set out in the 7th EAP. Annex 5 contains a selection of the **main outputs** including legislative and non-legislative action, major events, instruments, programmes and evaluations, with the main outputs given by area.

As in many political strategies, some sub-objectives and even suggested actions, although agreed, are not fully SMART:¹³ (see list of actions in Annex 4):

- they are accepted, having gone through co-decision, and
- they should be realistic and timely,

¹² The Environment Implementation Review, founded in 2016, is a mechanism to improve the implementation of environment legislation and dialogue with the Member States.

¹³ Specific, Measurable, Accepted, Realistic, Timely.

- but, crucially for any presentation of the overall level of implementation, many are not specific or measurable.

The best way to gauge the level of implementation is systematic monitoring coupled with assessment of progress, both of which are to some extent subjective. This method, presented below, is discussed in detail in Annex 6. The methodology was to:

- Take the various sub-objectives and actions, and to cluster them into 32 policy areas. A typical policy area covers one sub-objective and one to two actions, though this varies. For example, forests covers two sub-objectives and three actions, while communication and awareness raising relates to a single action.
- For these 32 policy areas, there is an assessment of implementation against the sub-objectives and actions of the 7th EAP.
- The degree of progress was scored by policy area and the sub-objectives and actions they cover. Clearly, the allocated scores are not free from subjective judgements.

Assessment category	Definition
No progress	The EU/Member State has not announced or adopted any measures to address the actions and sub-actions under the 7 th EAP.
Limited progress	The EU/Member State has announced some measures to address the actions and sub-actions, but they appear insufficient and/or their adoption/implementation is at risk.
Some progress	The EU/Member State has announced or adopted measures to address the actions and sub-actions. These measures are promising, but not all of them have been implemented yet and it is uncertain whether they will in all cases.
Substantial progress	The EU/Member State has adopted measures, most of which have been implemented. These measures go a long way to addressing the actions and sub-actions.
Fully implemented	The EU/Member State has adopted and implemented measures that address the actions and sub-actions appropriately.

3.2. Implementation State of Play

For some sub-objectives or actions, it has always been understood that we are moving towards a target but expectations have not been made fully explicit. Actions, for instance, are often in the legal text along the lines of “urgently increasing efforts” or “taking further steps” or “improving”. Moreover, progress within any policy area varies (as does progress within an action, with most actions having multiple clauses: for instance, the waste action includes 6 numbered sub-actions and some general actions).

Finally, the EAP sets goals on taking legislative action which are a spur to further work but cannot imply automatic implementation in themselves as this would pre-empt the usual steps of policy development, and the various institutions' rights.

The scores below by priority objective are the average of the policy areas covered by that objective.

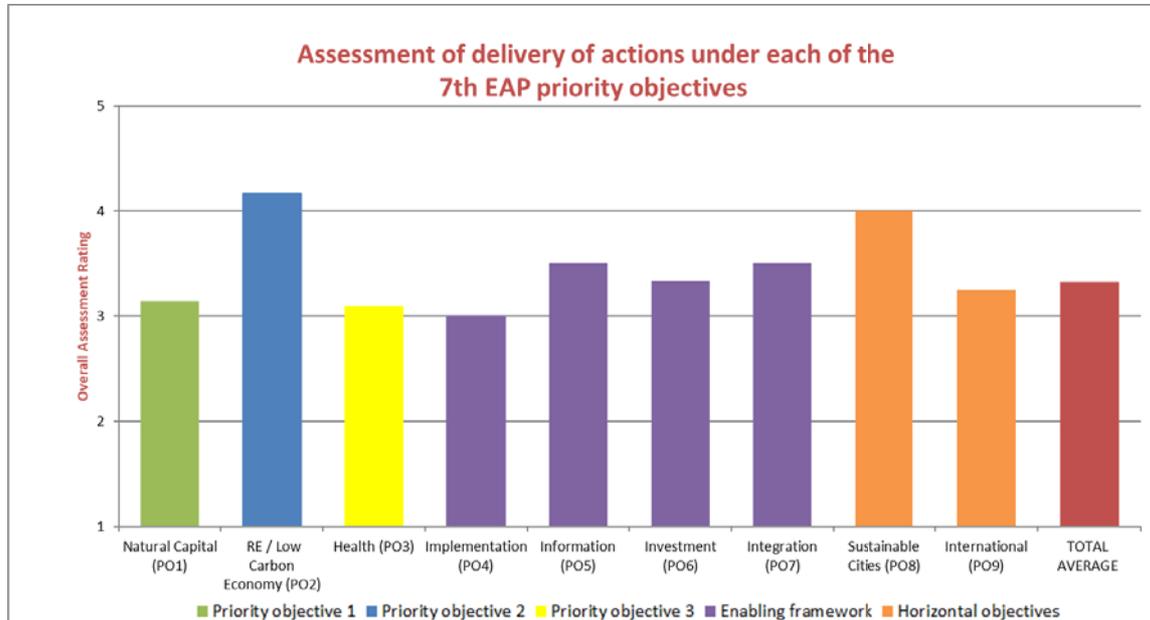


Figure 3: Assessment of delivery of sub-objectives and actions under the 7th EAP priority objectives (1= no progress; 2 = limited, 3 = some; 4 = substantial, 5 = fully implemented)

3.3. European Environment Agency assessment

Stronger progress in delivering 7th EAP sub-objectives and actions should help improve the state of the environment in practice: there may be time lags, but the correlation is clear. The European Environment Agency publishes an annual indicator assessment of progress for the three thematic priority objectives¹⁴. The scoreboard results confirm that:

“the European Union continues to fall short of achieving a number of environmental objectives by 2020, especially in areas aimed at protecting biodiversity and natural capital. When it comes to 'boosting sustainable, resource-efficient, low-carbon economy', trends and outlooks cause more concern compared to the assessment from last year, while progress in addressing environment-related threats to health remains rather mixed.”

In more detail:

- **For priority objective 1, *Protect nature and strengthen ecological resilience*:**

The outlook to 2020 remains bleak. There continues to be a considerable negative impact on the EU's natural capital, to the point that the EU is not on track to reach almost all of the selected 2020 objectives. For example, common birds – a key indicator for biodiversity – continue to show a declining trend and over-

¹⁴ “Environmental indicator report 2018 - In support to the monitoring of the Seventh Environment Action Programme”, EEA Report No 19/2018.

fishing continues to be a problem. Also there are still no policies in sight to promote the necessary reductions in the rate of land take (land lost to artificial surfaces such as buildings and roads).

- **For priority objective 2, *Boost sustainable, resource- efficient, low carbon growth:***

The outlook to 2020 remains mixed. The EU is on track to meet climate and renewable energy related targets for 2020, although it is uncertain whether it will meet its energy efficiency target. There have been resource efficiency improvements. However, waste generation increased recently, and a reduction in environmental impact of production and consumption is uncertain for the housing sector and unlikely for the food and mobility sectors. Overall, this year's scoreboard has modified the outlook towards meeting this objective from uncertain to unlikely to be met by 2020.

- **For priority objective 3, *Effectively address environment-related threats to health and well-being:***

The outlook to 2020 remains mixed. There have been substantial reductions in emissions of air and water pollutants in recent decades. However, there are still key concerns over air quality and noise pollution in urban areas, and chronic exposure of the population to mixtures of chemicals. Ammonia emissions, arising mainly from agricultural production have continued to increase.

Figure 4 below sets out the EEA's independent assessment of past trends and outlooks for the various 7th EAP indicators they use. While these are focused on the state of the environment, they cover the full DPSIR range (drivers-pressures-states-impact-responses).

Figure 4: European Environment Agency 7th EAP indicators (December 2018)

Indicator	EU indicator past trend (*)	Outlook for meeting the selected objective by 2020								
Priority objective 1: 'to protect, conserve and enhance the Union's natural capital'										
(!) Exposure of terrestrial ecosystems to eutrophication due to air pollution (*)	▲	●								
Gross nutrient balance in agricultural land: nitrogen	▲	●								
(!) Land take (*)	▲	●								
(!) Forest: growing stock, increment and fellings	▲	●								
Status of marine fish and shellfish in European seas	▲	●								
Abundance and distribution of selected species (common birds (*) and grassland butterflies)	▲	●								
(!) Species of European interest	▲	●								
(!) Habitats of European interest	▲	●								
Status of surface waters	▲	●								
Priority objective 2: 'to turn the Union into a resource-efficient, green, and competitive low-carbon economy'										
Resource productivity	▲	●								
Waste generation in Europe (excluding major mineral wastes) — absolute and per capita	▲	●								
Recycling of municipal waste (*)	▲	●								
Use of freshwater resources	▲	●								
Total greenhouse gas emission trends and projections	▲	●								
Share of renewable energy in gross final energy consumption	▲	●								
Progress on energy efficiency in Europe	▲	●								
Energy consumption by households	▲	●								
Greenhouse gas emissions from transport	▲	●								
(!) Animal product consumption (animal protein)	▲	●								
Share of environmental and labour taxes in total tax revenues	▲	●								
Employment and value added in the environmental goods and services sector (EGSS) compared with the whole economy	▲	●								
Environmental protection expenditure in Europe (deflated absolute value)	▲	●								
Priority objective 3: 'to safeguard the Union's citizens from environment-related pressures and risks to health and well-being'										
Exceedance of air quality standards in urban areas (nitrogen dioxide: NO ₂ ; dust particles: PM ₁₀ ; fine particulate matter: PM _{2.5} ; ozone: O ₃)	▲ NO ₂ , PM ₁₀ , PM _{2.5} ▲ O ₃	●								
Emissions of the main air pollutants in Europe (sulphur oxides: SO ₂ ; nitrogen oxides: NO _x ; fine particulate matter: PM _{2.5} ; non-methane volatile organic compounds: NMVOCs; ammonia: NH ₃) (*)	▲ SO ₂ , NO _x , PM _{2.5} , NMVOCs ▲ NH ₃	● SO ₂ , NO _x , PM _{2.5} , NMVOCs ● NH ₃								
Bathing water quality	▲	●								
Number of countries that have adopted a climate change adaptation strategy and/or plan	N.A.	●								
Exposure to environmental noise	▲	●								
Consumption of chemicals, by hazard class	▲	●								
Total sales of pesticides	▲	●								
<table border="1"> <thead> <tr> <th>EU indicator past trend</th> <th>Outlook for meeting the selected objective by 2020</th> </tr> </thead> <tbody> <tr> <td>▲ Improving trend</td> <td>● It is likely that the EU will meet the objective by 2020</td> </tr> <tr> <td>▲ Stable or unclear trend</td> <td>● It is uncertain whether or not the EU will meet the objective by 2020</td> </tr> <tr> <td>▲ Deteriorating trend</td> <td>● It is unlikely that the objective will be met by 2020</td> </tr> </tbody> </table>			EU indicator past trend	Outlook for meeting the selected objective by 2020	▲ Improving trend	● It is likely that the EU will meet the objective by 2020	▲ Stable or unclear trend	● It is uncertain whether or not the EU will meet the objective by 2020	▲ Deteriorating trend	● It is unlikely that the objective will be met by 2020
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▲ Deteriorating trend	● It is unlikely that the objective will be met by 2020									

3.4. European Parliament and Committee of the Regions

In its med-term review of 2 November 2017, the European Parliament¹⁵ concluded that:

“while the EAP scope remains relevant to current needs and adds value to EU and national policy-making efforts, its objectives are unlikely to be fully met by 2020, despite sporadic progress in some areas. Another key finding in this document is

¹⁵ See: [http://www.europarl.europa.eu/thinktank/en/document.html?reference=EPRS_STU\(2017\)610998](http://www.europarl.europa.eu/thinktank/en/document.html?reference=EPRS_STU(2017)610998)

that environmental and climate-related concerns are not sufficiently integrated into a number of EU policies.”

The Committee of the Regions in its opinion ‘Towards an 8th Environment Action Programme’¹⁶:

Concludes that the 7th EAP has demonstrated its added value and has had a positive influence on EU environmental policy, citizens, the environment and the economy. Its long-term vision is key in providing a stable environment for sustainable investment and growth, within the planet's ecological limits;

Highlights that the 7th EAP was comprehensive and very complex, with many sub-targets and detailed descriptions. Also, as it was rather static by setting targets for a given period, the 7th EAP was not able to respond to new technology developments, changing circumstances and new international strategies;

Points out that the 7th EAP outlined actions for improving the sustainability of cities, but neglected other types of communities, such as rural, coastal or mountain areas. While cities are important hubs for achieving the objectives, they do not exist in isolation from their surroundings. More attention should be given to the interrelations between cities and their hinterland;

4. METHODOLOGY

This evaluation focuses on January 2014 to December 2018. It looks at the extent to which the structure and strategic role of the 7th EAP improved environmental and climate policy-making in Europe. In doing so, it examines three aspects: 1) What a good strategy for policy-making is? 2) To what extent does the 7th EAP meet the success criteria of a good strategy? (details in Annex 3), and 3) To what extent did the 7th EAP implement the promised actions?

The Commission’s assessment builds on an internal analysis of action implementation; external input, such as the stakeholder consultation; an external study with issue papers on different topics; and the EEA indicator reports. It reflects the Commission’s ongoing work and expert views, as well as documented sources. As far as possible, the external inputs are integrated in the Commission’s analysis, but in Section 5 it was decided, for the sake of transparency, to keep the Commission’s assessment separate from stakeholders’ views. In Section 5, the ‘Commission findings’ take those stakeholder views into account and then presents the Commission’s views on the basis of all the available evidence.

In line with the **European Commission’s guidelines for evaluations**¹⁷, the evaluation includes an assessment of the 7th EAP against the Better Regulation guidelines using a number of evaluation questions, set out in the Roadmap.

Effectiveness:

- To what extent has the 7th EAP enabled more predictable, faster and better co-ordinated actions by the EU and the Member States?

¹⁶ May 2019: <https://cor.europa.eu/EN/our-work/Pages/OpinionTimeline.aspx?opId=CDR-1672-2018>

¹⁷ See: http://ec.europa.eu/smart-regulation/guidelines/toc_guide_en.htm

- To what extent has the 7th EAP been useful in terms of engaging different stakeholders?
- How has the 7th EAP structure contributed towards achieving its nine priority objectives?

Efficiency:

- To what extent has the 7th EAP created synergies or opportunities for streamlining, and cost saving at various levels?
- To what extent has the 7th EAP been useful in identifying and addressing information needs and thus supporting efficient and effective policies?

Relevance:

- To what extent does the 7th EAP address the challenges of EU environmental policy in a proportionate way?
- How flexible is the 7th EAP approach to allow new and emerging issues to be taken into account?

Coherence:

- How consistent with each other are the nine priority objectives and their actions?
- To what extent is the 7th EAP integrated and coherent with other EU policies and strategies, including the Juncker priorities and the Europe 2020 Strategy?
- To what extent is the 7th EAP coherent with international commitments, including the 2030 Agenda and SDGs?

Added value:

- What is the additional value resulting from the 7th EAP, compared to what could be achieved by EU environmental policy without such a framework? ¹⁸

4.1. Process

In line with standard practice for Commission evaluations, after adoption of the Roadmap, the main questions were divided into sub-questions, which are easier to answer¹⁹. Answers were provided²⁰ on the basis of:

- **Implementation assessments** (see Annex 6): these provide an overview of developments and implementation of the 7th EAP and its various objectives, sub-objectives and actions across 32 policy areas. They cover (together with Annex 5)

¹⁸ Usually, evaluations look at EU value-added but this was considered inappropriate in this case because the initiative is a joint commitment by the EU and the Member States.

¹⁹ For example, a better way to look at the first effectiveness question is to break it up into sub-questions such as: Have the 36 sub-objectives been achieved? Have the 70 actions been achieved? Has any progress been made with the enabling framework? Is there any evidence that the enabling framework is helping to meet the other priority objectives? Is there any evidence that policy is 'smarter'? Is there any evidence that policy is 'faster'? Is there any evidence that policy is 'better coordinated'? Do Member States and regions have a consistent EAP?

²⁰ The Commission used an external contractor to support the stakeholder consultation through administrative and logistical support and also to undertake some specific literature research. The external contractor was not asked to provide answers to all of the evaluation questions, or to summarise evidence for all of them. The contractor also provided papers on selected issues such as the mapping of environment policy to SDGs, development of EAPs over time, assessment of the 7th EAP against good governance criteria.

the main outputs in terms of: legislation, evaluation, information, improving the knowledge base, implementation, major conferences; an assessment of the current situation in the light of the 7th EAP's objectives and sub-objectives; and indicators of progress. These help with the basic assessment of the link between the structure of the EAP and the actions taken, and progress made at Community and Member State level (the results in the intervention logic). Given their focus on implementation, they do not aim to evaluate what would have happened in the absence of the 7th EAP, although explicit links are reported in some cases. These summaries helped to identify examples of implementation (good and bad), used in this evaluation.

- **Stakeholder consultation** (summarised in Annex 2) in line with the consultation strategy. Firstly, a 12 week **online public consultation** held in 2018 received 153 responses. Also, a series of **workshops** and **targeted consultations** involving specific interest groups to allow different aspects of the 7th EAP to be explored in more depth. The targeted consultation focused on specific groups of stakeholders, including:
 - representatives of EU environment and climate NGOs and European think tanks
 - independent academics specialising in EU environment and climate policy
 - business operating in key environmental sectors

However, not all stakeholder groups responded and commented (e.g. agriculture representatives did not respond), and so the responses despite best efforts are not a representative sample.

- **EU Member States** (summarised in Annex 2) were all consulted through a questionnaire targeting National Ministries for Environment and Climate Change, and follow-up discussions. Although all were invited to respond, responses were received in detail from 14 Member States (Ministries of Environment). EU Member States also discussed the 7th EAP in an Informal Environment Council and then at the Environment Council of December 2018, and expressed unanimous support for EAPs in principle.
- **EU institutions.** The European Parliament issued a review of the 7th EAP and the stakeholder consultation also benefited from the views of regional and local authorities through the involvement and opinion of the Committee of the Regions.
- The evaluation also draws upon the following **reports, datasets and indicators**:
 - Communication on the Final Assessment of the 6th Community Environment Action Programme²¹
 - Impact Assessment of the 7th EAP²²
 - EU Environment Implementation Review
 - the European Environment Agency (EEA) indicator reports and the EEA's work on the next State and Outlook of the Environment Report (SOER)

²¹ COM (2011) 531

²² SWD (2012) 398

- Eurostat’s indicator work through the resource efficiency scoreboard, the circular economy monitoring framework and the indicators on the Sustainability Development Goals
 - Progress reports on greenhouse gas reductions
 - relevant evaluations, studies and datasets relating to EU environment and climate policy areas and indicators on good governance
- **Benchmarking of the 7th EAP against the features of a ‘good’ strategy.** Annex 3 identifies the features of a strategy that generally enable it to meet its objectives, and then scores or benchmarks the 7th EAP against them. The assumption is that scoring well on these features means the 7th EAP is likely to be meeting the four objectives set out in its intervention logic. Some of these criteria overlap with the objectives in the intervention logic (which should be reassuring and allows for double checking of analysis elsewhere in this evaluation) whilst others are more about the process, and so do not appear in the objectives of the intervention logic. The identification and scoring of the 7th EAP against these criteria was done independently by a contractor; the criteria are based upon ample knowledge about good governance including the Commission’s ‘Quality of Public Administration – a Toolbox for Practitioners’.

4.2. Limitations – robustness of findings

The evaluation requires a comparison with the counterfactual, which in this case is the **baseline** of environmental policy if no 7th EAP had been agreed. The evaluation investigates this, but it is hard because there is an issue of **causality**:

- What would have happened without an EAP? Are achievements a result of the 7th EAP, or were they unaffected by it? For example, if an action set out in the 7th EAP is not carried out in full, the result might still be better than if it had not been included in the 7th EAP.

The response to this was to develop a series of sub-questions by: breaking broader questions down into smaller and more manageable questions. For example, a question such as 'Is policy smarter' can be better answered by looking at whether policy is based on better information, whether integration has improved allowing for more coherent responses etc. This approach reflects the way in which the 7th EAP strands reinforce each other. It also reduces the degree of subjectivity enabling more evidence based judgements.

Also in response, extra efforts were also made to hold discussions with stakeholders. The Online Public Consultation and public workshops were complemented by additional targeted consultations. This led to wider feedback and a broadly representative response, even though there could have been more feedback from some groups where environmental issues are not their primary focus (such as business or agricultural stakeholders²³). However, their views are also reflected in government responses.

Overall, efforts to triangulate multiple sources of evidence and views are considered to lead to robust findings in terms of evidence.

²³ These groups were explicitly included in the targeted consultation attempts, but with limited success

5. ANSWERS TO THE EVALUATION QUESTIONS

5.1. Effectiveness

5.1.1 *Better-coordinated*

Evaluation question: "To what extent has the 7th EAP enabled more predictable, faster and better co-ordinated actions by the EU and the Member States?"

Overall response: Overall, the 7th EAP helped to provide more predictable, faster and better co-ordinated actions. It matches good governance criteria for developing a strategy, and this is logically linked to better policies. The 7th EAP has increased predictability by bringing together distinct issues and having everyone agree them. This has helped with the implementation of some measures (such as the Environment Implementation Review, designation of small drinking water suppliers, tackling invasive alien species, following up the Rio+20 agenda which eventually led to agreement on the SDGs). As in most broad long-term strategies, some of the actions envisaged did not take place (non-toxic environment strategy by 2018 and headline target for reduction in marine litter), while others were added (Plastics strategy). Stakeholders have raised the question of whether the change in political leadership from one Commission mandate to the next led to reduced predictability.

What is the issue?

The EAP involved co-ordinating and agreeing a list of sub-objectives and actions. This should lead to a smoother implementation for the duration of the EAP because strategic decisions have been taken, translated into more operational sub-objectives and actions, discussed and then agreed amongst a broad range of interested parties. That means they should be more predictable, in the sense of having a degree of strategic buy-in.

What are the Commission's findings?

Section 3 sets out the extent to which the 36 sub-objectives and 60 actions have been implemented. Clearly, there has been progress overall, many sub-objectives and actions have been implemented, and there is policy progress in all areas.

Looking at the different objectives, sub-objectives and actions, there is widespread agreement (see 5.1.2) that they cover the main issues and provide a comprehensive framework for action. The process of agreeing through co-decision has enabled policy to be better co-ordinated thanks to the explicit co-ordination of the parties involved (i.e. cities to regions to national governments to EU level) and explicit agreement on shared actions. Stakeholders (see below) have generally appreciated the co-ordination and clarity provided by a shared programme.

Better co-ordinated policy should be more predictable. The priority objectives are the right ones (see the first relevance question), and the involvement of stakeholders in the process has ensured better co-ordination. However, a possible limiting factor mentioned by stakeholders was loss of predictability with the transition from one Commission to the next (as in 2013), with the new Commission having its own mandate and priorities.

The governance assessment (see Annex 3) suggests that the 7th EAP met the criteria for good governance. There is widespread acceptance (see 5.5.1) of having a periodic high-level discussion on priorities amongst all interested parties, followed by agreement on a strategy which guides all parties involved and helps with resource allocation. This is in line with the requirements for good policy making promoted by the Commission²⁴ and is common practice across EU policies (e.g. Europe 2020, EU trade for all strategy, EU global strategy, EU plastics strategy, EU migration strategy). More specifically, the 7th EAP meets to a high degree the quality criteria for good policy making: political commitment; adequate resources; vision, objectives and targets; monitoring, continuous learning; and broad participation.

Although national strategies tend not to quote the EAP directly, they often are heavily influenced by it so coherently reflect the policy framework at the EU level.

- The 7th EAP has influenced the strategic approaches and action programmes of Member States, regions and cities (see Annex 8). In several Member States, the 7th EAP has been taken into consideration when developing specific national policies. Examples include climate policies (e.g. Cyprus, Czechia and Finland) and waste policies (Bulgaria, Cyprus, Finland). Some Member States say they have taken explicit account of the 7th EAP when developing their national strategy on climate change mitigation and adaptation.
- Strategies in other Member States show a considerable degree of consistency with the 7th EAP. This holds both for larger countries, such as Poland, and for smaller ones with fewer resources, which confirm that the 7th EAP has been a crucial source of inspiration for their national strategies.

Assessing whether policy is ‘faster’ inevitably involves a subjective judgement. However, it is reasonable to suppose that a more predictable and better coordinated policy will proceed at a faster rate.

Having a strategic framework to back up policy proposals can support change, but strategic frameworks also need firm political backing in the longer term. For instance, waste proposals in 2014 and 2015 included references to the 7th EAP, yet negotiators were not consider themselves to be bound by the commitments in that programme, such as the commitment to phase out landfilling of recoverable waste²⁵ and so this is not fully reflected in the final proposals²⁶.

However, there are some clear positive examples – even if it remains difficult to prove causality– such as the development of the Environment Implementation Review process (see box below). There is also evidence that the enabling framework is contributing positively to meeting the other priority objectives. One Member State suggested that the implementation focus of the 7th EAP was effective at pushing stronger consideration at national and provincial level.

²⁴ See ‘*Quality of Public Administration, A toolbox for Practionner’s*, 2015.

²⁵ See Annex 4 and the action: “*landfilling is limited to residual (i.e. non-recyclable and non-recoverable) waste*”

²⁶ <http://ec.europa.eu/environment/waste/index.htm>

An example of success of the 7th EAP in facilitating delivery of the objectives of existing EU environmental policies and legislation is the Environment Implementation review (EIR) process. The EIR process is inclusive and participative, flexible and in synergy with existing work on environmental implementation.

The EIR improves the knowledge base about implementation gaps on EU environmental policy and law in each Member State; provide new solutions complementary to legal enforcement; address the underlying root and often cross-sectoral causes of these gaps; and stimulate exchanges of good practices. Based on the diagnostic, the Commission can accompany the Member States' own efforts with technical and financial support and if necessary, with expertise underpinning structural reforms. It follows a two-year cycle of Member State reports and analysis.

The EIR process was first put forward and agreed as part of the discussions on the 7th EAP, and in light of the implementation challenge identified during the period of the 6th EAP. Having this recognition of the strategic issue of implementation, and agreement on the broad response, allowed for a smoother adoption of the first EIR reports.

Examples of how the 7th EAP helped include:

- The key role played by the EU in the process for agreeing the **2030 Agenda**. Reaching agreement at the EU level on all the issues covered by such a wide-ranging agenda was a challenge. Having the 7th EAP was helpful as it provided a common agreed starting point within the EU, particularly on the Agenda's environmental aspects. The shared point of departure was not far from what was eventually needed for the SDG negotiations.
- An action on **drinking water** in small supplies was included in the 7th EAP because it coincided with a related discussion that took place while preparations for the 7th EAP were under way, between 2011 and 2013. The issue was that more than a third of the EU's 85,000 small supplies were not properly monitored or complying with all quality standards. The way it was followed up through the implementation of the 7th EAP thus cross-fertilised each other. In other words, the 7th EAP action was a helpful catalyst.

There are examples where the 7th EAP highlights issues that are relevant but where major challenges remain in relation to the objectives it lists for 2020 (more details in Annex 6):

- **Sustainable nutrient management:** the 7th EAP notes that excessive nutrient releases continue to affect air and water quality, adversely affecting ecosystems and causing significant problems to human health. Despite some progress thanks to efforts relating to the implementation of the Nitrates Directive and the Urban Waste Water Directive, more needs to be done to meet the 7th EAP 2020 objective of managing the nutrient cycle in a sustainable and resource-efficient way.

- **Noise pollution:** The Environmental Noise Directive has raised awareness of the need for action, and initiated a process of adopting and revising action plans. However, the 7th EAP target²⁷ has not been met and actions remain scattered with instances of ambitious plans, but also instances where almost nothing was achieved.²⁸ For example, the evaluation reported that more than 125 million people in Europe are exposed to excessive levels of road traffic noise, nearly 8 million people to excessive rail traffic noise, almost 3 million people exposed to excessive levels of aircraft noise, and 300,000 people exposed to excessive industrial noise in urban areas.
- **Move to a non-toxic environment:** Despite some progress in the chemical policy area, including in the continued implementation of REACH and through actions to address issues identified in the REACH review, policy assessments have identified remaining policy gaps, inconsistencies and development needs, where further action is needed. The 7th EAP agreement to develop a Union strategy for a non-toxic environment by 2018 has not been met.
- The specific reference to a **marine litter** headline target in the 7th EAP did not provide enough impetus to establish such a target. However, this has been responded to through the Plastic Strategy and the legislative action to reduce marine litter from single use plastics and fishing gear.

A typical criticism of strategic frameworks is the difficulty of measuring its performance. One solution offered is to include a realistic target for each action, and to make it legally binding. However, it is unclear whether this should be the purpose of a strategic framework with the 7th EAP leaving it for directives and regulations to lay down the details of the actions.

Overall, compliance with good governance principles suggests that the 7th EAP resulted in more predictable, faster and better coordinated action on the part of the EU and the Member States than would have been the case without it.

Views of stakeholders

In the online public consultation²⁹, stakeholders largely agreed that the 7th EAP was an effective tool to promote predictable and coordinated EU environmental and climate policy. They strongly agreed (69 %), or agreed (67 %), that the programme provides more environmental and climate policy predictability and facilitates policy coordination among Member States. The 7th EAP was also described as a key success factor in terms of making EU environmental policy more predictable and accountable in future.

The main message from interviews with Member State representatives was that the 7th EAP was useful in providing high-level strategic guidance at the EU-level that can be used or referred to at all levels of governance if desired. Because it is an accessible reference document it is used in national discussions. However, it was also noted that the

²⁷ 54b) noise pollution in the Union has significantly decreased, moving closer to WHO recommended levels

²⁸ Evaluation of the Directive 2002/49/EC relating to the assessment and management of environmental noise, SWD (2016) 454

²⁹ See: https://ec.europa.eu/info/consultations/public-consultation-evaluation-7th-environment-action-programme_en

7th EAP is probably not the sole reason for the adoption of any specific policy. One comment was that the European Parliament and NGOs attach more importance to the 7th EAP than the Commission does (Parliament uses the 7th EAP in letters to highlight failures). Moreover, the 7th EAP is a handy reference text for Parliament as it brings together all EU environmental policy in a single document.

Parliament’s European Implementation Assessment:

“found that while the EAP scope remains relevant to current needs and adds value to EU and national policy-making efforts, its objectives are unlikely to be fully met by 2020, despite sporadic progress in some areas. Another key finding in this document is that environmental and climate-related concerns are not sufficiently integrated into a number of EU policies. These findings were made on the basis of publicly available sources of information (specifically aimed at informing the evaluation of the 7th EAP) and views shared in the course of the targeted stakeholder consultation in support of this document.”

The targeted stakeholder consultation of Member States asked if the EAP made the decision-making process more effective, and the overwhelming response was ‘yes’. One Member State suggested that the 7th EAP made it easier to agree legislative proposals, suggesting it gave increased legitimacy to the topics it covered. Others suggested that it helped to integrate climate and environmental concerns into other policy areas. Still others highlighted its importance as a strategic tool to set out clear objectives and drive policy at the national level.

In its opinion, the Committee of the Regions praises the EAP as a tool for coordinating EU, national, regional and city-level policies, to align priorities, avoid duplication, minimise contradictory or disconnected processes, and close existing policy gaps. However, it also points out weaknesses in addressing rural communities.

Other stakeholders commented on the predictability between an ‘old’ and ‘new’ Commission: generally the EAP helped provide predictability between the two but predictability was reduced in a ‘new’ Commission, which had less ownership.

The 7th EAP has probably been of some help in coordinating Member States' environmental action, particularly as regards the Circular economy and tackling knowledge gaps. One respondent noted that the programme was considered to be a driving force in their focus on coordinating measures to close gaps amongst Member States.

5.1.2 Engagement of stakeholders

Evaluation question: "To what extent has the 7th EAP been useful in terms of engaging different stakeholders?"

Overall response: Overall, the 7th EAP has been very useful in engaging different stakeholders. The 7th EAP is a cooperative product, with systematic attempts to engage stakeholders in the Commission proposal followed by co-decision. This broad participation makes it a shared product, and increases buy-in. Although there has been broad buy-in from stakeholders, there have been shortcomings in

<p>implementation that could have been addressed through a clearer follow-up mechanism, including explicit information on who does what.</p>

What is the issue?

This evaluation question examines whether there has been broad participation and whether all the parties that should have been involved in the discussion, negotiation and delivery actually have been.

What are the Commission's findings?

In the Commission's view, the process of agreeing the 7th EAP was an inclusive process in which stakeholders were involved and had every opportunity to give their views.

The process by which the 7th EAP was adopted was a significant one. The co-decision process for EAPs was a Treaty requirement for the first time for the 7th EAP,

- A **sound analytical basis** was created including the evaluation of the 6th EAP, the state of the environment report, and an Impact Assessment of the 7th EAP. Of these, the evaluation work was more valuable than the Impact Assessment in determining the shape and content of the 7th EAP.
- The Commission **consulted a wide range of stakeholders** in drawing up its proposal for a 7th EAP. Through multiple public events, an open consultation process and written inputs, it gave all major stakeholders opportunities to state their position. Those consulted included the business community, NGOs, academia, bodies responsible for implementation in EU countries and representatives of civil society. Stakeholders broadly agree that the process was inclusive. Engagement was considerable both in terms of breadth and depth (for example, representatives of agriculture were asked to contribute to this evaluation, but did not become involved, whereas they did become involved in reaching agreement on the 7th EAP). The stakeholder consultation process was seen as extremely useful.
- Subsequently the proposal went through the co-decision process resulting in a legal decision under which the proposal was discussed and amended with the European Parliament and the Council. In terms of **negotiations with the other institutions**, these were productive and relatively rapid. One caveat, however, is that the Commission's proposal was detailed, which encouraged the creation of a long list of actions judged less useful elsewhere in this evaluation.
- The 7th EAP comprises a **range of commitments**: some were relatively new, others were next steps that had not been discussed by everyone before this process, while others were existing commitments. This rich variety is not a problem, but simply reflects the fact that there tend to be more strategic discussions under way in certain areas. Even in these cases, it was useful to have a clear discussion of how to put the commitments into practice.

In terms of the pros and cons of this approach:

- In general, having a strategic discussion was extremely with stakeholders has been useful to develop a common narrative, reference point and vision for the next steps: a shared understanding of priorities is not to be underestimated.

- As the product of an inter-institutional discussion it benefited from the contribution of NGOs, business and other stakeholders including those from cities and regions. The Committee of the Regions, for example, was able to put forward local needs.
- The emphasis on engagement continues a trend that could be seen with the 6th EAP which was developed in a more cooperative way than the 5th. This reflects changes in thinking about environmental governance, and a stronger emphasis on cooperative processes reflecting the need to move away from top-down solutions when tackling increasingly complex issues.
- The cooperative decision-making process stemming from the adoption of decisions as a legal form broadens and strengthens the political buy-in of the structure and content of the 7th EAP. While other Commission's policy proposals and documents are also based on broad consultations with stakeholders and the public, the added value of a decision for an EAP is that it helps to secure the commitment of Member States and Parliament and what it takes to achieve them. Indeed, the EAP provides an overarching framework for action on objectives whose implementation is under the shared responsibility of both the EU and its Member States. A Communication would not allow for such good discussion or for other institutions to amend the text.

However, despite these important positive aspects, adopting the EAP as a decision also has drawbacks:

- A co-decision process is time-consuming and, by welcoming different views and perspectives, it risks transforming the EAP into a long wish-list that is difficult to monitor and prioritize. The large number of specific actions of the 7th EAP reflects this drawback, while offering a useful lesson learnt for any future EAP. A clear follow-up mechanism accompanied by a clear allocation of responsibilities among stakeholders and a limited number of actions could contribute to streamline and strengthen the effectiveness of the EAP.

Leaving aside the co-decision process, other positive examples include:

- The Member States referred to the 7th EAP in a letter sent to President Juncker, on becoming Commission president, to maintain continuity in environmental policy between the 'old' and 'new' Commissions.
- In many Member States, policy reflects the EAP's general principles and/or structure, although no explicit reference is made to the programme.
- The involvement of the local actors, in relation to priority objective 8, with for example the Covenant of Mayors showing consistent commitments.

Whilst some less positive examples include:

- Some Member States commented that the 7th EAP was not used directly to set policy. This could reflect the fact that it was a one-off commitment, or the lack of detail in the actions along with the need to preserve flexibility.
- It was thought to be harder to engage business in developing the 7th EAP, compared with other stakeholders. This is perhaps reflected by less focus on how to support business in responding to environmental challenges (although there are

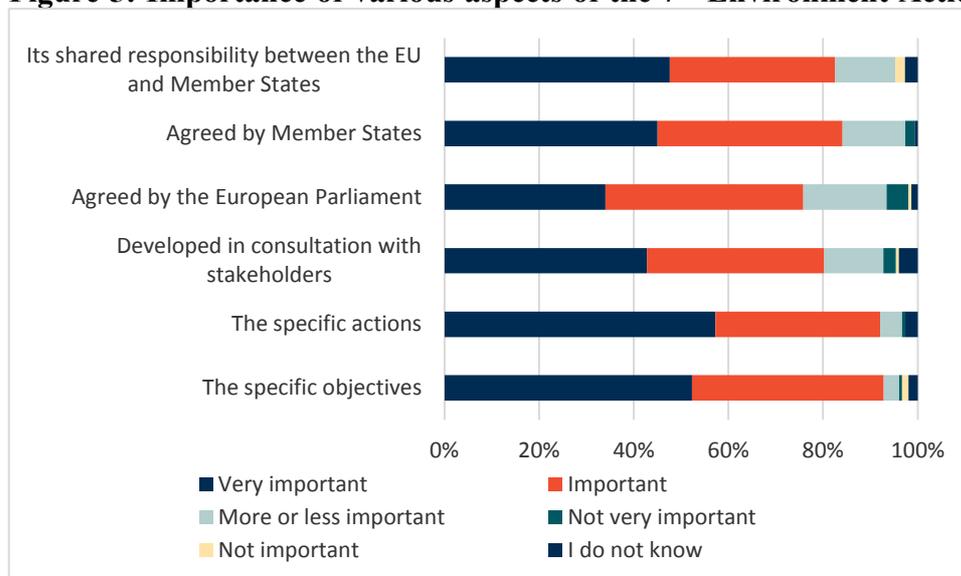
still some good examples of such co-operation). At the same time, business focused increasingly on the Sustainable Development Goals.

More generally, it was difficult to involve stakeholders from some sectors (agricultural associations and cities networks) through the Commission’s stakeholder consultation process for this evaluation (even though they were targeted). These stakeholders are more involved with the specific pieces of legislation referred to under the 7th EAP, whose development is shaped by the 7th EAP, and inevitably they have to concentrate their limited resources on following such exercises after the initial period of agreement³⁰. Cities' views are captured and well represented by the Committee of the Regions.

Views of stakeholders

Respondents to the Online Public Consultation stated how important certain factors were for the success of the 7th EAP. All the factors mentioned were viewed as either very important or important³¹. This suggests an endorsement of the approach to the 7th EAP, and specifically for this evaluation question an endorsement of stakeholders’ shared responsibility and involvement in the process (first four bars/lines of Figure 5 below).

Figure 5: Importance of various aspects of the 7th Environment Action Programme



³⁰ For example, agricultural representative bodies such as Copa-Cogeca and agriculture stakeholders were asked to participate in public workshops and in the targeted consultation, but chose not to do so. It is likely that they are more involved in responding to core business, e.g. the ongoing discussions on EU budget spending in the CAP. Farming representatives did not take part in the stakeholder consultation held by the European Parliament either.

³¹ All the factors for the 7th EAP’s success were viewed by the OPC respondents to be very important or important for the success of the 7th EAP. However, the two with the strongest positive reactions were the specific actions and objectives of the programme. Conclusions did not differ noticeably between stakeholder groups apart from some small variations such as: NGOs were relatively more supportive of objectives; private individuals of the specific actions noted by the programme were very important, rather than important; private individuals were least positive about the 7th EAP being agreed upon by the European Parliament. See Support Study for more details.

The targeted consultation of Member States found the 7th EAP to be ‘politically useful’, in part because stakeholders were involved and the programme was debated and approved by the Council and Parliament. More generally, the participatory policy-making process meant that stakeholders played a more active role in its development.

5.1.3 *Structure of the 7th EAP*

Evaluation question: "How has the 7th EAP structure contributed towards achieving its nine priority objectives?"

Overall response: The overall structure (of a limited number of thematic objectives, supported by increasingly more operational sub-objectives or actions) helped meet the priority objectives. While the principle of a multi-level EAP is endorsed and reflects good practice, the evaluation findings call into question the degree of complexity and depth of the actions.

What is the issue?

The structure of the 7th EAP comprises nine priority objectives, 36 more operational sub-objectives and 60 actions. Is this the right structure, is it detailed enough, or is it too detailed?

What are the Commission's findings?

The overall structure (a limited number of thematic objectives, supported by increasingly more operational sub-objectives and then actions) enables priorities and actions to be communicated to different groups and for different purposes.

The nine thematic objectives chosen are still largely relevant and appropriate. In particular, the enabling framework has been very relevant: for example, the focus on investment was a cross cutting issue which benefited from increased attention. On the other hand, international and city-level issues could have been mainstreamed within the other priority objectives.

Annex 9 shows that the structure was simplified by comparison with that of the 6th EAP, with the 7th EAP given the format of a ‘narrative brochure’ to highlight and focus on a few priority objectives and enabling objectives. All stakeholders view this improvement in the clarity of the narrative as appropriate and helpful.

The sub-objectives and actions are rather long and have been criticised by a number of stakeholders (from a mixture of stakeholder groups) with some justification on two grounds: (a) they are too complex, and (b) it is difficult to monitor them and assess whether they have been achieved.

- As regards complexity, the actions often have multiple sub-clauses and so move away from the intention to identify priorities and instead becoming a long wish list.
- As regards monitoring, the state of the environment report and the EEA indicator reports provide the environmental picture on the ground, but it is an incomplete picture with no coverage of the enabling framework. Of course, the lack of a comprehensive monitoring framework may be inevitable and does not necessarily indicate that the structure is wrong, but simply that monitoring can be a challenge.

One indication that the structure is appropriate is the extent to which it is copied or reflected in national strategies or in other EU strategies (see 5.2.2 and Annexes 3 and 8). A first and important point is that most Member States also have an environmental strategy, and they appear to be consistent with the 7th EAP (see Annex 8). The differences between them reflect the need to have national ownership and reflect national issues.

The structure of the 7th EAP was also in part a response to findings about the 6th EAP in the Impact Assessment of the 7th EAP. Whilst the relevant issues are discussed elsewhere in this evaluation report, it is worth looking at the key issues together and in particular the problem drivers identified in the Impact Assessment:

- inadequate implementation
- insufficiently coordinated data and information on the environment and gaps in the knowledge base
- lack of coherence (consistency) in addressing increasingly interlinked challenges
- problems related to incentives for investment in environment-related measures

The 7th EAP explicitly addresses the problem drivers that were identified at the time of its design. These issues led to the enabling framework and the four ‘Is’: implementation, information, integration and investment. There has been progress in all of these areas (see Annex 6), related to their prominence in the structure and the added focus on them.

Overall, the structure of the 7th EAP has been helpful in meeting priority objectives. Its concepts and objectives have been picked up and reflected and given more emphasis by Member States. The principle of a multi-level EAP is generally endorsed, but the degree of complexity or depth is more open to question.

Views of stakeholders

The online public consultation found that stakeholders perceived some action in all nine objective areas (see Annexes 5 and 6). There was no explicit assessment of the causality; while action has been taken, stakeholders did not explicitly link this to the structure. In general, they noted that the objectives requiring most improvement were objectives 4 (improved implementation of policy), 5 (an improved knowledge base), and 9 (addressing international challenges).

The targeted stakeholder consultation of Member States found that 7th EAP has affected individual countries differently. Its influence is more direct in some and indirect, in others (so it has always helped improve understanding, but sometimes influences policies and strategies). Another distinction can be drawn from the different areas of influence of the 7th EAP, for example in some Member States the 7th EAP’s natural capital approach and the resource-efficiency approach were both mentioned as influential.

Some Member States suggested that the 7th EAP was too complex. This perception was echoed by stakeholders.

5.2. Efficiency

5.2.1 *Synergies and opportunities*

Evaluation question: ‘To what extent has the 7th EAP created synergies or opportunities for streamlining, and cost saving at various levels?’

Overall response: The 7th EAP’s structure and in particular the enabling framework, have supported synergies: both horizontally (between policy areas) and vertically (between levels of government). The programme’s focus on better integration and implementation have supported actions designed to make cost savings and improve efficiency. Failing to implement environment legislation costs the EU around EUR 55 billion every year. Despite increasingly ambitious environmental targets and increased efforts in many policy areas, spending on environmental protection has remained broadly constant in Europe over many years at about 2 % of GDP. This may reflect improvements in efficiency, although it is difficult to prove causality.

What is the issue?

Having a well-designed EAP should allow for better-designed and more effective actions, in particular through better integration and the generation of synergies. This should lead to actions that are more efficient, achieving their desired effects at lower regulatory cost. This could be seen through either the overall regulatory cost burden, the enabling framework facilitating better delivery of other objectives or a direct link between the 7th EAP and changes in costs and streamlining.

What are the Commission’s findings?

A particular issue for synergies and streamlining is integration and mainstreaming. The policy levers to best tackle environmental issues are increasingly owned by other policy areas, e.g. agriculture for biodiversity, transport for air quality, employment on healthy and non-polluted work environment. There are also synergies and trade-offs between climate change policies and environment: for example, there is increasing recognition of solutions that act on both climate change and air pollution, such as methane emissions reductions and development of non-combustible renewable energy sources (e.g. wind, solar). Also, there is increasing awareness of the benefits of a circular economy in meeting climate objectives.

Whilst integration can achieve cost synergies, it is difficult to measure as it cannot be ‘separated out’. This means that any assessment of it needs to rely on looking at where the logic is applied and the processes in place to deliver it.

For example, the common agriculture policy reform of 2013 introduced a more targeted cross compliance, new greening direct payments and more focused rural development policy to reinforce the coherence between the CAP and environmental and climate policies. On 1 June 2018, the Commission published the legislative proposals for the next CAP (2020-2027) for a smarter, simpler, modern and more sustainable CAP providing significant added value for farmers and society, which aims at strengthening integration and delivering a higher degree of ambition for the environment and climate.

Annex 6 shows many improvements in cost-efficiency, though these are challenging to link specifically to the 7th EAP.

- There has been an increased use of evaluation to investigate the fitness for purpose of the acquis. As regards the rules and laws for which DG Environment is responsible, about three fifths of the legislation has either undergone evaluation or is currently being evaluated, including consideration of regulatory burdens and the scope for streamlining. This includes the most costly legislation (air, water, chemicals, industrial emissions, and nature). However, while this is reflected in the 7th EAP actions, it is unclear if this was driven by the 7th EAP or by the Commission's Better Regulation agenda.
- There are changes associated with reductions in regulatory costs as part of the Commission's REFIT Programme³². For example, the Impact Assessment accompanying the proposal on the use of hazardous substances in electrical and electronic equipment³³ found the proposal would reduce costs for business and public authorities, have a positive social impact for EU hospitals, and save about EUR 170 million. The exclusion of pipe organs from the scope of the Directive would also help avoid the loss of jobs and an annual loss of up to EUR 65 million, and have no material environmental impact.
- The focus on compliance assurance and the Environmental Implementation Review will have helped improve implementation.
- The one-stop-shop for cities³⁴ is a good example of an effort to improve efficiency. There is a single entry point for information on the funding available for cities, as requested in the 7th EAP.

Overall, the 7th EAP's focus on improving implementation and integration is very likely to have improved efficiency and driven down the regulatory cost of environmental policy (at a given level of ambition). In terms of the overall regulatory burden, Eurostat's statistics on environmental protection expenditure show that while spending has gone up in line with inflation, total spending on environmental protection in the European economy has remained fairly static at around 2 % of GDP since 2000 despite increasingly ambitious environmental targets in many policy areas. At the same time, efforts to improve the environment have improved and there is additional effort (further implementation) now in many areas³⁵. This means that environmental policy is gradually becoming more efficient, although whether this is due to EAPs or smarter policy and technological advances is unclear. These figures need to be seen in the context of the costs of non-implementation estimated to be around EUR 55 billion Euros per annum (with an estimated range of EUR 30-80 billion)³⁶.

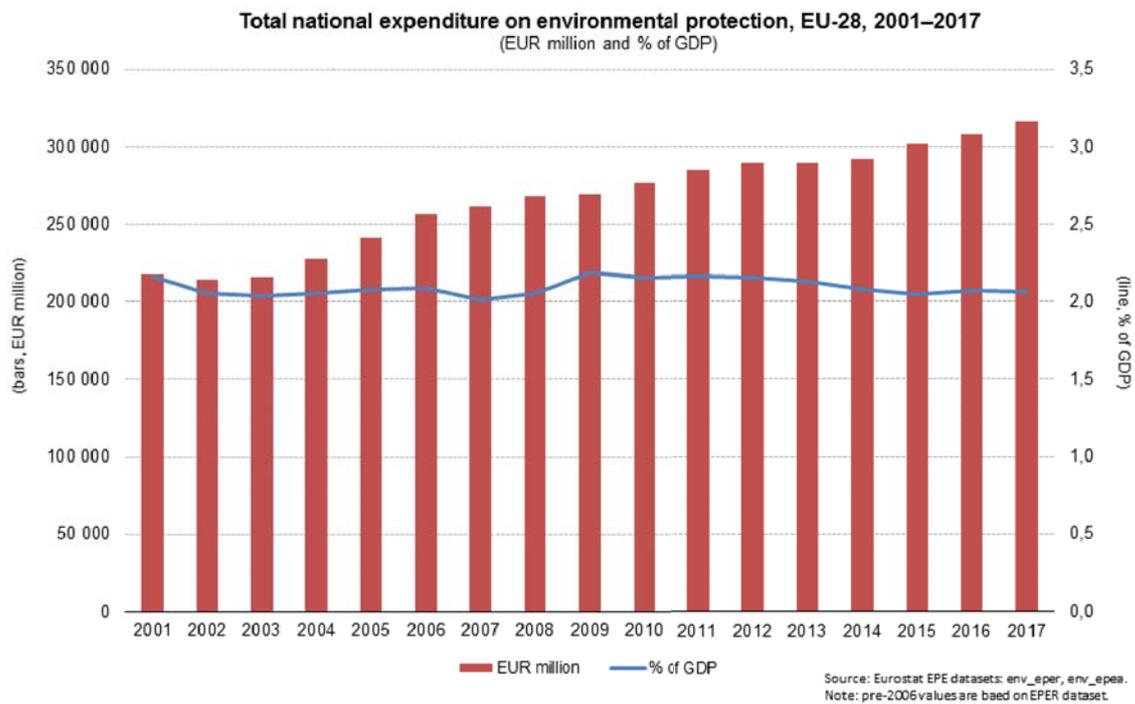
³² The European Commission's regulatory fitness and performance (REFIT) programme ensures that EU legislation delivers results for citizens and businesses effectively, efficiently and at minimum cost. REFIT removes unnecessary burdens and adapts legislation without compromising policy objectives.

³³ SWD (2017)23

³⁴ https://ec.europa.eu/regional_policy/en/policy/themes/urban-development/portal/

³⁵ For example, in air, water and waste quantified targets have increased and performance has also increased in line with this.

³⁶ Forthcoming study, COWI et al (2019).

Figure 6: EU-28 expenditure on environmental protection

Views of stakeholders

In the online public consultation, stakeholders noted that the streamlining/mainstreaming of environmental protection concerns was one of the programme's more positive aspects.

Stakeholders see efficiency as a key principle running through the 7th EAP. Some Member States have suggested that the 7th EAP has been useful in achieving synergies and streamlining actions. Others have expressed doubt, or noted that there are so many other factors at play that the extent of synergy/interaction between policies is not defined by the 7th EAP.

One Member State mentioned that the EIR process itself has been very useful, particularly as a vehicle for discussion across government departments and an opportunity for debate between ministers and senior officials at EU level (e.g. Environment Council, Informal Environment Council, meetings of Directors general from environment ministries). As such, the process has had quite a high political profile, and could support integration and the spread of best practices, hence efficiency.

5.2.2 Supporting efficient policies

Evaluation question: 'To what extent has the 7th EAP been useful in identifying and addressing information needs and thus supporting efficient policies?'

Overall response: Knowledge is a priority objective under the 7th EAP. Consequently, advances have been made in identifying and addressing information needs (both through research, the Environmental Knowledge Community, and increased evaluation). The Commission has streamlined reporting obligations, which are an important source of legislation-specific information and link various levels (local, national, EU, the general public). Member States need to share the

results of their Better Regulation activities more openly so as to create synergies with the EU level.

What is the issue?

This question asks whether the 7th EAP has enabled better information to be identified, helping to meet objectives more effectively. In practice, this can mean: identifying emerging environmental risks; ensuring research is productive; and ensuring better knowledge provision. The management of information flows, from the local level through Member States to the EU level and then onwards through active dissemination, is also relevant.

What are the Commission's findings?

The fitness check of environmental reporting looked at the costs and benefits of the current reporting system³⁷. It estimated total annual costs of EUR 22 million and benefits that by far exceed these costs. It was estimated that ongoing activities would already allow EUR 2 million to be saved annually at EU and national level, and the Commission also adopted an action plan³⁸ to improve environmental reporting and make it more transparent and better targeted. Administrative burdens were reduced while maintaining or improving benefits, mainly through efficiency gains and increased transparency (i.e. wider public dissemination of information). Action 1 of the action plan relates to the streamlining of reporting through legislative changes, which the Commission subsequently implemented by amending several pieces of environmental legislation. These efforts have been driven by both the 7th EAP and the Better Regulation agenda.

The 7th EAP identified the need, in the context of Better Regulation, for environmental policy to be evaluated in the interests of simplification and better implementation: this is a knowledge intensive process. In 2013, 13 % of the EU rules and legislation directly managed by DG Environment had been subject to an ex-post evaluation (ongoing or finalised) within the last five years. The percentage now stands at around 60 % (including ongoing evaluations). However, while surveys of Member States find they are committed to evaluation, few systematically undertake such analysis and it is rarely publicly available (see Annex 6, priority objective 7). As a result, in many cases analysis is not channelled from the Member States to the Commission as it should be and Commission analyses lack the information they need. This represents a failure at all levels of government to meet the relevant 7th EAP commitments in full.

Annex 6 details the progress made on priority objective 5, where there has been progress. Some positive examples include:

- The focus on knowledge as a priority objective in the 7th EAP has probably improved knowledge provision, with a positive impact on policies. For example, the 7th EAP has helped improve the knowledge underpinning the implementation of the EU strategy thanks to the upgrade of the Biodiversity Information System for Europe (BISE³⁹). The 7th EAP also boosted the launch of the MAES initiative

³⁷ SWD(2017) 230

³⁸ COM(2017) 312

³⁹ BISE was created to act as a single entry point for data and information on biodiversity and strengthen the knowledge base.

(Mapping and Assessment of Ecosystems and their Services), a transparent and inclusive process designed to build the knowledge base for environmental policy.

- The Climate-ADAPT platform has developed as a 'one-stop shop' for information on adaptation to climate change in the EU. Between 1 March 2013 and 31 March 2018, Climate-ADAPT had 409 565 visitors, with 5 000 registered users receiving a newsletter. As regards research and dissemination of knowledge, around 120 research projects, reports and articles have been identified as focusing on climate adaptation under Horizon 2020, and the European Climate Change Adaptation Conference (ECCA) conference .
- The 7th EAP has helped develop and improve the European Forest Fire Information System (EFFIS) and the pilot version of an overall Forest Information System for Europe (FISE).
- Research programmes such as Copernicus have proved critical in generating and disseminating knowledge on the environment, in Europe and beyond. The 3rd edition of the World Atlas of Desertification is a comprehensive tool for analysing land degradation as a global problem of human dominance involving complex interactions between social, economic and environmental systems.

Overall, the 7th EAP has addressed the right issues as regards knowledge, and led to an improved situation.

Specific work on environmental knowledge has progressed substantially. The work of the Environment Knowledge Community⁴⁰, for instance, has played a significant role in a number of actions. However, major knowledge gaps remain in areas such as: various environmental and climate policies; the transitions needed in global systems of production and consumption; further technological and social innovation and the dissemination of innovations; synergies and trade-offs between social and environmental policies and their implementations for sustainable development outcomes; and the development of effective science-policy and science-society interfaces at all levels of governance.

As regards active dissemination of environmental policy, there are overlapping scoreboards, and indicator frameworks that are not always consistent. There would be advantages in moving to more targeted communication by applying a core set of indicators more consistently, covering both policy and the state of the environment, which could also strengthen links with SDG indicators.

The European Semester is one of the ways in which actions are monitored, but this is arguably insufficient. As regards monitoring of the 7th EAP itself, the European Environment Agency's indicator reports are valuable. However, a more focused process could have helped.

Views of stakeholders

In the online public consultation, a few respondents (drawn from across the stakeholder groups) in the open answers noted that addressing knowledge gaps would facilitate transparency, allowing more actors (particularly civil society) to support policy-making, implementation, and enforcement.

⁴⁰ The Environment Knowledge Community brings together the main knowledge providers to regularly discuss and ensure coherence in environmental knowledge provision (see Annex 6).

In the targeted consultation, stakeholders thought it hard to say whether the EAP had helped with updating new information.

5.3. Relevance

5.3.1 *Address the challenges of EU environment policy*

Evaluation question: ‘To what extent does the 7th EAP address the challenges of EU environmental policy in a proportionate way?’

Overall response: The 7th EAP 2050 vision has been helpful and continues to be valid. The 7th EAP covered the right areas, whilst new areas should be considered for the post 2020 era (such as digitalisation and governance). The principle of a multi-level EAP is endorsed and reflects good practice, but there are questions about the degree of complexity or depth which also makes some actions hard to monitor.

What is the issue?

This question is about whether the 7th EAP included an appropriate range of the various challenges, and whether these were then addressed at the right level of detail.

What are the Commission’s findings?

As regards the long term vision, what follows remains a relevant statement about the long-term challenges facing EU environmental policy: *‘in 2050, we live well, within the planet’s ecological limits. Our prosperity and healthy environment stem from an innovative, circular economy where nothing is wasted and where natural resources are managed sustainably, and biodiversity is protected, valued and restored in ways that enhance our society’s resilience. Our low-carbon growth has long been decoupled from resource use, setting the pace for a safe and sustainable global society’.*

There was support from stakeholders for this vision, and there is no evidence that it does not correctly encapsulate future challenges. Relatively little time has elapsed since its adoption, compared with the period it covers, and that is one reason why it has not been overtaken.

Thematic priority objectives

The three thematic priorities correctly reflect the environmental challenges and are still valid and relevant. This was concluded after considering the European Environment Agency indicator reports, on feedback from stakeholders (see below) and the actions in the various policy areas (see Annexes 5 and 6). So, they have adequately captured the key issues also because they recognised that these problems would endure beyond the end of the 7th EAP.

Enabling framework

The four enabling priority objectives also remains largely relevant and call for continued effort. Again, this was concluded after examining feedback from stakeholders (see below) and actions in the various policy areas (see Annexes 5 and 6). However, there could have been more of focus on certain emerging issues. This is linked with the issue of future-

proofing and how to ensure that EAPs can take on board new issues as they move up the policy agenda during the lifespan of a single programme (see Section 5.3.2 for more details).

- Digitalisation and the link to the Digital Single Market agenda could have been strengthened (e.g. the eGovernment action plan).
- Social justice, as an enabler for environment policy, given that environmental policies may be harder to implement if they are perceived as harming vulnerable groups.

Cross-cutting priority objectives

The cross-cutting priorities of tackling environmental challenges as a whole and within the context of urban sustainable development remain very relevant.

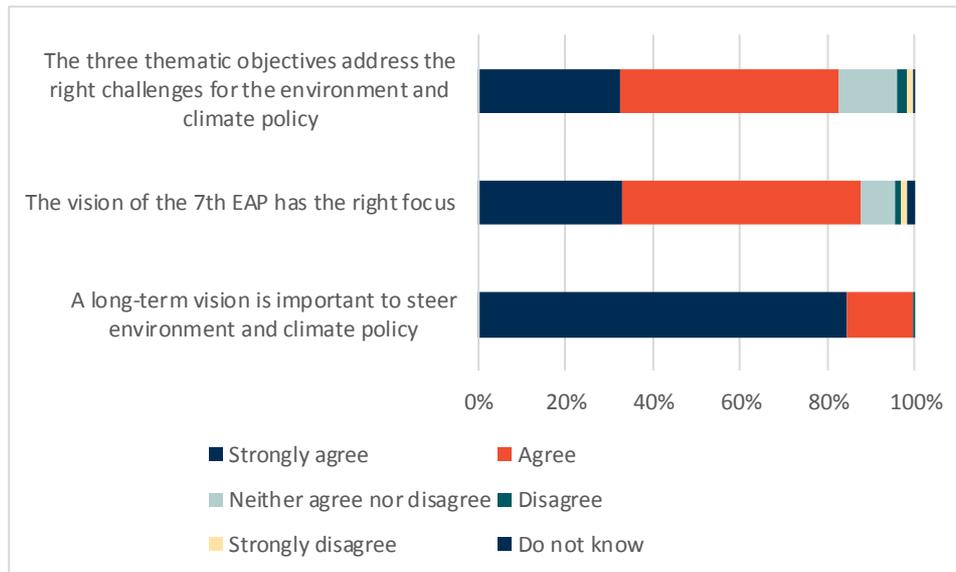
While certain environmental problems are most concentrated in cities, cities are also a source of solutions. Under priority objective 8, progress has been made towards making cities in the EU more sustainable, with many of them applying sustainable development approaches – not least European Green Capital Award (EGCA)/ European Green Leaf Award (EGL) applicants and winners. However, more cities need to be mobilised to achieve real change on a European scale.

In the spirit of the 7th EAP's priority objective 9, most environmental challenges can be tackled only by combining internal and global action. Since the 7th EAP predates the 2030 Agenda and the SDGs, the goals and actions under priority objective 9 (tackling international environmental challenges) are partially obsolete, and need fine-tuning. The goal of following up the Rio+20 outcome⁴¹ was completed with the agreement on Agenda 2030, and the focus is now on implementing the SDGs.

Views of stakeholders

Overall, most respondents thought the 7th EAP had a relevant focus and addressed pressing issues. Most respondents to the open public consultation were positive about the current breadth, longevity, and focus of the 7th EAP, and very positive about the long-term vision. All stakeholder groups were, generally positive about these three criteria. NGOs were more likely to strongly agree, while private individuals predominated among those who disagreed (though private individuals still agreed on average).

⁴¹ “the outcomes of Rio + 20 are fully integrated into the Union’s internal and external policies and the Union is contributing effectively to global efforts to implement agreed commitments, including those under the Rio conventions and to initiatives aimed at promoting the global transition towards an inclusive and green economy in the context of sustainable development and poverty eradication”; (106.(a))

Figure 7: The importance of different aspects of the 7th EAP

The respondents to the online public consultation were also asked if there were any environmental and climate challenges that were not addressed by the 7th EAP. Respondents were split over this question, with 51 % saying there were unaddressed challenges, while 49 % said there were not (but there was no marked differences between stakeholder groups). Many respondents referred to challenges, which the 7th EAP does actually deal with. However, broader issues referred to included:

- Meeting international commitments and objectives, such as the Paris Agreement, World Health Organisation (WHO) objectives and the SDGs.;
- Closer cooperation and alignment with neighbouring third countries, i.e. promoting the objectives of the 7th EAP vis-à-vis these states. Additionally, some mentioned the need to do more to promote social and climate equality;
- How environmental policy is modernised in the context of the digitalisation of society;
- Indoor air quality;
- How to tackle overpopulation; and
- Including health issues in other policy areas.

As regards feedback from stakeholders, some of the issues identified (such as including health issues in other policy areas or indoor air pollution) are included in the 7th EAP, and the Commission's view is that the feedback reflects a wish for further action. Although the SDGs were agreed after the 7th EAP, it is consistent with them (see Section 5.4.3). Other issues (such as overpopulation) are beyond the 7th EAP's remit or environmental policy more widely.

There is less agreement on whether the 7th EAP addresses the challenges to the right level of detail or specification. Analysis has revealed criticisms that the 7th EAP is disproportionately detailed – too long and complex - yet vague at the same time. The actions set out (see Annex 4) show a very long list of things to do, but often it is unclear what is to be done, by whom, or by when. This results in a loss of focus and of the capacity to monitor implementation properly.

Another example mentioned in the interest of improving focus in the future is the need to further strengthen governance, and particularly to ensure that interested parties at different levels (local, regional, national, EU) are involved in implementing the actions.

5.3.2 *Respond to new issues*

Evaluation question: How flexible is the 7th EAP approach to allow new and emerging issues to be taken into account?’

Overall response: The analysis shows that the non-prescriptive nature of the 7th EAP has allowed for flexibility in terms of achieving the programme’s overall goals and long-term vision, even if the actions taken were not detailed in the text. Two specific examples are the circular economy agenda and the Environmental Implementation Review, as actions following up the overall priority objectives of *moving to a low-carbon, resource-efficient and green economy, and improving implementation of environment legislation* respectively. The 7th EAP also led to improvements in identifying and responding to emerging risks.

What is the issue?

This question is about whether new and emerging issues arose, or required increased attention and whether the 7th EAP allowed (or supported) this.

What are the Commission’s findings?

Annex 6 shows that on the issue of emerging risks, good progress was made on setting up an integrated system to identify emerging environmental issues. Further progress needs to be made on understanding the environmental risks associated with technological developments. Systems are being set up to improve the monitoring of emerging risks.

More generally, EU policymaking during the 7th EAP has focused more on certain issues than was predicted in 2013. In these cases, the 7th EAP was successful in setting broad parameters and paths, but did not specify in detail on how they should be delivered. Having nine priority objectives established a focus, but allowed for flexibility thanks to the non-prescriptive nature of the text. Some positive examples include:

- Rapid development of circular economy policy; the Commission adopted an ambitious circular economy package including measures to promote the EU’s transition towards a circular economy, boost global competitiveness, encourage sustainable economic growth and generate new jobs. The package included EU-wide rules targeting the 10 single-use plastic products most often found on Europe’s beaches and seas, plus lost and abandoned fishing gear. Although these rules were not part of the 7th EAP, they are in line with its objectives.
- The Environmental Implementation Review is a successful approach to improving implementation and beefing up governance. The 7th EAP was sufficiently flexible to allow for the original objective to be met through an action other than the one for which provision was originally made.
- There is no evidence that the EU has adopted anything contradicting the EAP or delaying progress.

The 7th EAP itself reflected issues that emerged during the 6th EAP (see Annex 9): in particular, sustainable growth required a move toward a green, resource-efficient, competitive and low-carbon economy. The impact assessment of the 7th EAP highlighted underlying problems, which prevented the key environmental objectives during the 6th EAP from being achieved in full. These were reflected in the way 7th EAP's was designed.

Significant progress was also achieved in terms of mainstreaming environment in the security and migration agendas, and working at the nexus between environmental degradation and climate change, and migration and stability. Land restoration and the sustainable management of natural resources are acknowledged as a key contribution to tackling key drivers of forced migration by the Rabat Process and in the conclusions of the La Valetta Joint action plan.

Overall, the 7th EAP allowed for a fairly dynamic environmental policy and thus appears to have avoided any lock-in or blocking of new technologies. If the downside of a strategic framework is the lack of details in terms of follow-up to actions, the plus side is that it allows for flexibility at a later stage.

Views of stakeholders

Most stakeholders said the 7th EAP did not fully address new and emerging issues, but they felt that this was not something it needed to do.

One of the interviewees noted that some priorities now get more attention (as the policy debate evolves). For example, plastics and chemicals have become increasingly important topics during the 7th EAP. This underlines the need for flexibility in an EAP, to allow for changes in the policy debate.

The Committee of the Regions was more sceptical about the 7th EAP's capacity to respond to new issues, feeling that it suffered from some lock in.

5.4. Coherence

5.4.1 Internal coherence

Evaluation question: 'How consistent with each other are the nine priority objectives and their actions?'

Overall response: There is a high level of internal consistency: the 7th EAP was designed to be internally coherent, and this seems to have worked well in practice. In particular, the enabling framework contributed positively to the thematic objectives. However, the linkages with the horizontal priority objectives as regards local, regional and global challenges are less clear. The nine priority objectives, their sub-objectives and actions are mutually reinforcing and encouraged actions to be developed in a consistent way (addressing synergies and trade-offs).

What is the issue?

This question looks at the internal consistency of the 7th EAP. This includes whether the enabling framework contributed to the thematic objectives, and whether the cross-cutting priority objectives as regards local, regional and global challenges were consistent with

the other objectives. This involves an understanding of whether synergies were achieved, and whether trade-offs were identified and either mitigated or taken into account.

What are the Commission's findings?

The enabling framework contributed positively to the thematic objectives, as it reflects a successful promotion of a more coherent and internally consistent environmental policy. Some positive examples include the following (See Annex 6 for more details):

- The 7th EAP improved the knowledge underpinning the implementation of the EU strategy with the upgrade of the Biodiversity Information System for Europe (BISE). It boosted the launch of the MAES initiative (Mapping and Assessment of Ecosystems and their Services), a transparent and inclusive process designed to build the knowledge base for environmental policy.
- Forest protection and restoration is an important part of the broader protection, enhancement and preservation of Europe's nature and natural capital. The 7th EAP has helped to highlight connections, and the EU forest strategy stresses the continued need for sustainable forest management and policy coherence.
- The system to identify emerging issues is helping to bring policies and methodologies into line with each other (see Annex 6, Section 5.2). For the first time, it has brought together within a single framework all services and experts working on emerging environmental issues , and will bring together all relevant policy actors to discuss the consequences of the issues identified. It will help to ensure trade-offs are detected at an early stage and that opportunities for the environment are exploited.
- The increased focus on information allowed for better identification of synergies: such as those between biodiversity or air pollution and climate action. There are similarly some trade-offs in environmental media either at national or EU level (diesel cars versus petrol, biomass). Where these trade-offs exist, there have been efforts to reconcile them, such as in the revision of the Renewable Energy Directive and the reinforcement of sustainability criteria for the use of biomass.
- The structure of the 7th EAP highlights the interlinkages between key policy concerns and the need for systemic approaches, as the wording itself shows: 'enabling framework'. Examples include the importance of terrestrial and marine ecosystem services and nature-based solutions for climate change mitigation and the potential for sustainable consumption and production to reduce air pollution and the resulting links to climate change.

The horizontal priority objectives relating to local, regional and global challenges are in principle consistent with the other objectives. However, there is less evidence that their potential was properly reflected in policies. Arguably, these could have been integrated into the other seven priority objectives.

Views of stakeholders

The interviewees did not perceive any major material inconsistencies between the nine priority objectives, although some inconsistencies were questioned in terms of specific actions.

5.4.2 *Coherence with other EU policies and strategies*

Evaluation question: ‘To what extent is the 7th EAP integrated and coherent with other EU policies and strategies, including the Juncker priorities and the Europe 2020 Strategy?’

Overall response: There is some clear (and welcome) synergy between the 7th EAP objectives and the Juncker priorities (i.e. Commission priorities), such as the shared objective of climate action. In general, they are mutually supportive i.e. environmental policies are good for growth and jobs. There are examples where the 7th EAP and other policy areas reinforce each other (sustainable cities/urban agenda, making increasing use of the European Semester to address air pollution, transport and health issues collectively). There are no obvious inconsistencies, and the 7th EAP seems to have helped to incorporate environmental considerations into other policy areas. However, other ways of integrating the environment into other policy fields could be identified and prioritised.

What is the issue?

In 2014, the Commission President, Jean-Claude Juncker, identified 10 Commission priorities for 2015-2019 as his ‘agenda for jobs, growth, fairness and democratic change’. The Europe 2020 strategy is the EU's agenda for growth and jobs for the current decade. It emphasises a move towards smart, sustainable and inclusive growth through overcoming the structural weaknesses in Europe's economy, improving its competitiveness and productivity and underpinning a sustainable social market economy. This question looks at the 7th EAP's consistency with the Juncker priorities and the Europe 2020 Strategy.

What are the Commission's findings?

The 7th EAP and other EU policies are mutually reinforcing in many ways, with environmental policies supporting other policy objectives. This is important because these policy agendas have political support, so this leads to more and better action. Integration is one of the priority objectives of the 7th EAP, and so it is not surprising that it has helped to integrate environmental considerations into other policy field. Examples include:

- The 7th EAP objectives as regards the low-carbon economy are consistent with meeting air quality objectives. The policy is also in line with the Juncker priority of the energy union and the climate priority of making energy more secure, affordable and sustainable. It is also in line with SDG 13 (Take urgent action to combat climate change and its impacts) and SDG 7 (Ensure access to affordable, reliable, sustainable and modern energy for all).
- Green infrastructure is a network of healthy ecosystems that provides cost-effective alternatives to traditional 'grey' infrastructure. The Natura 2000 network is the backbone of EU green infrastructure. It helps to integrate green infrastructure into regional policies, by improving the local quality of life and supporting economic development.
- The management of small water supplies requires cooperation between health and environmental policies. The 7th EAP facilitated the Commission's drinking water

proposal and has thus improved the integration of drinking water policy and health policy.

- The Environment Knowledge Community has brought together key data providers engaged in projects that could serve the needs of different policies, such as natural capital accounting, integrating of citizen science into EU policies, and planetary boundaries.
- Eliminating environmentally harmful subsidies (EHS) leads to more efficient use of resources and is in line with circular economy policy, the energy union and clean air policy. Eliminating EHS is part of the jobs and growth priority and is one of the SDGs.
- The 7th EAP's ambition of integrating the environment better into the European Semester has led to more attention being paid in the country reports to structural reforms that are relevant to climate and environmental objectives, while also aiming for growth and jobs and sustainable public finances (in line with the Europe 2020 Strategy and the 10 Juncker priorities).

Areas where further work is needed include achieving coherence between the CAP objectives and EU environmental objectives:

- The current CAP supports biodiversity and promotes sustainable farming systems through cross compliance, greening practices and rural development measures and interacts with the on-going action plan for nature, people and the economy. Agri-environmental measures and organic farming are the main instruments in the second pillar for improving the impact of agriculture on the environment. Positive local experiences supported by the CAP and promoted by the European Network for Rural Development have demonstrated the importance of communication, co-operation between stakeholders and advisory services for farmers on the compatibility of nature protection with socio-economic activities. Ensuring sufficient funding for climate and the environment in the CAP and the EU in general is crucial to ensure the protection and enhancement of the environment in agriculture-related ecosystems, including Natura 2000 sites.
- In the legislative proposals on the CAP beyond 2020, three out of nine of the CAP's objectives concern the environmental and climate dimensions and would provide a new legislative framework for a smarter, simpler, modern and more sustainable CAP providing significant added value for farmers and society, in line with the EU's international commitments under the Paris Agreement, Agenda 2030 and its Sustainable Development Goals and the Convention on Biological Diversity. The policy will shift the emphasis from compliance and rules towards results and performance.

The 7th EAP is consistency with the Juncker priorities. When it was agreed in 2013, the narrative of the 7th EAP clearly linked environmental protection to a stronger economy.

- Most of the potentially relevant interactions are effects that the Juncker priorities have had on the EAP (Juncker → EAP), while the EAP had had a more limited impact on the achievement of the Juncker priorities (EAP → Juncker). In general, interlinkages are positive. Whilst some stakeholders see economic growth as leading to environmental degradation, the Commission's view, and indeed the underlying narrative of the 7th EAP, is that the EU should promote green growth

(see Annex 7). The number of green jobs in Europe has risen to around 4.1 million⁴².

Notable interactions between the 7th EAP and the Juncker priorities include:

- The 7th EAP is one of the main mechanism for meeting the Juncker priority of ‘A resilient energy union with a forward-looking climate change policy’.
- In the spirit of the 2030 Agenda, more work could be done to connect environmental, social and economic policies, building on linkages between environmental policy on the one hand, and, on the other, employment and social policy; the 2020 targets with regard to poverty, social exclusion, and employment and education; links with other Juncker priorities stressing inclusive growth and fair markets; and links with other social SDGs.
- The EU agenda on migration does not explicitly address environmental issues, but they are a key driver of migration. Tackling international environmental problems thus has the side benefit of reducing the factors that drive migration.
- Enhanced free trade could result in environmental impacts by increasing trade and the scale of economic activity (‘scale effect’), producing shifts in an economy’s product mixes (‘composition effect’) and changing sectoral emission intensities (‘technique effect’) or shifting environmental impacts outside the EU (pollution havens). Trade can be consistent with environmental policy only if economic growth is decoupled from resource consumption and environmental impacts (in this case through sustainable trade)⁴³.

Many of the stakeholder comments concern recurrent issues that were also discussed under the 6th EAP, and to which the EU is responding. As regards food systems, for example, the EU is investing in the sustainability and resilience of its agri-food sector, to ensure the production of safe, high-quality, affordable, nutritious and diverse food for consumers and strengthen the socio-economic fabric in rural areas. The legislative proposals for the common agricultural policy after 2020, adopted by the Commission on 1 June 2018, are designed to promote sustainable development in farming, food and rural areas, and include an objective on health and nutrition.

Views of stakeholders

In the online public consultation, 60 % of respondents thought the programme had some influence on achieving the 2020 strategy⁴⁴.

In the targeted consultation of Member States, respondents addressed consistency with other policies, though not necessarily at EU level (they could also be national policies). Member States suggested that there were synergies between the 7th EAP and other policies, whether at Community level or national level. One Member State, for example, said it was good the 7th EAP to ensure linkages, as the 7th EAP indicates interlinkages among policies and hence that those interlinkages are being transferred to the national

⁴² Eurostat data, based on environmental goods and services sector

⁴³ For developments in EU Trade policy see 2015 Communication *‘Trade for All: Towards a more responsible trade and investment policy’*.

⁴⁴ NGOs and private individuals were slightly more positive than those in business.

level. Another highlighted the fact that the 7th EAP to foster the integration of policies, albeit in collaboration with these other policies rather than as a steering force. Some Member States suggested that other EU strategies, such as Europe 2020, are higher profile and that the 7th EAP was just one of many such strategies ‘fighting for attention’. Others suggested that the 7th EAP had encouraged interaction between different national policies and promoted the development of processes at the local level including the Covenant of Mayors.

Some stakeholders outlined areas where they felt more coherence was needed:

- Commission coherence: environmental targets must coherent with each other and with current broad targets. In addition, the EAP should guide the environmental dimension of other policy fields, for example, linking energy policy with circular economy policy.
- Sustainable food system: some stakeholders said the food system put a significant pressure on the environment. At the same time, food production was increasingly suffering from climate change.
- Synergy between the circular economy and climate action: this was positively received.
- Lack of coherence between various directives: e.g. incoherence between the Water Framework Directive and Renewable Energy Directive.

One general point raised by some interviewees (mainly from NGOs) concerned perceived silo mentality hindering mainstreaming of environmental considerations into other policies, while also pointing at important trade-offs between different policy fields.

5.4.3 *Coherence with international commitments*

Evaluation question: ‘To what extent is the 7th EAP in line with international commitments, including the 2030 Agenda and Sustainable Development Goals (SDGs)?’

Overall response: The 7th EAP is largely in line with international commitments. It influenced and now reflects the UN 2030 Agenda: it fully anticipated the SDGs’ three dimensional approach, i.e. that social and economic wellbeing depend on natural resource conditions. The 7th EAP is a mechanism for meeting SDG commitments, although the latter’s call for a ‘just transition’ could have been stressed more. The feedback from stakeholders shows that the 7th EAP needs to be used to step up the ambition of environment policy-making globally, and to anchor the actions soundly in the SDGs, which are seen as more effective in communication terms.

What is the issue?

The 2030 Agenda for Sustainable Development (2015) was adopted under the aegis of the United Nations (UN) in September 2015. The agenda is a universal programme for action comprising 17 Sustainable Development Goals (SDGs) and 169 targets. The following have also been adopted: the UN Framework Convention on Climate Change’s Paris Agreement (2015), the Sendai Framework for Disaster Risk Reduction (2015), and the UN Habitat’s New Urban Agenda (2016).

This question examines the extent to which the 7th EAP is consistent with the 2030 Agenda (including the Sustainable Development Goals). Are the 7th EAP priority objectives reflected in the SDGs (and vice versa)? In other words: are there overlaps between the 7th EAP and the SDGs? Are the 7th EAP and the SDGs consistent with each other (resulting in synergy) or inconsistent?

What are the Commission's findings?

Almost all nine EAP priority objectives are reflected in the SDGs (see Annex 7). The exception is the priority objective 9 ('To increase the Union's effectiveness in addressing international environmental and climate-related challenges') as obviously the SDGs are not specifically designed to make the EU more effective. The EAP's 'low-carbon economy' objective is not explicit in the SDGs, but is enshrined in the Paris Agreement, which boasts a wide international membership and is expressly recognised in the 2030 Agenda as the primary forum for the global response to climate change.

The 7th EAP, which predates the SDGs, anticipated their three dimensions. However, it is naturally focused on environmental policy and therefore contains less detail on the social and economic aspects of the SDGs. As regards social aspects, there is a clear focus on health through safeguarding EU citizens from environment-related pressures and risks to health and well-being. To some extent, this also includes employment issues, such as the value of green jobs. There is less of a focus in the 7th EAP on inequality, social inclusion, poverty, and a socially just transition, though it does refer to citizens' democratic involvement. The enabling framework is also largely reflected in the SDGs, although the 7th EAP is more detailed on certain issues than the SDGs. For example, a sub-objective of the 7th EAP, 'Address environmental externalities', reflects a higher ambition for the EU 28 than the SDGs' more limited call to phase out fossil fuels subsidies.

It is worth mentioning that other international commitments, such as the Hyderabad's Conference of the Parties to the UN Convention on Biological Diversity agreed objective of doubling biodiversity-related financing in developing countries and countries with economies in transition, were achieved under the 7th EAP.

The Commission's view that the 7th EAP is very much in line with international commitments is shared by stakeholders. Indeed, both the Commission and stakeholders see it as one way of achieving SDG commitments.

Views of stakeholders

The Online Public Consultation asked if the 7th EAP is coherent with the EU's international commitments to the UN Sustainable Development Goals (SDGs), and the Paris Agreement of the United Nations Framework Convention on Climate Change (UNFCCC). Overall respondents noted there was some level of coherence with both international commitments. 48 % noted that the programme is more or less aligned with the SDGs, while 40 % said the same of the Paris Agreement. Furthermore, 40 % and 42 % respectively said the 7th EAP was coherent with the SDGs and Paris Agreement. Only small minorities (4 % and 7 %) did not consider the SDGs or the Paris Agreement to be coherence with the 7th EAP: the few respondents who submitted a negative answer were from NGOs or were private individuals. Other stakeholders said the 7th EAP and the SDGs were in line with one another. Nevertheless, there were some comments.

- **EU maintains leadership:** several stakeholders said the 7th EAP outlined a more ambitious environmental policy than the SDGs. One said this was true of EU practice in general. For instance, in a United Nations Environment Programme Finance Initiative (UNEP FI), EU banks were much more advanced in terms of taking account of the environment.
- **Explicitly use SDGs more:** several stakeholders said the SDGs were higher profile for some stakeholders (both within and outside the EU, and across sectors and especially for business). One stakeholder said Agenda 2030 was the only global policy process that people ‘wear on their vests’. Stakeholders therefore suggested that the EU and any future EAP should make a more explicit link with the SDGs, to take advantage of the strong symbolic resonance they currently hold, while maintaining EU ambition.

5.5. Added Value

5.5.1 *Did the 7th EAP help?*

Evaluation question: ‘What is the additional value resulting from the 7th EAP, compared to what could be achieved by EU environmental policy without such a framework?’

Overall response: Environmental policy often sets a framework and then spreads responsibility for its implementation across different levels of government in line with the principle of subsidiarity. It is the interlinked nature of environmental policy that partly explains stakeholders’ opinion that the 7th EAP has had added value. An overwhelming majority (80 %) in the open public consultation considered the 7th EAP to be useful or very useful. It has proven to be a valuable guiding tool, enabling policy-makers at various levels (EU, national, regional, local) to address, the environmental challenges facing the EU at the appropriate level.

What is the issue?

Essentially, this question asks if the 7th EAP has helped implement better environmental policy at EU, national and regional level. It is easier to answer this if we first consider the programme’s contribution to effectiveness and efficiency, and its relevance and coherence. All these questions feed into the most important question - whether this programme represent value added - but their analysis is not repeated here.

What are the Commission’s findings?

Firstly, the fact that this question is about ‘value added’, not ‘EU value added’, reflects the joint ownership of the programme. This is important because subsidiarity plays a fundamental role in environmental policy - one of the reasons why, such an EAP is needed.

Examples of value added by the 7th EAP include the following. These examples also reflect the success of effectiveness, efficiency, coherency and relevance (i.e. value added can flow from these):

- The 7th EAP has provided added value through promoting the agenda on natural capital (biodiversity and ecosystem services) emphasising the importance of

biodiversity for well-functioning ecosystems which support our socio-economic model and human long-term well-being.

- The 7th EAP was helpful in the negotiations on the 2030 Agenda and its SDGs, both in the Council and in the UN.
- The focus on the urban aspect of sustainability has helped shape the new Urban Agenda for the EU, and support the development of various greening mechanisms.
- The focus on environmental implementation resulted in rapid endorsement of the Environmental Implementation Review. In addition, the role of IMPEL was strengthened and more effort went into sharing best practice.
- 7th EAP Priority provided the mandate for the establishment of the Environment Knowledge Community.

The discussion of value added is also linked with the discussion of subsidiarity and proportionality⁴⁵, which leads to a spread of responsibilities between levels of governance that in turn increases the value-added of strategic co-ordination. For example, DG Environment directly manages 66 pieces of legislation (directive, regulations and recommendation) in the area for which it is responsible. Many of these have had subsidiarity assessed: 45 % have had it assessed as part of an evaluation in the last five years (and that proportion will rise to about 60 % in coming years), and 42 % in an Impact Assessment. Overall, some 64 % of this legislation has already had subsidiarity assessed in either an evaluation or an impact assessment (some are covered by both). This is necessary because the subsidiarity principle has led to a wide sharing of competences in the environmental policy field.

- Subsidiarity means identifying the most efficient level at which to take action. About three quarters of legislation in this field clearly has to do with issues that cross boundaries (and, to some extent, this holds for the whole environmental *acquis*). This means environmental policy often leads to economies of scale through co-ordination.
- While in around 70 % of cases the legislation set a clear environmental objective, much of the legislation has strong process requirements to ensure those objectives are met efficiently. Process requirements appear in about four fifths of the legislation. In around 65 %, the EU harmonises measurements or similar process issues to ensure comparability. Finally, in around 30% of legislation it makes stakeholder involvement mandatory, thus helping to ensure that objectives are met while bringing together members of the public and government.
- Beyond core environmental legislation, the benefit of a strategic document may be higher as it supports mainstreaming of environmental concerns.

The overall picture is of an environmental *acquis*, which often deals with transboundary issues and responsibilities spread across government levels. The 7th EAP helps the EU, national and regional or local levels to work together more closely on decisions taken at the lowest level possible within a given framework. It is the closely interwoven but

⁴⁵ Subsidiarity means that the EU should act only where the envisaged objectives cannot be achieved sufficiently by the Member States acting alone (centrally or at regional or local levels) but can be better achieved at EU level because of the scale or effects of the proposed action. Proportionality means that the content and form of European Union action shall not exceed what is necessary to achieve the objectives of the Treaties.

decentralised nature of this cooperation that accounts in part for the EAP’s value added in terms of coordinating EU environment policy.

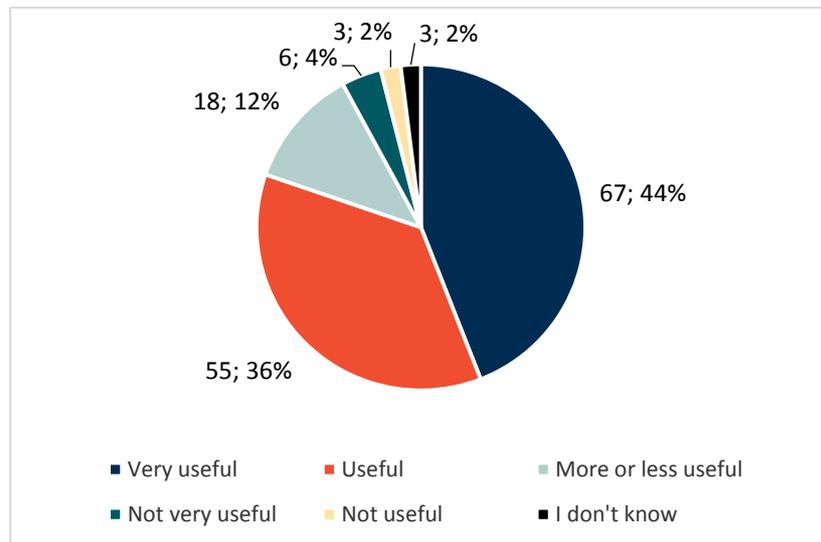
On the other hand, sub-objectives and actions are not implemented in full, perhaps because of the remaining trade-offs and costs, or because costs and benefits fall on different groups. At the same time, there will always be some intentions adopted in an EAP that are amended once subject to Impact Assessment or more detailed examination and / or new information. The value added of the 7th EAP to respond to this was limited somewhat by the lack of a scrutiny mechanism to ensure continued co-ordination throughout the 7th EAP (which runs to the end of 2020).

Views of stakeholders

A Commission Eurobarometer public opinion survey held in 2017 with around 27 000 participants across the Member States found that 67 % of respondents thought national governments should take environmental decisions jointly with the EU. Less than a third (29 %) thought that only national governments should take decisions. This represents an increase in support for joint decision-making of around 7 % compared with a previous survey in 2014.

It was clear that respondents to the online public consultation thought the 7th EAP provided added value beyond what could be achieved without such a high-level strategy. When asked if they thought the 7th EAP as useful, most respondents said it was to at least some extent (44 % said it was very useful, 36 % useful, and 12 % more or less useful). The NGOs were most sure that it was very useful.

Figure 8: The importance of a long-term strategy like the 7th Environment Action Programme



The online public consultation also asked stakeholders which aspects they perceived as the most successful and which areas could provide more added value. This question was in an open answer format and 96 respondents provided additional feedback.

Table 1: Frequency of successful aspects and areas for improvement for the 7th Environment Action Programme

Successful aspects	
Issue	Number
High-level and ambitious strategy	17
Timeframes and longevity	12
Predictability and accountability	8
Environmental mainstreaming	6
Financial backing	5
Focus on cities/regions	3
Areas for Improvement	
Issue	Number
Implementation	32
Knowledge-base (monitoring)	12
International commitments	9
Prioritising objectives	7
Local action	6
Communication strategy	6
Link to other strategies	4
Further Longevity	2

In the targeted consultation, Member States were asked if it was beneficial to have the 7th EAP, as opposed to just Member State-based objectives; the response was yes. Responses included: a suggestion that the EAP process should be maintained, as it provided an effective policy approach; praise for the overarching nature and direction for implementation; confirmation that the priorities for action were essential; confirmation that the 7th EAP was essential in encouraging action requiring transnational responses; that the programme would remain essential as a reference point to provide long-term goals for policy coherence and to hold legislators to account at the EU and national level; and that the programme had proved useful in the past as a way of helping to justify applications for specific EU project funding.

Most Member States suggested that the 7th EAP had been useful as a strategic document, providing a wide-ranging vision for consistent and long-term policy-making at national level. On the political side, one Member State emphasised the continued usefulness of having such a tool to express agreed priorities for harmonised action across the EU and Member States. This politically agreed aspect also helps to ensure the continued relevance of the document, since it covers broad goals.

Some Member States suggested that the programme's added value lay in generating dialogue and raising awareness. Others highlighted its importance to particular policy areas, such as chemicals policy. Some also suggested that its added value was unclear, it being hard to separate the programme from specific EU policy initiatives.

Member States provided a number of specific pointers regarding the 8th EAP (if the next Commission decides to have one). These are useful to encourage discussion of essential aspects that may have been missing from the 7th EAP. These include paying more attention to integration across policy areas; including the SDGs so as to ensure that any 8th EAP and the SDGs are mutually reinforcing; translating the EAP into a business case and improving the link between business and industries; ensure shared responsibility across Member States and EU institutions; implementing a more focused approach or

more quantifiable objectives and steps to achieve targets; including an official midterm evaluation and a monitoring system; establishing a to-do list, with more precision on how to achieve coherence and integration; providing a broad long-term strategy towards 2030 (i.e. covering all environmental goals and actions).

A clear majority of other stakeholders noted that ‘without doubt’ the 7th EAP adds value to EU environmental policy.

6. CONCLUSIONS

The 7th Environment Action Programme entered into force in 2014 with the purpose of guiding EU environment policy up to 2020. It does this by setting out nine priority objectives for action and a series of sub-objectives and then more detailed actions to be implemented by the EU and its Member States.

The European Environment Agency is responsible for monitoring the extent to which objectives relating to the state of the environment are met. This evaluation has focused instead on the structure of the 7th EAP and its added value compared with a baseline (no EAP in place). It will be for the next Commission to decide on the successor to the 7th EAP taking account of this evaluation and “*if appropriate, present a proposal for an 8th EAP in a timely manner, with a view to avoiding a gap between the 7th EAP and the 8th EAP*”⁴⁶.

The 7th EAP evaluation shows that the programme has helped bring about a major shift in policy-making; today it is more widely accepted that environmental protection and economic growth go hand in hand. The programme has helped drive forward important new agendas such as the circular Economy and the Sustainable Development Goals. Having a long-term vision to 2050 for the first time in an EAP has provided a useful tool for policy-making, both as a complement to more short-term policy goals, and as a feature that all stakeholders could buy into as guidance for their activities. Finally, the enabling framework brought – in a unique way - focused attention and resources to the main challenges we face in EU environment policy: lack of implementation, information, investments and integration.

Effectiveness: the structure has contributed towards achieving the various priority objectives by enabling more predictable, faster and better coordinated action to be taken with the involvement of stakeholders.

The following factors have a positive impact on effectiveness:

- The 7th EAP benchmarks well against good governance criteria for developing a strategy.
- The overall structure of a multi-level EAP seems appropriate but it goes into too much depth and becomes too complex.
- The 7th EAP has increased political ownership of environmental policy by involving stakeholders systematically and by having such policy agreed subsequently with Council and Parliament.

⁴⁶ Article 4.3 of Decision 1386/2013/EU

The following factors limiting effectiveness:

- The 7th EAP has helped implement action in all policy areas, but its original sub-objectives and actions have been implemented only in part so far. This may reflect longer timetables, or actions being too complex and detailed, or reflect the fact that the programme is not yet over. Partial implementation of actions has some bearing on the mixed progress reported by the European Environment Agency on the state of the environment.
- Effectiveness could have been increased if there had been a regular review mechanism with Member States and civil society as well as a mid-term review.
- Many of the actions are not SMART (specific, measurable, accepted, realistic and timely). This may be difficult to avoid, but limits commitment to those same actions, and contributed to only partial monitoring of delivery of the 7th EAP. On the other hand, this also allowed more scope for flexibility.

Efficiency: the 7th EAP appears to have helped improve the efficiency of environmental policy. It has both made such policy more effective (see above) and enabled it to be simplified, thereby reducing the cost burden.

The following factors have a positive impact on efficiency:

- The 7th EAP has facilitated actions designed to save costs and improve efficiency. The enabling framework is geared towards improved efficiency: for example, the focus on integrating environmental considerations into other policy areas.
- The 7th EAP has identified and addressed information needs and thus supported efficient policies. Efforts have been made to streamline and modernise reporting obligations, and a step up has taken place in evaluation of policy.

The following factors limit efficiency:

- The enabling framework actions show mixed progress. Given their importance to overcome barriers to environmental policy delivery, they need continued commitment.
- There needs to be more systematic sharing by Member States of the information they gather through their evaluation and Better Regulation work.

Relevance: the 7th EAP remains highly relevant and addresses the right challenges in a proportionate manner, although of course there has been progress and the sub-objectives or actions need to be updated.

The following factors have a positive impact on relevance:

- The long term vision, the thematic priority objectives and many of the sub-objectives remain valid, for example, because they are work in progress.
- Relevance has been maintained thanks to flexibility in interpreting the 7th EAP's mandate to work on issues that have become more prominent during the period (such as the circular economy).

The following factors limit relevance:

- Issues such as digitalisation and governance (and the links between the EU and national level in terms of follow-up and implementation of the 7th EAP) could have been better reflected.
- In terms of proportionality, the 7th EAP is too detailed in many areas. The actions become too complex and detailed, losing their strategic focus and so become less relevant over the period covered by the programme.

Coherence: there is a high level of consistency both within the 7th EAP and with other EU strategies such as the Juncker priorities and with Agenda 2030 and the SDGs. The 7th EAP helps make policies in different areas coherent by integrating environmental considerations in other policy areas. However, coherence could have been improved by considering social issues more in environment policymaking.

The following factors have a positive impact on coherence:

- During the development of the 7th EAP, actions are agreed across all environmental policy areas simultaneously. This helps to make them consistent with each other and facilitate mainstreaming of environmental policies into other areas.
- There are clear links between the 7th EAP and the Juncker priorities, such as the shared objective of climate action. Europe has passed decisive climate legislation, and this is expected to bring important co-benefits for other 7th EAP priority areas. In general, the 7th EAP and the Juncker priorities are mutually supportive, with environmental policies positive for growth and jobs. There are clear overlaps with the SDGs, with the 7th EAP helping to achieve the environmental related SDGs.
- Many EU countries have oriented their environment policy strategies towards the 7th EAP. This has improved policy coherence between the EU and the Member States.

The following factors limit coherence:

- Coherence with other agendas could have been improved through better consideration of social issues in the EAP. Relatively little attention is given to this aspect within the 7th EAP given the links between environmental policy and social policy (impacts on vulnerable groups, jobs, social inclusion, inequality, etc.).
- The enabling framework has contributed positively to the thematic objectives; the linkages to the cross-cutting priority objectives on local, regional and global challenges, though, are less obvious.

Added value: The 7th EAP has made environmental policy more effective and more efficient. It is welcomed by stakeholders. It is an important co-ordination tool in an area subject to a wide spread of responsibilities across the EU, national and local levels.

The following factors have a positive impact on value added:

- There is widespread demand from stakeholders for an EAP, with appreciation of a strategic programme given the shared responsibility.

- Much of environmental policy involves frameworks set at EU level, with choices for implementation delegated to national or local level. This is fully in line with the principles of subsidiarity and proportionality, but means there is more value added in having such an overarching agreement and strategy.

The main conclusion of this evaluation is that the 7th EAP has improved the effectiveness, efficiency and coherence of EU environmental policy and remains relevant. As a result, it has brought value added and improved the co-ordination and strategic planning of the various different levels that need to work together. This can be said with some confidence on the basis of the analysis and, in particular, the widespread support and feedback of stakeholders.

LESSONS LEARNED

This evaluation of the 7th EAP has identified a number of lessons, including both positive aspects and some areas that could have been improved.

- **Having a strategy for EU environment policy-making provides added value.** The 7th EAP is a solid strategy with strong links to national environment strategies. Many Member States have taken it as a blueprint for their own environment policy strategies or for specific actions. As a result, the 7th EAP has supported more predictable, faster and better coordinated actions in environment policy. Predictability has helped in taking effective action.
- **Progress towards achieving the 7th EAP goals is linked with improvements in the state of the environment:** in an implementation analysis of the 60 actions listed in the 7th Environment Action Programme, the Commission concludes that *some progress* has been made towards achieving the goals (bearing in mind that the programme runs until 2020). The EEA's specific reports on implementation of the 7th EAP⁴⁷ show a similar picture: some significant progress has been made but in many areas we are lagging behind. It looks unlikely that goals linked to protecting nature will be met (indicators relating to nutrients, biodiversity, freshwater, and so on), and it is uncertain whether we will meet all our goals related to environment and health. The EEA's assessment as regards the likelihood of achieving our 2020 goals linked to a *resource-efficient and low-carbon economy* changed from *likely* to *uncertain* in 2018.
- **This Environment Action programme is broadly in line with good governance practice.** The programme shows a solid analytical foundation; political commitment; adequate resources; a clear vision, objectives and targets; monitoring, continuous learning and improvement. However, the programme could have benefited from **more strategic actions**, as **concrete** as possible to best allow for **stocktaking**, and **better prioritisation by having a limited set of actions** as opposed to covering the entire EU environment acquis. The 7th EAP would also have benefited from a **monitoring mechanism** to ensure ownership and fulfilment of commitments, plus clear and agreed **indicators** to measure progress.

⁴⁷ <https://www.eea.europa.eu/airs>

- **Wide stakeholder participation is crucial**, both before an EAP and throughout its life span. It increases buy-in to the programme and its follow-up actions. The 7th EAP was the result of a broad consultation process and consequently we have a wider buy-in today from different stakeholders to pursue the overall goal of sustainable development. However, more could have been done to maintain active participation by different stakeholders throughout the programme.
- **The 7th EAP covers the right areas and its 2050 vision continues to be valid.** However, adjustments need to be made as new challenges arise. In particular, some enabling issues could be more explicitly addressed, such as digitalisation and governance.
- **The 7th EAP is largely coherent with the political agenda, both in Europe and globally.** However, more could have been done to integrate environmental concerns across other EU policy areas. Stakeholders agree that EAPs should be fully **coherent with the political priorities of the European institutions**, guaranteeing their political ownership. This could have been achieved by linking the EAP lifespan both to the EU parliamentary election cycle and to as other important long-term strategic frameworks such as the Paris Agreement and the 2030 Agenda for Sustainable Development.

ANNEX 1 – PROCEDURAL INFORMATION

1) Lead DGs and internal references

This evaluation is co-led by DG Environment and DG Climate Action. It was included as item PLAN/2017/1389 in the Agenda Planning (AP).

2) Organisation and timing

An inter-service group to steer and provide input for the evaluation was set up in 2017 with representatives from the Directorates General for Environment (ENV); Energy (ENER); Agriculture and Rural Development (AGRI); Regional and Urban Policy (REGIO); Legal Service (SJ); European Neighbourhood Policy and Enlargement Negotiations (NEAR); European Civil Protection and Humanitarian Aid Operations (ECHO); Internal Market, Industry, Entrepreneurship and SMEs (GROW); Health and Food Safety (SANTE); Employment, Social Affairs and Inclusion (EMPL), Mobility and Transports (MOVE); Justice and Consumers (JUST); Trade (TRADE); Economic and Financial Affairs (ECFIN); Research and Innovation (RTD); Joint Research Centre (JRC) and the Secretariat-General (SG).

The group met four times during the evaluation process – topics and dates are listed below.

DATE	TOPICS OF DISCUSSION
14 Nov 2017	1st ISG meeting: discussion of overall process, roadmap
8 Feb 2018	2 nd ISG meeting: discussion of stakeholder consultation and online public consultation questionnaire and process
20 Nov 2018	3 rd ISG meeting: discussion of results of stakeholder consultation and 1 st draft of evaluation report
19 Feb 2019	4 th ISG meeting: final draft discussions

3) Exceptions to the better regulation guidelines

No exceptions were made to the Better Regulation Guidelines⁴⁸ during this fitness check, apart from examining ‘added value’ instead of ‘EU value added’.

4) Opinion of the Regulatory Scrutiny Board

On 30 January 2019, a meeting was held with the Regulatory Scrutiny Board. The Board gave a positive opinion on the evaluation report, and recommended improvements with respect to the following aspects:

RSB main considerations	Reflection in the text
The report does not examine whether the process of co-decision has achieved its objectives.	This consideration is addressed in section 5.1.2.
The report is not sufficiently clear about the standards against which it evaluates the 7 th EAP’s performances. Some of the conclusions are not sufficiently supported by evidence.	Section 4 on the methodology has been strengthened. The report stresses that the risk of subjectivity has been addressed through data triangulation and extensive stakeholders consultations. This is done throughout the report. Vague forms of words that are not sufficiently supported by evidence have been removed (e.g. ‘the 7 th EAP may have contributed to’ or ‘presumably the 7 th EAP helped create’).
The report does not do enough to examine how the 7 th EAP may have shifted the narrative and raised the prominence of environmental policy and sustainable development goals.	This is done throughout the report and in particular in Section 5.5, in the conclusions (Section 6), which better highlight the added value of the 7 th EAP.
Further considerations and recommendations	
The 7th EAP was the first environmental action programme that the Lisbon Treaty required to be agreed in co-decision. To learn from this first round for the future, the evaluation should examine what went well under this regime and what did not.	This consideration is addressed in Section 5.1.2.
The evaluation should clarify its intervention logic, including with regard to the objectives of the 7th EAP. The logic should make clear the relationship between how the strategy has operated and the observed progress toward policy objectives.	Section 4.2 explains better the relationship between the intervention logic, the information reported in Annex 3 and the objectives of the 7 th EAP.

⁴⁸ See: https://ec.europa.eu/info/better-regulation-guidelines-and-toolbox_en

<p>Some analysis of the performance of the 7th EAP as a strategy that is currently in Annex 3 should be better integrated in the intervention logic and the main report. A clearer comparison to the 6th EAP would also help the reader to understand what changes the 7th EAP brought, and whether those were successful.</p>	
<p>The report should draw more attention to the bigger picture, i.e., the role of the 7th EAP in reframing the narrative of environmental policy and bringing it to the fore in the general economic context. Internationally, this arguably includes anchoring negotiations on the Sustainable Development Goals. The report might elaborate on how the 7th EAP accommodated the Commission’s priorities, helped develop positions for international negotiations, and generally guided environmental policymaking. While it may be difficult to establish causal links, it is useful to know the sequence of main activities and actions carried out in agreeing the 7th EAP or guided by it.</p>	<p>This is addressed throughout the report and particularly in the conclusions.</p>
<p>The report’s narrative should come out more strongly. In the current version, main messages are difficult to distil from the abundance of detail. The conclusion and executive summary might focus more on the main messages and reflect the overall picture rather than comprehensively summarise all analyses. The report should ensure that all of its conclusions are evidence-based. It should be transparent about what relevant information is not available, including with regard to stakeholder views.</p>	<p>This is addressed in the conclusions (Section 6) and the section on lessons learned.</p>

5) Evidence, sources and quality

The evaluation was largely internal but was supported by a study that provided support focused on stakeholder consultation and:

- The support study, 'Service contract to support the Evaluation of the 7th Environment Action Programme', Trinomics et al., was completed in January 2019. It includes support for stakeholder consultation and issue papers on:
 1. Links between the 7th EAP, SDGs and the Juncker priorities

2. The evolution of the EU environment and climate policy framework: from the 6th to the 7th EAP
3. 7th EAP – a sound environmental strategy?
4. 7th EAP as a lever to reach the SDGs, with particular focus on the social and economic dimension
5. Environmental investment gap – review of data to estimate the investment need and/or gap in a variety of EU environment policy areas

ANNEX 2 – SYNOPSIS REPORT OF STAKEHOLDER CONSULTATION

Introduction

The stakeholder consultation activities ran from May until November 2018. The purpose was to gather views and evidence from all stakeholders on the 7th EAP.

The evaluation roadmap was published and feedback invited. Comments were received from three Member States insisting on the importance of having an 8th EAP and on the need for it to ensure more consistency among policy sectors.

Several consultation methods were used in order to engage with a broad variety of stakeholders. The methods included:

- Online public consultation;
- Targeted consultation with Member States, and other interested stakeholders
- Public workshops.
 - Stakeholder perceptions of the programme.
 - Interim findings of the evaluation.

The 7th EAP is a shared responsibility. The European Parliament and the Committee of the Regions consulted stakeholders and members respectively for their implementation review and opinion, and the Environment Council also considered the usefulness of EAPs. The conclusions of their consultations and comments are not explicitly included in this summary, but are broadly in line with the Commission's own stakeholder consultation conclusions.

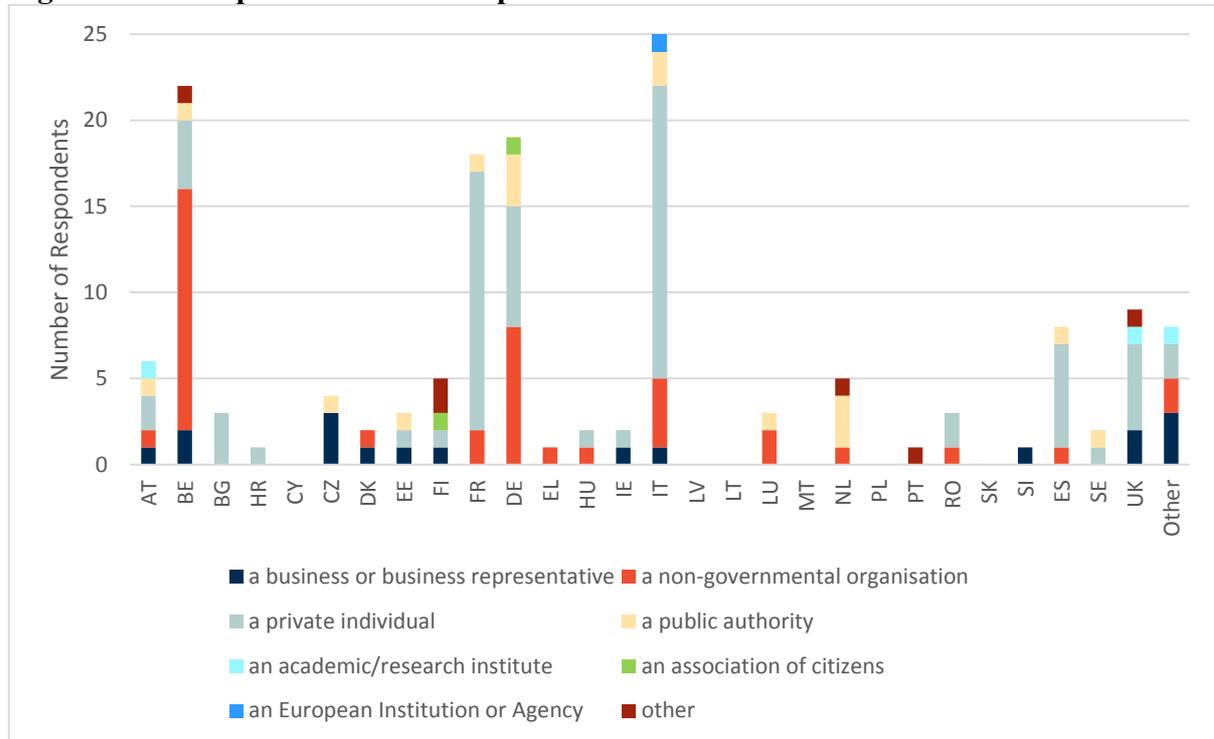
Online public consultation

In line with Better Regulation Guidelines, an online public consultation ran for 12 weeks from 3 May to 26 July 2018. The objective was to consult with as many stakeholders as possible to gain a variety of views and opinions about the 7th Environment Action Programme (7th EAP). An invitation to respond was sent to stakeholders, to encourage their response. Twitter was also used, e.g. to advertise the public workshop where the emerging findings were discussed. 153 responses were received from several stakeholder types and Member States.

Most respondents were private individuals (69 in total, or 45% of the 153). 39 respondents (26%) were from NGOs, 17 (11%) were business representatives, and 16 (10%) were from public authorities. There were also responses from two academics, a citizen association and an EU institution. 95% of the respondents were based within the EU. Responses were received from 22 of the 28 EU countries. Most responses were received from Italy (16%), Belgium (14%), Germany (12%), and France (12%). Belgium's high response rate is due to the large number of EU interest groups that are located in Brussels. This is discernible from the proportion of NGOs that responded from Belgium.

Of the eight non-EU respondents, one was based in Morocco (a private individual), one in the USA (a private individual), one in Serbia (an academic), and one in Switzerland (an NGO). There was also one respondent from a UN organisation. There were three stakeholders that are part of international businesses with offices in multiple countries.

Figure 1: Participants in the online public consultation



Targeted consultation

Targeted consultations were held with key stakeholders. These were intended to enable more detailed inputs on issues closest to the stakeholders’ experience and involvement with the 7th EAP. The stakeholders contacted (on the basis of whether they had responded to the online public consultation, or through the approaches made to all Member States) were split into two main groups - Member State representatives and non-Member State stakeholders. Most stakeholders were interviewed via telephone or video conference. Some stakeholders chose to provide written responses to the interview questions, and a small number of stakeholders were interviewed in person.

Fourteen Member States replied; responses were received from: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Estonia, Finland, France, Germany, Italy, Luxembourg, the Netherlands, Poland, and the United Kingdom. Several Member States were able to give specific examples of where their national policy had been directly influenced by the 7th EAP. These included:

- **Bulgaria:** 2020 National Development Programme, Waste Strategy;
- **Cyprus:** Biodiversity Strategy, Action Plan for Soil Sealing, Climate Change Adaptation Strategy, Waste Management Strategy;
- **Finland:** Environmental Ministry Strategy, Waste Plan to 2022, Air Pollution Control Programme, Water Protection Policy;
- **Italy:** Collegato Ambientale, Made Green in Italy;
- **UK:** 25-year Environment Plan (England);
- **Czechia:** State Environmental Policy (SEP), Strategy on Adaptation to Climate Change;

- **Estonia:** General Principles of Climate Policy 2050, Energy Sector Development Plan 2030+; and
- **Poland:** National Ecological Policy 2030

The table below shows the nature of the 18 non-Member State stakeholders that were interviewed. Many of these, (39%), were NGOs. Few private businesses/industrial stakeholders were interviewed. This is believed to be because this group of stakeholders are less aware and/or interested in the programme after its agreement, and instead focus on specific policy consultations.

Business	EU / international organisation	NGO	Regional authority	Industry association	Bank	Sustainability association	Total
1	4	7	1	2	1	2	18

Public workshops

The first workshop was held on 21 June 2018, with a second one on 13 November 2018. The objective of the first workshop was to collect input for the consultation procedure (e.g. what questions should we ask?) The second one was designed to give stakeholders an opportunity to validate and/or challenge the emerging evaluation findings.

Both workshops allowed stakeholders to provide in-depth feedback via breakout sessions on detailed questions. The first workshop focused: if the 7th EAP influences environment/climate policy, what the utility of a long-term strategy is, and if the structure of the programme was appropriate. The discussions in the second workshop were structured against the evaluation criteria: effectiveness, efficiency, coherence, relevance, and EU added value and allowed for a broad validation of the emerging conclusions.

Summary of all consultation activities by evaluation criteria:

Effectiveness

The consultation process has revealed that stakeholders broadly perceive the 7th EAP as an effective high-level strategy for promoting environmental issues at the EU-level. Most Member States highlighted that the 7th EAP was a strategic tool that guided environmental objectives and had an indirect impact on policy developments. Member State governments reported using it as a package with other strategies and policies, such as Europe2020, and the sustainable development goals (SDGs). A non-Member State stakeholder highlighted how they perceived few direct policy developments caused by the 7th EAP, however they did see more alignment of EU-Member State environment/climate/energy ministries. This was particularly apparent with regard to actions on the circular economy (CE) and in addressing knowledge gaps. This view was supported by workshop participants who felt that the effectiveness of the document was its high-level which more easily facilitates a systemic and holistic outlook on the future. Many stakeholders support the high-level nature of the long-term vision which is deemed fundamental in inspiring action towards a positive future. 84% of stakeholders in the online public consultation agreed that a long-term vision was crucial to steer environment and climate policy.

As a high-level strategy, stakeholders expressed difficulty in perceiving and/or monitoring direct contributions from the 7th EAP to relieving environmental pressures. The UK and Poland reported that their national strategies do not directly quote the 7th EAP, but it is part of the suite of influences on these strategies. Germany and Estonia also noted that the programme did not directly inspire Member State action, but that it more directly stimulated the development of EU legislation, and initiatives such as the Covenant of Mayors. Some stakeholders highlighted priority objective (PO) 3 (health and wellbeing) of the 7th EAP as being an area with less progress since the adoption of the programme. It was also noted that implementation of environmental policies across Member States could be more coherent, with waste shipment and CE policy noted as areas lacking in coherence. Some stakeholders perceived better general progress in other areas of the 7th EAP. This was particularly the case for PO 2 (resource efficiency, and the green low-carbon economy). There was a recognition of some progress in PO1 (natural capital), and PO8 (sustainability in cities).

The 7th EAP was regarded by many stakeholders as an effective means of providing accountability and predictability for European Commission actions. A clear majority (69%)⁴⁹ of the surveyed stakeholders highlighted the programme's effectiveness in doing this. An interviewee also stated that this predictability creates a positive environmental continuity across Commissions. The 7th EAP also functions as a planning tool to provide policy-makers with a to-do-list and outline their future objectives. Workshop participants noted that the long-term vision helped the focus on resource-efficiency and the CE in 2014. Both Member State and non-Member State stakeholders stated that NGOs and the European Parliament (EP) were the most likely to utilise the programme for accountability. Some stakeholders felt that the 7th EAP's effectiveness could be improved as a tool for predictable and accountable environmental policy if it included more actions in the form of concrete roadmaps and/or milestones targeted towards various EU actors. Some stakeholders perceived a lack of Commission ownership of the 7th EAP, due to the transition from the previous to the current Commission. Some felt that 7th EAP had become a lower priority for the new Commission, in comparison to other issues (e.g. the Juncker Priorities). Some felt that 7th EAP had become a lower priority for the new Commission, in comparison to other issues (e.g. the Juncker Priorities). It was suggested that improving the ownership of the 7th EAP across the whole EC would improve its effectiveness.

In theory, the 7th EAP should provide all stakeholders with a 'predictable framework for action'⁵⁰. It is clear that individual citizens, businesses and local authorities are not as engaged by the 7th EAP as EU, Member State, or NGO actors. This reflects these groups being the initial target for the 7th EAP. From those interviewed, it is clear that NGOs and public agencies are most aware of the intricacies of the programme. This was supported by the Open Public Consultation, where NGOs and public authorities were the largest groups to note their 'close familiarity' with the 7th EAP. Business and industry stakeholders were poorly represented in the two workshops, although an even distribution of stakeholder types were invited. An industrial stakeholder confirmed they

⁴⁹ NGOs made up the strongest proportion (56%) of those who 'strongly agreed' with this statement.

⁵⁰ Paragraph 15: 'Clear goals and objectives also provide policy makers and other stakeholders, including regions and cities, businesses and social partners, and individual citizens, with a sense of direction and a predictable framework for action'.

were involved with 'setting the goal-posts' during the development of the programme, but they are much more affected by specific directives or roadmaps in their daily work. Some stakeholders outlined that the document should be more accessible to businesses and individual citizens. They feel that this would make it more effective. It was suggested any future programme should have a stronger communication strategy in order to address this lack of awareness. Local authorities noted that they are often interacting more with the national level, as part of the framework so there are links, but they are not so evident.

Efficiency

The 7th EAP was generally felt to have a positive influence on mainstreaming environmental policy and in streamlining policy actions. Both of these influences should result in more efficient policies (as they help to avoid contradictions between policies). Within the open public consultation, streamlining and mainstreaming of environmental protection concerns was considered one of the more positive aspects of the programme. Seven respondents outlined in their open answers that the programme helps policy-makers identify linkages across policy sectors. Another stakeholder noted that they are aware of attempts from the EC to improve synergies (particularly DG ENV, GROW, and EMPL), however it was difficult to prove the extent to which the 7th EAP was responsible for this. Member State stakeholders had a mixed reaction on whether the 7th EAP facilitated the streamlining of national legislation. Austria, Cyprus, and Poland stated the 7th EAP was definitely used to achieve the streamlining of actions. Czech thought the programme had some influence in this regard, whereas Bulgaria and Italy doubted its use for creating such synergies. The UK noted that there are many factors that feed into a more streamlined policy and action agenda, which makes it difficult to attribute successful streamlining to the 7th EAP.

Stakeholders outlined that there is an ever-growing acquis of environmental legislation and there are some areas in which implementation could be improved. Therefore, some stakeholders believed that a greater focus on implementation was necessary. To better mobilise EU funding, these stakeholders thought more explicit reference should be made to the 7th EAP in EU financial tools, such as the multi-annual financial framework (MFF), the cohesion policy funds, and the EU's framework programme for research. If these programmes were all more explicitly aligned with the objectives of the EAP, it should help direct funding and lead improved implementation of environmental legislation.

Information was also viewed as key to ensuring efficient EU policy. Within the 7th EAP, priority objective (PO) 5 focuses on improving the knowledge and evidence base for EU environmental policy. Many of the responses to the online public consultation noted that the 7th EAP had helped to address information gaps. Twelve respondents in the open answers noted that addressing knowledge gaps also helps to provide public transparency. This facilitates the public playing a more active role in policy-making, implementation, and enforcement. There were also positive stakeholder views on the influence of the 7th EAP in basing this knowledge on scientific data. Interviewed stakeholders agreed that an updated knowledge-base, particularly via monitoring and scientific data, is crucial for efficient and effective environmental policy. One public agency noted that PO5 has influenced their work. Another stakeholder noted that PO5 could be improved if it outlined a common approach to sharing information at EU level. This would facilitate

more information sharing and subsequently more efficient policy decisions across the EU.

Coherence

The internal coherence of the 7th EAP, i.e. the coherence of the document's POs was considered satisfactory. There was some stakeholder concern though. One noted that coherence and synergies should be made more explicit within each PO, and there should not be a reliance on PO7 (integration and coherence) to ensure coherence. For example, biodiversity concerns (within PO1) could be more explicitly referenced within PO2 (resource-efficiency) and PO3 (health and well-being). One stakeholder mentioned the CE as another example of the need for more explicit cross PO coherence. The CE concerns a wide range of sectors and links close to the sustainable bioeconomy – which is the renewable segment of the circular economy. Therefore, it links to food and agricultural waste, which links to water management, which links to chemical use (biocides and pesticides) etc.

It was noted that there are areas where there are potential trade-offs within the EU policy landscape. The Water Framework Directive and the Renewable Energy Directive was noted by stakeholders as an example of where coherence could be improved. Stakeholders also noted some lack of coherences between environmental issues and the Common Agricultural Policy (CAP) and chemical policy. For example, some felt that environmentally-harmful subsidies continue to exist in the CAP and energy policies. This suggests that there is still a need for the 7th EAP's PO7 to keep promoting 'joined-up policy approaches'. Other stakeholders referred to the need for more coherence with funding policy. Examples again included the MFF, the cohesion policy funds, Horizon2020, and the EU's framework programme for research. One stakeholder noted the draft of the new LIFE programme has no reference to a future EAP, which was a point of concern. It was suggested that the 7th EAP should try and reference more funding tools, to try and improve environmental coherence within the EU.

Stakeholders outlined some positive aspects of coherence. Seven stakeholders from the online public consultation stated that helping mainstream environmental issues into other EU policies was one of the key successes of the programme. Example from interviewees of these were the CE and climate action synergies, which many saw as being driven (in part) by PO2 in the 7th EAP. The EU's Network for the Implementation and Enforcement of Environmental Law (IMPEL) used the 7th EAP to create their strategic programme for 2016-2020. They felt that this provided a clear example of the 7th EAP generating environmental coherence related to implementation.

The 7th EAP's coherence with other EU strategies was discussed. From the surveyed stakeholders, 60% believed that the 7th EAP helped achieve the EU2020 strategy. The Bulgarian and Finish representatives noted that the 7th EAP often has to 'fight for attention' with other EU environmental strategies, such as Europe2020. A particularly prominent example was with the Juncker priorities, which stakeholders broadly perceived as overshadowing the 7th EAP within the EU, and in the Commission in particular. It was suggested that if the Commission as a whole more explicitly utilised the EAP as its high-level environmental strategy, then environmental coherence would be improved. 'Silo thinking' was discussed as a key contributor to this issue, with some stakeholders perceiving that environmental issues are not a key concern for DGs other than DG ENV.

Coherence at Member State level was a key discussion point with the various Member State authorities. Member States suggested that there were several synergies between the 7th EAP and other policies. Poland, for example, was positive about the ability of the programme in ensuring inter-national or national-level environmental synergies. Czech, Estonia, and Italy also suggested that the programme stimulated interaction between different national policies. The UK noted that it stimulated coherent local-level action through encouraging EU level action such as the Covenant of Mayors and the programme's focus on sustainable cities (PO8). Some states noted the difficulties they had in integrating environmental issues more coherently into other areas of public policy. This suggests that the EAP needs to retain a focus on this challenge. Finland gave the example of the difficulties of integrating biodiversity into economic and social activities. Estonia felt that there needs to be continued focus on encouraging environmental synergies via EU led financial instruments. The UK representative highlighted that it is important for the EU to continue to push for further coherence and synergy through initiatives such as the 7th EAP.

The 7th EAP's coherence with other international programmes such as the SDGs and the Paris Agreement was also discussed. Overall, 40% and 42% respectively stated that the 7th EAP was coherent with the SDGs and the Paris Agreement. A small minority (4% and 7% respectively) did not consider these to be coherent. This was confirmed by the interviewees that all regarded the 7th EAP and the SDGs to be coherent. There were some comments on their relationship. All stakeholder types emphasised the need to more explicitly incorporate the environmental SDGs into any future high-level environmental strategy. This was suggested as the SDGs have higher visibility in the international forum and are generally regarded as being better at engaging stakeholders globally. A particular focus for positive EU-SDG coherence was SDG12 (responsible consumption and production). Interviewees noted that there was coherence here with the EU's circular economy package, and workshop attendees stated this SDG could be the starting point for incorporating the SDGs into a future EAP. A small number of stakeholders highlighted the need to focus the 7th EAP on more coherence and cooperation with neighbouring and third countries. This was deemed an important addition in order to improve social and climate equality in the EU's neighbourhood.

Relevance

A clear majority of stakeholders believed the 7th EAP was a relevant document. Respondents to the online public consultation believed that the scope of POs1-3 was still relevant⁵¹ and that the focus of the long-term vision remained relevant⁵². NGOs were more likely to strongly agree with these two statements. Member State stakeholders emphasised the long-term relevance of the 7th EAP. Estonia and Poland highlighted the EAP's relevance as a guiding structural strategy. France and Germany were positive in their support of the EAP's relevance, with the former regarding the document as 'indispensable' and the latter highlighting its use as a legal reference point to defend

⁵¹ When the 153 participants were questioned if the three thematic objectives had the right focus, 50% agreed and 33% strongly agreed.

⁵² When the 153 participants were questioned if the long-term vision had the right focus, 55% agreed and 33% strongly agreed.

national policy-making. Some non-Member State stakeholders pointed out that the 7th EAP was very innovative for its time, addressing relevant contemporary challenges.

Most stakeholders agree that the 7th EAP addresses the relevant environmental challenges. However, many stakeholders think that some issues are not as well covered as they should be. Topics that stakeholders wanted a greater focus on included:

- **Funding instruments:** the focus on funding in PO6 was deemed important. Stakeholders wanted a greater mobilisation of funding tools, such as the cohesion policy funds, European Investment Bank (EIB), and European Agricultural Fund for Rural Development (EAFRD) the EAP's environmental mandate.
- **Policy interface and systemic logic:** a greater focus on addressing policy interface issues as outlined in PO7 was sought. This was thought to be a particular issue in chemical and waste policy, where action is needed to help facilitate the transition to the circular economy. Workshop participants also noted a need to focus more on systemic logic. Policy should utilise and consider its effects on entire systems in order to maximise the value of EU policy. Health was noted by survey participants as a key issue that should be integrated in all policy areas.
- **Implementation:** a variety of stakeholders noted that legislation is heading in a positive direction, however there is still a need to see more action on the ground. One stakeholder regarded this as the most relevant PO in the 7th EAP.
- **Communication:** stakeholders believed this aspect of the 7th EAP could have been improved. It was unclear to many stakeholders who the programme was targeted towards. It was therefore believed that the communication strategy should be improved in order to more effectively engage and mobilise stakeholders from all across the EU (especially private citizens and businesses). A stakeholder noted that communication should – without becoming alarmist – more clearly outline the severity of the current environmental/climate situation. This would add to the document's necessity and relevance. Some stakeholders felt that the relevance of the 7th EAP could be better communicated if the SDGs were better incorporated into its structure.
- **Emerging issues:** Stakeholders pointed out that certain issues have become more pressing and politically relevant overtime, and this is not reflected in the 7th EAP. Chemicals and plastics were provided as examples of this. However, some believed the broad overarching nature of the programme captured these issues sufficiently well. The example of the circular economy was provided, which is only mentioned twice in the document. Nevertheless, PO2 was viewed as an influence in the political drive towards the circular economy. Therefore, keeping the EAP broad was deemed as an important means to maximising relevance. Stakeholders also suggested some new and emerging issues that should be included in a future EAP. These included; digitalisation, the sharing economy, and the rebound effects associated with these.

Added-value

All but one stakeholder agreed that the 7th EAP provides EU added value.⁵³ This view was often focussed on the EAP's status as the only EU strategy that prioritises

⁵³ Only one non-Member State stakeholder stated the programme did not add value, as overall policy improvement comes from the political guidelines of the EC or from better regulation guidelines.

environmental concerns. This provides a clear reminder that the Union requires environmental protection. In the open public consultation's open answers, 17 stakeholders outlined that the 7th EAP's added value was that it steers the EU towards more ambitious legislation. This added value of pushing ambition can be retained if future iterations remain more ambitious than international standards. Some stakeholders felt that the 7th EAP is a more ambitious high-level strategy than the SDGs. The EAP's role as a high-level structural guide was perceived by Germany as being positive in holding legislators to account and to push for the objectives described within the document. Survey participants agreed, with 84% believing that the long-term vision helps to steer environmental and climate policy. The 7th EAP's added value in setting priorities was noted by Finland and the UK. Czech and France stated that long-term priorities for action were essential. Such long-term priorities were noted by one stakeholder as having facilitated more concrete actions, such as the Resource Efficiency roadmap, and the circular economy action plan. Stakeholders noted that additional milestones or roadmaps to the long-term vision would help capitalise on this added value.

The 7th EAP was seen as adding value through its use as a tool for dialogue and communication. Many non-Member State interviewees stated that it provides a clear message and understanding of environmental issues for a broad range of stakeholders (EU, national, local). Some stakeholders noted that the 7th EAP created a common language for some EU citizens which made it easier to tackle certain environmental challenges. One stakeholder noted that they use it as a tool for engaging the interest of other stakeholders in environmental topics. As mentioned under effectiveness and relevance, stakeholders perceived that the programme would add more value if it had a stronger communication strategy throughout its lifespan, and if it could engage a broader range of stakeholders (including private individuals and businesses). Many Member States highlighted how the 7th EAP generated dialogue between EU nations and raised awareness as a whole. Germany, Austria and Bulgaria felt that the development phase of the EAP was noted as an effective time for the generation of dialogue. Finland felt that the EAP presented global and environmental challenges and helped provide EU predictability on future policy developments.

Stakeholders regarded the coherence generated by the 7th EAP as added value that would be absent without such a pan-EU strategy. One stakeholder noted that environment and climate action is becoming ever more necessary at an international level. Therefore, the existence of a strategy that manages a coordinated policy response at EU level is key. Another noted that the 7th EAP provides a buffer against the complete fragmentation of environmental policy. The overarching nature of the document is necessary, as it means it overlaps with a large variety of policy areas. France emphasised its added value is as a tool to express agreed priorities for harmonised action across the EU and Member States. Czechia, Estonia, and France noted that it stimulates action in areas that require a transnational response. Stakeholders also noted that the programme's focus on implementation added value. Workshop participants noted that the 7th EAP enables the sharing of best practices across a wide variety of stakeholders to further aid implementation. This was noted via the programme's influence on the Environmental Implementation Review (EIR) and the positive effects this has had on Member States.

A future EAP

Several stakeholders reported that they support the idea of an 8th EAP: although beyond the scope of an evaluation, it reflects on the value added of the 7th EAP. Several suggestions were made for how the programme could be improved, and these suggestions imply that there are some shortcomings with the 7th EAP. These points cut across the evaluation criteria, some of the key suggestions are:

- **Inclusion of the SDGs:** many stakeholders outlined this as a way to improve the accessibility of the document. Stakeholders did not want the SDGs to define the structure of the 7th EAP, which should remain as a more (environmentally) ambitious strategy.
- **Target currently unengaged stakeholders:** such as businesses/industry and private individuals, which/who were felt to lack engagement with the programme. Some workshop participants suggested adjusting the structure to have certain sections for certain stakeholders, i.e. one clear narrative section, for public awareness; one concise target section, for industry and business action; and one section outlining the commitments of the Commission departments, for NGOs and institutional accountability. An improved communication strategy would further facilitate this.
- **Structure:** other stakeholders noted the structure could be made more logical and targeted to improve usability. Keeping the programme concise and continuing the focus on broad environmental goals at EU level was considered to provide the most added-value for the programme.
- **Objective driven:** though not agreed by all, some stakeholders suggested that more quantifiable objectives would help drive the achievement of targets. This could be achieved by strengthening the action plan elements within the programme or creating a to-do-list for stakeholders to guide them on the broader objectives. This would require an official midterm evaluation and monitoring system. However, some stakeholders noted that there would be more added value in a less target-oriented document. A balance between flexibility and policy strength was highlighted.

Key conclusions

- Stakeholders strongly supported having an EAP. They saw the 7th EAP as helping to provide more predictable, faster and better coordinated actions and so also improving the efficiency of policies. However, predictability may have been reduced after the change of a European Commission, with new political priorities.
- There was broad buy-in from stakeholders on the structure and content of the 7th EAP, although it was also felt that the actions were too detailed / complex.
- Value added would have been increased by a better mechanism for ensuring ownership and complete fulfilment of commitments.

ANNEX 3. METHODS AND ANALYTICAL MODELS USED IN PREPARING THE EVALUATION

The evaluation of this strategy is unique for the European Commission in terms of its scope (especially its focus on whether the strategy has been well-formulated) and because progress on the ground is assessed by the EEA through its work on the State of the Environment report. Given this, classical modelling was neither needed nor undertaken. Instead, the 7th EAP was compared against a conceptual model for judging whether a strategy is well designed and fit for purpose given its governance context: to what extent the 7th EAP meets the criteria of a sound environmental strategy. This comparison was done by breaking the evaluation questions into clearer sub-questions.

1. What makes a good strategy?

As a means to verify the analysis guided by the intervention logic, it was decided to identify in parallel *what makes a good strategy*. The supporting study examined what constitutes a ‘sound’ or ‘well-designed’ strategy and which success criteria can be identified, taking advantage of examples from other policy areas and also from the European Commission’s ‘Quality of Public Administration – A Toolbox for Practitioners’. Subsequently, the supporting study examines the 7th EAP against these criteria, highlighting both strengths and shortcomings and providing ideas for improvement.

This analysis identifies some criteria that are already fully reflected in the intervention logic but also others that are not. For example:

- political commitment is clearly included as an objective in the intervention logic, so it is considered in the evaluation;
- solid foundation relates more to the process, and so is less highlighted in the intervention logic; therefore the analysis of this aspect brings something new to the evaluation.

The hypothesis is that *the better the 7th EAP scores/benchmarks against these criteria, the better it will perform as a strategy*.

Purposes of strategies

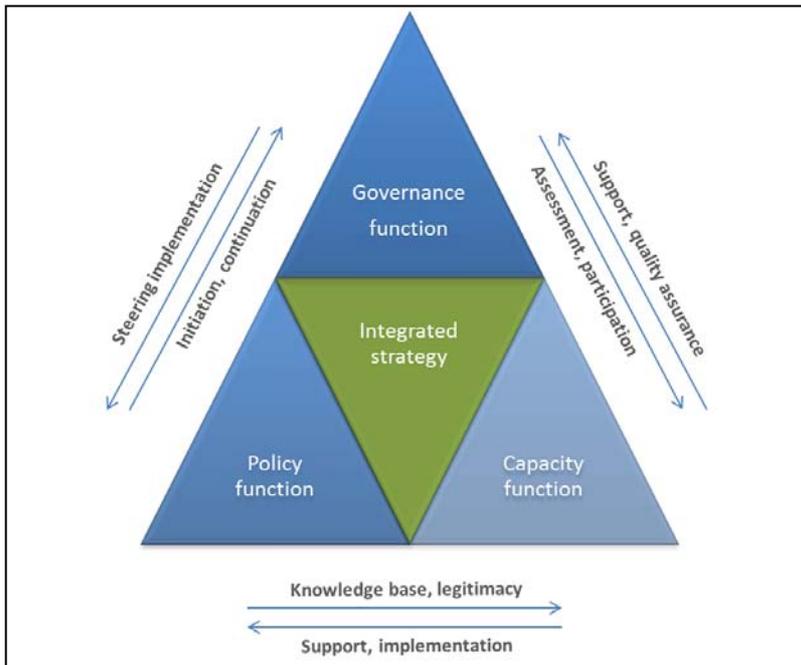
Integrated strategies are increasingly common in contemporary policymaking in the environmental field. They can have three functions.

1. Policy function: integrated strategies constitute policy documents which analyse the status quo and provide direction and guidance to policymakers by defining a vision, priority themes and policy objectives. Potential synergies and trade-offs are identified. They may also propose concrete measures and instruments or include the same in additional action plans, sectoral strategies, etc.
2. Governance function: integrated strategies are designed to enable a cyclical and reflexive governing process to be established – contrary to the previous, one-off environmental action plans. As such, they can enable the integration of policymakers from other sectors (horizontal integration) and levels of governance (vertical integration) on a continuous basis, and involve responsibilities and resources being assigned as well as ensure learning and adaptation through monitoring and evaluation activities.

3. Capacity building function: the aim of integrated strategies is to build capacities. This includes building a knowledge base for formulating and implementing policy measures, establishing and strengthening policy networks, raising awareness for certain issues, mobilising stakeholders through participation activities and establishing a monitoring and evaluation mechanism that informs policymakers.

In sum, integrated strategies can be considered as governing processes that serve the ultimate purpose of shaping broader political agendas and steering policy outputs, as the following figure illustrates.

Figure 1: Functions of an integrated strategy



Source: Trinomics et al, adapted from Jacob et al. (2012)

Various principles, in turn, play into the various phases of designing, implementing, evaluating and revising a strategy. The following ‘elements’ or ‘criteria’ for developing a promising environmental strategy can be differentiated, even though they partially overlap:

Solid foundation: an in-depth analysis of the status quo, based on reliable scientific data, is an essential prerequisite for developing a credible, acceptable, relevant and ultimately effective environmental strategy.

Political commitment: high-level political commitment over time is essential for a strategy to be effective and for institutional changes to take place. Also, as environmental issues and, ideally, environmental strategies cut across both different sectors and different levels of government it is crucial to factor in and involve policymakers from different sectors and the downstream political levels.

Adequate resources: It is important for the strategy and its related processes to enjoy sufficient access to knowledge, funding and personnel so it can become cyclical, and so that a continuous process can be established that allows for a long-term vision, monitoring and continuous adaptation and improvement.

Vision, objectives and targets: formulating a vision helps spell out the strategy’s overall aim and long-term goal, upon which all objectives and targets are based. Moreover, the strategy should define priorities, divided into themes or otherwise, which provide its overall structure (e.g. areas of action, pillars) and which are complemented by more concrete objectives.

Monitoring, continuous learning and improvement: All strategies should be monitored and evaluated regularly in order to track progress and change strategic direction if necessary. Suitable indicators need to be identified to track progress on the strategy’s implementation and the fulfillment of its objectives and targets.

Broad participation: the broad involvement and participation of a wide variety of stakeholders including businesses, trade unions, academics and civil society representatives serve different purposes.

The 7th EAP: a sound environmental strategy?

Criteria for a good strategy	In the intervention logic explicitly?
Solid foundation	No, but there is a discussion of this in terms of involving stakeholders and the pros and cons of the process for agreeing the 7 th EAP
Political commitment	Yes, and discussed throughout particularly in terms of effectiveness questions
Adequate resources	No, but it is discussed in terms of implementation
Vision, objectives and targets	Yes, and discussed throughout
Monitoring, continuous learning and improvement	No, but it is discussed in the different evaluation questions
Broad participation	Yes, and discussed throughout particularly in terms of involving stakeholders

An assessment of the 7th EAP by these six criteria⁵⁴

The aim is not to provide an assessment of the 7th EAP’s achievements (covered in both Annex 6 or by the European Environment Agency) but to look at the 7th EAP from the perspective of what an environmental strategy can and is supposed to accomplish, and to what extent the programme meets the above-defined criteria of a sound or well-designed strategy.

The analysis shows that the 7th EAP performs well in terms of solid foundation. The programme’s extensive prior impact assessment is well-founded and evidence-based and

⁵⁴ Note that the views expressed in this section are not necessarily those of the European Commission. They form part of the assessment made by external contractors supporting the evaluation, and in some cases they differ and are more reflective of the ‘stakeholders views’ found in the answers to the evaluation questions. All of the issues though are picked up within the main evaluation report where relevant.

provides a comprehensive analysis of, among other things, the current situation, prevailing and pressing environmental challenges, the policy context, and the impact of different options and the underlying rationale of the programme's focus and objectives. Stakeholder consultations that were carried out as part of the 7th EAP's mid-term implementation assessment also confirm that the programme as a whole is considered relevant in relation to environmental needs. However, there are shortcomings in terms of coherence and interlinkages. The prior analysis did not look in-depth at synergies and trade-offs with other policy areas and does not identify the necessary actions to integrate environmental concerns across sectors.

Inconsistencies between policy frameworks, i.e. the failure to effectively integrate environmental objectives across sectors (of relevance to the environment), are also considered a major weakness of the 7th EAP. The reasons for this lie less in the programme's preparation, but rather in stakeholders perceiving the 7th EAP to be lacking in political weight and influence compared to other political agendas. Therefore, the programme is garnering the necessary commitment from relevant policymakers. In particular, the dominance of economic and business interests is seen as hampering the fulfilment of environmental objectives within the Member States.

Consequently, the 7th EAP is seen by various stakeholders as mostly fit to:

- provide strategic guidance;
- act as an inter-institutional roadmap for policymaking and policy coherence;
- act as an agenda-setting tool for national authorities;
- raise awareness;
- support NGOs in advocacy; and
- hold the EU accountable.

However, it is considered less successful in serving as a tool for implementation.

In terms of adequate resources, the 7th EAP appears to enjoy sufficient access to funding, personnel and knowledge as it allows for a continuous process in which findings from previous programmes are thoroughly reflected and incorporated and current objectives closely monitored and evaluated. However, according to stakeholders as well as the 7th EAP itself (see priority objective 6), there are clearly problems with funding in relation to developing and implementing suitable policies in the EU and Member States.

While the 7th EAP meets the criteria of including a vision, priority objectives, targets and measures, the programme could significantly improve in clarity and structure by better separating and highlighting its different sections (rationale, objectives and actions). Overview tables on, for example, targets, actions⁵⁵ or indicators would also help illustrate the programme's focus, proposed actions and how it intends to track progress. Moreover, consulted stakeholders suggest that the programme is too broad and vague, and that a better organisation of the different topics into overarching themes should be adopted around the most pressing environmental challenges. It should also be clearer about its targets, the actions required and the stakeholders responsible for these actions.

⁵⁵ The programme lists 60 concrete 'actions' to be taken by 2020, in order to fulfil the goals listed

Regarding the criterion on monitoring and evaluation, the 7th EAP has allowed for limited improvement. The programme is accompanied by monitoring and evaluation processes that assess both progress towards implementation (process monitoring) and progress towards the desired outcomes/impact (outcome/impact monitoring). The way in which the 7th EAP (and its predecessors) have been prepared also suggests that the Commission is making a considerable effort to learn from previous programmes and adapt and improve the upcoming one.

Lastly, in terms of broad participation, the consultations undertaken as part of the programme's preparation and evaluation appear comprehensive and adequate to allow for all relevant stakeholders to express their position, contribute to the strategy and gain a sense of ownership. However, the Commission could have looked into further institutionalising these processes and moving to a more continuous and regular dialogue.

2. Sub-questions

As discussed in Section 4.2, the approach used for carrying out the evaluation involved identifying clearer sub-questions as well as finding sources of evidence to answer these questions (Commission experts, stakeholder consultation, external reports etc.). These sub-questions served as inspiration for structuring the work at the beginning.

Questions	Sub-questions	Sources of data (apart from Commission expert views)	Judgment criteria/ indicators
Effectiveness:			
To what extent has the 7th EAP enabled more predictable, faster and better coordinated action by the EU and the Member States?			Evidence that the programme's objectives are being met or that progress is made toward meeting them.
	Have the 36 sub-objectives been met?	Assessment and scoring for policy area clusters (see Annex 6)	Level of implementation
	Have the 60 actions been implemented?	Assessment and scoring for policy area clusters (see Annex 6)	Level of implementation
	Has there been progress on the enabling framework?	Assessment and scoring for policy area clusters (see Annex 6), stakeholder views	Level of implementation
	Is there evidence that the enabling framework is contributing to meeting the other priority objectives?	Assessment and scoring for policy area clusters (see Annex 6), stakeholder views	Level of implementation for the enabling framework; links made from the other objectives
	Is there any evidence that policy is 'more predictable'?	Assessment for policy area clusters (see Annex 6), stakeholder views, comparison against good governance model, comparison with Member State strategies	Links made across the different priority objectives
	Is there any evidence that policy is 'faster'?	Assessment for policy area clusters (see Annex 6), stakeholder views, comparison against good governance model, comparison with Member State strategies	Links made across the different priority objectives

	Is there any evidence that policy is 'better coordinated'?	Assessment for policy area clusters (see Annex 6), stakeholder views, comparison against good governance model, comparison with Member State strategies	Links made across the different priority objectives, evidence on stakeholder consultation, Comparison against criteria
	Do Member States and regions have a consistent EAP?	Stakeholder views, comparison against good governance model, comparison with Member State strategies	Evidence on stakeholder consultation, feedback on Member States' strategies
To what extent has the 7th EAP been useful in involving different stakeholders?			
	To what extent have stakeholders been involved in determining the 7 th EAP?	Stakeholder views, comparison against good governance model	Evidence from stakeholder consultation
	Do stakeholders think that this was a useful exercise for them?	Stakeholder views	Evidence from stakeholder consultation
	How much reference is made to the 7 th EAP?	Assessment for policy area clusters, stakeholder views	Links made across the different priority objectives
	Has the 7 th EAP influenced business?	Assessment for policy area clusters, stakeholder views	Evidence from stakeholder consultation
How has the 7th EAP structure contributed towards achieving its nine priority objectives?			
	Is the state of the environment improving?	EEA	Trends as presented in the EEA Indicator reports
	Have the 36 sub-objectives been achieved?	Assessment and scoring for policy area clusters (see Annex 6)	Level of implementation
	Have the 60 actions been implemented?	Assessment and scoring for policy area clusters (see Annex 6)	Level of implementation
	Did the structure itself contribute to this?	Assessment for policy area clusters (see Annex 6), stakeholder views	Links made across the different priority objectives
	Does the structure match best practice for strategies?	Assessment for policy area clusters (see Annex 6), stakeholder views	Evidence from stakeholder consultation, Comparison against criteria
Efficiency:			
To what extent has the 7th EAP created synergies or opportunities for streamlining, and cost saving at various levels?			Cost savings or investments and other expenses (including non-monetary) incurred in connection with the programme's implementation.
	Has there been streamlining or cost savings?	Assessment for policy area clusters (see Annex 6), stakeholder views, evaluations and evidence from REFIT programme	Evidence from stakeholder consultation, links made across the different priority objectives

	How is the regulatory burden for environmental policy overall changing over time?	Eurostat data	Environment protection expenditure statistics
	Has the enabling framework helped to better achieve the other objectives?	Assessment for policy area clusters (see Annex 6), stakeholder views, evaluations and evidence from REFIT programme	Evidence from stakeholder consultation, links made across the different priority objectives. REFIT findings
	Can the 7 th EAP be linked to changes in costs and streamlining?	Assessment for policy area clusters (see Annex 6), stakeholder views, evaluations and evidence from REFIT programme	Evidence from stakeholder consultation, links made across the different priority objectives. REFIT findings
To what extent has the 7th EAP been useful in identifying and addressing information needs and thus supporting efficient and effective policies?			
	Has our understanding of the different priority objectives improved?	Assessment for policy area clusters (see Annex 6), stakeholder views	Evidence from stakeholder consultation, links made across the different priority objectives.
	Are we better at identifying emerging environmental risks?	Assessment for policy area clusters (see Annex 6), stakeholder views	Evidence from stakeholder consultation, links made across the different priority objectives.
	Are there better flows of information (reporting to the Commission, active dissemination and reporting onwards)?	Assessment for policy area clusters (see Annex 6), stakeholder views	Evidence from stakeholder consultation, links made across the different priority objectives. fitness checks on reporting
	Are we addressing information needs through research and innovation?	Assessment for policy area clusters (see Annex 6), stakeholder views	Evidence from stakeholder consultation, links made across the different priority objectives.
	Has better information helped to better achieve the other objectives?	Assessment for policy area clusters (see Annex 6), stakeholder views	Evidence from stakeholder consultation, links made across the different priority objectives
Relevance:			
To what extent does the 7th EAP tackle the challenges posed to EU environmental policy in a proportionate way?			
	Were any challenges not addressed?	Assessment for policy area clusters (see Annex 6), stakeholder views	Evidence from stakeholder consultation, links made across the different priority objectives
	Are the sub-objectives still relevant, and are they broadly addressed in equal depth?	Assessment for policy area clusters (see Annex 6), stakeholder views	Evidence from stakeholder consultation, links made across the different priority objectives
How flexible is the 7th EAP approach in allowing new and emerging issues to be taken into account?			

	What new and emerging issues are there?	Assessment for policy area clusters (see Annex 6), stakeholder views	Evidence on new and emerging issues that have been accepted as relevant for EU environment policy
	Would it be easy to incorporate new and emerging issues in the EAP?	Assessment for policy area clusters (see Annex 6), stakeholder views	The extent to which new and emerging issues have been incorporated into the EAP.
Coherence:			
To what extent are the nine priority objectives and their actions consistent with each other?			The extent to which there is a (general) consistency between the programme objectives.
	Have the enabling framework objectives contributed to the other objectives?	Assessment for policy area clusters (see Annex 6), stakeholder views, issue paper by contractor	Evidence from stakeholder consultation, links made across the different priority objectives, examples
	Have the objectives n.8 and n.9 ensured coherent action at the local and international level?	Assessment for policy area clusters (see Annex 6), stakeholder views, issue paper by contractor	Evidence from stakeholder consultation, links made across the different priority objectives, examples
	Are there examples of good synergies and co-benefits?	Assessment for policy area clusters (see Annex 6), stakeholder views, issue paper by contractor	Evidence from stakeholder consultation, links made across the different priority objectives, examples
	Are there examples of tradeoffs?	Assessment for policy area clusters (see Annex 6), stakeholder views, issue paper by contractor	Evidence from stakeholder consultation, links made across the different priority objectives, examples
	Are these trade-offs being taken into account?	Assessment for policy area clusters (see Annex 6), stakeholder views, issue paper by contractor	Evidence from stakeholder consultation, links made across the different priority objectives, examples
To what extent is the 7th EAP integrated and consistent with other EU policies and strategies, including the Juncker priorities and the Europe 2020 strategy?			The extent to which there is a (general) coherence between the programme objectives and other EU policies and strategies.
	Are sectoral policies at EU and Member State level consistent with the priority objectives?	Assessment for policy area clusters (see Annex 6), stakeholder views, issue paper by contractor	Links made across the different priority objectives, examples.
	Is the 7 th EAP consistent with the Juncker priorities?	Assessment for policy area clusters (see Annex 6), stakeholder views, issue paper by contractor	Links made across the different priority objectives, examples.
To what extent is the 7th EAP consistent with international commitments, including the 2030 Agenda and SDGs?			The extent to which there is a (general) coherence between the programme objectives and Agenda 2030.
	What other international commitments are there?	Assessment for policy area clusters (see Annex 6), stakeholder views, issue paper by contractor	Links made across the different priority objectives, examples

	Is the 7 th EAP consistent with these other international commitments?	Assessment for policy area clusters (see Annex 6), stakeholder views, issue paper by contractor	Links made across the different priority objectives, examples
	Is the 7 th EAP consistent with the SDGs?	Assessment for policy area clusters (see Annex 6), stakeholder views, issue paper by contractor	Links made across the different priority objectives, examples
Added value:			
What is the additional value resulting from the 7th EAP compared to what could be achieved by EU environmental policy without such a framework?			The extent to which there is a clear additional value from the programme compared to what could have been expected from national or regional level actions
	Has the 7 th EAP led to more effective policy?	Previous answers	See effectiveness above
	Has the 7 th EAP led to more efficient policy?	Previous answers	See efficiency above
	Has the 7 th EAP led to more relevant policy?	Previous answers	See relevance above
	Has the 7 th EAP led to more coherent policy?	Previous answers	See coherence above
	What have been the best 'features' of the 7 th EAP?	Assessment for policy area clusters (see Annex 6), stakeholder views, analysis of EU environmental law, subsidiarity profile	Evidence from stakeholder consultation, links made across the different priority objectives, examples.
	How could the 7 th EAP have provided more added value?	Assessment for policy area clusters (see Annex 6), stakeholder views, analysis of EU environmental law subsidiarity profile	Evidence from stakeholder consultation, links made across the different priority objectives, examples.

ANNEX 4 LIST OF SUB-OBJECTIVES AND ACTIONS BY THEMATIC PRIORITY**Priority objective 1: To protect, conserve and enhance the Union's natural capital**

Sub-objectives

The 7th EAP shall ensure that by 2020:

- a) the loss of biodiversity and the degradation of ecosystem services, including pollination, are halted, ecosystems and their services are maintained and at least 15% of degraded ecosystems have been restored;
- b) the impact of pressures on transitional, coastal and fresh waters (including surface and ground waters) is significantly reduced to achieve, maintain or enhance good status, as defined by the Water Framework Directive;
- c) the impact of pressures on marine waters is reduced to achieve or maintain good environmental status, as required by the Marine Strategy Framework Directive, and coastal zones are managed sustainably;
- d) air pollution and its impacts on ecosystems and biodiversity are further reduced with the long-term aim of not exceeding critical loads and levels;
- e) land is managed sustainably in the Union, soil is adequately protected and the remediation of contaminated sites is well underway;
- f) the nutrient cycle (nitrogen and phosphorus) is managed in a more sustainable and resource-efficient way;
- g) forest management is sustainable, and forests, their biodiversity and the services they provide are protected and, as far as feasible, enhanced and the resilience of forests to climate change, fires, storms, pests and diseases is improved.

Actions:

- i. stepping up the implementation of the EU Biodiversity Strategy without delay, in order to meet its targets;
- ii. fully implementing the Blueprint to Safeguard Europe's Water Resources, having due regard for Member States' specific circumstances, and ensuring that water quality objectives are adequately supported by source-based policy measures;
- iii. urgently increasing efforts, inter alia, to ensure that healthy fish stocks are achieved in line with the Common Fisheries Policy, the Marine Strategy Framework Directive and international obligations. Combating pollution and establishing a Union-wide quantitative reduction headline target for marine litter supported by source-based measures and taking into account the marine strategies established by Member States. Completing the Natura 2000 network of marine protected areas, and ensuring that coastal zones are managed sustainably;
- iv. agreeing and implementing an EU Strategy on adaptation to climate change, including the mainstreaming of climate change adaptation into key Union policy initiatives and sectors;
- v. strengthening efforts to reach full compliance with Union air quality legislation and defining strategic targets and actions beyond 2020;
- vi. increasing efforts to reduce soil erosion and increase soil organic matter, to remediate contaminated sites and to enhance the integration of land use aspects into coordinated decision-making involving all relevant levels of government, supported by the adoption of targets on soil and on land as a resource, and land planning objectives;
- vii. taking further steps to reduce emissions of nitrogen and phosphorus, including those from urban and industrial wastewater and from fertiliser use, inter alia through better source control, and the recovery of waste phosphorus;
- viii. developing and implementing a renewed Union Forest Strategy that addresses the multiple demands on, and benefits of, forests and contributes to a more strategic approach to protecting and enhancing forests, including through sustainable forest management;
- ix. enhancing Union public information provision, awareness and education on environment policy.

Objective 2. To turn the Union into a resource-efficient, green, and competitive low-carbon economy

Sub-objectives

The 7th EAP shall ensure that by 2020:

- a) the Union has met its 2020 climate and energy targets and is working towards reducing by 2050 GHG emissions by 80-95% compared to 1990 levels, as part of a global effort to limit the average temperature increase below 2 °C compared to pre-industrial levels, with the agreement of a climate and energy framework for 2030 as a key step in this process;

- b) the overall environmental impact of all major sectors of the Union economy is significantly reduced, resource efficiency has increased, and benchmarking and measurement methodologies are in place. Market and policy incentives that foster business investments in resource efficiency are in place, while green growth is stimulated through measures to foster innovation;
- c) structural changes in production, technology and innovation, as well as consumption patterns and lifestyles have reduced the overall environmental impact of production and consumption, in particular in the food, housing and mobility sectors;
- d) waste is safely managed as a resource and to prevent harm to health and the environment, absolute waste generation and waste generated per capita are in decline, landfilling is limited to residual (i.e. non-recyclable and non-recoverable) waste, having regard to the postponements provided for in Article 5(2) of the Landfill Directive and energy recovery is limited to non-recyclable materials, having regard to Article 4(2) of the Waste Framework Directive;
- e) water stress in the Union is prevented or significantly reduced.

Actions:

- i. fully implementing the Climate and Energy Package and urgently agreeing on the Union's 2030 climate and energy policy framework, with due regard for the most recent IPCC assessment report, taking into account the indicative milestones set out in the Low-Carbon Roadmap, as well as developments within the UNFCCC and other relevant processes;
- ii. generalising the application of 'Best Available Techniques' in the context of the Industrial Emissions Directive and enhancing efforts to promote the uptake of emerging innovative technologies, processes and services;
- iii. giving impetus to the public and private research and innovation efforts required for the development and uptake of innovative technologies, systems and business models which will speed up and lower the cost of transition to a low-carbon, resource-efficient, safe and sustainable economy. Further developing the approach set out in the Eco-innovation Action Plan, identifying priorities for incremental innovation as well as system changes, promoting a larger market share of green technologies in the Union and enhancing the competitiveness of the European eco-industry. Establishing indicators and setting realistic and achievable targets for resource efficiency;
- iv. developing measurement and benchmarking methodologies by 2015 for resource efficiency of land, carbon, water and material use and assessing the appropriateness of the inclusion of a lead indicator and target in the European Semester;
- v. establishing a more coherent policy framework for sustainable production and consumption including, where appropriate, the consolidation of existing instruments into a coherent legal framework. Reviewing product legislation with a view to improving the environmental performance and resource efficiency of products throughout their lifecycle. Stimulating consumer demand for environmentally sustainable products and services through policies which promote their availability, affordability, functionality and attractiveness. Developing indicators and realistic and achievable targets for the reduction of the overall impact of consumption;
- vi. developing training programmes geared towards green jobs;
- vii. increasing efforts to reach existing targets and reviewing approaches to green public procurement, including its scope, in order to increase its effectiveness. Establishing a voluntary green purchaser network for Union businesses;
- viii. fully implementing Union waste legislation. Such implementation will include applying the waste hierarchy in accordance with the Waste Framework Directive and the effective use of market-based instruments and other measures to ensure that: (1) landfilling is limited to residual (i.e. non-recyclable and non-recoverable) waste, having regard to the postponements provided for in Article 5(2) of the Landfill Directive; (2) energy recovery is limited to non-recyclable materials, having regard to Article 4(2) of the Waste Framework Directive; (3) recycled waste is used as a major, reliable source of raw material for the Union, through the development of non-toxic material cycles; (4) hazardous waste is safely managed and its generation is reduced; (5) illegal waste shipments are eradicated, with the support of stringent monitoring; and (6) food waste is reduced. Reviews of existing product and waste legislation are carried out, including a review of the main targets of the relevant waste directives, informed by the Roadmap to a Resource Efficient Europe, so as to move towards a circular economy; and internal market barriers for environmentally-sound recycling activities in the Union are removed. Public information campaigns are required to build awareness and understanding of waste policy and to stimulate a change in behaviour;
- ix. improving water efficiency by setting and monitoring targets at river basin level on the basis of a common methodology for water efficiency targets to be developed under the Common Implementation Strategy process, and using market mechanisms, such as water pricing, as

provided for in Article 9 of the Water Framework Directive and, where appropriate, other market measures. Developing approaches to manage the use of treated wastewater

Objective 3. To safeguard the Union's citizens from environment-related pressures and risks to health and wellbeing

Sub-objective

the 7th EAP shall ensure that by 2020:

- a) outdoor air quality in the Union has significantly improved, moving closer to WHO recommended levels, while indoor air quality has improved, informed by the relevant WHO guidelines;
- b) noise pollution in the Union has significantly decreased, moving closer to WHO recommended levels;
- c) citizens throughout the Union benefit from high standards for safe drinking and bathing water;
- d) the combination effects of chemicals and safety concerns related to endocrine disruptors are effectively addressed in all relevant Union legislation, and risks for the environment and health, in particular in relation to children, associated with the use of hazardous substances, including chemicals in products, are assessed and minimised. Long-term actions with a view to reaching the objective of a non-toxic environment will be identified;
- e) the use of plant protection products does not have any harmful effects on human health or unacceptable influence on the environment, and such products are used sustainably;
- f) safety concerns related to nanomaterials and materials with similar properties are effectively addressed as part of a coherent approach in legislation;
- g) decisive progress is made in adapting to the impact of climate change.

Actions:

- i. implementing an updated Union air quality policy, aligned with the latest scientific knowledge, and developing and implementing measures to combat air pollution at source taking into account the differences between the sources of indoor and outdoor air pollution;
- ii. implementing an updated Union noise policy aligned with the latest scientific knowledge, and measures to reduce noise at source, and including improvements in city design;
- iii. increasing efforts to implement the Water Framework Directive, the Bathing Water Directive (65) and the Drinking Water Directive (66), in particular for small drinking water supplies;
- iv. continuing to implement REACH in order to ensure a high level of protection for human health and the environment as well as the free circulation of chemicals within the internal market while enhancing competitiveness and innovation, while being mindful of the specific needs of SMEs. Developing by 2018 a Union strategy for a non-toxic environment that is conducive to innovation and the development of sustainable substitutes including non-chemical solutions, building on horizontal measures to be undertaken by 2015 to ensure: (1) the safety of manufactured nanomaterials and materials with similar properties; (2) the minimisation of exposure to endocrine disruptors; (3) appropriate regulatory approaches to address combination effects of chemicals and (4) the minimisation of exposure to chemicals in products, including, inter alia, imported products, with a view to promoting non-toxic material cycles and reducing indoor exposure to harmful substances;
- v. monitoring the implementation of Union legislation on the sustainable use of pesticides products and reviewing it, as necessary, to keep it up to date with the latest scientific knowledge;
- vi. agreeing and implementing an EU Strategy on adaptation to climate change, including the integration of climate change adaptation and disaster risk management considerations into key Union policy initiatives and sectors.

Objective 4. To maximise the benefits of Union environment legislation by improving implementation

Sub-objectives

The 7th EAP shall ensure that by 2020:

- a) the public has access to clear information showing how Union environment law is being implemented consistent with the Aarhus Convention;
- b) compliance with specific environment legislation has increased;
- c) Union environment law is enforced at all administrative levels and a level-playing field in the internal market is guaranteed;
- d) citizens' trust and confidence in Union environment law and its enforcement is enhanced;
- e) the principle of effective legal protection for citizens and their organisations is facilitated.

Actions:

- i. ensuring that systems at national level actively disseminate information about how Union environment legislation is being implemented, and complementing such information with a Union level overview of individual Member States' performance;
- ii. drawing up partnership implementation agreements on a voluntary basis between Member States and the Commission, involving local and regional participation where appropriate;
- iii. extending binding criteria for effective Member State inspections and surveillance to the wider body of Union environment law, and further developing inspection support capacity at Union level, drawing on existing structures, backed up by support for networks of professionals such as IMPEL, and by the reinforcement of peer reviews and best practice sharing, with a view to increasing the efficiency and effectiveness of inspections;
- iv. ensuring consistent and effective mechanisms at national level for the handling of complaints about implementation of Union environment law;
- v. ensuring that national provisions on access to justice reflect the case law of the Court of Justice of the European Union. Promoting non-judicial dispute resolution as a means of finding amicable and effective solutions for disputes in the environmental field.

Objective 5. To improve the knowledge and evidence base for Union environment policy

Sub-objectives

the 7th EAP shall ensure that by 2020:

- a) policy-makers and stakeholders have a more informed basis for developing and implementing environment and climate policies, including understanding the environmental impacts of human activities and measuring the costs and benefits of action and the costs of inaction;
- b) the understanding of, and the ability to evaluate and manage, emerging environmental and climate risks are greatly improved;
- c) the environment science-policy interface is strengthened, including the accessibility of data for citizens and the contribution of citizens' science;
- d) the impact of the Union and its Member States in international science-policy fora is enhanced in order to improve the knowledge base for international environment policy.

Actions:

- i. coordinating, sharing and promoting research efforts at Union and Member State level with regard to addressing key environmental knowledge gaps, including the risks of crossing environmental tipping-points and planetary boundaries;
- ii. adopting a systematic and integrated approach to risk management, particularly in relation to the evaluation and management of new and emerging policy areas and related risks as well as the adequacy and coherence of regulatory responses. This could help to stimulate further research on the hazards of new products, processes and technologies;
- iii. simplifying, streamlining and modernising environmental and climate change data and information collection, management, sharing and re-use, including the development and implementation of a Shared Environmental Information System;
- iv. developing a comprehensive chemical exposure and toxicity knowledge base which draws on data generated without animal testing where possible. Continuing the Union's coordinated approach to human and environmental biomonitoring including, where appropriate, standardisation of research protocols and assessment criteria;
- v. intensifying cooperation at international, Union and Member State level on the environment science-policy interface.

Objective 6. To secure investment for environment and climate policy and address environmental externalities.

Sub-objectives

the 7th EAP shall ensure that by 2020:

- a) environment and climate policy objectives are achieved in a cost-effective way and are supported by adequate finance;
- b) public and private sector funding for environment and climate-related expenditure is increased;
- c) the value of natural capital and ecosystem services, as well as the costs of their degradation are properly assessed and considered in policy-making and investments.

Actions:

- i. phasing out environmentally harmful subsidies at Union and Member State level without delay, and reporting on progress through the National Reform Programmes; increasing the use of market-based instruments, such as Member States' taxation policies, pricing and charging, and expanding markets for environmental goods and services, with due regard to any adverse social impacts, using an action-based approach, supported and monitored by the Commission, inter alia, via the

<p>European Semester;</p> <ul style="list-style-type: none"> ii. facilitating the development of, and access to, innovative financial instruments and funding for eco-innovation; iii. adequately reflecting environment and climate priorities in policies and funding strategies to support economic, social and territorial cohesion; iv. making dedicated efforts to ensure the full and efficient use of available Union funding for environmental action, including by significantly improving its early uptake under the Union's Multiannual Financial Framework 2014-2020 and devoting 20% of the budget to climate change mitigation and adaptation through the mainstreaming of climate action and linking that funding to clear benchmarks, target setting, monitoring and reporting; v. developing and applying a system for reporting and tracking environment-related expenditure in the Union budget, in particular expenditure on climate change and biodiversity, by 2014; vi. integrating environmental and climate-related considerations into the European Semester process, where this is relevant for individual Member States' prospects for sustainable growth and is appropriate for country-specific recommendations; vii. developing and applying alternative indicators that complement and go beyond GDP to monitor the sustainability of progress and continuing work to integrate economic indicators with environmental and social indicators, including by means of natural capital accounting; viii. further developing and encouraging 'payments for ecosystem services' schemes; ix. putting in place incentives and methodologies that stimulate companies to measure the environmental costs of their business and profits derived from using environmental services and to disclose environmental information as part of their annual reporting. Encouraging companies to exercise due diligence, including throughout their supply chain.
<p>Objective 7. To improve environmental integration and policy coherence</p>
<p>Sub-objectives The 7th EAP shall ensure that by 2020:</p> <ul style="list-style-type: none"> a) sectoral policies at Union and Member State level are developed and implemented in a way that supports relevant environment and climate-related targets and objectives.
<p>Actions:</p> <ul style="list-style-type: none"> i. integrating environmental and climate-related conditionalities and incentives in policy initiatives, including reviews and reforms of existing policy, as well as new initiatives, at Union and Member State level; ii. carrying out ex-ante assessments of the environmental, social and economic impacts of policy initiatives at appropriate Union and Member State level to ensure their coherence and effectiveness; iii. fully implementing the Strategic Environmental Assessment Directive and the Environmental Impact Assessment Directive; iv. using ex-post evaluation information relating to experience with implementation of the environment acquis in order to improve its consistency and coherence v. addressing potential trade-offs in all policies in order to maximise synergies and avoid, reduce and, if possible, remedy unintended negative effects on the environment.
<p>Objective 8. To enhance the sustainability of the Union's cities.</p>
<p>Sub-objectives the 7th EAP shall ensure that by 2020:</p> <ul style="list-style-type: none"> a) a majority of cities in the Union are implementing policies for sustainable urban planning and design, including innovative approaches for urban public transport and mobility, sustainable buildings, energy efficiency and urban biodiversity conservation.
<p>Actions:</p> <ul style="list-style-type: none"> i. agreeing on a set of criteria to assess the environmental performance of cities, taking into account economic, social and territorial impacts; ii. ensuring that cities have information about, and better access to, financing for measures to improve urban sustainability; iii. sharing best practice between cities at Union and international level in relation to innovative and sustainable urban development; iv. in the context of ongoing Union initiatives and networks, developing and promoting a common understanding of how to contribute to improved urban environments by focusing on the integration of urban planning with objectives related to resource efficiency, an innovative safe and sustainable low-carbon economy, sustainable urban land-use, sustainable urban mobility, urban biodiversity management and conservation, ecosystem resilience, water management, human health, public participation in decision-making and environmental education and awareness.

Objective 9. To increase the Union's effectiveness in addressing international environment and climate-related challenges.

Sub-objectives

the 7th EAP shall ensure that by 2020:

- a) the outcomes of Rio + 20 are fully integrated into the Union's internal and external policies and the Union is contributing effectively to global efforts to implement agreed commitments, including those under the Rio conventions and to initiatives aimed at promoting the global transition towards an inclusive and green economy in the context of sustainable development and poverty eradication;
- b) the Union is providing effective support to national, regional and international efforts to address environmental and climate-related challenges and to ensure sustainable development;
- c) the impact of consumption in the Union on the environment beyond the Union's borders is reduced.

Actions:

- i. working as part of a coherent and comprehensive post-2015 approach to the universal challenges of poverty eradication and sustainable development, and through an inclusive, collaborative process, towards the adoption of sustainable development goals that:
 - a. are coherent with existing internationally agreed goals and targets on, inter alia, biodiversity, climate change, social inclusion and social protection floors;
 - b. address, at national and international level, priority areas such as energy, water, food security, oceans and sustainable consumption and production, decent work, good governance and the rule of law;
 - c. are universally applicable, covering all three dimensions of sustainable development;
 - d. are assessed and accompanied by targets and indicators, while taking into account different national circumstances, capacities and levels of development, and
 - e. are consistent with, and supportive of, other international commitments, such as those concerning climate change and biodiversity;
- ii. working towards a more effective UN structure for sustainable development, in particular its environmental dimension by:
 - a. further strengthening the United Nations Environment Programme (UNEP) in line with the outcome of Rio + 20, building on the decision by the UN General Assembly to change the designation of the Governing Council of the UNEP to the UN Environment Assembly of the UNEP (93), while continuing to strive for an upgrade of the UNEP's status to that of a specialised Agency;
 - b. supporting efforts to enhance synergies between multilateral environmental agreements, in particular in the chemicals and waste cluster and the biodiversity cluster; and
 - c. contributing to ensuring a strong and authoritative voice for the environment in the work of the High-Level Political Forum;
- iii. strengthening the impact of various sources of funding, including taxation and domestic resource mobilisation, private investment, new partnerships and innovative financing sources, and creating options for using development aid to leverage those other sources of financing as part of a sustainable development financing strategy, as well as in the Union's own policies, including international commitments on climate and biodiversity finance;
- iv. engaging with partner countries in a more strategic way, for example by focusing cooperation with:
 - a. strategic partners on the promotion of best practice in domestic environment policy and legislation and convergence in multilateral environmental negotiations;
 - b. countries covered by the European Neighbourhood Policy on gradual approximation with key Union environment and climate policy and legislation and on strengthening cooperation to address regional environmental and climate-related challenges;
 - c. developing countries to support their efforts to protect the environment, fight climate change and reduce natural disasters, and implement international environmental commitments as a contribution to poverty reduction and sustainable development;
- v. engaging in existing and new multilateral environmental and other relevant processes, in a more consistent, proactive and effective way, including through the timely outreach to third countries and other stakeholders, with a view to ensuring that commitments for 2020 are met at Union level and promoted globally, and to agree on international action to be taken beyond 2020, and ratifying and boosting efforts to implement all key multilateral environmental agreements well before 2020. Implementing the 10-year Framework of Programmes on Sustainable Consumption and Production;

- vi. assessing the environmental impact, in a global context, of Union consumption of food and non-food commodities and, if appropriate, developing policy proposals to address the findings of such assessments, and considering the development of a Union action plan on deforestation and forest degradation;
- vii. promoting the further development and implementation of emissions trading schemes around the world and facilitating the linking of such systems;
- viii. ensuring that economic and social progress is achieved within the carrying capacity of the Earth, by increasing understanding of planetary boundaries, inter alia, in the development of the post-2015 framework in order to secure human well-being and prosperity in the long-term.

ANNEX 5 LIST OF MAIN OUTPUTS

The information provided in this annex includes the main outputs achieved and/or planned from 2014 until February 2019. The list does not pretend to be exhaustive or complete.

PRIORITY OBJECTIVE 1: TO PROTECT, CONSERVE AND ENHANCE THE UNION'S NATURAL CAPITAL

Biodiversity

Implementation of the EU Birds and Habitats Directives

2014

- The Commission published a new 'Financing Natura 2000 Guidance Handbook' for 2014-2020, and 'Farming in Natura 2000' guidance.
- The Commission launched the European Natura 2000 awards to reward excellence in the management of Natura 2000 sites and conservation achievements.
- The EU Platform on coexistence between people and large carnivores was established in June 2014.
- A review was published on *the provisions of Article 6.1 and their practical implementation in different Member States*.

2015

- The Commission issued the "Natura 2000 and forests" guidelines.
- The Commission issued "The state of nature" report for 2007-2012.

2016

- The Commission published the 'Fitness Check' evaluation⁵⁶ of the EU Birds and Habitats Directives (the 'Nature Directives').
- The Commission published the first ever European Red List of Habitats.
- The Commission adopted a guidance document on streamlining environmental assessments conducted under the Environmental Impact Assessment Directive with assessments conducted under Art. 6(3) of the Habitats Directive and other environmental legislation.

2017

⁵⁶ SWD(2016) 472

- The Commission adopted the ‘Action Plan for nature, people and the economy’⁵⁷ to improve implementation and boost their contribution towards the EU's biodiversity targets.

2018

- The Commission issued the following guidance documents: ‘*The requirements for hydropower in relation to EU nature Legislation*’, ‘*Energy transmission infrastructure and EU nature legislation*’ and ‘*Establishment of conservation measures under the Common Fisheries Policy for Natura 2000 sites and for Marine Strategy Framework Directive purposes*’.

Implementation of the EU Biodiversity Strategy to 2020

2014

- Adoption of Regulation (EU) 1143/2014 on Invasive Alien Species.
- The 12th Conference of the Parties (COP12) of the UN Convention on Biological Diversity, including agreement on dedicated targets for mobilising resources in support of biodiversity by 2020.

2015

- The mid-term review of the EU biodiversity strategy helped refocus priorities up to 2020.
- An information exchange mechanism EASIN (European Alien Species Information Network) was established to support the implementation of Regulation (EU) 1143/2014.

2016

- The Commission adopted Implementing Regulation (EU) 2016/1141, establishing the first list of Invasive Alien Species of Union concern⁵⁸.
- The Commission adopted Implementing Regulation (EU) 2016/145, establishing the format of the document serving as evidence for the permit issued by the competent authorities of Member States allowing establishments to carry out certain activities concerning invasive alien species of Union concern.
- Adoption of the EU action plan on wildlife trafficking.
- The 13th Conference of the Parties to the Convention on Biological Diversity — CBD COP13 — adopted decisions on anchoring biodiversity in the agriculture, forestry, fisheries and aquaculture sectors.

2017

- The Commission adopted Implementing Regulation (EU) 2017/1263 updating the list of invasive alien species of Union concern.
- The Commission adopted Implementing Regulation (EU) 2017/1454 specifying the technical format for reporting by the Member States.
- COP12 of the Convention on Migratory Species (Manila, October 2017) adopted 34 proposals to amend the Convention’s appendices, four of which were voted upon, for the first time in the Convention’s history.

⁵⁷ COM(2017) 198

⁵⁸ See: http://ec.europa.eu/environment/nature/invasivealien/list/index_en.htm

2018

- The Commission adopted a communication on an EU Pollinators Initiative⁵⁹.
- Commission proposals for the next MFF that integrate biodiversity and ecosystem services into a number of instruments, including a proposal for new strategic nature projects under the LIFE programme.
- The Commission published the fifth MAES (Mapping and Assessment of Ecosystems and their Services) technical report⁶⁰ which provides an integrated analytical framework and a set of indicators for mapping and assessing the condition of ecosystems in the EU.
- Green infrastructure: Adoption of a Commission report on the review of progress in implementing the green infrastructure strategy and adoption of a Commission Guidance document on a strategic framework for further supporting the deployment of EU-level green and blue infrastructure.
- Adoption of a Commission Guidance document on integrating ecosystems and their services into planning and decision-making.
- The launch at the COP14 CBD of a post-2020 global biodiversity process and high level ministerial discussions on mainstreaming biodiversity concerns in the sectors of mining, energy, manufacturing, and health.

Fresh, transitional and coastal waters

2015

- The fourth Implementation Report of the Water Framework Directive (WFD): ‘The Water Framework Directive and the Floods Directive: Actions towards the ‘good status’ of EU water and to reduce flood risks’⁶¹.

2017

- Commission staff working document ‘Agriculture and Sustainable Water management in the EU’⁶² setting out the challenges and opportunities for attaining improved implementation, better governance, targeted investments and a stronger knowledge base to achieve EU water sustainability goals.
- Proposal for a Directive of the European Parliament and of the Council on the quality of water intended for human consumption (recast)⁶³.

2018

- Proposal for a Regulation of the European Parliament and of the Council on minimum requirements for water reuse⁶⁴.
- Commission Decision (EU) 2018/229 of 12 February 2018 establishing, pursuant to Directive 2000/60/EC of the European Parliament and of the Council, the values of

⁵⁹ COM(2018) 395

⁶⁰

See:
http://ec.europa.eu/environment/nature/knowledge/ecosystem_assessment/pdf/3rdMAESReport_Condition.pdf

⁶¹ COM(2015) 120

⁶² SWD(2017) 153

⁶³ COM(2017) 753

⁶⁴ COM(2018) 337

the Member State monitoring system classifications as a result of the intercalibration exercise and repealing Commission Decision 2013/480/EU

- The 5th implementation report on the WFD, COM 2019 (95)

2019

- Communication on a strategic approach to pharmaceuticals in the environment.

Marine waters

2014

- The Commission's report on the first phase of implementation of the Marine Strategy Framework Directive (MSFD)⁶⁵, together with the EEA's 'Marine messages', offered the first overview of the state of EU seas.

2015

- Commission report on the progress in establishing marine protected areas under the MSFD⁶⁶.
- Report from the European Environment Agency on 'The State of the European Seas'.
- Technical report on *Overview of the potential interactions and impacts of commercial fishing methods on marine habitats and species protected under the EU Habitats Directive*.

2016/2017

- Commission Report on the assessment of monitoring programmes under Article 12 of the MSFD⁶⁷.
- Commission Directive⁶⁸ replacing Annex III (indicative lists of characteristics, pressures and impacts for the assessment of the environmental status) to the MSFD.
- EU Member States completed the first cycle of implementation of the MSFD⁶⁹.
- Technical report on *Socio-economic benefits of the EU marine protected areas*.
- Commission Decision 2017/848/EU requires, among other things, the setting of threshold values that help determine good environmental status for pressures on the marine environment, including marine litter and other forms of pollution.

2018

- Report on the assessment of programmes of measures⁷⁰ under Article 16 of the MSFD.
- Adoption of a proposal revising the port reception facilities Directive to tackle sea-based marine litter, with measures to ensure that waste generated on ships or gathered at sea is returned to land and appropriately managed there⁷¹.
- Adoption of the European strategy for plastics in a circular economy⁷².

⁶⁵ COM(2014) 97

⁶⁶ COM(2015) 481

⁶⁷ COM(2017) 3

⁶⁸ Directive 2017/845/EU

⁶⁹ Directive 2008/56/EC

⁷⁰ COM(2018) 562

⁷¹ COM(2018) 33

2019

- Directive on the reduction of the impact of certain plastic products on the environment, aiming to reducing marine litter with measures on single use plastics and fishing gear⁷³.

Land and Soil

2014

- The Commission withdrew its proposal for a soil framework directive, stating that ‘The Commission remains committed to the objective of the protection of soil and will examine options on how to best achieve this. Any further initiative in this respect will however have to be considered by the next college’⁷⁴.

2015

- The Commission adopted a waste package as part of the circular economy strategy, establishing binding targets for reuse and recycling of municipal waste, and reducing landfilling which will have a favourable effect on soil quality.

2016

- The Commission made a proposal for a revision of the Fertilisers Regulation, setting limits for the presence of heavy metals and contaminants, notably cadmium, in fertilising products affecting agricultural soils.
- The Commission made a proposal for the integration of the land use, land use change and forestry (LULUCF) sectors into the non-ETS mitigation framework.

2017

- The EU adopted a new Regulation on Mercury⁷⁵, which provided for an exchange of information with Member States on the identification, inventory and assessment of sites contaminated with mercury or mercury-compounds.

2018

- The report of the Mapping and Assessing of Ecosystems and their Services (MAES) soil pilot was published in 2018. As part of the soil biodiversity strategy to 2020, this report studied the ecosystem services so these could be better taken into account in further policy developments.

Forests

2015

- Commission staff working document ‘Multi-annual Implementation Plan of the new EU Forest Strategy’⁷⁶.
- Publication of guidance on ‘Natura 2000 and forests’⁷⁷.

⁷² COM (2018) 28

⁷³ COM(2018) 340

⁷⁴ OJEU C 163/15 28.5.2014

⁷⁵ OJ L 137, 24.5.2017

⁷⁶ SWD(2015) 164

⁷⁷ ISBN 978-92-79-49396-6

- Incorporation of the European Forest Fire Information System (EFFIS) into the EU Copernicus programme under the emergency management services.

2016

- Evaluation⁷⁸ of Regulation (EU) No 995/2010 laying down the obligations of operators who place timber and timber products on the market (the EU Timber Regulation)
- The Commission submitted a proposal to prepare for the integration of the LULUCF sectors into the non-ETS mitigation framework.

2018

- Publication of the study on ‘implementing sustainable forest management according to the EU biodiversity strategy and the EU bioeconomy strategy’⁷⁹.
- Review of the EU forest strategy.

Nutrient cycles

2016

- The Commission made a proposal for a Regulation⁸⁰ laying down rules on the making available on the market of CE marked fertilising products and amending Regulations (EC) No 1069/2009 and (EC) No 1107/2009
- Directive (EU) 2016/2284 on the reduction of national emissions of certain atmospheric pollutants, amending Directive 2003/35/EC and repealing Directive 2001/81/EC. This Directive include national reduction targets for ammonia, and listed options for reducing ammonia taking into account the whole nitrogen cycle.

2017

- Commission Implementing Decision (EU) 2017/302 (i.e. conclusions on the best available technique (BAT) for the intensive rearing of poultry or pigs), which concerns farm processes and activities like nutritional management, animal rearing, and management of manure.

2018

- Nitrates report 2012-2015: 4.5.2018, Report from the Commission on the implementation of Council Directive 91/676/EEC concerning the protection of waters against pollution caused by nitrates from agricultural sources based on Member State reports for 2012-2015⁸¹.
- The Commission adopted a Proposal for a Regulation on minimum requirements for water reuse.

⁷⁸ SWD(2016) 34

⁷⁹ ISBN 978-92-79-78025-7

⁸⁰ COM(2016) 157

⁸¹ COM(2018) 257; SWD(2018) 246

Communication and awareness raising on environment policy

2014

- The ‘Generation Awake!’ awareness-raising campaign on resource efficiency, 2014 focus on waste management; winner of a Gold Dolphin at the Cannes Corporate Media & TV Awards in the category ‘Environmental issues and concerns’.
- EU Green Week 2014 ‘Circular economy – saving resources, creating jobs’.
- Natura 2000 Award launch, a pan-European Award recognising excellence in the management of Natura 2000 sites and conservation achievements, showcasing the added value of the network for local economies, and increasing public awareness about Europe's valuable natural heritage
- European Green Capital Award Copenhagen

2015

- EU Green Week 2015 ‘Nature – our health, our wealth’
- Natura 2000 Award.
- European Green Capital Award Bristol; launch of the European Green Leaf Award Mollet del Vallès and Torres Vedras.

2016

- EU Green Week 2016 ‘Investing for a greener future’
- Natura 2000 Award.
- PR campaign to promote the new circular economy package in eight Member States.
- European Green Capital Award Ljubljana.

2017

- EU Green Week 2017 ‘Green jobs for a greener future’
- Natura 2000 Day launch (21 May).
- PR campaign on plastic waste and water reuse policies.
- Communication activities around the Clean Air Forum and Environmental Implementation Review, 25th anniversary of the Habitats Directive and of the LIFE programme.
- European Green Capital Award Essen; European Green Leaf Award Galway.

2018

- EU Green Week 2018 ‘Green cities’.
- Natura 2000 Day.
- Natura 2000 Award.
- Plastics strategy and single use plastics/marine litter awareness raising campaign
- Waste legislative package communication activities.
- European Green Capital Award Nijmegen; European Green Leaf Award Leuven and Växjö.

PRIORITY OBJECTIVE 2: TO TURN THE UNION INTO A RESOURCE-EFFICIENT, GREEN, AND COMPETITIVE LOW-CARBON ECONOMY

Low-carbon economy (climate change mitigation)

2014

- The EU Heads of State and Government agreed the 2030 policy framework for climate and energy. The framework sets out the EU commitment to a binding target of at least a 40 % domestic reduction in economy-wide greenhouse gas emissions by 2030 compared to 1990.

2015

- Universal, ambitious comprehensive legally-binding framework agreement adopted in Paris by all 197 UNFCCC Parties that will apply no later than 2020.
- The communication, ‘The Paris Protocol - a blueprint for tackling global climate change beyond’⁸².
- Agreement on EU position for Paris climate change conference (adopted by Environmental Council on 18 September 2015).
- 2nd EU biennial report on progress towards GHG emission targets and implementation of climate policies and measures (UNFCCC requirement) (adopted by the Commission on 18 October 2015).
- February 2015: the Commission adopted ‘A Framework Strategy for a Resilient Energy Union with a Forward-Looking Climate Change Policy’⁸³. By supporting the EU’s leadership in clean technologies it contributed to the modernisation and competitiveness of the EU economy.

July 2015: the Commission presented a proposal to reform the EU Emissions Trading System (ETS) to make it fit for purpose and to drive investments in the industrial and power sectors after 2020⁸⁴. This is the first legislative proposal to start the implementation of the EU's international commitment under the Paris Agreement on climate change.

2016

- The Road from Paris: assessing the implications of the Paris Agreement (completed).
- Proposal for a Decision of the European Parliament and of the Council - Integration of the LULUCF sector into 2030 climate framework (CWP 2016) (2015/CLIMA/003).
- Agreement on the Regulation on binding annual greenhouse gas emission reductions by Member States from 2021 to 2030 for a resilient Energy Union and to meet commitments under the Paris Agreement and amending Regulation 525/2013 on a mechanism for monitoring and reporting greenhouse gas emissions and other information relevant to climate change⁸⁵.
- Agreement on a Directive on the promotion of the use of energy from renewable sources (recast)⁸⁶.

2018

- Adoption of Directive (EU) 2018/410 to enhance cost-effective emission reductions and low-carbon investments (amendment of EU ETS for the 2021-2030).

⁸² COM(2015) 81

⁸³ COM(2015) 80

⁸⁴ COM(2015) 337

⁸⁵ COM(2016) 482

⁸⁶ COM(2016) 767

- The Effort Sharing Regulation⁸⁷ was adopted in May 2018 and entered into force at the end of 2018.
- Under EU legislation adopted in May 2018, EU Member States have to ensure that greenhouse gas emissions from LULUCF are offset by at least an equivalent removal of CO₂ from the atmosphere in 2021 to 2030⁸⁸.
- The Commission presented in November 2018 its strategic long-term vision for a prosperous, modern, competitive and climate-neutral economy by 2050. The supporting in-depth analysis studies a variety of cost-efficient pathways towards reaching greenhouse gas emissions that are in line with the goal adopted in the Paris Agreement of keeping the global average temperature rise well below 2 °C compared to pre-industrial level, and towards pursuing efforts to limit it to 1,5 °C.
- The Regulation on the Governance of the Energy Union and Climate Action was adopted, putting in place a comprehensive and streamlined framework for planning, reporting and monitoring across all five dimensions of the energy union.
- A Directive amending Directive 2012/27/EU on energy efficiency was adopted, setting a target for the European Union of at least 32.5% by 2030.
- The (recast) Directive on the promotion of the use of energy from renewable sources was adopted, setting an EU-target of at least 32% by 2030.

Sustainable production and consumption

2014

- Adoption of the communication on resource Efficiency opportunities in the building sector⁸⁹.
- Conclusions on best available techniques (BATs) for refining mineral oil and gas. Conclusions on BAT for producing pulp, paper and board.
- Adoption of the green action plan for SMEs providing a framework and including 39 measures that the EU, in partnership with Member States and regions, uses to help SMEs exploit the business opportunities offered by the transition to a green and circular economy.

2015

- Adoption of the EU action plan for the circular economy, composed of 54 planned actions covering key areas (production, consumption, waste management, market for secondary raw materials, innovation & investments, monitoring) and 5 key sectors (plastics, food waste, critical raw materials, construction and demolition, and biomass and bio-based materials).
- Conclusions on BAT for producing wood-based panels.

2016

- Publication of the voluntary industry-wide recycling protocol for construction and demolition waste
- Conclusions on BAT for common waste water and waste gas treatment/ management systems in the chemicals sector. Conclusions on BAT for the non-ferrous metals industries.

⁸⁷ Regulation (EU) 2018/842

⁸⁸ Regulation (EU) 2018/841.

⁸⁹ COM(2014) 445

- Establishment of the European Resource Efficiency Knowledge Centre - a virtual centre that provides advice, training, capacity building opportunities, networking opportunities and information materials for EU SMEs and national and regional SME support organisations.

2017

- Adoption of a package of deliverables from the circular economy action plan (CEAP) which includes the CEAP Implementation Report, a communication on waste-to-energy processes and their role in the circular economy, and a proposal to make a targeted amendment to the Directive restricting the use of hazardous substances in electrical and electronic equipment ('RoHS Directive').
- Adoption of the Final Report on the pre-demolition assessment guidelines for the construction sector (GROW).
- Adoption of the Report to the European Parliament and the Council on the review of the implementation of the eco-management and audit scheme (EMAS) Regulation and of the EU Ecolabel Regulation (REFIT)⁹⁰.
- Conclusions on BAT for intensive rearing of poultry or pigs. Conclusions on BAT for large combustion plants. Conclusions on BAT for producing large volume organic chemicals.
- Establishment in 2017 of a three-year pilot Observatory on Industrial Emissions that will test methods for improving the innovation incentives provided by BAT Reference documents (known as the BREFs).
- The voluntary industry-wide tool known as Level(s) was made available, which has indicators to assess the sustainability performance of buildings; the test phase for this tool was also launched.

2018

- Adoption of a package of deliverables from the CEAP which includes, a proposal for the revision of the Directive on port reception facilities, and the monitoring framework to measure progress towards a circular economy⁹¹. In addition, two other documents have been presented together with these measures: a report to the European Parliament and to the Council on the issue of oxo-degradable plastics and a staff working document on critical raw materials.
- The environmental footprint pilot phase was finalised, leading to the development of 21 product environmental footprint category rules and 2 organisation environmental footprint sectoral rules. The Environmental Footprint transition phase (covering 2018-2021) was launched.
- Conclusion of the support study for the evaluation of the EU environmental technology verification (ETV) pilot programme including an ex-ante assessment of possible options for the future of an EU ETV scheme.
- Adoption of the Communication 'A New Deal for Consumers', whose points related to misleading environmental claims, environmental information for consumers, and premature obsolescence contribute to the circular economy.
- Conclusions on BAT for waste treatment.

⁹⁰ COM(2017) 355

⁹¹ COM(2018) 29

- Adoption of the proposal for a ‘Directive on the impact of certain plastic products on the environment’⁹².

2019

- Adoption of a Report on implementing the EU Circular Economy Action Plan⁹³, together with staff working documents on:
 - an EU product policy framework contributing to the circular economy, including a revision of the environmental footprint methods and lessons learnt from the pilot phase;
 - An evaluation of the EU Environmental Technology Verification (ETV) pilot programme.

Waste

2014

- Adoption of a legislative proposal on waste to review recycling and other waste-related targets in EU waste legislation⁹⁴.
- Amendment of Commission Decision 2000/532/EC on the list of waste and Annex III to Directive 2008/98/EC on hazardous properties of waste by Decision 2014/955/EU and Commission Regulation (EU) No 1357/2014, respectively. All properties except eco-toxicity were updated, thus strengthening the alignment of waste classification with the new legislation on chemicals.
- A Fitness Check Report to evaluate the effectiveness, efficiency, coherence and relevance of five waste stream Directives: Packaging and Packaging Waste Directive (94/62/EC), Batteries Directive (2006/66/EC), End of Life Vehicles (ELV) Directive (2000/53/EC), PCB/PCT Directive (96/59/EC), and the Sewage sludge Directive (86/278/EEC).
- Adoption of Regulation (EU) No 660/2014 of 15 May 2014 amending Regulation (EC) No 1013/2014 regarding the strengthening of Member States’ inspection systems.
- Report on the availability of mercury-free button cells for hearing aids⁹⁵
- Adoption of Recommendation 2014/70/EU on minimum principles for the exploration and production of hydrocarbons (such as shale gas) using high volume hydraulic fracturing.

2015

- Adoption of the circular economy package: A communication with an action plan and legislative proposals to amend relevant EU waste legislation⁹⁶
- ‘Municipal Waste Compliance Promotion Exercise’ Phase II took place from 2014 to 2015 through seminars with responsible authorities in eight more Member States with a low/middle performance in waste management.
- Adoption of Directive 720/2015/EU amending Directive 94/62/EC on packaging and packaging waste, adding specific measures on using of plastic carrier bags.

⁹² COM (2018) 340

⁹³ COM(2019) 190

⁹⁴ COM (2014) 397

⁹⁵ COM (2014) 632

⁹⁶ COM (2015) 614

- Adoption of a delegated act adding four hazardous substances (phthalates) to the list of restricted substances under the RoHS Directive 2011/65/EU.

2016

- Adoption of the first EU list of ship recycling facilities complying with environment and safety requirements (the list was amended in 2018).
- Adoption of Commission Implementing Regulation (EU) 2016/1245 setting out a preliminary correlation table between codes of the Combined Nomenclature provided for in Council Regulation (EEC) No 2658/87 and entries of waste listed in Annexes III, IV and V to Regulation (EC) No 1013/2006 of the European Parliament and of the Council on shipments of waste.
- Setting up of an EU Platform for food losses and food waste.
- Implementing Regulation on the implementation of electronic data exchange on waste shipments (2016/ENV/051).
- Report on the implementation of the Extractive Waste Directive (2016/ENV/009).

2017

- Adoption of the Communication on the role of waste to energy in the circular economy⁹⁷.
- Update of the Annex III to Directive 2008/98/EC on the hazardous waste property 'ecotoxic' by Council Regulation (EU) 2017/997 to strengthen the alignment of waste classification with the new legislation on chemicals.
- Adoption of Directive 2017/2102 to update the RoHS Directive 2011/65/EU containing further measures facilitating second-hand market operations as well as reuse and repair, thus avoiding an additional generation of hazardous waste and leading to savings of energy and raw materials.
- Adoption of the 8th amendment of Annex II to the ELV Directive further limiting certain exemptions to the substance restrictions under the Directive (EU) 2017/2096.
- Adoption of a 'Construction and Demolition Waste Management Protocol', aimed at providing guidance to public authorities, practitioners and quality certification bodies on how to manage construction and demolition waste.
- Commission implementing Regulation 2017/699 establishing a common methodology for the calculation of the weight of electrical and electronic equipment placed on the national market in each Member State and a common methodology for the calculation of the quantity of waste electrical and electronic equipment (WEEE) generated by weight in each Member State. The WEEE generated calculation tools which were developed for each Member State, form an integral part of the methodology.
- The report on the review of the scope of Directive 2012/19/EU on WEEE and on the re-examination of the deadlines for reaching the collection targets and on the possibility of setting individual collection targets for one or more categories of electrical and electronic equipment in Annex III to the Directive.
- The report on the re-examination of the WEEE recovery targets, on the possible setting of separate targets for WEEE to be prepared for re-use and on the re-examination of the method for the calculation of the recovery targets set out in Article 11(6) of Directive 2012/19/EU on WEEE.

⁹⁷ COM (2017) 34

2018

- Adoption of the communication on the implementation of the circular economy package: options to address the interface between chemical, product and waste legislation⁹⁸.
- Adoption of revisions of Directive 2008/98/EC on waste, Directive 1999/31/EC on the landfill of waste, and Directive 94/62/EC on packaging and packaging waste.
- Adoption of the guidance on the classification of waste⁹⁹.
- Adoption of the ‘Report on implementation of waste legislation, including the Early Warning report’ discussing the state of implementation of some EU waste directives and setting out a shortlist of Member States at risk of not meeting the 2020 recycling target for municipal waste. Follow-up actions to the ‘Early Warning Report’.
- Adoption of the European strategy for plastics in a circular economy¹⁰⁰.
- Follow-up of the compliance promotion exercise for implementing the Directive 2012/19/EU on WEEE. The launch of a study of which main objective was to assess the possibility of adopting an implementing act laying down minimum quality standards for WEEE treatment.
- Adoption of a Commission report on implementing Regulation (EC) No 1013/2006 on shipments of waste.

PRIORITY OBJECTIVE 3: TO SAFEGUARD THE UNION'S CITIZENS FROM ENVIRONMENT-RELATED PRESSURES AND RISKS TO HEALTH AND WELLBEING

Air quality

2014

- The Clean Air Package, adopted in December 2013, was designed to further reduce emissions to air by 2030, through the proposals for new national targets for reducing emissions (revising the previous National Emission Ceilings Directive) and emission reductions from medium combustion plants (MCP Directive). The package also identified emissions from light vehicles (passenger cars and light commercial vehicles) as an area where special attention was needed.
- Two new conclusions on BATs under the Industrial Emissions Directive, for the refining of mineral oil and gas and for producing pulp, paper and board. Work to evaluate and refit the regulation dealing with the register of emissions from industrial facilities (the E-PRTR Regulation) also started.

2015

- Adoption of Commission Directive (EU) 2015/1480 amending several Annexes to Directives 2004/107/EC and 2008/50/EC laying down the rules concerning reference methods, data validation and location of sampling points for the assessment of ambient air quality.

⁹⁸ COM(2018) 32

⁹⁹ Commission notice C/2018/1447.

¹⁰⁰ COM(2018) 28

- Continued work on implementing the air quality legislation (this year all derogations/ time extensions allowed under the legislation expired); also first round of PM10 cases (BG and PL) referred to the European Court of Justice.
- Adoption of the Directive on medium combustion plants, which will contribute up to 20% of the proposed 2030 air pollution reduction goals.
- Publication of the BAT conclusions for the production of wood-based panels.
- Adoption of eco-design requirements for boilers and space heaters.
- Adoption of 1st and 2nd regulatory acts on real-driving emission (RDE) tests, a new test to measure cars' emissions before they are placed on the market.

2016

- Adoption of the Directive on reduction of national emissions of certain air pollutants, setting national emission reduction objectives for key pollutants (SO₂, NO_x, NMVOC, NH₃ and PM_{2.5}).
- Publication of the BAT conclusions for common waste water and waste gas treatment/ management systems in the chemicals sector
- Publication of the BAT conclusions for non-ferrous metals industries
- Commission proposal on a new type-approval framework for motor vehicles, to strengthen market surveillance tools.
- Adoption of the 3rd regulatory act on RDE testing

2017

- Launch of Clean Air Dialogues (CADs) with Member States, focused on better understanding the models of air policy implementation in the Member States, exchanging of good practices, promoting synergies between different policy areas with an impact on air quality, and raising awareness on funding streams available through EU funds.
- Launch of the Clean Air Forum to broadly engage with stakeholders; the inaugural Clean Air Forum on 16 and 17 November 2017 in Paris focused on three areas: air quality in cities; agriculture and air quality; and clean air business opportunities.
- Launch of the Air Quality Index, together with the European Environment Agency.
- Initiation of a Fitness Check of the Ambient Air Quality Directives (i.e. Directives 2004/107/EC and 2008/50/EC), as per the agreed roadmap. This fitness check will conclude in 2019.
- Publication of the conclusions for BAT for intensive rearing of poultry or pigs, BAT conclusions for large combustion plants, BAT conclusions for the production of large volume organic chemicals.
- Establishment (pilot scale) of an Observatory on industrial emissions innovation.

2018

- Commission Communication ‘A Europe that protects: Clean air for all’¹⁰¹ outlining main policy initiatives under the current Commission in support of clean air and available funding to Member States to help them implement clean air policies.
- Publication of ‘The First Clean Air Outlook’¹⁰², a report that updates the impact assessment analysis to track progress towards the objectives of the Directive on the reduction of emissions of certain atmospheric pollutants.

¹⁰¹ COM(2018) 330

¹⁰² COM(2018) 446.

- Adoption of the 4th regulatory act on RDE testing, ensuring transparent and independent control of emissions of vehicles during their lifetime.
- Publication of the BAT conclusions for waste treatment.
- Evaluation of the Industrial Emissions Directive (ongoing), under the Better Regulation agenda.

Noise

2015

- Annex II of the Environmental Noise Directive on common methods was adopted, allowing a single EU picture to be portrayed and to enable comparisons between different situations.

2016

- REFIT evaluation of the Environmental Noise Directive¹⁰³

2017

- Implementation Report¹⁰⁴ was adopted showing the implementation difficulties and setting an action plan for the future

2018

- Annex III on health assessment methods is being drafted following the WHO (World Health Organisation) work on noise guidelines

Drinking and bathing waters

2014

- The triannual implementation synthesis report¹⁰⁵ was published, including information provided voluntarily on small supplies. In addition fact sheets for small supplies were published for all Member States.
- A Guidance document 'Framework for Action for the management of small drinking water supplies' was published.
- Commission response to the first ever successful European Citizens Initiative 'Right2Water' with 1.8 million signatures.

2015

- Regarding Commission Directive (EU) 2015/1787, the monitoring Annexes to the Directive were amended enabling Member states to apply a risk based approach.

2016

- The Commission completed REFIT evaluation¹⁰⁶ of the EU Drinking Water Directive 98/83/EC

2018

¹⁰³ SWD(2016) 454

¹⁰⁴ COM(2017) 151

¹⁰⁵ COM(2014) 363

¹⁰⁶ SWD(2016) 428

- A Commission proposal for a revised Drinking Water Directive including an accompanying Impact Assessment¹⁰⁷.

Chemicals

2015

- The Commission together with EU agencies made the Information Platform for Chemical Monitoring (IPCHEM) public.
- The EU nominated 2 substances under the Stockholm Convention on Persistent Organic Pollutants for consideration (2013, 2015).

2016

- The Commission published a number of review reports focusing on existing methodologies and knowledge regarding the assessment of combination effects of chemicals.
- The Endocrine Active Substances Information System (EASIS) was established and made publically available.
- The Commission provided the Report on the sustainable use of biocides under Article 18 of Regulation (EU) No 528/2012 concerning the making available on the market and use of biocidal products¹⁰⁸

2017

- Criteria for identifying endocrine disruptors (EDs) under the Biocidal Product Regulation adopted.
- Several Commission studies identifying gaps in current test guidelines for EDs, initiating work on new tests and test guidelines were published.
- Guidelines for risk assessment of nanomaterials updated by EHCA in 2017.
- The Commission published the Study for the strategy for a non-toxic environment of the 7th Environment Action Programme and the ‘Study on the cumulative health and environmental benefits of chemical legislation’.
- Several studies preparing for the Fitness Check of chemicals legislation, excluding REACH, were published.
- A Commission report on progress in implementing Directive 2009/128/EC on the sustainable use of pesticides was published.
- The EU ratified the ‘Minamata Convention’ on mercury.

2018

- Proposal for a Recast of Persistent Organic Pollutants Regulation 850/2004 adopted in March 2018.
- Communication on a comprehensive European Union framework on endocrine disruptors adopted in November 2018.
- Criteria for identifying EDs under the Plant Protection Products Regulation adopted.

¹⁰⁷ COM(2017) 753

¹⁰⁸ COM(2016) 151

- The final round of REACH registrations was finalised in May. A total, 21,551 unique chemicals placed on the EU and EES market in quantities over 1 tonne per producer/importer and per year have been registered.
- By June, a total of 174 substances had been identified as substances of very high concern (SVHC) and listed on the REACH Candidate List, 30 of these after 2013.
- Some 35 substances or groups of substances had been restricted under REACH by late 2018. Around 25 individual or groups of SVHCs had been authorised for use.
- A guidance document for implementing the criteria identifying EDs under the Biocidal Products and Plant Protection Products Regulations was published.
- The Commission adopted a Communication on an integrated framework for EDs.
- The Commission adopted a restriction of the use of 32 CMR substances in textiles through REACH Article 68(2) (the ‘fast-track’ for CMRs in consumer products).
- Adoption of the new provision that ECHA must compile data on the content of SVHCs in articles and make this information available in a database by 2020 to waste treatment operators and consumers on request.
- A communication and a staff working document assessing the interface between chemicals, products and waste legislations, identifying challenges and options to address them¹⁰⁹
- A communication and SWD on the REACH Refit evaluation¹¹⁰
- The EU submitted eight notifications of final regulatory action under the Rotterdam Convention on Prior Informed Consent, between 2013 and 2018 and submitted more than 33,000 export notifications to third countries between 2013 and 2018.

Climate change adaptation

2014

- Launch of the Mayors Adapt initiative to encourage local action on climate adaptation

2015

- Mayors Adapt initiative merged with the Covenant of Mayors initiative.

2016

- Launch of the Urban Agenda for the EU by means of the Pact of Amsterdam. This agenda is a new multi-level working method promoting cooperation between Member States, cities, the European Commission and other stakeholders in order to simulate growth, liveability and innovation European and to identify and successfully tackle social challenges.
- Covenant of Mayors merges with the Compact of Mayors to form the Global Covenant of Mayors for Climate & Energy.

2017

- Strengthening the EU's ability to prevent, prepare for and respond to natural disasters through the integration of climate change consideration into the European Civil

¹⁰⁹ COM(2018) 32; SWD(2018) 20

¹¹⁰ COM(2018) 116; SWD(2018) 58

Protection mechanism and the 2017 Commission proposal for the creation of the 'rescEU' system.

2018

- Adoption of 10 national adaptation strategies by Member States, bringing up the total number to 25 Member States as of October 2018.
- Report on the implementation and evaluation of the EU adaptation strategy.

PRIORITY OBJECTIVES 4: BETTER IMPLEMENTATION OF LEGISLATION

Compliance assurance

2015-2016

- Continuous cooperation with networks of practitioners (in particular IMPEL – European Union Network for the Implementation and Enforcement of the Environmental Law; BRIG – Better regulation Group of IMPEL; EUFJE – European Federation of Environmental Law Judges; ENPE – European network of Prosecutors). ENV also co-operated with Make it Work, a grouping of Member States led by the Netherlands, the UK and Germany, which showed a particular interest in environmental compliance assurance.

2017

- Development started on an assessment framework to improve the evidence base on compliance assurance approaches in the Member States in the wider context of environmental governance to prepare for the second round of the Environmental Implementation Review (EIR).

2018

- Adoption of Commission Communication on environmental compliance assurance endorsing nine actions.

Supporting Member States in implementation

2016

- Communication on delivering the benefits of EU environmental policies through a regular EIR adopted in May 2016.

2017

- The Commission adopted a new EIR) process with 28 country specific reports with the next set of reports due in spring 2019.

Complaints handling

2018

- The 9-point environmental compliance and governance action plan, adopted by the Commission on 18 January 2018, has 2 points (actions) relevant to this 7th EAP a:

- first, it aims to deliver documentation to Member States on complaint-handling;
- second, it aims to develop the evidence-base on complaint-handling practices in Member States as part of a wider assessment framework on governance.

Access to justice

2017

- Adoption of Commission Notice on access to justice in environmental matters¹¹¹.

PRIORITY OBJECTIVE 5: BETTER INFORMATION BY IMPROVING THE KNOWLEDGE BASE

Environmental knowledge

2014 - present

- Progress made on further development of the biodiversity knowledge base: the Initial Mapping and Assessment of Ecosystems and their Services (MAES) and the strengthening of the EU Biodiversity Information System for Europe.
- In total around 120 research projects, reports and articles were identified on climate change adaptation under FP7 and H2020 as well as originating from JRC, EEA, service contracts of the Commission and other EU sources, involving a total budget of EUR 285 million. The most frequently addressed topics were water, nature, and agriculture; four LIFE integrated projects and over 90 LIFE traditional projects have been launched to improve the climate knowledge base.
- EUR 1 868 million as EU funding through the research and innovation programme Horizon 2020 for the Societal Challenge ‘Climate action, environment, resource efficiency and raw materials’. The activities include fighting and adapting to climate change, protecting the environment, sustainably managing natural resources, such as water, biodiversity and ecosystems; ensuring the sustainable supply of non-energy and non-agricultural raw materials enabling the transition towards a green economy and society through eco-innovation; and developing comprehensive and sustained global environmental observation and information systems.

2015

- Publication of ‘The European Environment State and Outlook Report’ 2015 by the European Environment Agency.
- Creation of the Environment Knowledge Community (EKC) between DGs (DG Environment, DG Climate Action, DG Research, Science and Innovation, DG Eurostat, DG Joint Research Centre) and the European Environment Agency to improve the co-generation and sharing of environmental knowledge for EU policies. This led to EKC knowledge Innovation projects on planetary boundaries, and the creation of INCA (Integrated system for Natural Capital and ecosystem services Accounting), Citizens and Science and European (Environmental) Data Centres.

2016

¹¹¹ OJC 275, 18 August 2017, p.1.

- Contribution to the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) thematic and regional assessments (IPBES 4 2016 thematic assessment on pollination pollinators and food security; methodological assessment on scenarios and models of biodiversity and ecosystem services).

2017

- Science-policy symposium on the environmental and climate aspects of the next EU research and innovation programme.

2018

- Preliminary projections of economic impacts of climate change in sectors of the EU based on bottom-up analysis (PESETA III) developed by the JRC and published in 2017-2018.
- IPBES 6 2018 four regional assessments on biodiversity and ecosystem services (Africa, Americas, Asia & Pacific, Europe and Central Asian regions) and thematic assessment on land degradation and restoration.

2019

- The European Environment State and Outlook Report 2020 by the European Environment Agency.
- Contribution to the first IPBES global assessment on biodiversity and ecosystem services, which is foreseen to be adopted in 2019.

Emerging environmental risks

2014

- Report on Risk Perception: A Science for Environment Policies Future Brief to review scientific literature on risk communication and the public perception of risk.

2015

- Survey on the public perception of environmental risks.
- Report on integrated environmental assessment: A Science for Environment Policies Thematic Issue explores the scientific literature on environmental risk assessment, including challenges and opportunities for better integration across sectors and impacts.

2016

- Report on the identification of emerging risks: review of scientific literature was carried out to screen all main approaches for identifying emerging environmental risks, Identifying emerging risks for environmental policy, science for environment policy.

2017

- Agreed methodology for an EU system for identifying emerging environmental issues from new technology developments (FORENV).
- Web monitoring of environmental risks: based on a text mining tool developed by the JRC for media monitoring (EMM), a specific version for monitoring environmental risks through web sources has been developed.
- Report on the insurance of weather and climate-related disaster risk. Providing an inventory and analysis of mechanisms to support damage prevention in the EU.

2018

- Annual running of the FORENV system and annual identification of 10 emerging environmental issues from new technology developments.

Streamline environment data and information

2014

- Monitoring mechanism – Regulation (EU) No 525/2013 – Delegated Regulation (C (2014) 1539) and implementing Regulation (EU) No 749/2014.

2016

- Commission staff working document “Towards a Fitness Check of EU environmental monitoring and reporting: to ensure effective monitoring, more transparency and focused reporting of EU environment policy”¹¹²
- Proposal for the repeal of the Standardised reporting Directive¹¹³.
- Implementation Report on the INSPIRE Directive and related REFIT evaluation¹¹⁴ and staff working document¹¹⁵.
- Proposal for a Regulation on the Governance of the Energy Union¹¹⁶.

2017

- Commission Report ‘Actions to Streamline Environmental Reporting’¹¹⁷ including the results of the Fitness Check¹¹⁸.

2018

- Repeal of Standardised Reporting Directive adopted by Council and European Parliament
- Rolling work programme 2018-2020 for environmental reporting streamlining published
- Commission proposal on the Environmental Reporting Alignment Regulation¹¹⁹

PRIORITY OBJECTIVE 6: MORE AND WISER INVESTMENT FOR ENVIRONMENT AND CLIMATE POLICY

Adequate finance to support environment and climate objectives

2014-2020

- The 2013 CAP Reform made the following funding for environmental action available under the two pillars of the CAP:

¹¹² SWD(2016) 188

¹¹³ COM(2016) 789

¹¹⁴ COM(2016) 478

¹¹⁵ SWD(2016) 273

¹¹⁶ COM(2016) 759

¹¹⁷ COM2017) 312

¹¹⁸ SWD(2017) 230

¹¹⁹ COM(2018) 381

- At least 30% of direct payments were earmarked for agricultural practices that benefit the climate and the environment. This represents approximately EUR 93 billion.
- Member States are required to spend a minimum of 30 % of the total contribution of the European Agricultural Fund for Rural Development (EAFRD) to each rural development programme on climate change mitigation and adaptation as well as on environmental issues. Such spending is carried out through agri-environment-climate and organic farming payments, payments to areas facing natural or other specific constraints, payments for forest climate and environment interventions, payments for Natura 2000 areas and climate and environment-related investment support. This represents approximately EUR 30 billion.
- A maximum of 75 % of EAFRD contributions is directed towards operations supporting the objectives of environment and climate change mitigation and adaptation.

2014-today

- Overall the 118 rural development plans have allocated approximately 44 % of the EAFRD to priority 4 of EU's common priorities for rural development (EUR 44 billion) (restoring, preserving and enhancing ecosystems related to agriculture and forestry) and 7.5 % to priority 5 (promoting resource efficiency and supporting the shift towards a low carbon and climate resilient) (EUR 7.5 billion).

2015

- As a part of the approach to integrate/mainstream climate action across all EU policies and programmes, the Commission proposed and the Council and European Parliament endorsed the objective of allocating at least 20% of the 2014-2020 multi-annual financial framework (MFF) to climate related objectives.

2017

- Mid-term evaluation of the LIFE programme

2018

- The 2017 MFF mid-term review took stock of progress towards the 20 % climate mainstreaming target and the EU budget's contribution to biodiversity. Building on its success, the Commission proposed a new target of 25% contribution to climate objectives for the next MFF 2021-2027, and identified specific expected climate contributions for the main programmes concerned.
- To stimulate integration of climate and environment considerations in the financial markets, the EU adopted the EU sustainable finance action plan, and followed this up with a legislative package.
- The Commission published the legislative proposals for the next CAP (2020-2027). The proposals aim to introduce a new delivery model, based on higher subsidiarity. They also aim to foster a higher degree of ambition for the environment and climate.
- The Commission adopted the LIFE multiannual work programme for 2018-2020 in Feb 2018.
- Communication on the Investment Plan for Europe: stock-taking and next steps.

Addressing environmental externalities

2015

- In 2015, a new financing instrument - the Natural Capital Financing Facility (NCFF) – was launched to support projects that help to preserve natural capital, including adaptation to climate change.

2016

- The Winter Energy Union Package stepped up the EU's action in removing fossil fuels subsidies and internalising environmental costs in line with the 7th EAP.
- Report on phase 1 of the knowledge innovation project on an integrated system of natural capital and ecosystem services accounting in the EU (KIP-INCA Phase 1 report)
- The REFIT evaluation of the Environmental Liability Directive was adopted¹²⁰.

2017

- A pilot project ‘Capacity building, programmatic development and communication in the field of environmental taxation and budgetary reform’ investigated the use of economic instruments and led to exchanges of experience, knowledge and best practice.

2019

- Finalisation of the ongoing evaluation of the Energy Taxation Directive (ETD), 2003/96/EC. The evaluation is examining, among other things, the impact of the current minimum levels of taxation laid down in the ETD for the different energy products on consumption behaviour (and potentially on the quality of the environment).

Beyond GDP

2014-2016

- Sustainable development indicators to monitor progress on the revised sustainable development strategy were published by Eurostat and communicated in biannual reports.
- Eurostat updates the Resource Efficiency Scoreboard, with a series of reports published by the European Commission in 2014, 2015 and 2016.

2014

- The Council and European Parliament adopted the Regulation on Environmental Economic accounts¹²¹ adding three additional modules on the environmental goods and service sector, environmental protection expenditure and energy flow accounts, thus amending the 2011 Regulation on environmental economic accounts.
- The European Statistical System Committee adopted the European strategy for environmental accounts (ESEA 2014), defining the development of European environmental accounts during 2014-2018.

2015 - present

¹²⁰ SWD(2016) 121

¹²¹ OJ L 158, 27.5.2014, p. 113–124.

- Economic, social and environmental indicators are used in the context of the European Semester (country reports and thematic factsheets).

2017

- Eurostat published the EU SDG indicators used to monitor progress towards the Sustainable Development Goals of the global 2030 agenda for sustainable development, and in November the first report on the progress made towards achieving the SDGs was published; the economic, social, environmental and governance indicators were included, and were partially in line with the global SDG indicators adopted by the UN.

2018

- The Commission adopted the monitoring framework on the circular economy, in order to measure progress towards the circular economy in the EU and Member States. The framework included 10 indicators cover economic, social and environmental aspects of circular economy.
- The list of 100 EU indicators for monitoring progress towards the SDGs was revised and published in March, and Eurostat published a second report on monitoring EU progress towards the SDGs.

PRIORITY OBJECTIVE 7: FULL INTEGRATION OF ENVIRONMENTAL REQUIREMENTS AND CONSIDERATIONS INTO OTHER POLICIES

Improving integration and coherence

2014 - ongoing

- The Commission adopted around 100 ex-post evaluations a year and around 70 ex-ante impact assessments a year. Each is scrutinised by the Regulatory Scrutiny Board to ensure they include a proportionate assessment of economic, social and environmental impacts.

2014

- The newly amended Environmental Impact Assessment (EIA) Directive (2014/52/EU) entered into force in 2014 to simplify the rules for assessing the potential effects of projects on the environment and improve the level of environmental protection.

2018

- On 1 June 2018, the Commission published the legislative proposals for the next CAP (2020-2027). These proposals aim to introduce a new delivery model, based on higher subsidiarity. They also aim to foster a higher degree of ambition for the environment and climate.

European Semester

- In 2013, the ‘Greening the European Semester’ expert group was established and since 2017 it has been discussing the Environmental implementation Review (EIR) to promote synergy between the Semester and EIR.

- Ongoing environmental references in the Semester country reports and Country specific recommendations

PRIORITY OBJECTIVE 8: TO MAKE THE EU'S CITIES MORE SUSTAINABLE

Sustainable cities

2014

- The Covenant of Mayors (launched in 2008 in Europe with the ambition to gather local governments voluntarily committed to achieving and exceeding the EU climate and energy targets) has grown steadily, with the Commission launching Mayors Adapt (the Covenant of Mayors Initiative on Adaptation to Climate Change)¹²² in 2014.

2015

- The Commission launched the new Covenant of Mayors for Climate & Energy, integrating both the Covenant of Mayors and the Mayors Adapt initiatives. The new Covenant therefore covers sustainable energy, climate change mitigation and adaptation, as well as access to energy.

2016

- The EU Urban Agenda, also known as the Pact of Amsterdam, was launched establishing a new platform of policy analysis by cities, Member States and the Commission, covering environmental issues such as air, land use and the circular economy.
- Development of a green city tool that will help cities to assess, benchmark, and improve their environmental performance over time.

2017

- The Covenant of Mayors for Climate and Energy and the Compact of Mayors merged to create the Global Covenant of Mayors for Climate and Energy. Currently more than 7 000 EU local authorities from the 28 Member States, representing almost 200 million inhabitants, have signed up to the Covenant of Mayors for Climate and Energy. They have committed to developing, implementing and reporting on sustainable energy and climate change mitigation and/or adaptation action plans.

PRIORITY OBJECTIVE 9: TO HELP THE UNION ADDRESS INTERNATIONAL ENVIRONMENTAL AND CLIMATE CHALLENGES MORE EFFECTIVELY

Implementation of Rio+20 outcomes

2014

- Commission Communication ‘A decent Life for all: from vision to collective action’¹²³.

¹²² See: <http://www.covenantofmayors.eu/about/covenant-initiative/origins-and-development.html>

¹²³ COM(2014) 335

- Council Conclusions ‘A transformative post-2015 agenda’.

2015

- Commission Communication ‘A Global Partnership for Poverty Eradication and Sustainable Development after 2015’¹²⁴.
- Council Conclusions ‘A New Global Partnership for Poverty Eradication and Sustainable Development after 2015’.
- The two Communications mentioned above and the related Council Conclusions set out clearly the EU’s vision and priorities for the path towards an agreement on a post-2015 framework for eradicating poverty and achieving sustainable development. The EU’s views on the main inputs (goals, targets and means of implementation) for the framework were agreed upon.
- Throughout 2014 and the first part of 2015, the EU participated in the negotiations for the adoption of the SDGs as part of the UN’s post-2015 agenda, first in the Open Working Group, then in intergovernmental negotiations.
- In September 2015, EU Heads of State and Government, together with their counterparts from all 193 UN member countries, unanimously adopted Agenda 2030 with 17 SDGs to eradicate poverty and achieve sustainable development by 2030.

2016

- Commission Communication ‘Next steps for sustainable European future. European action for sustainability’¹²⁵
- Publication of the EU action plan against wildlife trafficking¹²⁶. By reducing the volume of illegal wildlife from outside of Europe that is either consumed, or passes through Europe, the action plan will contribute to strengthening governance, rule of law, sustainable livelihoods, and security in the source countries.
- Publication of ‘Larger than Elephants. Inputs for an EU strategic approach to wildlife conservation in Africa’¹²⁷. This document provides the strategic framework to guide EU biodiversity investments in Africa. It promotes a universal landscape approach to biodiversity integrating the needs of protected areas, local communities and private sector, and is fully aligned with the 5 pillars of the European Consensus on Development (people, planet, prosperity, peace and partnership)

2017

- Council Conclusions ‘A sustainable European future: The EU response to the 2030 Agenda for Sustainable Development’
- ‘European Consensus on Development: Our World, Our Dignity, Our Future’
- These documents in 2016 and 2017 set out the EU internal and external implementation of the 2030 Agenda.

2018

¹²⁴ COM(2015) 44

¹²⁵ COM(2016) 739

¹²⁶ COM(2016) 87

¹²⁷ See: https://ec.europa.eu/europeaid/larger-elephants-inputs-eu-strategic-approach-wildlife-conservation-africa-regional-analysis_en

- Publication of ‘Larger than Tigers. Inputs for a strategic approach to biodiversity conservation in Asia’¹²⁸ which sets the strategic framework to guide EU biodiversity investments in 25 Asian countries. As with the Africa strategic document it is fully aligned with the 5 pillars of the European Consensus on Development.
- Additionally, a number of policy and legal initiatives and actions referred to elsewhere in the 7th EAP evaluation implement the Rio+20 and 2030 Agenda commitments.
- 2019 Reflection Paper ‘Towards a Sustainable Europe by 2030, on the follow-up to the UN Sustainable Development Goals, including on the Paris Agreement on Climate Change’.

Cooperation with third countries

2014

- The screening of the EU environment rules and laws took place with Serbia.
- Montenegro continued to work on the comprehensive national strategy and action plan, which was to demonstrate how it is going to align with EU law.
- Albania was granted candidate status in June 2014 in recognition of its reform efforts.
- The negotiations for a Stabilisation and Association Agreement with Kosovo were finalised.
- 2014 marked the entry into force of the Association Agreements with Moldova, Georgia and Ukraine, which contain very ambitious environmental chapters requiring approximation with a significant portion of the EU environmental rules and laws.
- The EU also contributed to tackling illegal logging and its associated global trade by implementing the EU Timber Regulation, and based on a Commission proposal the Council decided on the conclusion of the Voluntary Partnership Agreement between the European Union and the Republic of Indonesia on forest law enforcement, governance and trade in timber products to the European Union.

2015

- After a three-year hiatus, bilateral discussions on the environment and climate change were resumed with Turkey. The areas of cross-cutting legislation, water, air quality, nature protection and climate action still had to be addressed.
- All enlargement countries continued working on approximation of environment and climate change legislation in the framework of the Environment and Climate Regional Accession Network.
- Negotiations, conclusion and implementation of Forest Law Enforcement, Governance and Trade (FLEGT) Voluntary Partnership Agreements;
- Free trade agreement negotiations with Vietnam concluded in December 2015, with substantive provisions on environment.
- Montenegro adopted climate strategy, Kosovo endorsed Low Emissions and Adaptation to climate change Strategy, Serbia prepared legislation on ETS and on monitoring, reporting and verification on shipping emissions, Kosovo on MMR.

¹²⁸ See: https://ec.europa.eu/europeaid/larger-tigers-inputs-strategic-approach-biodiversity-conservation-asia-regional-reports_en

- For Eastern Partnership countries in Association Agreements with EU (Georgia, Moldova, and Ukraine): launch of activities for implementing climate-related acquis identified in those agreements – early stage. Domestic climate strategies remain under development.
- For Southern Periphery countries, the outline of national climate strategies was presented in all submitted intended nationally determined contributions. These strategies remain under development.

2016

- Serbia and Montenegro made progress in further aligning policies and legislation with the environment acquis. Both countries have submitted strategies for implementation of EU acquis which the Commission has recommended to the Council as a sufficient basis for the opening of the formal enlargement negotiations of Chapter 27 (Environment).
- Stabilisation and Association Agreement (SAA) with Bosnia-Herzegovina came into force in June 2016, SAA with Kosovo signed.
- Albania ratified the Paris Agreement on climate change and drafted strategy on climate change and the Law on Climate Change.
- For Turkey, cross-cutting legislation, water, air quality and nature protection as well as climate action areas still had to be addressed.
- The Association Agreement for Ukraine had still not been ratified but was being provisionally applied;
- Moldova and Georgia were progressing in implementing their Association Agreements.
- New agreements are currently being negotiated with Armenia and with Azerbaijan.
- The EU-Canada Comprehensive Economic and Trade Agreements (CETA) was signed along with the EU-Canada Strategic Partnership Agreement (SPA) that upgrades the current cooperation framework with Canada.
- Deep and Comprehensive Free Trade Areas (DCFTAs) are part of the Association Agreements for Ukraine, Moldova and Georgia. DCFTAs are currently being negotiated with Morocco and Tunisia;
- A Memorandum of Understanding (MOU) on a Strategic Energy Partnership between Ukraine and the EU on water cooperation was adopted, which provides for collaboration in the area of the decarbonisation of the economy.
- An MOU between India and the EU on water cooperation was adopted.
- The EU strategy for the Arctic was issued with prominent emphasis on environmental issues.
- The Climate Change Working Group of the US-EU Energy Council was established in May 2016 and convened in September 2016.
- Recommendation of the Energy Community Ministerial Council on preparing for the implementation of Regulation (EU) No 525/2013 on a mechanism for monitoring and reporting greenhouse gas emissions (applicable to Albania, Bosnia and Herzegovina, Former Yugoslav Republic of Macedonia¹²⁹, Georgia, Kosovo, Moldova, Montenegro, Serbia and Ukraine).
- Ministerial meeting of the Eastern Partnership on environment and climate took place in October 2016

¹²⁹ Now Republic of North Macedonia

2017-2018

- Bosnia and Herzegovina, Montenegro, Serbia and the Former Yugoslav Republic of Macedonia have ratified the Paris Agreement. Serbia has drafted the Climate Law with ETS and MMR provisions.
- Alignment with climate policies and legislation continues for Western Balkan countries and Turkey within the EU-funded Regional Implementation of Paris Agreement Project.
- MoUs signed with China on water co-operation and circular economy.
- The EU – Indonesia Working Group on Environment and Climate Change was established and two meetings took place, in Indonesia and in Brussels.
- First high-level dialogue held with South Africa following the revitalisation of the Terms of Reference.
- ASEAN-EU Plan of Action 2018-2022 was adopted.
- Circular economy missions held in South Africa, Columbia, India, Japan and Indonesia.
- First Trade and Sustainable Development Committee held under the CETA.
- First EU- Kazakhstan Sub-committee on Energy, Transport, Environment and Climate change under the new Enhanced Partnership and Cooperation Agreement held in Astana, back-to-back with a technical assistance and information exchange (TAIEX) workshop on climate cooperation.
- New agreement was being negotiated with Kyrgyzstan.
- For Turkey, cross-cutting legislation, water, air quality and nature protection areas, as well as climate action areas, still has to be addressed.
- Recommendation of the Energy Community Ministerial Council on the preparation of integrated national energy and climate plans (applicable to Albania, Bosnia and Herzegovina, former Yugoslav Republic of Macedonia, Georgia, Kosovo, Moldova, Montenegro, Serbia and Ukraine).
- MOU between Iran and the European Union on cooperation on climate change.
- Ministerial meeting for of the Eastern Partnership on environment and climate took place in October 2018.
- Continued support was offered to tackling illegal logging and associated trade in Africa through FLEGT, and Voluntary Partnership Agreements were further concluded between the European Union, Guyana and Honduras on forest law enforcement, governance and trade in timber products to the European Union.

Updates on cooperation in the international carbon markets cooperation:

- The linking agreement between the EU ETS and the Swiss ETS has been signed and is in the process of being ratified both sides.
- The EU works closely with jurisdictions across the world that are considering, operating and implementing carbon market mechanisms, in particular emissions trading systems.
- The EU is the largest contributor (USD20 million) to the Partnership for Market Readiness, controlled by the World Bank, which supports 19 countries in implementing market instruments and readiness projects around the world.
- The EU has active ongoing bilateral cooperation and exchange with both China and South Korea on implementing of ETS (including the provision of significant technical assistance and support).

- The EU supports the International Climate Action Partnership (ICAP) that encompasses all jurisdictions actively implementing the ETS and fosters exchange and dissemination of technical expertise on ETS amongst practitioners
- The EU is hosting the ‘Florence Process on ETS’ comprising regular informal meetings of senior administrators from established major emissions trading jurisdictions.

Reducing the external impact of the EU’s consumption

2018

- The study on the feasibility of options steps up EU action against deforestation
- Study published on the environmental impact of palm oil consumption and on existing sustainability standards

2019

- Communication on ‘Stepping-up EU action against tropical deforestation and forest degradation’ will be adopted.

Engagement in environmental and climate change negotiations and ratification of Multilateral Environmental Agreements (MEAs)

2014

Environment negotiations and ratifications of MEAs:

- A clear path towards an agreement on a post 2015 framework for poverty eradication and sustainable development was created and the main inputs (goals, targets and means of implementation) for the framework were agreed. The EU set out its views on the priority themes and prepared views on the means of implementation.
- The EU ratified the Nagoya Protocol on access to genetic resources and the fair and equitable sharing of benefits arising from their utilisation under the Convention on Biological Diversity in 2014.
- The European Commission and UNEP renewed their MOU to step up their collaboration in common areas of interest, including through dialogues on related policy matters.
- Establishment of a new Cooperation Agreement with UNEP under the EU thematic programme for global public goods and challenges. The agreement received a total EU contribution of EUR 37 million over 2014-2017 to strengthen UNEP work in environmental advocacy and monitoring including more effective implementation of and synergies among MEAS involving chemicals, waste and biodiversity.

2015

Environment negotiations

- Contribution to the Post-2015 period: global partnership, means of implementation, monitoring, review and accountability communication – adoption of 2030 Agenda and SDGs.
- Effective functioning of the Nagoya Protocol on access and benefit sharing at the international level.
- Implementation and review of the FLEGT action plan
- Effective implementation of the EU Wildlife Trade Regulations: updated implementing regulations and ‘suspension’ Regulation and guidance documents adopted.

- UNEA 2 in May 2016: the Commission strengthened its framework for policy dialogue with UNEP.
- Coordination and representation of the EU positions at the Basel, Rotterdam and Stockholm Conferences of the Parties, at the Seventh session of the intergovernmental negotiating committee on mercury (INC 7) and the Fourth Session of the International Conference on Chemicals Management under the UN's Strategic Approach to International Chemicals Management
- The Commission renewed its programmatic cooperation on improved environmental governance with UNEP and MEAs for 2014-2017;
- Preparations were made for the start of the special programme to support the institutional strengthening at national level for implementing the Basel, Rotterdam, Stockholm, and Minamata Conventions
- To further the implementation of the MoU signed in June 2014, the European Commission and UNEP agreed to an Annex that listed common policy areas (6) for consolidated or better dialogue and cooperation. They also agreed to establish regular dialogues in each of those policy areas.
- To advance the implementation of the MoU signed in June 2014, the European Commission and UNEP agreed to an Annex that lists common policy areas (6) for consolidated or strengthened dialogue and cooperation. They also agreed to establish regular dialogues in each of those policy areas.

Climate negotiations:

- The EU, leading the 'High-Ambition Coalition', was a major player in the successful negotiations for a new historic legally binding global climate agreement by 196 parties at the UN climate conference in Paris on 12 December 2015 (COP21) to keep global temperature increase well below 2 °C.

2016

Environment multilateral processes and ratification of MEAs:

- The European Commission adopted an EU action plan to tackle wildlife trafficking within the EU and to strengthen the EU's role in the global fight against these illegal activities.
- For the first time, the EU participated in a CITES COP as a party.
- Promotion of the environment in the G7/G20 including the G7 Environment Ministerial meeting: several workshops organised in the context of the G7 Alliance on Resource Efficiency. Adoption of the Toyama Framework on Materials Cycles by the G7 Environment Ministers.

Climate negotiations

- The signing in April 2016 of the Paris Agreement, the new legally binding global climate change agreement reached at COP 21 in December 2015 by 196 Parties (including the EU and its Member States). This was quickly ratified by the EU on 5 October 2016. This led to the entry into force of the Agreement on 4 November, just days ahead of the Marrakech climate conference.
- During the Marrakech climate conference, the EU expected tangible progress on key elements of the Paris package, including on access to finance for developing countries and on establishing and strengthening the skills and processes needed in developing countries to implement their domestic climate plans.

- On the margins of the Marrakech climate conference, there was a shift from intergovernmental negotiation to the showcasing of best practices and action. DG CLIMA was in the lead for more than 100 events being organised and Commission DGs collaborated successfully. Key outcomes included sustained momentum and global determination, as evidenced by the "Marrakech Action Proclamation", the strong evidence of solidarity and action (e.g. on climate finance, the adaptation fund and capacity building) as well as the steady progress on the Paris rulebook, which was due to be delivered by 2018.
- On 15 October 2016, the EU welcomed the agreement reached in Kigali, Rwanda, on a global phasing out of climate-warming hydrofluorocarbon gases (HFCs). The 197 Parties (196 countries and the EU) to the Montreal Protocol agreed to the amendment to bring HFCs within the scope of this international treaty that has been so successful in phasing out ozone depleting substances that were used in the same sectors.
- The EU proposed concrete ways on how to prepare for the implementation of the CORSIA (Carbon Offsetting Scheme for International Aviation) instrument decided at the level of ICAO, the International Civil Aviation Organisation.

2017

- EU Ratification of the Minamata Convention, which entered into force on 16 August 2017
- The EU participated effectively in the 3rd UN Environment Assembly which adopted a set of ambitious decisions and pledges to beat pollution.
- The EU Global Public Goods and Challenges invested EUR 692 million for external action on environment protection¹³⁰ and for combatting climate change during 2014-2017 (and EUR 635 million to be invested in 2018-2020).
- The EU actively contributed to the adoption of a global action plan for restoration under the Convention on Biological Diversity.

2018

- The Commission adopted a recommendation to the Council to authorise the opening of negotiations for the Global Pact for Environment¹³¹.
- The renewal of the Cooperation Agreement with UNEP under the EU thematic programme for Global Public Goods and Challenges is planned for 2018-2020 with an envisaged EU contribution of EUR 10 million to be increased in 2019 and 2020.
- In 2018, the EU participated for the first time as enhanced observer in the IPBES plenary where there were four regional IPBES assessments on biodiversity and ecosystem services and one thematic assessment on land degradation and restoration in 2018.
- The EU participated in the first joint IPCC-IPBES Workshop on Biodiversity and Climate Change: Integrated Science for Coherent Policy, in Paris on 18 October 2018. In the Workshop it was recommended that an expert meeting be set up in 2019, to distil key messages from the three climate reports on 1.5 °C, on land and on oceans, as well as the IPBES global assessment and the land degradation report,

¹³⁰ Including promoting circular/green economies, biodiversity, forests, water and ecosystems management, combatting desertification pollution, promoting environmental governance, and environmental mainstreaming.

¹³¹ COM(2018) 138

relevant to both climate and biodiversity. These messages aim to support the outcomes in the 6th IPCC assessment report.

- The EU actively contributed to the adoption of four substantive guidance documents under the Convention on Biological Diversity on: (i) the integration of protected areas and other effective area-based conservation measures; (ii) avoidance of unintentional introduction of invasive alien species; (iii) the design and implementation of ecosystem-based approaches to climate change adaptation and disaster risk reduction; and (iv) an updated action plan 2018-2030 for the international initiative on conservation and sustainable use of pollinators.



Brussels, 15.5.2019
SWD(2019) 181 final

PART 2/2

COMMISSION STAFF WORKING DOCUMENT

Evaluation of the 7th Environment Action Programme to 2020

"Living well, within the limits of our planet"

Accompanying the document

**Report from the Commission to the European Parliament, the Council, the European
Economic and Social Committee and the Committee of the Regions**

on the evaluation of the 7th Environment Action Programme

{COM(2019) 233 final}

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Introduction

As part of the Commission's assessment of progress made in implementing the 7th Environment Action Programme (7th EAP), the Commission has prepared assessments of the policy areas addressed by the nine priority objectives. The assessments provide an overview of developments and implementation of the 7th EAP and its priority objectives, sub-objectives and actions. They cover main outputs in 32 policy areas (see Annex 5) in terms of: (i) legislation, evaluation, information, improving the knowledge base, implementation; and (ii) indicators of progress. These help with the basic assessment of the link between the EAP structure and the actions and progress made at EU and Member State level.

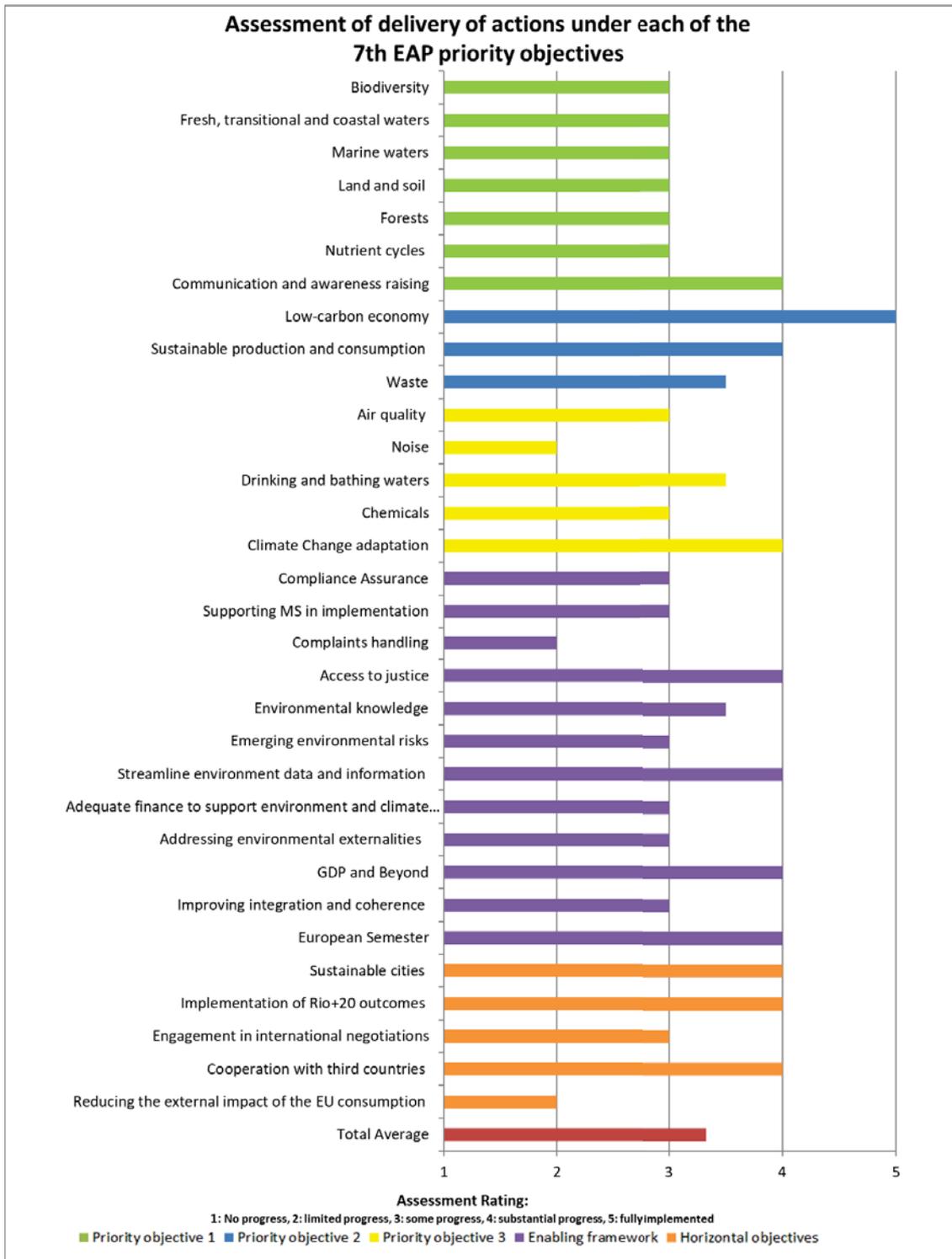
The policy area assessments cover the 36 sub-objectives and 60 actions listed in the 7th EAP (see Annex 4). These sub-objectives and actions share synergies to some extent. Grouping actions around 32 policy areas as reflected in the 7th EAP Impact Assessment therefore provides a meaningful structure to demonstrate the progress made in implementing the overall environmental policy.

The current Annex contains an assessment of the current situation and a short summary with a rough estimate of the progress made on each of the policy areas, listed in Annex 4. A scale ranging from no progress (1) to fully implemented (5) was used, as shown in Figure 1 below. A simple scoring system rates the outputs for each of the policy areas. It is worth bearing in mind that the allocated scores may be subjective.

To gain a better understanding of the link between the policy areas assessed and the actions as outlined in the 7th EAP, the groupings of sub-objectives and actions are presented in text boxes under each of the policy areas. Some of the actions appear under different policy areas as they are interconnected and cannot always be solely attributed to one specific policy area.

In the analysis, the Commission concludes that some progress has been made in achieving the goals. The most progress was made on actions linked to priority objective 2: towards a resource-efficient low-carbon economy. All relevant proposals have been adopted as legislation and we now have binding targets that cover nearly all greenhouse gas emissions in Europe. By contrast, the least progress was made in the policy areas relating to nature protection, environment and health, implementation and integration.

Figure 1: Assessment of delivery of sub-objectives and actions under the 7th EAP priority objectives



1 PRIORITY OBJECTIVE 1: To protect, conserve and enhance the Union's natural capital

1.1 Biodiversity

Sub-objectives:

- The 7th EAP shall ensure that by 2020 the loss of biodiversity and the degradation of ecosystem services, including pollination, are halted, ecosystems and their services are maintained and at least 15% of degraded ecosystems have been restored.

Actions:

- Stepping up the implementation of the **EU biodiversity strategy** without delay, in order to meet its targets;

Introduction

Under priority objective 1, the 7th EAP sets out the need to step up implementation of the EU biodiversity strategy, which seeks to ensure that by 2020, the loss of biodiversity and the degradation of ecosystem services are halted, ecosystems and their services are maintained and at least 15% of degraded ecosystems have been restored. The six operational targets of the strategy are as follows:

1. Fully implementing the Birds and Habitats Directives
2. Maintain and restore ecosystems and their services
3. Increase the contribution of agriculture and forestry to biodiversity
4. Ensure the sustainable use of fisheries resources and achieve Good Environmental Status by 2020
5. Combat invasive alien species
6. Step up action to tackle the global biodiversity crisis.

The 1992 EU Habitats Directive and the 1979 Birds Directive form the cornerstone of EU legislation aimed at conserving EU nature, and are key instruments for achieving the targets of the EU biodiversity strategy. Target 1 of the biodiversity strategy¹ focuses on their implementation, while there is strong interplay between the actions under the other targets of the strategy and these Directives.

Current situation

The mid-term review of the EU biodiversity strategy in 2015 showed that, while progress had been made between 2011 and 2015 on a number of actions, it was not sufficient to halt the loss of biodiversity in the EU. Some key outputs are outlined below.

Key actions under Target 1: Fully implement the Birds and Habitats Directives

In 2016, the Commission completed a fitness check of the Birds and Habitats Directives². The evaluation concluded that the Directives remain highly relevant for the conservation and

¹ *To halt the deterioration in the status of all species and habitats covered by EU nature legislation and achieve a significant and measurable improvement in their status so that, by 2020, compared to current assessments: (i) 100% more habitat assessments and 50% more species assessments under the Habitats Directive show an improved conservation status; and (ii) 50% more species assessments under the Birds Directive show a secure or improved status*

² http://ec.europa.eu/environment/nature/legislation/fitness_check/index_en.htm

sustainable use of species and habitats of EU conservation concern, for the environment, people and the economy, and as an essential component of EU biodiversity policy. However, full achievement of the objectives of these Directives will depend on a substantial improvement in their implementation in close partnership with local authorities and different stakeholders in the Member States. Based on these findings, the Commission adopted in 2017 an action plan for nature, people and the economy³. It addresses the shortcomings identified during the evaluation and aims to boost the implementation of the directives and to ensure their coherence with broader socio-economic objectives. The action plan focuses on four priority areas and comprises 15 actions and more than 100 sub-actions to be carried out by 2019.

There has been progress in establishing the Natura 2000 network. The terrestrial component of the network is largely complete (18.4 % of EU land). Within the 7th EAP reporting period, the marine component has more than doubled (9.2 % of EU seas). This has helped the EU achieve the Aichi Target on protected areas under the Convention on Biological Diversity (CBD)⁴. However, important gaps remain, especially offshore, and additional marine Natura 2000 sites need to be designated. There have been significant delays in putting in place the conservation measures necessary to achieve the conservation objectives of the network. Out of 27,758 sites, only 70 % have established conservation measures. Moreover, their implementation on the ground still needs major improvements. The Commission has also used its enforcement prerogatives opening infringement procedures where necessary to speed up completion of the network and the adoption of conservation measures. Access to funding and policy integration remains a major challenge. In addition:

- The Commission has developed guidance documents and disseminated good practice in close cooperation with Member States and stakeholders. A wealth of seminars and networking events have been organised under the Natura 2000 Biogeographical Process⁵.
- Under the action plan, the Commission has established bilateral dialogues with Member States and stakeholders to discuss key implementation issues for the Directives.
- The Commission launched the Natura 2000 award⁶ in 2014 to reward excellence in managing Natura 2000 sites and to raise awareness about the network and its benefits.
- The LIFE programme provides support to implement the Directives at national level. Funding for nature and biodiversity projects has been increased by 10% for 2018-2020⁷. However, this increase is not enough compared to the needs that can only be satisfied through effective integration into, among other things, agriculture, forestry and fisheries policies at EU and national level.

³ http://ec.europa.eu/environment/nature/legislation/fitness_check/action_plan/index_en.htm

⁴ <https://www.cbd.int/sp/targets/>

⁵ http://ec.europa.eu/environment/nature/natura2000/seminars_en.htm

⁶ http://ec.europa.eu/environment/nature/natura2000/awards/index_en.htm

⁷ Commission Delegated Regulation (EU) 2018/93 of 16 November 2017 on the increase of the percentage of the budgetary resources allocated to projects supported by way of action grants under the sub-programme for Environment dedicated to projects supporting the conservation of nature and biodiversity according to Article 9(4) of Regulation (EU) No 1293/2013 of the European Parliament and of the Council on the establishment of a Programme for the Environment and Climate Action (LIFE) and repealing Regulation (EC) No 614/2007.

- Substantial progress has been made to strengthen the knowledge base⁸.

Key actions under Target 2: Maintain and restore ecosystems and their services

The knowledge and evidence base for EU biodiversity policy on biodiversity and ecosystem services has been improved thanks to the EU initiative on the **Mapping and Assessment of Ecosystems and their Services**⁹, which has produced five methodological reports since 2013¹⁰. An EU wide assessment of ecosystems and their services will be published towards the end of 2019.

Work is under way to design and implement an integrated accounting system for ecosystems and their services at EU level, notably through the Knowledge Innovation Project on Integrated Natural Capital Accounts (KIP INCA)¹¹.

The Biodiversity Information System for Europe (BISE)¹² serves as a single entry point for access to data and information on biodiversity to help implementing the EU biodiversity strategy.

To steer work on restoring at least 15 % of degraded ecosystems by 2020, a guidance document was drawn up on restoration prioritisation frameworks¹³.

In 2013, the Commission adopted an EU strategy¹⁴ to promote investments in **green infrastructure** (GI). Several guidance documents have been produced on GI implementation and integration. The EnRoute project¹⁵ (Enhancing Resilience of **urban ecosystems** through green infrastructure) has provided scientific knowledge on how urban ecosystems and their benefits (the services they provide) can support urban planning and policy-making for sustainable cities. In the period 2016-2018, the EU invested through its research and innovation framework programme Horizon 2020 EUR 150 million¹⁶ in demonstrating and testing innovative nature-based solutions implementing GI.

According to country fiches on green infrastructure¹⁷, several Member States have established national ecological networks or equivalent instruments. These findings will be

⁸ For example the EU State of Nature Report with facts and figures on the status and trends of the species and habitats covered by the two EU nature directives: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2015:219:FIN>

⁹ Mapping and Assessment of Ecosystems and their Services:

http://ec.europa.eu/environment/nature/knowledge/ecosystem_assessment/index_en.htm

¹⁰ MAES-related developments in the European Union: https://biodiversity.europa.eu/maes/maes_countries

¹¹ http://ec.europa.eu/environment/nature/capital_accounting/pdf/KIP-INCA-ScopingPaper.pdf

¹² <https://biodiversity.europa.eu/>

¹³ <http://ec.europa.eu/environment/nature/biodiversity/strategy/pdf/RPF%20letter%20to%20MS%20from%20PB%20April%202014%20Annexe.pdf>

¹⁴ COM(2013) 249 final

¹⁵ <https://oppla.eu/enroute>

¹⁶ Projects Connecting Nature, GrowGreen, UNaLab, URBAN GreenUp, CLEVER Cities, EdiCitNet, proGIreg, URBINAT demonstrate and test innovative Nature-Based Solutions in cities (98.3 million EUR); projects PHUSICOS, RECONNECT, OPERANDUM for hydro-meteorological risk reduction (35.2 million EUR); NATURVATION and Nature4Cities explore new governance, business, financing models and economic impact assessment tools for Nature-Based Solutions (15.3 million EUR). Further information on each project: <https://cordis.europa.eu/en> and <https://oppla.eu/>

¹⁷ https://biodiversity.europa.eu/countries_old/gi

further developed in a **review of progress made on implementation of the GI strategy** to be published in 2019. **Commission guidance on a strategic framework** will be published in 2019 to further support deployment of **EU-level green and blue infrastructure**.

Moreover, the Commission will provide **guidance on how to better integrate ecosystems and their services into decision-making** in 2019.

In June 2018, the Commission adopted a **Communication on the EU Pollinator Initiative**,¹⁸ which contains 10 actions.

The **Natural Capital Financing Facility**¹⁹ (NCCFF) further provides financing (debt and equity) and technical assistance to natural capital projects that can generate revenues or save costs while delivering on biodiversity and climate adaptation objectives. To ensure that the EU budget has no negative impact on biodiversity and that spending under the EU budget helps achieve the EU biodiversity strategy targets, the Commission developed a common framework for biodiversity proofing of the EU budget²⁰ in 2016.

Key actions under Target 3a: Increase the contribution of agriculture to maintaining and enhancing biodiversity

The common agricultural policy (CAP) has an essential role to play in conserving and improving biodiversity. The current CAP for 2014-20 provides a range of instruments that can help support biodiversity and promote sustainable farming systems through the complementary actions of cross compliance, greening practices and rural development measures together with possible interaction with other initiatives such as the on-going action plan for nature, people and the economy. Local examples demonstrate successful sustainable agricultural practices.

The mid-term review of the EU biodiversity strategy to 2020, issued in 2015, revealed that greater efforts were needed to conserve and improve biodiversity. The review urged Member States to take up these opportunities on a sufficient scale.

In terms of improving direct payments for environmental public goods in the CAP, in 2018 the Commission evaluated the payments for agricultural practices beneficial for the climate and the environment (so called green direct payments or greening measures).²¹ The overall effects of the measures were considered fairly limited, but uncertain as the evaluation was carried out after only two years of implementation and thus many changes could not have been detected. The evaluation showed that while Member States have had significant flexibility in implementing the measures, environmental objectives had not been generally a major factor in their choices.

The legislative proposals on the CAP beyond 2020 aim to increase the level of environmental and climate ambition. Three out of nine CAP's objectives relate to the environment and climate. Farmers' income support is already linked to the application of environment and climate-friendly practices and the new CAP will require farmers to achieve a higher level of ambition through both mandatory and incentive-based measures, such as:

¹⁸ http://ec.europa.eu/environment/nature/conservation/species/pollinators/index_en.htm

¹⁹ https://www.eib.org/attachments/documents/nccff_terms_eligibility_en.pdf

²⁰ <http://ec.europa.eu/environment/nature/biodiversity/comm2006/proofing.htm>

²¹ https://ec.europa.eu/agriculture/sites/agriculture/files/staff-working-document-22.11.2018_en.pdf

- Direct payments will be conditional on enhanced environmental and climate requirements;
- Each Member State will have to offer eco-schemes to support farmers in going beyond the mandatory requirements, funded with a share of their national direct payments' allocations;
- At least 30 % of each rural development national allocation will be dedicated to environmental and climate measures;
- 40 % of the CAP's overall budget is expected to contribute to climate action;
- In addition to the possibility to transfer 15 % between pillars, Member States will also have the possibility to transfer an additional 15 % from Pillar 1 to Pillar 2 for spending on climate and environment measures (without national co-financing).

The legislative proposals on the CAP shift the emphasis from compliance and rules towards results and performance and, if adopted, thus provide new opportunities. The EU aim is to create a strong and common framework that defines the basic policy parameters for the whole CAP while providing Member States with more subsidiarity on how to achieve their agreed objectives and targets in order to better deliver the desired results especially for the environment.

Key actions under Target 4: Sustainable fisheries

See Section 1.3 on marine waters.

Key actions under Target 5: Help combat invasive alien species

Regulation (EU) 1143/2014 on invasive alien species (**the IAS Regulation**)²² entered into force on 1 January 2015. It equips Europe with an effective system to prevent and manage the introduction and spread of species that can have significant adverse impacts on biodiversity, the related ecosystem services, as well as the economy and human health.

As provided for in the Regulation, invasive alien species have been prioritised in a list of invasive alien species in the EU. It currently includes 49 species that are subject to common action at EU level. Member States are currently developing measures on priority pathways. The European Alien Species Information Network²³, an information exchange mechanism that helps implement the Regulation has been established. It enables easy access to data on alien species reported in Europe.

Key actions under Target 6: Efforts to help avert global biodiversity loss

Table 1: EU global funding for biodiversity

Total EU biodiversity international financing (ODA, OOF) ²⁴ in EUR billion						
2006-2010 Average	2011	2012	2013	2014	2015	2016
173.0	125.9	396.9	319.3	239.0	365.2	427.2

The EU and its Member States collectively are the largest contributor to **biodiversity-related official development assistance** and have made a significant and growing contribution to the collective global target of doubling biodiversity financing in line with international

²² http://ec.europa.eu/environment/nature/invasivealien/index_en.htm

²³ <https://easin.jrc.ec.europa.eu/easin>

²⁴ Official development aid (ODA); other official flows (OOF).

commitments. The Commission is working to further integrate environment and climate change across all sectors of EU development cooperation. In addition, the Commission also made efforts to make spending on biodiversity-related research more visible by tagging biodiversity related topics. Regularly updated figures can be retrieved from spending visualisation tools, such as Horizon 2020 Dashboard²⁵.

The EU used its new role as a Party in its own right to the **Convention on International Trade in Endangered Species of Wild Fauna and Flora** (CITES – see below, Section 9.3) to reinforce the importance of international trade as a driver of biodiversity loss. For instance, the 17th Conference of the Parties to CITES in 2016 adopted several EU proposals to include additional animals and plants in the list of species protected under the Convention, thereby submitting international trade in those species to strict controls, and in case of the most endangered species (e.g. pangolins) prohibiting commercial trade altogether. The EU also initiated important CoP decisions on the implementation of CITES, including on hunting trophies and on corruption associated with illegal wildlife trade. Further proposals have been submitted by the EU in preparation for the 18th Conference of the Parties in 2019.

The **Convention on the Conservation of Migratory Species of Wild Animals (CMS)** contributes to biodiversity conservation in the EU, by ensuring international cooperation for shared populations of species. EU species, which are protected under the Birds or Habitats Directive are thus also protected when they migrate outside of EU territory if they are protected under CMS. The 12th meeting of the Conference of the Parties (Manila, October 2017) adopted 34 proposals to amend the Convention's appendices, including nine species that occur in the EU.

The Conferences of the Parties to the **Convention on Biological Diversity (CBD)** have adopted key decisions to reduce biodiversity loss, in particular on **mainstreaming** biodiversity in agriculture, forestry, fisheries, aquaculture and tourism (cf. 13th meeting in 2016) extended to mining, infrastructure, energy, manufacturing and health (CBD COP14 in 2018). An ambitious preparation process for a post-2020 global biodiversity framework was launched in 2018, with a Sharm el Sheikh to Kunmin Plan of Action, calling stakeholders to make commitments to halt biodiversity loss.

In 2014, the EU ratified the Nagoya Protocol on **access to genetic resources and the fair and equitable sharing of benefits** arising from their utilisation to the CBD. The Protocol implements the third objective of the CBD, **namely the fair and equitable sharing of benefits** arising out of the utilization of genetic resources, thereby contributing to the conservation of biological diversity and the sustainable use of its components. To implement the Protocol, the EU adopted Regulation (EU) No 511/2014 on measures of compliance for users of genetic resources in the EU. An implementing regulation (Regulation (EU) 2015/1866) was also adopted to lay down detailed rules to implement the Regulation as regards a register of collections, monitoring user compliance and best practice.

To enhance the contribution of **trade policy** to conserving global biodiversity and to address potential negative impacts, the Commission has taken steps to include these concerns in trade negotiations and dialogues with third countries. It published its second report on the effects of

²⁵ <https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/horizon-dashboard>

the Generalised Scheme of Preferences (GSP)²⁶ in January 2018. All recent EU trade agreements contain trade and sustainable development chapters with biodiversity provisions.

The **EU Action Plan against Wildlife Trafficking**²⁷ will help address wildlife trafficking within the EU and strengthen the EU's role in the fight against these illegal activities globally through measures under three priority areas: prevention, enforcement and cooperation. By reducing illegal trafficking, and disrupting the international criminal networks involved, the EU contributes to improving governance, law and order, security and ultimately livelihoods in the source countries.

In 2018, a Commission report on progress in the implementation of the Action Plan²⁸ found that it had contributed to directing additional attention and resources to the fight against illegal wildlife trade, in the EU as well as globally, while also concluding that a lot still remained to be done to achieve the objectives of the Plan.

Significant progress has been made in implementing the **EU FLEGT action plan**²⁹, which dates back to 2003. The action plan provides for a combination of supply and demand-side measures to exclude illegal timber from markets, improve the supply of legal timber and increase the demand for wood products from legal sources. Its ultimate goal is to encourage sustainable forest management by improving forest governance frameworks and ensuring that the legality of forest operations is considered a vital first step. A key element of the FLEGT action plan is the possibility for the EU to conclude **Voluntary Partnership Agreements** (VPAs). Negotiations are ongoing with a number of countries and Indonesia is the first country that started issuing FLEGT Licenses on 15 November 2016. To complement the FLEGT VPAs, the EU has legislation in place laying down the obligations of operators who place timber and timber products on the market, also known as the **EU Timber Regulation** (TR). The European Commission is monitoring how Member States are implementing and enforcing the EU Timber Regulation. Reports on its effectiveness are being compiled by the Commission from reports by Members.

To complement the FLEGT VPAs, the EU has legislation in place laying down the obligations of operators who place timber and timber products on the market, also known as the **EU Timber Regulation**. Under the framework of the FLEGT action plan the EU has also been promoting public procurement policies as a means to encourage trade in sustainable and verified legal timber (eleven EU Member States have adopted timber public procurement policies), and private sector initiatives (voluntary codes of conduct, procurement policies, chain-of-custody/certification initiatives, etc.).

On the basis of a feasibility study on deforestation³⁰ and discussions with stakeholders, the Commission is considering further steps towards a possible future EU international forest

²⁶http://ec.europa.eu/trade/policy/countries-and-regions/development/generalised-scheme-of-preferences/index_en.htm.

²⁷ Adopted in 2016, see COM(2016) 87 of 26.2.2016, and subsequently endorsed by the Member States and the European Parliament

²⁸ COM(2018) 711 of 24.10.2018

²⁹ <http://www.euflegt.efi.int/flegt-action-plan>

³⁰ http://ec.europa.eu/environment/forests/studies_EUaction_deforestation_palm_oil.htm

strategy³¹, including an action plan or other suitable instrument containing measures to tackle deforestation and forest degradation³².

In parallel to the feasibility study, the Commission launched a dedicated study on the environmental impact of palm oil consumption and on existing sustainability standards with a view to strengthening the knowledge base on this subject.³³

For FLEGT, the Timber Regulation, VPAs and EU Action on deforestation, see also section 9.4 on *Reducing the external impact of the EU consumption*.

Key horizontal actions

The voluntary scheme for Biodiversity and Ecosystem Services in Territories of European Overseas (**BEST**)³⁴ allows for swifter and easier access to funding for the protection of biodiversity and the sustainable use of ecosystem services in EU Outermost Regions (ORs) and Overseas Countries and Territories (OCTs).

To support businesses in understanding and taking into account their impacts and dependencies with natural capital and biodiversity, the Commission created the EU B@B platform for **Business and Biodiversity**³⁵.

The Commission also adopted the partnership instrument project for implementing the economics of ecosystems and biodiversity (TEEB) initiative in the agrifood sector work in emerging economies "*Promoting biodiversity and sustainability in the agriculture and food sector through economic valuation*" (TEEB implementation)³⁶.

Are we on track to meet the 7th EAP's objectives and sub-objectives?

Overall, biodiversity loss and the degradation of ecosystem services in the EU have continued since the EU 2010 biodiversity baseline was established, The European Environment Agency's 2015 - state and outlook report confirmed this³⁷. The mid-term review of the EU biodiversity strategy showed that the 2020 targets were unlikely to be met. Overall, while good progress has been made in particular with regard to strengthening the policy frameworks and the knowledge base under most targets, this is still insufficient to reverse the trends of biodiversity loss.

- Regarding the contribution of agriculture and forestry to maintaining and enhancing biodiversity (Target 3), data on the ground indicate a general declining trend in biodiversity in agro-ecosystems, while assessment of greening and of the uptake of biodiversity measures suggest that their deployment would not be sufficient to change the negative trends.

³¹ https://ec.europa.eu/info/law/better-regulation/initiatives/ares-2018-6516782_en

³² *Forests - Deforestation: Forests and the planet's biodiversity are disappearing*, <http://ec.europa.eu/environment/forests/deforestation.htm>

³³ http://ec.europa.eu/environment/forests/studies_EUaction_deforestation_palm_oil.htm.

³⁴ http://ec.europa.eu/environment/nature/biodiversity/best/index_en.htm

³⁵ http://ec.europa.eu/environment/biodiversity/business/index_en.htm

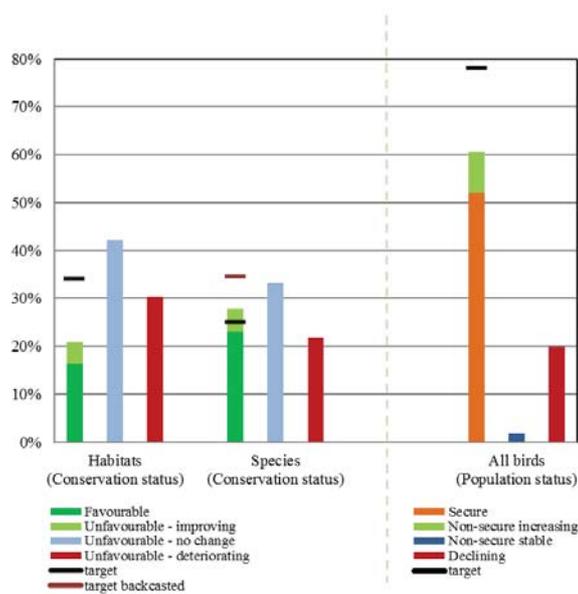
³⁶ https://ec.europa.eu/fpi/sites/fpi/files/ann-6-action-fiche-for-promoting-biodiversity-and-sustainability-in-the-agriculture-and-food-sector_en.pdf

³⁷ <https://www.eea.europa.eu/soer>

- Implementation of Target 5 on invasive alien species should lead to the containment of the introduction and spread of the species of Union concern, and thus contain their negative impact on biodiversity. Member States are developing measures on priority pathways, which will reinforce the prevention of the introduction and spread of invasive alien species of Union concern.
- Assessments of global trends also point to continuing biodiversity loss, with serious implications for the capacity of biodiversity to meet human needs in the future.

Figure 2 illustrates progress as of 2015 toward achieving the set targets to 2020 of the strategy for improving the conservation status of the protected habitats and species.

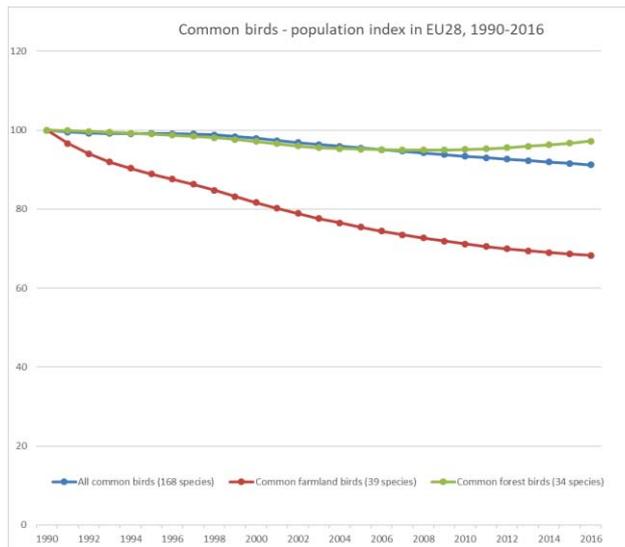
Figure 2 — Progress towards Target 1 of the EU Biodiversity Strategy



Common bird populations have decreased by around 13% in the EU between 1990 and 2014. The decline is most drastic amongst common farmland bird populations, as illustrated in Figure 3.

Figure 3: Long term trends for common bird species, EU³⁸

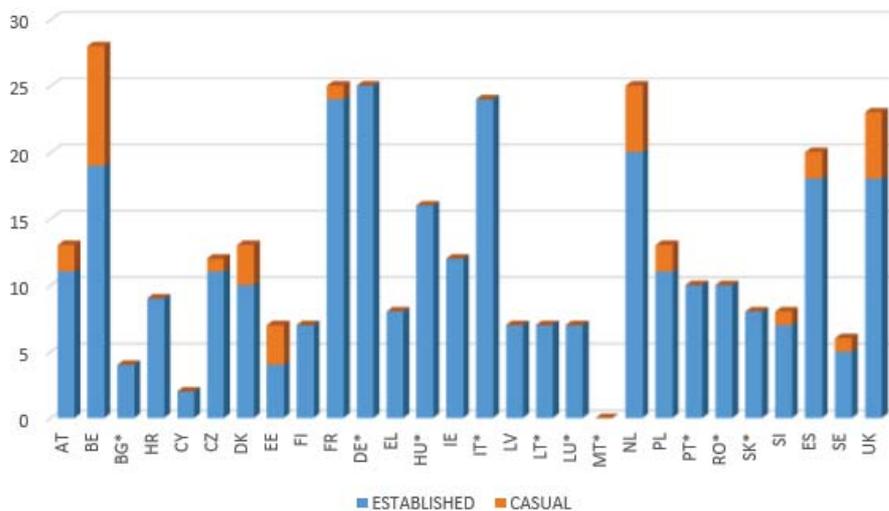
³⁸ <https://www.eea.europa.eu/airs/2017/natural-capital/common-birds-and-butterflies>



There was also a significant decline of 32% in grassland butterflies between 1990 and 2015.³⁹

The cumulative number of invasive alien species introduced in terrestrial environments in Europe has been constantly increasing since the 1900s.⁴⁰ This trend indicates that the problem is far from under control. The report published by the Joint Research Centre (JRC) in 2017 on the baseline distribution of invasive alien species of Union concern⁴¹ shows that many invasive alien species are already established in Member States (Figure 4).

Figure 4: Number of invasive alien species of Union concern per Member State



Summary

State of implementation of the policy area
<input type="checkbox"/> No progress

³⁹ <https://www.eea.europa.eu/airs/2017/natural-capital/common-birds-and-butterflies>

⁴⁰ <https://www.eea.europa.eu/data-and-maps/indicators/invasive-alien-species-in-europe/invasive-alien-species-in-europe>

⁴¹ <http://publications.jrc.ec.europa.eu/repository/bitstream/JRC104969/kj-na-28596-en-n.pdf>

<input checked="" type="checkbox"/> Limited progress
<input type="checkbox"/> Some progress
<input type="checkbox"/> Substantial progress
<input type="checkbox"/> Fully implemented

The 7th EAP aimed to step up implementation of the EU biodiversity strategy in order to meet its targets. The 2015 mid-term review showed that the 2020 biodiversity targets could only be achieved if implementation and enforcement efforts were stepped up. It concluded that achieving the 2020 biodiversity objectives would require strong partnerships and the full engagement and efforts from key actors at all levels. Achieving this target also requires more effective integration with a wide range of policies, by setting coherent priorities underpinned by adequate funding — in particular in the sectors of agriculture and forestry.

A number of key actions have been taken since then, such as: the Action Plan on Nature, People and the Economy; the EU Pollinators Initiative; measurement and assessment of ecosystem services. Contributions from the private sector have been promoted through the EU Business & Biodiversity Platform, and the first projects under the Natural Capital Financing Facility are being implemented, demonstrating the attractiveness of natural capital related projects to private investors. The Commission also contributes to international initiatives such as the Natural Capital Protocol that aims to help mainstream natural capital in the financing and business sectors.

The evaluation of the EU biodiversity strategy will be concluded by end of 2020. The 15th Conference of the Parties to the Convention on Biological Diversity in Beijing, China at the end of 2020 is expected to adopt the new post 2020 global biodiversity framework and provide a major opportunity to enhance global action for averting the increasing global biodiversity crisis, a pre-requirement for achieving most Global Agenda 2030 Sustainable Development Goals.

Challenges identified in the mid-term review regarding implementation, integration and funding remain for the forthcoming years. Regarding integration in agriculture, which was identified as a key issue in the mid-term review, the Commission’s proposals on the CAP aim to bolster climate and environmental ambition. The Commission’s proposals on the next Multi-annual Financial Framework also include increased funding for LIFE, which will also benefit biodiversity, as well as new Strategic Nature Projects, which will help mainstream biodiversity in other instruments.

1.2 Fresh, transitional and coastal waters

Sub-objectives:

- The impact of pressures on transitional, coastal and fresh waters (including surface and ground waters) is significantly reduced to achieve, maintain or enhance good status, as defined by the **Water Framework Directive**;
- Water stress in the Union is prevented or significantly reduced.

Actions:

- Fully implementing the **Blueprint to Safeguard Europe’s Water Resources**, having due regard for Member States’ specific circumstances, and ensuring that water quality objectives are adequately supported by source-based policy measures;

- Improving **water efficiency** by setting and monitoring targets at river basin level on the basis of a common methodology for water efficiency targets to be developed under the **Common Implementation Strategy process**, and using market mechanisms, such as **water pricing**, as provided for in Article 9 of the Water Framework Directive and, where appropriate, other market measures. Developing approaches **to manage the use of treated wastewater**.

Introduction

Water is at the heart of natural ecosystems and climate regulation as well as a crucial element in citizens' daily life and an indispensable resource for the economy. Protection of water resources, of fresh and salt water ecosystems and of the water we drink and bathe in is therefore one of the cornerstones of environmental protection in Europe.

The EU Water Framework Directive (WFD), which was adopted in 2000, takes a pioneering approach to protecting water based on natural geographical formations: river basins with the target of increasing the quality of all European waters. Economic activities, population growth and urbanisation are putting increasing pressures on freshwater throughout Europe.

Achieving, maintaining or improving the good status of water bodies as defined by the Directive will ensure that EU citizens benefit from high quality standards e.g. for safe drinking and bathing water. It will also prevent and reduce water stress in the EU by ensuring a balance between groundwater abstraction and recharge.

Current situation

The Water Framework Directive is the most comprehensive EU water policy instrument. Its main objective is to protect and improve freshwater resources with the aim of achieving good status of EU waters by 2015. The main tools to implement the Directive are the river basin management plans (RBMPs) and the programmes of measures that are made in six-year cycles.

A river basin or a catchment covers the entire river system, from the sources of small tributaries to the estuary. The EU and its Member States have divided the river basins and associated groundwater and coastal areas into 110 river basin districts, 40 of which are international and cross borders, covering around 60 % of EU territory. All EU Member States apart from islands like Cyprus and Malta share waters with neighbouring countries.

The RBMP describes the actions needed to implement the Directive. The RBMPs cover many aspects of water management and identify all actions and measures to be taken within the river basin district in order to deliver the objectives of the Directive. This includes non-deterioration of water status and the achievement of good status in all water bodies, unless an exemption is applied.

A common implementation strategy is used to realise the Water Framework Directive and its 'daughters' as well as the Floods Directive. It consists of a large network of Member State and stakeholder representatives (associations, business representatives, NGOs etc.). Support has been developed under the CIS, including Guidance Documents and technical reports.

The fifth Water Framework Directive Implementation Report – assessment of the second River Basin Management Plans and the first Floods Directive Implementation Report –

assessment of the first Flood Risk Management Plans as adopted in February 2019⁴², covering the period 2009-2015. Overall, substantial efforts were made to implement the WFD and compliance is increasing gradually. In many river basins districts, optimism is warranted, in light of the policy and financial investments that have been made. However, improvements in water quality will still take some time before they are noticeable. While a large majority of groundwater bodies have achieved good status, only a minority of surface water bodies have achieved this status even though trends in several underlying individual quality elements and individual substances are more positive.

The European Environment Agency's State of Water report 2018 and the underlying data provide detailed information on the status of Europe's water bodies, as reported by the Member States under the Directive.

- Of the different types of water bodies recognised by the Directive, groundwater bodies generally have the best status across Europe. Groundwater must have good chemical status and good quantitative status. This has been achieved for 74% and 89% of the groundwater area respectively.
- For surface waters (rivers, lakes, transitional and coastal waters) the percentage in good ecological status or with good potential is around 40%, while only 38% of surface waters are in good chemical status. Few individual pollutants have a large impact on status; mercury is still widely present despite global action and greater EU efforts to limit its impact on the environment.
- Only a limited number of European water bodies have improved their status since the last reporting period. There may be several reasons for this: late identification of pressures, time required to develop and implement policy measures, response time before measures take effect in the natural environment, but also stricter quality standards and improved reporting, which reveals that water bodies that previously had 'unknown' status now have insufficient status.
- While water bodies with good status remained more or less stable in general, some 20% of all water bodies in the EU improved in status, often by one 'class'⁴³, and sometimes by two or three classes.

The improved implementation of related legislation has also had a positive effect on water status: the Urban Waste Water Treatment Directive (UWWTD) also currently being evaluated), the Nitrates Directive, the Industrial Emissions Directive (EID) also currently being evaluated) and legislation in relation to chemicals. For example, sectors within the scope of the Industrial Emissions Directive account for a considerable share of overall pollution (emissions to air and water waste generation) in Europe. It is estimated that they represent 20 % to 40 % of heavy metal emissions and 30 % to 60 % of pollutants other than nutrients and organic carbon in water.

⁴² Report on the implementation of the Water Framework Directive (2000/60/EC) and the Floods Directive (2007/60/EC), COM (2019) 95

⁴³ Ecological status has five classes: high, good, moderate, poor and bad. Chemical status has two: good or fail.

Nevertheless, European waters remain under pressure from pollution, over-abstraction and change in structure from a range of human activities. A lot still needs to be done to fully achieve the objectives of the Directive and related Directives, in particular significant implementation efforts by Member States in the years to come⁴⁴. The path towards full compliance with the Directive’s objectives in 2027, after which exemption possibilities are limited, seems very challenging at this stage. Reporting shows that further measures will be taken until 2021, but also that a significant number of measures will be needed beyond 2021.

With regard to water efficiency, the European Commission proposed on May 2018 new rules to stimulate and facilitate water reuse in the EU for agricultural irrigation. Treated waste water from urban waste water treatment plants provides a reliable alternative water supply for various purposes. Among these, agricultural irrigation holds the highest potential for an increased uptake of water reuse. In this light, the proposal envisages the setting of harmonised minimum requirements on the quality of reclaimed water, accompanied by monitoring together with harmonised risk management tasks. It is estimated that the proposed instrument could facilitate the use of water reuse in agricultural irrigation in the magnitude of 6.6 billion m3 per year, compared to 1.7 billion m3 per year in the absence of any EU legal framework.

Summary

State of implementation of the policy area
<input type="checkbox"/> No progress
<input type="checkbox"/> Limited progress
<input checked="" type="checkbox"/> Some progress
<input type="checkbox"/> Substantial progress
<input type="checkbox"/> Fully implemented

The EU legislative framework on water is strong and provides an integrated framework for improving water quality and quantity at the level of river basin districts through the Water Framework Directive. To make further progress on achieving the objectives of both Directives, the Commission will continue to work with Member States and stakeholders to promote compliance as part of the common implementation strategy and, more broadly, also through the Environmental Implementation Review. Against this background, the Commission will continue to support implementation of the legislation providing guidance, facilitating exchanges between Member States and stakeholders, providing knowledge and science, and making finance available through different EU instruments. Where possible, reporting will be further streamlined or simplified. Attention will also need to be paid to new emerging pollutants, for example, microplastics and pharmaceuticals and the Commission has adopted a strategic approach to pharmaceuticals in the environment⁴⁵.

A combined evaluation (“Fitness Check”) of the Water Framework Directive, the Environmental Quality Standards Directive, the Groundwater Directive and the Floods Directive is ongoing. The overall purpose is to assess whether the legislation is still fit for

⁴⁴ Report on the implementation of the Water Framework Directive (2000/60/EC) and the Floods Directive (2007/60/EC), COM (2019) 95

⁴⁵ European Union Strategic Approach to Pharmaceuticals in the Environment, COM (2019) 128

purpose and has brought about the desired changes to European business and citizens. The evaluation will help the Commission to decide on the next steps for water legislation in Europe.

1.3 Marine waters

Sub-objectives:

- The impact of pressure on marine waters is reduced to achieve or maintain good environmental status, as required by the **Marine Strategy Framework Directive**, and coastal zones are managed sustainably.

Actions:

- Urgently increasing efforts, inter alia, to ensure that healthy fish stocks are achieved in line with the Common Fisheries Policy, the **Marine Strategy Framework Directive** and international obligations. Combating pollution and establishing a Union-wide quantitative reduction headline target for **marine litter** supported by source-based measures and taking into account the marine strategies established by Member States. Completing the **Natura 2000 network of marine protected areas**, and ensuring that **coastal zones** are managed sustainably;

Introduction

The 7th EAP sets out the need for more effective action to protect oceans and seas, safeguard fish stocks and reduce marine litter. It requires that by 2020 the impact of pressures on marine waters is reduced to achieve or maintain good environmental status, as required by the Marine Strategy Framework Directive (MSFD)⁴⁶, and coastal zones are managed sustainably.

Current situation

Good environmental status

The EU's **Marine Strategy Framework Directive** aims to achieve Good Environmental Status (GES) of the EU's marine waters by 2020 and to protect the resource base upon which marine-related economic and social activities depend. The Directive defines GES as: "The environmental status of marine waters where these provide ecologically diverse and dynamic oceans and seas which are clean, healthy and productive" (Article 3). In order to achieve GES by 2020, each Member State is required to develop a strategy for its marine waters (or marine strategy). In addition, because the Directive follows an adaptive management approach, the marine strategies must be kept up-to-date and re-viewed every 6 years.

The marine strategies consist of a number of sequential steps: Member States first determine what they consider to be good environmental status, set targets, establish monitoring programmes, and have to include a set of measures. They do so on the basis of 11 'descriptors'⁴⁷, such as the quality of biodiversity, reduction of marine litter, and integrity of the seabed.

Not all Member States have set quantitative targets in relations to their GES. A new legal framework⁴⁸ leading to the establishment of "threshold values" for the various criteria to be assessed and considered for GES is now being implemented. This aims to rectify the lack of

⁴⁶ Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive).

⁴⁷ Annex I of the MSFD.

⁴⁸ Commission Decision 2017/848/EU.

quantification and comparability experienced in the first cycle of implementation⁴⁹, which should allow us to measure the extent to which GES has been achieved. The Directive's 2020 objective has not yet been met. However, some Member States envisage that they will achieve GES for some MSFD descriptors by the required date.

In its first two assessments of implementation of the Directive in 2014⁵⁰ and 2017⁵¹ the Commission highlighted that implementation was not ideal; Member States had determined good environmental status in a sub-optimal manner or monitoring programmes did not ensure appropriate coverage. The Directive was being implemented in an incoherent and inconsistent way throughout the EU marine regions. In its third assessment,⁵² the Commission concluded that Member States need to improve their measures so that good environmental status is achieved in all Member States and for all descriptors. Nevertheless, the efforts undertaken so far should not be underestimated, as we now know more about the marine environment and need to take into account that it reacts slowly to change.

Member States frequently raise the issue of (financial & human) resources when implementing the MSFD. The Commission issues calls for proposals on a regular basis to facilitate implementation of the Directive. Other funding is available through funding instruments such as Horizon 2020, the European Maritime and Fisheries Fund and the LIFE programme.

The spatial area covered by the Directive has been cited as a challenge to implementing the MSFD. For some Member States their marine waters are much larger than their landmass (e.g. Portugal, Ireland). Commission Decision [2017/848/EU](#) has therefore facilitated the use of a risk-based management of the marine environment, while retaining a comprehensive approach to safeguard the EU seas and oceans.

Implementation of the Directive is also complex due to the wide distribution of certain pressures (e.g. eutrophication in the Baltic Sea) and the various number of different human activities it addresses. In this sense, Annex III of the MSFD has also been revised⁵³ to better match human activities and the pressures they exert on the marine environment with good environmental status.

To promote a common understanding of what is required by the Directive, the Commission, Member States, Regional Sea Conventions and stakeholders have formed a "Common Implementation Strategy".

The Commission launched the "Blue2" study to develop an integrated policy assessment method for the freshwater and marine environment. For the marine environment it will look at its hydrodynamic, biogeochemical and food web characteristics. Blue2 aims to prepare policy relevant input data for these models, design policy scenarios that can be translated into input data for the models, and evaluate the model outputs.

Complete the Natura 2000 network of marine protected areas

⁴⁹ COM (2014) 97.

⁵⁰ COM(2014) 97.

⁵¹ (COM(2017) 03.

⁵² COM(2018) 562.

⁵³ Commission Directive (EU) 2017/845 of 17 May 2017 amending Directive 2008/56/EC of the European Parliament and of the Council as regards the indicative lists of elements to be taken into account for the preparation of marine strategies.

On **marine protected areas**, the spatial coverage of marine sites designated for protection under the EU Habitats Directive quadrupled between 2008 and 2015.⁵⁴ Within the 7th EAP reporting period, the spatial coverage of marine Natura 2000 sites designated for protection under the EU Habitats and Birds Directives has more than doubled, covering more than 500,000 km²(end 2017). However, additional Natura 2000 areas need to be designated to sufficiently protect all listed marine species and habitats.

Recent data shows that the EU has met the Aichi target (Aichi Target 11 of the Strategic Plan for Biodiversity 2011-2020 specifies that 10 % of marine and coastal areas are to be conserved by 2020).

Furthermore, coordinated steps between Member States and the Commission are being taken to put in place the necessary conservation measures in order to protect and manage those areas, especially fishery management measures in accordance with the common fisheries policy (CFP).

Reduce marine litter

On **marine litter**, the Commission proposal will reduce single use plastics and discarded fishing gear. Work is on-going to set threshold values for marine litter that does not harm the marine environment. After threshold values have been developed, this target could still be possible in principle. Commitments have also been made at the Our Ocean Conferences and the third session of the UN Environment Assembly.

Safeguard fish stocks

The **CFP** provides a set of rules for managing European fishing fleets and for conserving fish stocks. It aims to ensure that fishing and aquaculture are environmentally, economically and socially sustainable and that they provide a source of healthy food for EU citizens. Article 2(5)(j) of the CFP sets as one of its objectives coherence "with the Union environmental legislation, in particular with the objective of achieving a good environmental status by 2020 as set out in Article 1(1) of Directive 2008/56/EC, as well as with other Union policies". The current policy therefore stipulates that between 2015 and 2020 catch limits should be set that are sustainable and maintain fish stocks in the long term.

On **CFP**, the SDG 14 Eurostat indicator shows a positive downward trend in overexploitation⁵⁵. Most of the EU catch comes from the North-East Atlantic, where around 60 % of assessed stocks were fished within fishing mortality at maximum sustainable yield (FMSY) in 2016, compared to 30 % in 2003. However, in other regions, the picture is less positive. The 2018 report⁵⁶ of the JRC's Scientific, Technical and Economic Committee for Fisheries shows that in the Mediterranean and Black Sea overfishing is broadly between two and three times FMSY for the region. Furthermore, in the Mediterranean and Black Seas, there are insufficient assessments of FMSY to allow for a realistic indication on the state of fish stocks. Spawning stock biomass is also still chronic in the Mediterranean, with stocks showing an average biomass decline of 25% between 2003 and 2015. Against this

⁵⁴ [http://ec.europa.eu/eurostat/statistics-explained/index.php/SDG_14_-_Life_below_water_\(statistical_annex\)](http://ec.europa.eu/eurostat/statistics-explained/index.php/SDG_14_-_Life_below_water_(statistical_annex))

⁵⁵ The 2018 edition of the Eurostat monitoring report on progress towards the SDGs in an EU context shows that in the North-East Atlantic (from where most of the EU catch originates, levels of overexploitation have generally fallen over the past decade. 'This positive development is visible in both the long-term period from 2003 to 2016, during which the share of overexploited stocks fell by 3.5% per year on average, and the short-term period 2011 to 2016, when it fell by 1.1% annually' (p. 270).

⁵⁶ <https://stecf.jrc.ec.europa.eu/documents/43805/2092142/STECF+18-01+adhoc+-+CFP+Monitoring+2018.pdf/26e5f439-3976-43d1-abe9-0f6d685afcff>

background, complying with the CFP objective of achieving FMSY for all stocks by 2020 will require more sustained efforts.⁵⁷

Manage coastal zones sustainably

Directive 2014/89/EU establishes a framework for **maritime spatial planning**. Together with the 2002 EU Recommendation on Integrated Coastal Zone Management, Council Decision 2010/631/EU,⁵⁸ and the ongoing coastal work from the Water Framework Directive there is now a framework for managing **coastal areas**.

Summary

State of implementation of the policy area
<input type="checkbox"/> No progress
<input type="checkbox"/> Limited progress
<input checked="" type="checkbox"/> Some progress
<input type="checkbox"/> Substantial progress
<input type="checkbox"/> Fully implemented

Overall, **some progress** has been made in the actions undertaken to reduce the impact of pressures on marine waters. While marine strategies have been set up by Member States, the limitations identified above means that limited progress has been recorded in some areas. As a result, more needs to be done to achieve good environmental status by 2020 in all Member States and across all MSFD descriptors, while a positive downward trend in overexploitation of fisheries resources has been registered. There is also strong EU engagement in international efforts. However, overfishing persists, especially in some regions, which means that limited progress has been made on this action. Substantial progress has been made on marine litter, in particular thanks to the recent initiatives linked to the circular economy and the international commitments undertaken. The marine strategies by Member States provide for a mixed picture, while the follow-up to the GES Decision is still ongoing. As a result, only some progress has been made on this. Progress in coastal zone management has so far been limited. On Natura 2000, the network of marine protected areas has increased, although is not near completion; this shows that some progress has been made towards fulfilling the actions.

1.4 Land and Soil

Sub-objectives:

- **Land** is managed sustainably in the Union, **soil** is adequately protected and the remediation of contaminated sites is well underway;

Actions:

- Increasing efforts to reduce **soil erosion** and increase **soil organic matter**, to remediate **contaminated sites** and to enhance the **integration of land use** aspects into coordinated decision-making involving all relevant levels of government, supported by the adoption of

⁵⁷ [http://ec.europa.eu/eurostat/statistics-explained/index.php/SDG_14_-_Life_below_water_\(statistical_annex\)](http://ec.europa.eu/eurostat/statistics-explained/index.php/SDG_14_-_Life_below_water_(statistical_annex))

⁵⁸ Council Decision 2010/631/EU adopts the Mediterranean Protocol on Integrated Coastal Zone Management into the EU acquis.

Introduction

Land and soils are critical but finite natural resources, with soil being part of the land surface. Together they provide key ecosystem services such as the production of food, feed, fibre and biomass for renewable energy, carbon sequestration, water purification, flood regulation, the provision of raw and building materials, etc. These resources are coming under increasing pressure in the EU, in particular from agriculture, urbanisation, climate change and industrial activities. A series of processes and threats are degrading the quality of European land and soils: erosion, decline in organic matter, local and diffuse contamination, sealing, compaction, loss of biodiversity, salinization, floods, landslides and desertification. The overall objective of EU soil policy is to address these soil threats in order to prevent further degradation by promoting sustainable land and soil management, to preserve soil functions, and to restore already degraded land and soils.

Current situation

The **soil thematic strategy**, which was adopted in 2006, remains the main overarching soil policy instrument at EU level. It encompasses four pillars of action, :(i) the integration of soil protection in national and EU policies, (ii) closing knowledge gaps by stimulating and funding research, (iii) increasing public awareness, and (iv) the development of EU soil legislation. Many actions have been taken under the first three (non-legislative) pillars at EU and Member State level.

Under Pillar 1, efforts have been made to integrate soil protection considerations into other EU policy domains (e.g. agriculture, water, waste, biodiversity, industrial emissions, environmental liability, regional development, research, etc.). For instance:

- The proposal for revision of the Fertilisers Regulation,⁵⁹ published in March 2016 covers a wide range of fertilising products (including those manufactured from secondary raw materials).It sets limits for heavy metals and contaminants in fertilising products, which will have a favourable effect on the condition of agricultural soils. The progressive limits on cadmium proposed by the Commission are particularly important for protecting soil and human and environmental health.
- The Minamata Convention (Article 12)⁶⁰ and the new Mercury Regulation⁶¹ provide for an exchange of information with Member States on the identification, inventory and assessment of sites contaminated with mercury or mercury-compounds.
- The Regulation on the inclusion of greenhouse gas emissions and removals from land use, land use change and forestry (LULUCF Regulation)⁶² defines soil organic carbon as a carbon pool. Member States have to monitor and include changes in it in their accounts. (See Section 2.1 on low carbon economy for more discussion of LULUCF.)

⁵⁹ COM(2016) 157 .

⁶⁰ <http://www.mercuryconvention.org/Portals/11/documents/Booklets/COP1%20version/Minamata-Convention-booklet-eng-full.pdf>

⁶¹ Regulation (EU) 2017/852 of the European Parliament and of the Council of 17 May 2017 on mercury, and repealing Regulation (EC) No 1102/2008 (OJ L 137, 24.5.2017.), p. 1-21.

⁶² Regulation (EU) 2018/841 of the European Parliament and of the Council of 30 May on the inclusion of greenhouse gas emissions and removals from land use, land use change and forestry in the 2030 climate and energy framework, and amending Regulation (EU) No 525/2013 and Decision No 529/2013/EU.

- The Renewable Energy Directive⁶³ promotes the cultivation of biomass for biofuels and bio liquids from restored degraded land.
- The waste package⁶⁴ under the circular economy strategy establishes binding targets for the reuse and recycling of municipal waste. It also reduces landfilling which will have a positive effect on soil quality.
- The common agricultural policy (CAP) can also help to prevent and mitigate soil degradation processes. Agri-environmental measures encourage farmers to protect and improve the quality of their farmland by paying them to provide environmental services. These incentives help build soil organic matter, increase soil biodiversity and reduce erosion, contamination and compaction. Under cross-compliance, the obligation to keep agricultural land in good agricultural and environmental condition, improves soil quality. The new proposal for the CAP post-2020⁶⁵ aims to strengthen soil protection by introducing conditionality measures on soil erosion and on soil organic matter as well as additional measures on cover crops and crop rotation, and provisions on the sustainable use of pesticides. However, the impact will depend on how the Member States decide to implement the measures in their national plans.

Under Pillar 2, projects that deal with land and soil protection have been funded by Horizon 2020,⁶⁶ LIFE,⁶⁷ regional policy and the Interreg programmes for territorial cooperation.⁶⁸ Soil data collection and soil monitoring have been improved at national and EU level, in particular thanks to the Land Use/Cover Area frame Survey (LUCAS), which survey which analyses the physico-chemical properties of soil samples from 27,000 locations across the EU. The resulting soil data and scientific information are available from the European Soil Data Centre (ESDAC) managed by the Joint Research Centre.⁶⁹

Under Pillar 3, the activities to increase awareness on soil culminated in more than 400 events being held at EU and national level during the International Year of Soils.⁷⁰ The Commission also actively promoted soil protection and sustainable soil and land management at international level in particular at the level of the UN Food and Agriculture Organisation and its Global Soil Partnership, the UN Convention to Combat Desertification (UNCCD), the Convention on Biodiversity (CBD), the UN Framework Convention on Climate Change (UNFCCC) and the 2030 Agenda for Sustainable Development. Soil and land are explicitly mentioned in four Sustainable Development Goals (SDGs) although many other SDGs depend on sustainable soil and land management. SDG target 15.3 is particularly important because it requires “countries to combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land-degradation-neutral world by 2030” .

⁶³ Directive (EU) 2015/1513 of the European Parliament and of the Council of 9 September 2015 amending Directive 98/70/EC relating to the quality of petrol and diesel fuels and amending Directive 2009/28/EC on the promotion of the use of energy from renewable sources, OJ L 239, 15.9.2015, p. 1-29.

⁶⁴ http://ec.europa.eu/environment/circular-economy/index_en.htm.

⁶⁵ COM(2018) 392 final – 2018/0216 (COD).

⁶⁶ e.g. LANDMARK, ISQAPER, INSPIRATION, GroundCleaner, BRODISE, POSIDON, and the European Joint Programme on Agricultural Soil Management.

⁶⁷ e.g. BIOREST, VITISOM, AGROWETLANDS II, SOIL4WINE, DESERT-ADAPT, No_Waste, The Green Link, Peat Restore, SOS4LIFE.

⁶⁸ e.g. DriDanube, Tania, Cocoon, Precarious Soil.

⁶⁹ <https://esdac.jrc.ec.europa.eu/>

⁷⁰ http://ec.europa.eu/environment/soil/iys2015/index_en.htm

The Urban Agenda⁷¹ for the EU represents a bottom up initiative, with 12 partnerships between Member States, cities, the Commission and other stakeholders developing action plans on better EU regulation, funding and knowledge for sustainable urban development. The partnership ‘sustainable land use and nature based solutions’ uses sustainable land use to address soil and has finalised its action plan on how to promote sustainable land use in the EU. This includes raising awareness about the detrimental effects of urban sprawl.

Under Pillar 4, the Commission launched a proposal for a Soil Framework Directive⁷² in 2006. It was endorsed by the European Parliament, but was blocked in the Council. After 8 years of political discussions, the Commission withdrew its proposal in May 2014., while confirming its commitment to the objective of protecting land and soil and the willingness to examine options on how to best achieve this⁷³

In 2015, the Commission set up an EU expert group on soil protection composed of experts nominated by the Member State.⁷⁴ Its mandate is ‘to reflect with Member States on how soil quality issues could be addressed using a targeted and proportionate risk-based approach within a binding legal framework’.

With the help of the EU soil expert group, the Commission published an inventory and gap analysis of soil protection policy instruments at EU and national level⁷⁵ in February 2017. This study analysed to what extent soil protection is integrated in national and EU policies. The report concluded that common strategic coordination and vision is needed with clear goals and targets, but is still lacking.

Are we on track to meet the 7th EAP's objectives and sub-objectives?

The 7th EAP sets out a number of soil and land related objectives, but does not provide any quantitative targets. The qualitative targets refer to soil erosion, soil organic matter, soil contamination, and land take which are the main soil and land degradation processes in the EU.

At EU level, there is no commonly agreed estimate of overall soil and land degradation. A consensus exists that EU soils are exposed to various threats with a lot of regional and local variability. The European environment state and outlook report 2015⁷⁶ concludes that: the ability of soil to deliver ecosystem services in terms of food production, as biodiversity pools and as a regulator of gasses, water and nutrients is under increasing pressure; and, observed rates of soil sealing, erosion, contamination and decline in organic matter all reduce soil capability.

Figure 5: Land use and soil trend and outlook

⁷¹ <https://ec.europa.eu/futurium/en/urban-agenda-eu/what-urban-agenda-eu>

⁷² COM(2006) 232.

⁷³ Withdrawal of obsolete Commission proposals, (2014/C 153/03), OJ C 153, 21.5.2014, p. 3-7, with a corrigendum in OJ C 163, 28.5.2014, p. 15-15.

⁷⁴ <http://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetail&groupID=3336>

⁷⁵ http://ec.europa.eu/environment/soil/pdf/Soil_inventory_report.pdf

⁷⁶ <https://www.eea.europa.eu/soer-2015/synthesis/report/action-download-pdf>

Trends and outlook: Land use and soil functions	
	<i>5-10 year trends:</i> Loss of soil functions due to (urban) land take and land degradation (e.g. as a consequence of soil erosion or land intensification) is continuing; nearly a third of Europe's landscape is highly fragmented.
	<i>20+ year outlook:</i> Land use and management, and their associated environmental and socio-economic drivers, are not expected to change favourably.
No target	<i>Progress to policy targets:</i> The only non-binding explicit objective is to arrive at 'no net land take by 2050', and to restore at least 15% of degraded ecosystems by 2020.

EU level data are mainly derived from LUCAS (field survey every 3 years), Copernicus and CORINE Land Cover (earth observation, every 3 years). The results of LUCAS 2015 have not yet been published, so the lack of time series makes it difficult to evaluate progress. There are also data available at national level (at least in some Member States) although these are not harmonised and comparable. In the absence of a common definition for soil quality and soil degradation, relative data should be preferred instead of absolute values.

- For **land take and soil sealing**, land take at EU level decreased from 930 km² annually between 2000 and 2006 to 845 km² annually between 2006 and 2012. However, this is still too high and well above the average annual land take rate of 800 km², which is the path described in the Roadmap To A Resource Efficient Europe⁷⁷ to meet the no net land take in 2050. The current trend indicates that the target of 'no net land take' will not be achieved by 2050.
- **Soil erosion by water and wind** is estimated to affect 22% of European land (Jones et al. 2012). More than half of agricultural land in the EU has average erosion levels higher than what can be naturally replaced (representing over one tonne of lost soil per year and per hectare), meaning that present management techniques in these areas are unsustainable.
- LUCAS measures **top-soil organic carbon content** in a harmonised way across Europe. Around 45 % of the mineral soils in Europe have low or very low organic carbon content (0-2%), and 45 % have a medium content (2-6 %) ⁷⁸. Low levels are found in particular in southern Europe where 74% of land has less than 2 % of organic carbon in topsoil (0-30 cm) ⁷⁹. The degradation of peatlands is a particular area of concern: the conversion and drainage of peatlands currently amounts to 20-40 tonnes of CO₂ per hectare per year. Soils under grassland and forests are a carbon sink (estimated at up to 80 million tonnes of carbon per year ^{80,81}), whereas the majority of EU arable soils are suffering net carbon losses each year (estimated at between 10-40 million tonnes of carbon per year) and therefore contribute to climate change.
- **Local soil contamination:** 2.5 million sites in Europe are potentially contaminated (based on risk activities), of which 350 000 are expected to require remediation.
- There is a lack of comprehensive information on **diffuse soil pollution** (e.g. from pesticides, fertilisers, emerging pollutants, heavy metals, etc.) at European level except for heavy metals (LUCAS and GEMAS data available). The presence of other pollutants is still largely unknown.

⁷⁷ http://ec.europa.eu/environment/resource_efficiency/about/roadmap/index_en.htm

⁷⁸ JRC (2012), "State of soil in Europe", p. 10:

http://eusoiils.jrc.ec.europa.eu/ESDB_Archive/eusoiils_docs/other/EUR25186.pdf

⁷⁹ https://www.eea.europa.eu/data-and-maps/indicators/soil-organic-carbon-1/assessment/#_edn2

⁸⁰ EEA (2012) Climate change, impacts and vulnerability in Europe: an indicator-based report.

⁸¹ Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES)

- Around 25 % of irrigated agricultural land in the Mediterranean region is estimated to be affected by salt with an impact on agricultural potential. The issue of **salinisation** is only partly addressed, e.g. by some rural development plans.
- In southern, central and eastern Europe, 8% of the territory currently shows a very high or high sensitivity for **desertification** corresponding to around 14 million ha, and more than 40 million ha if moderate sensitivities are included.⁸² Large parts of southern Europe are likely to become desert by 2050 as a result of climate change and inappropriate agronomic practices if strong action is not taken.
- 32-36 % of European subsoils have high or very high susceptibility to **compaction** (Jones et al. 2012)⁸³.
- There were 384 **flood** disasters worldwide in 2016, compared to 58 in 1980. Flood disasters have more than doubled across Europe in 35 years according to new research by Munich Re, the world's largest reinsurance company. The firm's latest data shows that there were 30 flood events that required insurance payouts in Europe last year - up from just 12 in 1980 - and the trend is set to accelerate as rising temperatures drive up atmospheric moisture levels.
- The combination of various soil degradation processes results in a **loss of soil biodiversity**. Due to increasing urbanisation, land abandonment, and intensification of agricultural production, soil functions and the delivery of ecosystem services continue to be undermined.

Summary

State of implementation of the policy area
<input type="checkbox"/> No progress
<input type="checkbox"/> Limited progress
<input checked="" type="checkbox"/> Some progress
<input type="checkbox"/> Substantial progress
<input type="checkbox"/> Fully implemented

The overall assessment is that there is some progress towards achieving the objectives on land management and soil set out in the 7th EAP.

Land and soil degradation is a complex process triggered by a complicated mix of drivers. It evolves slowly and the impact of measures often only becomes visible after many years. Due to the complexity and often hidden aspects of the problem, it is hard to raise awareness. Without quantitative and binding targets it is difficult to evaluate the progress. Following the withdrawal of the Soil Framework Directive proposal in 2014, the Commission set up a soil expert group with the mandate to address the 7th EAP commitments, in particular to reflect on further EU soil policy developments. The inventory of soil-related policies in the EU highlighted a number of gaps.

⁸² State of Soils in Europe, p. 28:
http://eusoils.jrc.ec.europa.eu/ESDB_Archive/eusoils_docs/other/EUR25186.pdf

⁸³ State of Soils in Europe, p. 18:
http://eusoils.jrc.ec.europa.eu/ESDB_Archive/eusoils_docs/other/EUR25186.pdf

At EU level, land and soil degradation are mainly addressed by integrating protection and prevention measures into other policy frameworks. There is no comprehensive instrument to protect soil in an integrated way. Soil protection is mostly an outcome derived from protecting other natural resources and from addressing other environmental threats or targets. There is still a lack of common definitions, targets, priorities, and harmonised monitoring methodologies. Some progress has been made on erosion and the remediation of contaminated sites., However, land take remains an issue making it difficult to meet the no net land take target by 2050. The evolution of organic carbon in European soils is unclear and gives mixed views. The degradation of European soils leads to costs and negative impacts for society and the economy. The recent assessment report on land degradation and restoration by Intergovernmental Science-policy Platform on Biodiversity and Ecosystem Services (IPBES) indicates that the costs of restoration are 10 times higher than prevention costs.

Nevertheless, some progress has been made: some Member States have strengthened their national soil policy frameworks. At international level, the momentum for soil protection has increased since the SDGs were adopted in particular target 15.3 on land degradation neutrality. The Rio Conventions better address land and soil degradation which are cross-cutting issues: the Convention on Biological Diversity recognises the crucial role of soil biodiversity and land degradation, the United Nations Framework Convention on Climate Change (UNFCCC) now takes soil carbon stocks fully into account, and the United Nations Convention to Combat Desertification (UNCCD) has made efforts to define, fund and stimulate the achievement of land degradation neutrality.

1.5 Forests

Sub-objectives:

- The loss of biodiversity and the degradation of ecosystem services, including pollination, are halted, ecosystems and their services are maintained and at least 15% of degraded ecosystems have been restored.
- Forest management is sustainable, and forests, their biodiversity and the services they provide are protected and, as far as feasible, enhanced and the resilience of forests to climate change, fires, storms, pests and diseases is improved.

Actions:

- Developing and implementing a renewed Union Forest Strategy that addresses the multiple demands on, and benefits of, forests and contributes to a more strategic approach to protecting and enhancing forests, including through sustainable forest management;
- Stepping up the implementation of the EU Biodiversity Strategy without delay, in order to meet its targets (including target 3b on forests)
- Agreeing and implementing an EU Strategy on adaptation to climate change, including the mainstreaming of climate change adaptation into key Union policy initiatives and sectors

Introduction

Forests and other trees are a precious natural resource and a key part of Europe's natural capital. They represent some of the most biodiversity-rich areas in Europe. The capture and storage of carbon and ecosystem resilience help mitigate and adapt to climate change; they also provide wood, other fibres and products, prevent soil erosion, clean water and protect from floods and landslides, and support leisure and recreation. However, existing and new pressures including increasing demand for wood and climate change impacts affect forests' resilience and ability to provide ecosystem and other services. There is therefore a need to strike the right balance and to preserve and manage forest ecosystems and forested landscapes in an appropriate way, if we want them to remain in good shape and to provide

their many benefits not only to us but also to future generations. EU policies in various fields must contribute to these objectives including environmental, climate, rural development, research, industry and energy policies.

Current situation

According to the EU forest strategy, sustainable forest management means: *‘using forests and forest land in a way, and at a rate, that maintains their biodiversity, productivity, regeneration capacity, vitality and their potential to fulfil, now and in the future, relevant ecological, economic and social functions, at local, national, and global levels, and that does not cause damage to other ecosystems’.*

Key EU legislation in support of these objectives includes

- the Birds and Habitats Directives⁸⁴, which aims to protect forest habitats and species, notably through the Natura 2000 network (more than 20% of EU forests are part of Natura 2000);
- the EU Timber Regulation⁸⁵, which aims to ensure that only legally harvested timber can enter the market;
- the Rural Development Regulation⁸⁶, which offers regional authorities from Member States the opportunity to fund specific forest measures in their territory that support the objectives of the 7th EAP, tapping into the EU’s rural development funds;
- The LULUCF regulation⁸⁷, which includes greenhouse gas emissions and removals from forestry and other land-use sectors in the EU’s mitigation efforts, and incentivising more climate-friendly land use for instance by supporting forest owners and managers with greater visibility for the climate benefits of certain harvested wood products; and
- Recast of the Renewable Energy Directive⁸⁸ which strengthens the EU’s sustainability criteria for bio-energy in order to minimise the risk of using forest biomass derived from unsustainable production

In addition to the EU forest strategy, the EU biodiversity strategy plays an important role. It includes a specific objective on forests (objective 3b) and lists a number of specific actions and requirements in support of it.

Key aspects of the ongoing work on forest information include the development of a future ‘Forest Information System for Europe’ and the so-called forest pilot of the ‘Mapping and Assessment of Ecosystem Services’ initiative.

The 2016 ‘Beyond Wood’ conference also highlighted the tremendous value of forest ecosystem services other than wood production.

Are we on track to meet the 7th EAP's objectives and sub-objectives?

The Progress in the implementation of the EU forest strategy’s report published on 7 December 2018 concludes that the strategy has set clear aims and has successfully coordinated efforts to achieve them⁸⁹.

⁸⁴ http://ec.europa.eu/environment/nature/legislation/index_en.htm

⁸⁵ Regulation (EU) No 995/2010

⁸⁶ Regulation (EU) No 1305/2013

⁸⁷ Regulation (EU) 2018/841

⁸⁸ Directive (Eu) 2018/2001

The use and management of forest resources varies greatly across Europe and depends on factors such as local social ownership and economic situations, history, traditions and government policies both within and outside the forest ecosystems, as well as available markets for wood and non-wood forest products and services. Europe's forests thus reflect this variety of economic, social and environmental conditions in the region.

Forest area in Europe has increased by 17 million hectares since 1990. This is the result of afforestation (e.g. planting of trees on land that was not previously forested) and the natural expansion of forests such as onto abandoned land. Around 3 % of forest land area is primary forest.

The 2017 Commission report on forest fires in Europe shows 'a clear trend towards longer fire seasons compared to previous years, with fires now occurring well beyond the dry and hot summer months (July-September)'. The problem is the catastrophic, large-scale and mega fires that are occurring more frequently (although the longer time series reveals a long-term downward trend in the number of fires, size and total area burnt). In southern Europe, wildfires destroyed over 1.2 million hectares of forest and land in Europe in 2017 – more than the total surface area of Cyprus. They also claimed the lives of 127 civilians and fire fighters and caused economic damage estimated at almost EUR 10 billion.

Atmospheric depositions such as nitrogen put additional pressure on forests. Forest soils in parts of central Europe, an area once awash with inorganic nitrogen deposition, are now showing the first signs of recovery. However, large parts of Europe still suffer from inorganic nitrogen inputs above critical levels, which negatively affect forest ecosystems. Current ozone levels are also high enough to negatively affect vegetation.

Forests play an important role in nature and biodiversity conservation. In Europe, protected forest areas account for more than 45 % of the Natura 2000 protected areas, 31.3 % of the national designated protected areas, and around 12 % of the total forest area. The Commission, together with key stakeholders, has developed a 'Natura 2000 and Forests' guidance. Overall, the implementation of the Birds and Habitats Directives and the practical management of the Natura 2000 network in forests is still work in progress and remains a major challenge for national authorities and target groups. According to the Natura 2000 monitoring process, the fitness check of the Directives, and the action plan for nature, people and the economy, the conservation status of forest habitats is analogous to the average situation of EU habitats, with around 80 % of forest habitat assessments 'unfavourable'.

There are several causes for the decline in biodiversity, including both habitat alteration in the case of inappropriate forest management and climate change. Both factors affect biodiversity separately and in combination.

Illegal logging is still a major problem in parts of Europe. For instance, the Carpathians Mountains contain a significant proportion of the few old growth forests that remain in Europe. In the EU, many of them are protected as part of the Natura 2000 network; in enlargement and neighbourhood countries, they are offered protection as part of the Emerald Network⁹⁰. In this context, the Commission is concerned about illegal logging of such extremely precious forests as well as forests located within Natura 2000 protected areas. In recent years, efforts to better monitor and trace timber across the supply chain have been

⁸⁹ COM(2018) 811

⁹⁰ <https://www.coe.int/en/web/bern-convention/emerald-network>

made. Implementation on the ground and the enforcement of the legal framework are still though a challenge.

Summary

State of implementation of the policy area
<input type="checkbox"/> No progress
<input type="checkbox"/> Limited progress
<input checked="" type="checkbox"/> Some progress
<input type="checkbox"/> Substantial progress
<input type="checkbox"/> Fully implemented

The previous sections detail a number of important aspects that suggest that progress has been made on the specific objective of the 7th EAP for forests (‘forest management is sustainable, and forests, their biodiversity and the services they provide are protected and, as far as feasible, enhanced and the resilience of forests to climate change, fires, storms, pests and diseases is improved’).

While Europe's forest area is relatively stable at present, the forests are subject to many pressures, including pollution, built infrastructure, tourism, human activities and climate change impacts such as storms and pests. The latest data from the European Environment Agency on forest biodiversity show that only 26 % of forest species and 15 % of forest habitats were found to have favourable conservation status. On the other hand, policy progress has been made, with the EU Forest Strategy adopted in 2013. It addresses the demands on forests and contributes to a more strategic approach to, including through sustainable forest management. The demand for forest products and ecosystem services, including removing carbon dioxide from the atmosphere and storing, is projected to increase in the future. At the same time, forest ecosystems are increasingly vulnerable to climate change⁹¹.

1.6 Nutrient cycles

Sub-objectives:

- The nutrient cycle (nitrogen and phosphorus) is managed in a more sustainable and resource-efficient way;

Actions:

- Taking further steps to reduce emissions of nitrogen and phosphorus, including those from urban and industrial wastewater and from fertiliser use, inter alia through better source control, and the recovery of waste phosphorus;

Introduction

Nutrients (nitrogen and phosphorus) are essential for life and an important natural resource. A large proportion of nutrient management relates to the use of fertilisers in agriculture. Furthermore, releases into the environment also result from other pollution sources, such as combustion processes and waste water treatment (nitrogen and phosphorous). Despite

⁹¹ European Environment Agency “Better information needed on Europe’s forests”, 2018

improvements in emission reduction and in management practices, these resources have to be managed more efficiently and a circular economy should be set up. At the same time, the environment should be protected from adverse effects.

Societal costs are very high due to an excess of nutrients and loss of air and water quality, which is linked to impacts on ecosystems and human health. The 'European Nitrogen Assessment'⁹² concluded that the overall environmental costs of all reactive nitrogen losses in Europe are estimated at EUR 70-320 billion per year, a lot higher than the costs of reducing pollution at source.

Current situation

There are different environmental policy instruments dealing with nutrients in the EU:

Nitrates Directive

This aims to protect water quality across the EU by preventing nitrates from agricultural sources from polluting ground and surface waters and by promoting the use of good farming practices. To achieve this objective, Member States must monitor of water quality, designate nitrate vulnerable zones and implement codes of good agricultural practices (voluntary) and action programmes (mandatory in nitrate vulnerable zones or, if the Member State chooses not to designate these, in its whole territory).

Urban Waste Water Treatment Directive: This requires the removal of nitrogen and/or phosphorus when treated urban wastewater is being discharged into so-called sensitive areas (Article 5). Compliance is at 84.5% for more stringent treatment than secondary treatment, which means removing nitrogen and/or phosphorus, when required.

The 7th EAP calls for a specific action on the sustainability of the nutrient cycle, namely that *the nutrient cycle (nitrogen and phosphorus) to be managed in a more sustainable and resource efficient way*. This requires, in particular, *taking further steps to reduce emissions of nitrogen and phosphorus, including those from urban and industrial wastewater and from fertiliser use, inter alia, through better source control, and the recovery of waste phosphorus*.

Projects linked to different aspects of nutrient cycles include projects under the LIFE programme and HORIZON 2020 as well as pilot projects funded by the European Parliament

Are we on track to meet the 7th EAP's objectives and sub-objectives?

Overall, the past trend in agricultural nitrogen balance improved from 2000 to 2015, although it has levelled off since 2010.⁹³ The gross phosphorus balance for the EU decreased from an estimated average of 3.9 kg per hectare per year in 2004-2006 to 1.2 kg per hectare per year in 2013-2015.⁹⁴ Despite these improvements, further efforts are needed to manage the nutrient cycle and reduce nutrient losses in the EU.

⁹² <http://www.nine-esf.org/node/360/ENA-Book.html>

⁹³ EEA Annual Indicator Report Series (AIRS) In support to the monitoring of the 7th Environment Action Programme - Agricultural land: nitrogen balance: <https://www.eea.europa.eu/airs/2018/natural-capital/agricultural-land-nitrogen-balance>

⁹⁴ Eurostat Agri-environmental indicator - risk of pollution by phosphorus: http://ec.europa.eu/eurostat/statistics-explained/index.php?title=Agri-environmental_indicator_-_risk_of_pollution_by_phosphorus.

Nitrates Directive

On nitrates from agricultural sources, the latest available data, indicate that nitrate concentrations decreased in both surface and groundwater in 2012-2015. However, agricultural pressures on water quality are still problematic and are often due to the intensive use of fertilisers and manure. This leads to high nutrient surpluses that are transferred to ground and surface water. For this reason, despite positive overall trends, nitrate pollution and eutrophication hotspots continue to cause problems in many Member States.

Urban Waste Water Treatment Directive

Overall, steady progress has been made on compliance with the Urban Waste Water Treatment Directive over the years. However, it has been slow and some Member States with obligations that expired many years ago are still not compliant. This Directive is subject to an ongoing evaluation.

Air quality (ammonia)

While emissions of ammonia have been decreasing in the last few decades, the European institutions have deemed these efforts to be insufficient. Revised Directive (EU) 2016/2284 of the European Parliament and of the Council of 14 December 2016 on the reduction of national emissions of certain atmospheric pollutants aims to lessen the health effects caused by air pollution, as well as reduce negative impacts on environment/ecosystems. One of the air pollutants addressed is ammonia, for which all Member States have reduced their total emissions. To help Member States, Annex III of the Directive includes a list of proven and affordable measures to reduce ammonia emissions.

Summary

State of implementation of the policy area
<input type="checkbox"/> No progress
<input type="checkbox"/> Limited progress
<input checked="" type="checkbox"/> Some progress
<input type="checkbox"/> Substantial progress
<input type="checkbox"/> Fully implemented

The 7th EAP called for the nutrient cycle of nitrogen and phosphorus to be better managed. Nitrates concentrations have decreased in both surface and groundwater in the 2012-2015 and sustainable agricultural practices on nutrient management have become more widespread. Overall, the quality of action programmes has improved, with tightened measures and improved methodologies to achieve balanced fertilisation.

However, some challenges still exist, and appropriate and additional measures by Member States are still needed to achieve the 7th EAP objectives. For instance, in some Member States where the action programme is applied throughout the whole territory, the measures need to be suitably adapted to different regional pressures and hotspots. Clear environmental objectives and targets should be coupled with effective advice and support to farmers in order to select and implement the right measures, stricter enforcement mechanisms and accurate nutrient management planning. It is also important to properly take into account all nutrient inputs from different sources, and use effective manure management to prevent nutrient losses to water and air.

The Urban Waste Water Treatment Directive (UWWTD) is a crucial part of water legislation as it ensures that bathing waters and catchment areas for drinking water are not contaminated by the discharges of untreated waste water. With urban waste water treatment being a basic measure under the Water Framework Directive, the UWWTD is also essential to achieving the Water Framework Directive's objectives. The UWWTD tackles different kinds of pollution, not only organic pollution, but also nutrient pollution. Agglomerations above 10 000 p.e. that discharge waste waters in sensitive areas must comply with requirements for treating nitrogen and phosphorus. Together with the Nitrates Directive, the UWWTD aims to reduce the release of unnecessary nutrients into the environment.

As ammonia emissions to the air have shown a slightly upward trend in recent years, Member States have to step up their efforts. The Directive on the reduction of national emissions of certain atmospheric pollutants (the NEC Directive) as well as supporting action such as the EU Clean Air Forum and Clean Air Dialogues should lead to further action.

1.7 Communication and awareness raising on environment policy

Sub-objectives:

Not relevant

Actions:

- **Enhancing Union public information provision, awareness and education on environment policy.**

Introduction

The communication actions undertaken during the 7th EAP implementation period reflect the Commission's priorities and highlight the EU added value in developing environmental policies such as resource efficiency, a low-carbon circular economy, protecting natural capital including biodiversity, water and air. As illustrated by the non-exhaustive examples below, we have achieved substantial progress in implementing the action 'enhancing Union public information provision, awareness and education on environment policy'.

Current situation

The social media accounts (Facebook and Twitter) managed by DG Environment to disseminate information and raise awareness of environmental policies have steadily grown with more than 53 000 followers on Twitter and 253 000 followers on Facebook (October 2018).

Every year, the EU Green Week continues to gather a significant number of participants engaged in environmental sectors and policies. The average number of participants per day has been stable, with around 500 daily participants daily since 2016. EU Green Week is an important forum for reaching out to EU citizens about EU environmental policies. Evidence of this is the survey of participants involved in the EU Green Week 2018 partner events, e.g. events outside Brussels not organised by the Commission but in partnership with EU Green Week. On the question 'EU Green Week 2018 improved my understanding of what the EU is doing in the field of environmental policy', 93 % tend to agree, or fully agree. On the question 'What difference, if any, does EU Green Week 2018 make to your feelings about the EU?', 77 % feel slightly positive, or much more positive.

From January 2014 to October 2018, 752 482 copies of publications about environmental policies (available in 24 languages) were disseminated mainly to the Representations of the EU in Member States, Europe Direct Info Centres and through spontaneous requests. One of the most requested publications was ‘52 Steps towards a Greener City’ with 95 198 copies printed; ‘the flight of the Cranes (publication for children) was printed 80 997 times. From January to October 2018, user-friendly ‘info sheets’ were produced to inform the public about EU environmental policies e.g. the info sheet on water (17,864 prints); info sheet on Green products and Services (18,078 prints); info sheet on Clean Air (15,304 prints).

In 2014, the ‘Generation Awake!’ awareness raising campaign on resource efficiency focused on waste management, using online and offline communication tools (web, social media, videos, competitions, events, press clippings and advertisements). The independent evaluation of the campaign concluded that the content of the campaign was clear and provided a rich source of information. Evidence also indicates that it raised awareness about resource efficiency and encouraged behavioural changes among its audiences, and was clearly recognised as an EU campaign.

The dedicated PR campaign that focuses on eight Member States at the beginning of 2016 to promote the circular economy package led to an aggregated reach of 375.5 million readers for results published in print, online media and by press agencies. It also generated an aggregated radio audience of around 2.2 million listeners for the coverage broadcast on radio stations in these Member States.

The Natura 2000 Award was launched in 2014 (every 2 years), with a clear increase over the years in outreach on social media. The conversations generated on social media about the award increased fivefold; together with a significant increase in conversations about the Natura 2000 network in general. The Natura Day (21 May) was launched in 2017. For its second edition in 2018, 20 Member States organised 111 events.

The ‘Ready to change’ awareness-raising campaign promoting the Commission’s single-use plastics initiative was implemented in summer 2018 in seven Member States. Some 600 articles were generated as part of the campaign in these Member States, with only neutral and positive (over 20%) clippings tracked. The online campaign resulted in some 20 million potential social media users, 10.3 million views of animations and over 400,000 visits to the website. The single-use plastics campaign followed activities to promote the plastics strategy, implemented as soon as the strategy was adopted in January 2018. Social media entries with the #PlasticsStrategy hashtag potentially reached over 150 million users online between January and October 2018.

Are we on track to meet the 7th EAP's objectives and sub-objectives?

As outlined above, a significant number of initiatives have been undertaken to complete this action (, and **substantial progress** has been achieved.

Summary

State of implementation of the policy area
<input type="checkbox"/> No progress
<input type="checkbox"/> Limited progress
<input type="checkbox"/> Some progress
<input checked="" type="checkbox"/> Substantial progress

Fully implemented

In addition to the daily work with media/press to provide information to journalists on environmental policies, the social media presence of DG Environment has grown steadily in recent years.

Specific awareness raising campaigns have been implemented; the awards launched by DG Environment are gathering interest and the annual EU Green Week continues to attract a significant number of participants.

The significant number of publications on environmental policies disseminated offline and online also reflects an improvement in the provision of information to the public, education and awareness raising.

2 PRIORITY OBJECTIVE 2: To turn the Union into a resource-efficient, green, and competitive low-carbon economy

2.1 Low-carbon economy (climate change mitigation)

Sub-objectives:

- The Union has met its **2020 climate and energy targets** and is working towards **reducing by 2050 GHG emissions by 80-95 % compared to 1990 levels**, as part of a global effort to limit the average temperature increase below 2 °C compared to pre-industrial levels, with the agreement of a climate and energy framework for 2030 as a key step in this process;

Actions:

- Fully implementing the **Climate and Energy Package** and urgently agreeing on the Union's 2030 climate and energy policy framework, with due regard for the most recent IPCC assessment report, taking into account the indicative milestones set out in the Low-Carbon Roadmap, as well as developments within the UNFCCC and other relevant processes;

Introduction

The EU has set 2020 climate and energy targets and has agreed on a climate and energy framework for 2030 as key steps in reducing greenhouse gas emissions by 80-95 % by 2050 compared to 1990 levels. This is part of a global effort to limit the average temperature increase to below 2 °C compared to pre-industrial levels.

In light of the 7th EAP's objective to turn the EU into a resource-efficient, greener and more competitive low-carbon economy, the EU has set itself targets for reducing its greenhouse gas emissions progressively up to 2050. These targets are outlined in the **2020 climate and energy package** and the **2030 climate and energy framework**.

The **2020 package** is a set of binding laws to ensure that the EU meets its climate and energy targets for 2020. The package sets three key targets: **20 %** cut in greenhouse gas emissions (from 1990 levels); **20 %** of EU energy from renewables; and **20 %** improvement in energy efficiency. These targets were set by EU leaders in 2007 and transformed into legislation in 2009.

As mentioned in the 7th EAP's set of actions, EU leaders adopted the **2030 climate and energy framework** in October 2014, which sets three key targets for 2030: at least a **40 %**

cut in greenhouse gas emissions (from 1990 levels); at least **27 %** of the EU energy from renewables; and at least a **27 %** improvement in energy efficiency. In 2019, the Commission, the European Parliament and the Council of the European Union reached agreement the “Clean Energy for all Europeans” package. Two targets were agreed upon by 2030: at least 32.5% energy efficiency to be achieved collectively by the EU), and a binding European Union-wide target of at least 32% of renewable energy in gross final energy consumption.

Current situation

In 2017, the EU’s greenhouse gas (GHG) emissions (excluding LULUCF emissions) were 22% below their 1990 levels, and the 2020 target is likely to be exceeded. The 20 % renewable energy target is also expected to be met. Meeting the (20 %) energy efficiency target for 2020 may require additional efforts. The major pieces of legislation (revised Emissions Trading System, Effort Sharing Regulation and LULUCF Regulation) to achieve a reduction of at least 40 % reduction of the EU’s GHG in 2030 were agreed in 2018. An EU-wide renewable energy target of 32 % (of energy consumption) was also agreed, together with an energy efficiency target of 32.5 % for 2030.

In the international context, all 197 parties to the United Nations Framework Convention on Climate Change (UNFCCC) adopted an ambitious universal legally binding framework agreement in 2015. This agreement will apply no later than 2020. Specific EU communications include the 2015 communication “The Paris Protocol – a blueprint for tackling global climate change beyond 2020” (adopted in February 2015), the 2015 EU biennial report on progress towards GHG emissions targets and implementation of climate policies and measures, as required by the UNFCCC (adopted in October 2015), as well as the 2016 communication “The Road from Paris: assessing the implications of the Paris Agreement” (adopted in March 2016).

The EU’s climate and energy framework for 2030 includes (i) integration of the LULUCF sector into the economy-wide accounting framework; (ii) an enhancement to cost-effective emission reductions and low-carbon investments⁹⁵; (iii) a Regulation of the European Parliament and of the Council on binding annual GHG emission reductions by Member States from 2021 to 2030 for a resilient Energy Union and to meet the commitments under the Paris Agreement and amending Regulation No. 525/2013 on a mechanism for monitoring and reporting GHG emissions⁹⁶; and (iv) Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources.

The EU is likely to **surpass the goal of a 20 % reduction in its GHG emissions by 2020** (compared to 1990). In 2016, the EU’s domestic GHG emissions were 22 % lower than in 1990. This reduction may even increase to 26 % by 2020. The share of **renewable energy** was around 17 % in 2016, and is forecast to reach 20 % in 2020. The **energy efficiency** target of 20 % for 2020 is likely to be achieved, although minor additional efforts may be needed. In May 2018, the EU also agreed on a climate and energy framework for 2030. This included a 40 % GHG reduction and an EU-wide renewable target of 32 %. An energy efficiency target of 32.5 % for 2030 was agreed in 2018.

Summary

⁹⁵ COM(2015) 337 .

⁹⁶ COM(2016) 482 .

State of implementation of the policy area
<input type="checkbox"/> No progress
<input type="checkbox"/> Limited progress
<input type="checkbox"/> Some progress
<input type="checkbox"/> Substantial progress
<input checked="" type="checkbox"/> Fully implemented

On the EU's climate and energy targets for 2020, the EU has a binding legal framework in place to reduce its **GHG emissions** by 2020 by 20 %, to meet a 20 % share of renewable energy in final energy consumption and achieve a 20 % reduction as compared to projections in primary and final energy consumption in 2020. The EU is expected to meet its climate and energy targets for 2020. With existing policies (translated into a detailed, coherent legal framework) under the EU 2020 climate and energy package, the EU is expected to reduce its GHG emissions by 20 % in 2020 (compared to 1990). In 2016, the EU's GHG emission levels already equated to a 24 % domestic reduction compared to 1990⁹⁷. According to Member States' own projections (based on existing policies and measures), the EU's GHG emissions will be 26 % lower than in 1990 levels in 2020 and 30 % lower in 2030. The EU has also adopted binding targets to lower GHG emissions by at least 40 % compared to 1990 levels as well as increase renewables to at least 32 % and energy efficiency to at least 32.5 % by 2030.

The share of **renewable energy** (in gross energy consumption) was around 17% in 2016 and is forecast to reach the 20 % target in 2020⁹⁸.

To achieve the **energy efficiency** target of 20 % by 2020, additional efforts may be needed⁹⁹¹⁰⁰. While energy consumption gradually decreased between 2007 and 2014, it increased in 2015.. Energy consumption appears to have increased further in 2016 following another less warm winter while energy consumption in transport was at similar levels as in 2005, due to improvements in energy efficiency of cars, trucks and aircraft, which counterbalanced increased transport activity over this period¹⁰¹.

Member States are making good progress in achieving energy savings. Collective efforts in 2015 were above the linear trajectory for achieving the required savings by 2020. It is expected that the circular economy package will contribute to reductions in GHG emissions, e.g. through the Landfill Directive. Likewise, the EU plastics strategy and the single use

⁹⁷EEA (2017) Trends and projections in Europe 2017 – tracking progress towards in Europe's climate and energy targets (no 17/2017) and EEA(2018) Annual European Union greenhouse gas inventory 1990-2016 and inventory report 2018).

⁹⁸<https://ec.europa.eu/eurostat/web/energy/data/shares>

⁹⁹COM(2017) 57

¹⁰⁰<https://ec.europa.eu/energy/en/topics/renewable-energy/progress-reports> and COM(687) final, “2017 assessment of the progress made by Member States towards the national energy efficiency targets for 2020 and towards the implementation of the Energy Efficiency Directive as required by Article 24(3) of the Energy Efficiency Directive 2012/27/EU.

¹⁰¹<https://ec.europa.eu/energy/en/topics/renewable-energy/progress-reports> and COM(687)final, “2017 assessment of the progress made by Member States towards the national energy efficiency targets for 2020 and towards the implementation of the Energy Efficiency Directive as required by Article 24(3) of the energy Efficiency Directive 2012/27/EU” and Eurostat (Statistical Pocketbook EU transport in figures 2018, p.119)

plastics initiative are also expected to reduce GHG emissions. While the national energy efficiency targets are still consistent with the EU level of ambition for final energy consumption in 2020, there is a gap in primary energy consumption.

The EU is also working towards reducing its GHG emissions by 2050 as part of a global effort (enshrined in the Paris Agreement) to limit the average temperature increase to below 2°C compared to pre-industrial levels. The EU also agreed on the climate and energy framework for 2030, which was adopted by EU leaders in October 2014 and amended in June 2018. It builds on the 2020 climate and energy package.¹⁰² It sets three key targets for 2030:

- 40% cut in **greenhouse gas emissions** (from 1990 levels)
- 32% share for **renewable energy**
- 32.5% improvement in **energy efficiency**

The Commission proposed a climate and energy framework for 2030 to achieve a 40 % reduction in GHG emissions in 2030 compared to 1990. A reduction of at least 40 % in GHG emissions is consistent with the long-term pathway and the indicative milestones set out in the roadmap for a low-carbon economy. The 40 % target reflects the most recent (5th) Intergovernmental Panel on Climate Change (IPCC) assessment report (i.e. the required reductions for industrialised countries as a group to meet a 2 °C target) as well as developments within the UNFCCC and other relevant processes. The climate and energy framework for 2030 has three pillars addressing greenhouse gas emissions. The first is a piece of legislation that revises the EU Emission Trading System (EU ETS). This would reduce EUETS emissions by 43 % in 2030 compared to 2005. To this end, the overall number of emission allowances will decline at an annual rate of 2.2 % from 2021 onwards, compared to 1.74 % at present. This amounts to an additional emissions reduction in the sectors covered by the ETS of some 556 million tonnes over the decade.

The second part is the (Effort Sharing) Regulation to reduce emissions in the sectors outside the ETS by 30 % in 2030 compared to 2005¹⁰³. The ETS revision and Effort Sharing Regulation together would ensure a reduction of at least 40 % in the EU's GHG emissions in 2030 compared to 1990. A regulation for the (net) emissions resulting from land use, land use change and forestry was adopted as part of the framework. In May 2018, a final agreement was reached on all three pieces of legislation.

EU ETS enables the participating companies to meet the ETS reduction in a cost-effective way. The Effort Sharing Regulation also has built in flexibility as it allows Member States to transfer emission reductions from other Member States to meet national targets for the sectors not covered by the ETS for 2030. It also allows the banking of early reductions to meet future targets. Furthermore, it allows for the (limited) use of ETS allowances.

In June 2018, political agreement was reached on a 32 % target for renewable energy and a 32.5% target for energy efficiency by 2030. The greenhouse gas and renewable targets for 2020 are expected to be met. Meeting the energy efficiency target for 2020 may require additional efforts. Evaluations (impact assessments) have been carried out as part of the preparation of the ETS (revision), the Effort Sharing Regulation and the LULUCF proposals as well as the Renewable Energy and Energy Efficiency Directives.

¹⁰² https://ec.europa.eu/clima/policies/strategies/2020_en

¹⁰³ COM(2016) 482.

2.2 Sustainable production and consumption

Sub-objectives:

- The overall environmental impact of all major sectors of the Union economy is significantly reduced, **resource efficiency** has increased, and benchmarking and measurement methodologies are in place. Market and policy incentives that foster business investments in resource efficiency are in place, while **green growth** is stimulated through measures to promote Best Available Techniques and foster innovation;
- structural changes in production, technology and innovation, as well as consumption patterns and lifestyles have reduced the overall environmental impact of **production and consumption**, in particular in the food, housing and mobility sectors;

Actions:

- Generalising the application of '**Best Available Techniques**' in the context of the **Industrial Emissions Directive** and enhancing efforts to promote the uptake of emerging innovative technologies, processes and services;
- Giving impetus to the public and private research and innovation efforts required for the development and uptake of innovative technologies, systems and business models which will speed up and lower the cost of transition to a low-carbon, resource-efficient, safe and sustainable economy. Further developing the approach set out in the **Eco-innovation Action Plan**, identifying priorities for incremental innovation as well as system changes, promoting a larger market share of green technologies in the Union and enhancing the competitiveness of the European eco-industry. Establishing indicators and setting realistic and achievable targets for resource efficiency;
- Developing training programmes geared towards **green jobs**;
- Increasing efforts to reach existing targets and reviewing approaches to **green public procurement**, including its scope, in order to increase its effectiveness. Establishing a **voluntary green purchaser network for Union businesses**;
- Developing **measurement and benchmarking methodologies by 2015 for resource efficiency of land, carbon, water and material use** and assessing the appropriateness of the inclusion of a lead indicator and target in the European Semester;
- Establishing a more **coherent policy framework for sustainable production and consumption** including, where appropriate, the consolidation of existing instruments into a coherent legal framework. Reviewing product legislation with a view to improving the environmental performance and resource efficiency of products throughout their lifecycle. Stimulating consumer demand for environmentally sustainable products and services through policies which promote their availability, affordability, functionality and attractiveness. Developing indicators and realistic and achievable targets for the reduction of the overall impact of consumption;

Introduction

The 7th EAP target is that, by 2020, (i) the overall environmental impact of all major sectors of the EU economy is significantly reduced; (ii) emissions to air and water have been reduced; (iii) resource efficiency has increased; (iv) and benchmarking and measurement methodologies are in place; (v) market and policy incentives that foster business investments and innovation in resource efficiency are in place and (vi) green growth is stimulated through measures to foster innovation. In addition, by 2020, structural changes in production, technology and innovation, as well as consumption patterns and lifestyles, have reduced the overall environmental impact of production and consumption, in particular in the food, housing and mobility sectors.

Actions to support and accelerate Europe's transition to a clean and more circular economy are crucial components of the Commission's efforts to modernise and transform the European

economy, shifting it in a more sustainable direction while increasing its competitiveness in global markets. A clean European circular economy will offer substantial opportunities for European businesses and citizens alike: the circular model and the use of advanced and best available techniques can protect the environment, create secure jobs in Europe, promote innovations, and create competitive advantage for EU businesses.

To close the loop of product life cycles, policies that support the circular economy in each step of the value chain are needed, from production to consumption, repair and manufacturing, waste management and secondary raw materials that are fed back into the economy. The wider benefits of the circular economy also include lowering energy consumption and carbon dioxide emission levels. Circular economy principles also need to be gradually integrated into industrial best practices, green public procurement, the use of cohesion policy funds, and also through initiatives in the construction and water sectors.

Current situation

Circular economy

The Circular Economy Action Plan is a major initiative of this Commission for both the environment and industrial competitiveness. On 4th March, the Commission adopted the last of the packages completing the commitments made by this College under the Circular Economy Action Plan. All 54 actions included in the Action Plan are now either delivered or ongoing¹⁰⁴.

The Circular Economy Action Plan, adopted on 2 December 2015, included measures aimed at helping stimulate Europe's transition to a more circular economy, boost global competitiveness, foster sustainable economic growth and generate new jobs, and a legislative proposal on waste. It established a concrete and ambitious set of actions, with measures covering the whole cycle: from production and consumption to waste management and the market for secondary raw materials and a revised legislative proposal on waste.

The 2nd circular economy package, adopted in January 2017, included a report on implementation of the action plan, which has been a major step in promoting circularity in Europe. Among others, the proposal to amend Directive 2011/65/EU on the restriction of the use of certain hazardous substances aimed to enable secondary market operations (e.g. reselling, second hand market) for certain electrical and electronic equipment, and to enable the repair with spare parts of certain electrical and electronic equipment that were placed on the market before 22 July 2019.

In March 2017, the Commission established the European Circular Economy Stakeholder Platform¹⁰⁵. This brings together stakeholders active in broad fields of the circular economy in Europe to share their solutions and team up to address specific challenges, while bridging existing initiatives, advocating the circular economy at national, regional and local level, and supporting its implementation.

In January 2018, the Commission adopted a 3rd circular economy package with a new set of measures. These include the EU strategy for plastics in the circular economy, a

¹⁰⁴ COM(2019) 190

¹⁰⁵ <https://circulareconomy.europa.eu/platform/en>

Communication on how to address the interface between chemical, product and waste legislation, a report on critical raw materials, and a monitoring framework for the circular economy⁸.

As part of the Strategy for Plastics, the Commission launched a pledging campaign for recycled plastic contents, aiming at having 10 million tonnes of recycled plastics into new products by 2025. The campaign capitalises on the role of the private sector as co-lead in the transition to a circular industry for plastics. The pledges received from suppliers of recycled plastics, if delivered as expected, already meet this target. However, the demand for recycled plastics based on the industry pledges amounts to approximately 6.4 million tonnes per year by 2025. The recently established Circular Plastics Alliance¹⁰⁶ could facilitate next steps by businesses to bridge this mismatch and help achieve the above-mentioned target in line with the objective of the strategy to improve the quality and economics of plastics recycling in Europe. The proposed Directive on single-use plastic items and fishing gears was adopted by the Commission in May 2018. It is currently being discussed with the European Parliament and the Council

Furthermore, the Commission has already submitted a request to the European Chemicals Agency to start the process for restrictions, within the framework of registration, evaluation, authorisation and restriction of chemicals (REACH regulation), for microplastics intentionally added to products and oxo-degradable plastics. The restriction dossier developed by ECHA has been submitted to scientific committees RAC and SEAC.

The proposal for a new Directive on port reception facilities, presented together with the 3rd circular economy package will also ensure that ship waste is delivered to adequate port reception facilities, instead of being discharged at sea.

A communication and staff working document presented the monitoring framework for the circular economy, which aims to measure progress towards a circular economy in the EU and its Member States¹⁰⁷.

Sustainable products

The environmental footprint (EF) pilot phase was launched in 2013 with 3 main objectives: (i) test the process for developing product- and sector-specific rules; (ii) test different approaches to verification; and (iii) test communication vehicles for communicating life cycle environmental performance to business partners, consumers and other company stakeholders. In early 2018, the pilot phase was finalised, leading to the development of 21 product environmental footprint category rules (PEFCRs) and two organisation environmental footprint sectoral rules (OEFSRs). The pilot phase resulted in improvements in the environmental footprint methods. The tests of communication vehicles are pointing to how to effectively communicate environmental footprint information. The tests on verification provided information on how to establish a reliable verification system. The environmental footprint transition phase (covering the period 2018-2021) has now been launched.

¹⁰⁶http://europa.eu/rapid/press-release_IP-18-6728_en.htm

¹⁰⁷ <http://ec.europa.eu/eurostat/web/circular-economy>

EU legislation on ecodesign and energy labelling improves the energy and resource efficiency of products and reduces emissions, waste and energy dependency. The Commission is currently implementing the Eco-design Working Plan 2016-2019, which largely focuses on durability, reparability and upgradeability, information and ease of reuse and recycling. New measures set out under the working plan have the potential to deliver, by 2030, the equivalent of Sweden's annual energy consumption. As a result, European households can save up to EUR 500 a year on their energy bills. Moreover, this policy should deliver around EUR 55 billion per year of extra revenue for industry, wholesale and retail sectors, which supports jobs and growth in our economy.

As indicated in the circular economy action plan, the Commission has identified actions and options to deliver a more sustainable product policy framework¹⁰⁸. This could help address the problem that many products in use today are not designed or produced with circularity in mind. On 4 March 2019, as part of the final package, the Commission presented a staff working document on sustainable product policy, looking at options to better articulate the various existing product policy tools at EU level and their contribution to the circular economy. The document also looks at product categories with high potential for circularity and to what extent this potential is currently being addressed by EU product policy tools.

Sustainable production

The work on sustainable buildings resulted in a communication on resource efficiency opportunities in the building sector¹⁰⁹. This was followed by technical work to develop a tool for the mainstream market in order to assess the sustainability performance of buildings. The tool, called Level(s), was published in 2017. In April 2018, the Commission published a set of documents to support the test phase of Level(s) and opened up a registry for testers.

The number of organisations and sites registered with the EU Eco-Management and Audit Scheme (EMAS) has remained stable in recent years. Progress has been made with the adoption of the EMAS sectoral reference documents on best environmental management practice. These, provide guidance and inspiration to organisations in specific sectors on how to further improve environmental performance.

The evaluation completed in 2017 concluded that EMAS is fit for purpose, its contribution is limited because of the low level of uptake caused by (i) limited awareness by external stakeholders about the benefits of EMAS; and (ii) organisations not getting enough reward for participation. The Commission is working with Member States to boost EMAS' contribution to the circular economy and to sustainable production.

Environmental Technology Verification (ETV) contributes as new environmental technologies often fail to gain a foothold on the market simply because they are new and untried. ETV aims to improve the situation by providing third-party evidence, derived from credible and scientifically sound procedures, that technologies perform as claimed. A support study to the evaluation of the ETV pilot programme in 2017-2018 shows that the programme can be a thorough and robust system, providing SMEs with a verified technology with a competitive advantage and contributing to an increase of sales for verified technologies, but

¹⁰⁸ SWD(2019) 91

¹⁰⁹ COM(2014) 445.

poor visibility of the programme and perceived complexity of the process limit its current uptake.

Sustainable Consumption

The EU Ecolabel continued being implemented and developed according to the EU Ecolabel Work Plans (2011-2015) and (2016-2018) agreed with the Member States. As of September 2018, the number of EU Ecolabel licence holders reached 2.167 and the number of products available on the market 72.227. The Fitness check of the EU Ecolabel regulation (and of the EMAS Regulation) carried out as part of the European Commission's Regulation Fitness and Performance Programme (REFIT) was completed in June 2017 and confirmed the useful – even if limited – role of the scheme as voluntary instruments for businesses. The conclusions of the Fitness check suggested the need for a more strategic approach for the EU Ecolabel accompanied with intensive communication and promotional activities, in cooperation with the Member States. In October 2018, the development of EU Ecolabel criteria for financial products was launched.

Although green public procurement (GPP) is a voluntary instrument, it has a key role to play in the EU's efforts to become a more resource-efficient economy. The Commission has published new voluntary EU GPP criteria for a number of products, and all GPP criteria sets now include requirements with circular economy relevance. The EU GPP policies encourage Member States to take further steps to achieve the target of applying GPP criteria to at least 50 % of public tenders. Across the EU, public authorities have not yet been using this possibility to its full extent.

The New Deal for Consumers package¹¹⁰ in 2018 addresses issues such as misleading environmental claims, environmental information for consumers and premature obsolescence. Contribution was also made to the behavioural study on consumers' engagement in the circular economy, in particular related to eco-design and the durability and reparability of products.

As part of EU global efforts to achieve sustainable consumption, the EU has contributed to the work of the One Planet Network, the 10-Year Framework of Programmes on Sustainable Consumption and Production (SCP), which supports the global shift to SCP, and the achievement of Sustainable Development Goal 12.

Industrial emissions

The Industrial Emissions Directive is the primary EU legal instrument used to regulate industrial emissions. The European Integrated Pollution Prevention and Control Bureau of the Joint Research Centre prepares the Best Available Techniques (BATs) reference documents (BREFs). This process involves all stakeholders participating in an evidence-based process. BREFs contain BAT conclusions that are given legal force and must be taken into account by competent authorities when issuing permits.

Beyond making the use of BAT more widespread, the Industrial Emissions Directive also seeks to promote continuous improvement by promoting emerging techniques. To this end, BREFs include a section on emerging techniques. However, a review of existing BREFs concluded that reaching out to a specialised community would substantially improve

¹¹⁰ COM/2018/0183

available information on emerging techniques and further amplify this effect, including through linking EU funding opportunities. To this end, the Commission established a three-year pilot Industrial Emissions Innovation Observatory in 2017 to test ways for enhancing the innovation incentives provided by BREFs.

Low-carbon economy

The EU has adopted binding, economy-wide targets that rely on two main instruments: the EU Emissions Trading System, which covers around 45 % of EU GHG emissions from the power sector, industry, and aviation; and the Effort Sharing Regulation, which covers over 50% of EU GHG emissions from sectors such as transport, buildings, agriculture and waste¹¹¹. Furthermore, the EU has adopted a regulation¹¹² that includes GHG emissions and removals from land use, land use changes, and forestry in the 2030 climate and energy framework to ensure that no additional emissions from these sectors are created¹¹³. The EU also supports innovation with its NER300 funding programme¹¹⁴ and Innovation Fund¹¹⁵.

EU Emissions Trading System (ETS)

The EU Emissions Trading System (EU ETS) has guaranteed cost-efficient emission reductions in the relevant energy and industry sectors and has become a role model for other emissions trading schemes outside the EU. It is important to highlight that, when faced with increased global competition, European installations are more energy-efficient than most international competitors.

The revised post-2020 architecture for the EU ETS, formally approved by the Council in February 2018, will guarantee a 43 % reduction in emission in the sectors covered by 2030 compared to 2005. This renewed legislation will also provide the necessary predictability and stability for industry until 2030, thereby supporting the regulatory environment for fostering investments.

Free allocation will be continued as a safeguard measure against the risk of carbon leakage until comparable climate policy measures are undertaken by other countries in such a way that energy-intensive industries receive an appropriate level of support so they are encouraged to become the best-performing players in the sector. Free allocation lowers the effective carbon cost for industry and retains financial resources that can be used to invest in low-carbon technologies. Free allocation is based on EU-wide benchmark values that provide incentives to reduce GHG intensity.

The sectors exposed to the risk of carbon leakage will receive 100 % of free allowances up to the level of the benchmark. Sectors that are not on the carbon leakage list will receive 30 % of the free allocation for 2021-26, decreasing to 0 % over 2027-2030.

The Effort Sharing Regulation

EU Member States have binding annual GHG emission targets for 2021-2030 for those sectors of the economy that fall outside the scope of the EU ETS. These sectors are transport,

¹¹¹ Background studies can be found here: https://ec.europa.eu/clima/policies/effort_en

¹¹² Regulation (EU) 2018/841

¹¹³ Background studies can be found here: https://ec.europa.eu/clima/policies/forests/lulucf_en#tab-0-2

¹¹⁴ https://ec.europa.eu/clima/policies/innovation-fund/ner300_en

¹¹⁵ for the NER300 evaluation see:

https://ec.europa.eu/clima/sites/clima/files/lowcarbon/ner300/docs/sec_2010_1320_en.pdf. For the innovation fund impact assessment see: https://ec.europa.eu/clima/sites/clima/files/innovation-fund/swd_2019_85_en.pdf.

buildings, agriculture, non-ETS industry and waste, and account for almost 60 % of total domestic EU emissions. Sectors of the economy not covered by the EU ETS must reduce emissions by 30 % by 2030 compared to 2005 as their contribution to the overall target. The Effort Sharing Regulation translates this commitment into binding annual GHG emission targets for each Member State for 2021-2030 based on the principles of fairness, cost-effectiveness and environmental integrity.

The LULUCF Regulation

Under EU legislation adopted in May 2018, EU Member States have to ensure that GHG emissions from land use, land use change or forestry are offset by at least an equivalent removal of CO₂ from the atmosphere in 2021-2030. This regulation is in line with the Paris Agreement, which points to the critical role of the land use sector in reaching long-term climate mitigation objectives.

The EU long-term strategy for decarbonisation ('the 2050 strategy')

In March 2018, the European Council asked the Commission to present, within 12 months, 'a proposal for a Strategy for long-term EU greenhouse gas emissions reduction in accordance with the Paris Agreement'. The same was requested by the European Parliament.

In November 2018, the Commission presented its strategic long-term vision for a prosperous, modern, competitive and climate-neutral economy by 2050. To prepare for this proposal, the Commission carried out a public consultation in summer 2018, seeking input from citizens and stakeholders.

Energy Union governance and climate action

The European Council decided in 2014 that a governance system was needed for the EU to meet its energy and climate targets. In 2018, the Regulation on Energy Union and Climate Action Governance was adopted. National energy and climate plans (NECPs) will be a new instrument and will serve as the basis for Member States to report every 2 years on their progress in contributing to the EU level target (e.g. for renewables). Member States are required to develop national plans that cover all five dimensions of the Energy Union for 2021 to 2030 (and every subsequent ten-year period) based on a common NECPs template to ensure comparability. All Member States have submitted draft plans¹¹⁶. The Commission is assessing these plans and may issue recommendations to countries by 30 June 2019 to amend the draft NECP. Member States then have until the end of 2019 to submit their final NECP.

Eco-innovation/SMEs

Since 2011, eco-innovation has been supported by a range of initiatives under the eco-innovation action plan¹¹⁷. The aim has been to foster the market uptake of eco-innovation in seven dedicated action areas: 1) environmental policy and regulations; 2) demonstration projects; 3) standards and performance targets; 4) finance and support services for SMEs; 5) international cooperation; 6) green skills and jobs; and 7) European innovation partnerships. Eco-innovation is a key element in environmental policy, because it links economic development with minimising resource use and protecting the environment, creates jobs and

¹¹⁶ The draft plans submitted to the Commission are available at: <https://ec.europa.eu/energy/en/topics/energy-strategy-and-energy-union/governance-energy-union/national-energy-climate-plans>

¹¹⁷ https://ec.europa.eu/environment/ecoap/frontpage_en

improves company competitiveness. It also helps achieve better compliance with environment legislation.

Horizon 2020 is the main funding programme for eco-innovation activities, with the LIFE programme also providing support. Other programmes such as COSME (the EU programme for small and medium-sized enterprises), the European structural and investments funds (in particular the European regional development fund), as well as funding schemes provided by the European Investment Bank and the European Investment Fund also offer funding opportunities for eco-innovation. The EU also promotes and shares best practices.

Small and medium-sized enterprises (SMEs) are key partners in environmental policy because of both their economic importance and also the cumulative impact of their activities on the environment. In many areas SMEs are also well placed to help address environmental challenges by proposing innovative solutions, services and products. That is why the EU has been integrating SME aspects into policy considerations, treating them as a specific body with targeted communication, support and treatment. As SMEs are a diverse and large group, we primarily work with intermediaries.

The EU also promotes resource efficiency, circular economy, eco-innovation and participation in green markets among SMEs. The aim is to make SMEs better placed to engage in and benefit from related actions. To ensure their buy-in, it is crucial that the business advantages of these actions are presented in a convincing way.

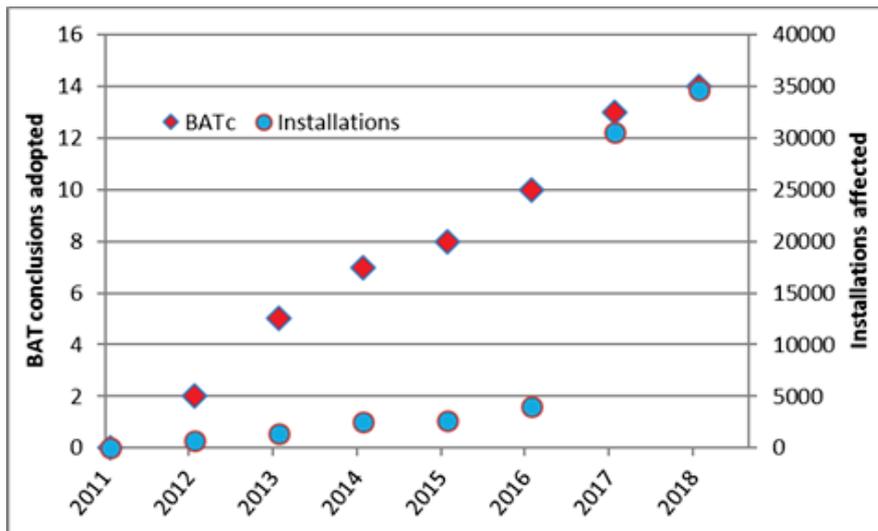
The flagship initiative is the Green Action Plan for SMEs¹¹⁸, which the EU has been implementing since 2014. It aims to (i) improve resource efficiency of European SMEs; (ii) support green entrepreneurship; (iii) exploit the opportunities of greener value chains; and (iv) facilitate market access for green SMEs. It contains 39 measures, funded by different EU programmes and progressing at different speeds.

Are we on track to meet the 7th EAP's objectives and sub-objectives?

The EU is on track to make the use of BATs more widespread' in major industrial plants in Europe. By summer 2018, 14 sets of BAT conclusions had been adopted for 65% of the 55 000 plants covered by the Industrial Emissions Directive, including large combustion plants. BAT conclusions are being drawn up for eight further sectors. By the end of 2020, work will have been launched or completed on sets of BAT conclusions that cover the remaining sectors.

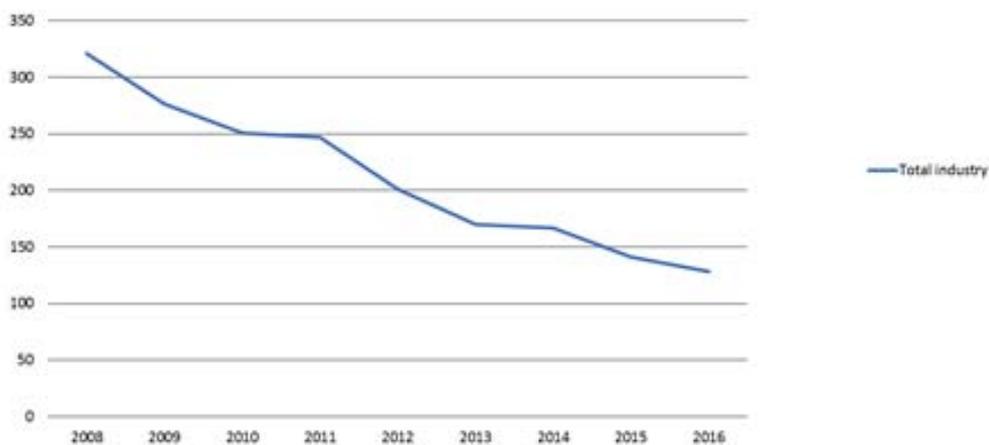
Figure 6: BAT coverage

¹¹⁸ http://ec.europa.eu/growth/smes/business-friendly-environment/green-action-plan_en



Pressure indicator: Trend of emissions to air and water from installations falling under the Industrial Emissions Directive (Source: E-PRTR) that cover air and water emissions by GVA from main E-PRTR sectors from all Member States for relevant pollutants

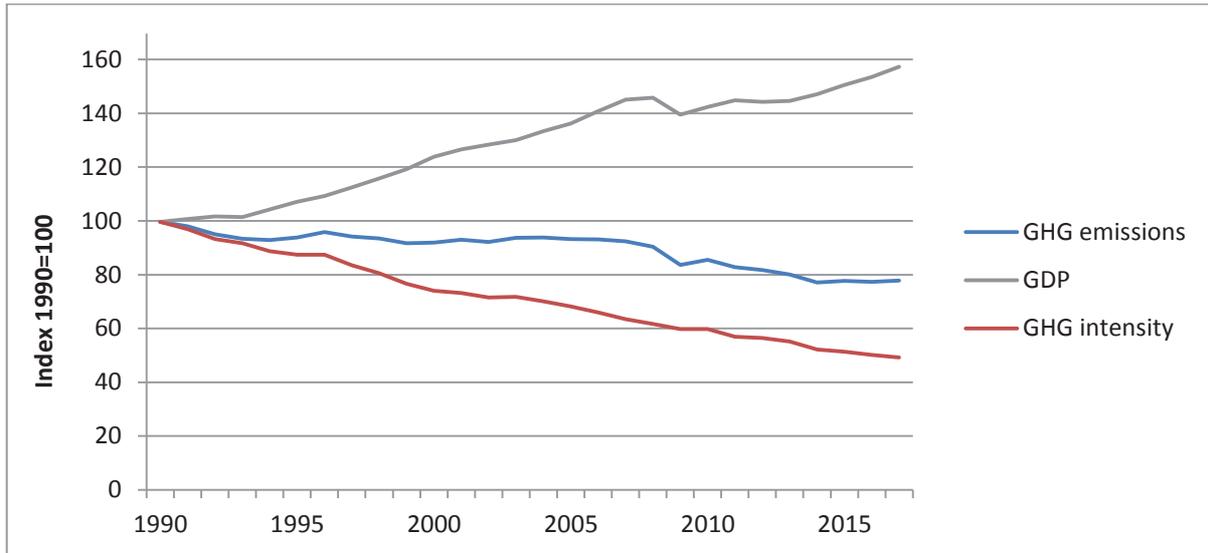
Figure 7: Industrial pollution to air intensity (tonnes of pollution per unit GVA)



All sectors (power generation, industry, transport, buildings, construction, agriculture and waste) need to contribute to the low-carbon transition according to their technological and economic potential. The EU succeeded in cutting emissions by 23 % between 1990 and 2016, while the European economy grew by 53 % over the same period.

Figure 8: Emissions intensity, indexed¹¹⁹

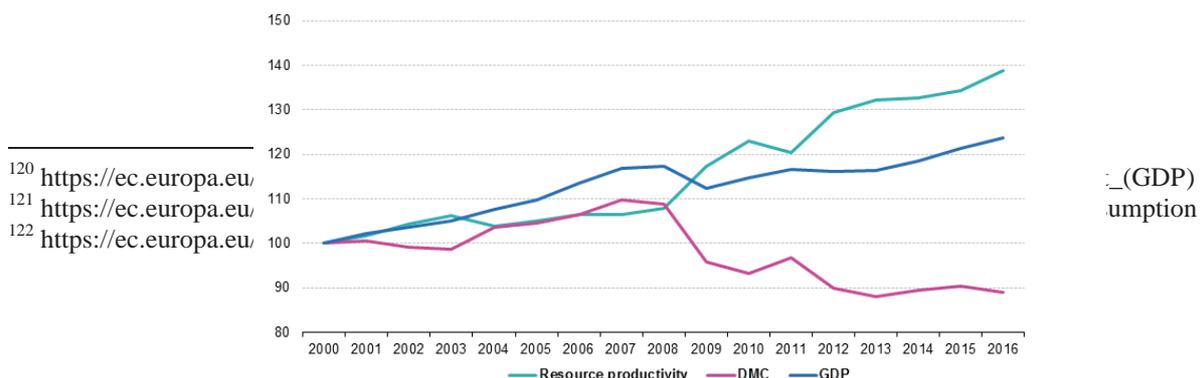
¹¹⁹ 2018 climate action progress report: *EU and the Paris Climate Agreement: Taking stock of progress at Katowice COP* (COM/2018/716)



The EU Eco-innovation Index and Scoreboard track action and output related to eco-innovation in all EU Member States. The findings indicate that promising eco-innovations can be seen across the EU and have the potential to be scaled-up. However, there has been uneven progress across different Member States. Most efforts also seem to be concentrated in individual markets or market niches instead of bridging the full circular model from design to disposal.

Resource productivity is measured as gross domestic product (GDP)¹²⁰ over domestic material consumption (DMC)¹²¹. Resource productivity in the EU-28¹²² economy increased by 38.8 % between 2000 and 2016. Starting from the economic crisis (4.3 % fall in GDP in 2008-2009), the significant increase in resource productivity (28.5 %) in 2008-16 was caused mostly by an 18.1 % fall in DMC over the same period. The crisis affected the material-intensive industries of manufacturing and construction more than the services industries. Material consumption therefore fell more than GDP, which started to recover from 2009.

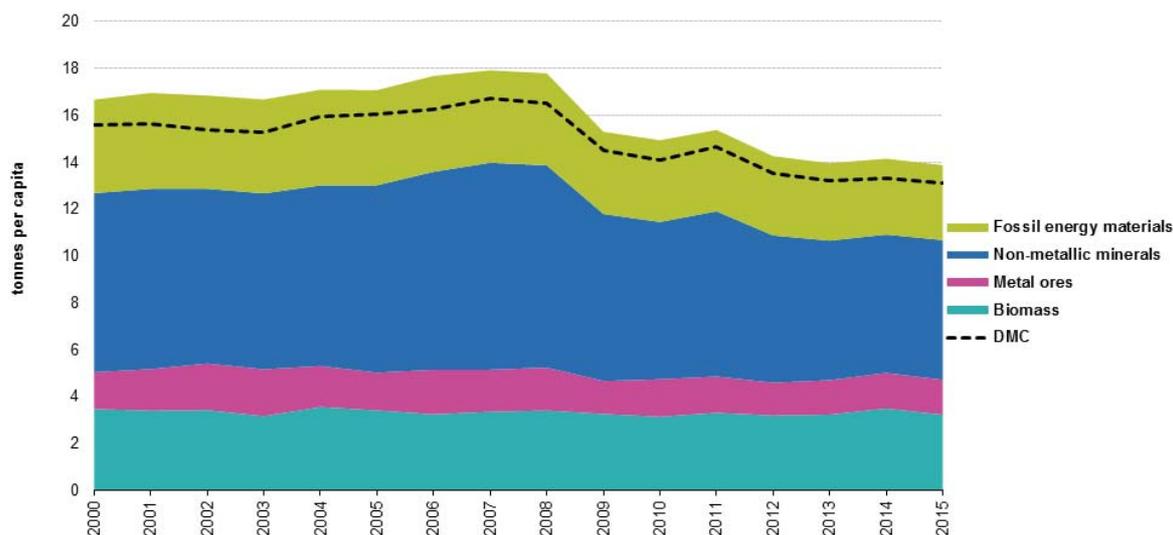
Figure 9: Resource productivity



¹²⁰ <https://ec.europa.eu/>
¹²¹ <https://ec.europa.eu/>
¹²² <https://ec.europa.eu/>

EU raw material consumption, also referred to as the EU's material footprint, represents the total amount of extracted raw materials needed to produce the goods and services consumed by EU residents. The derived global material footprint, also referred to as raw material consumption, was 13.9 tonnes per capita in the EU in 2015 and 5.6 % higher than DMC.

Figure 10: Raw material consumption / material footprint¹²³



Source: Eurostat (online data codes: env_ac_mfa, env_ac_rme, demo_gind)

Summary

State of implementation of the policy area
<input type="checkbox"/> No progress

¹²³ http://ec.europa.eu/eurostat/statistics-explained/index.php/Material_flow_accounts_statistics_-_material_footprints

<input type="checkbox"/> Limited progress
<input type="checkbox"/> Some progress
<input checked="" type="checkbox"/> Substantial progress
<input type="checkbox"/> Fully implemented

In 2014-2020, progress has been made in turning the EU into a resource-efficiency, greener and more competitive low-carbon economy. Promoting the concept of circularity is a first step in establishing a long-term commitment to a European circular economy and to further decoupling economic growth from resource use.

Making more widespread use of BATs by all major EU industrial plants is on track and is already delivering substantial reductions in emissions to air and water while promoting resource efficiency and circularity. Furthermore, the pilot phase of the Industrial Emissions Innovation Observatory will be completed in 2020. This will enable us to draw lessons on how to better promote the up-scaling of emerging techniques.

In the given period, activities to support SMEs on the circular economy, resource efficiency and eco-innovation has been stepped up. As a result, there have been gradual improvements in the related performance of SMEs. Further efforts will be needed to increase the effectiveness of activities and to reach out also to geographic regions and sectors that are performing much worse than frontrunners or the mainstream. Activities related to eco-innovation were being carried out through general and sectoral policies.

2.3 Waste

Sub-objectives:

- Waste is safely managed as a resource and to prevent harm to health and the environment, absolute waste generation and waste generated per capita are in decline, landfilling is limited to residual (i.e. non-recyclable and non-recoverable) waste, having regard to the postponements provided for in Article 5(2) of the Landfill Directive and energy recovery is limited to non-recyclable materials, having regard to Article 4(2) of the Waste Framework Directive;

Actions:

1. Full implementation of EU waste legislation.
2. Reduction of waste generation and in particular food waste
3. Waste recycling targets are reviewed and high quality recycling is achieved
4. Recycling barriers are addressed and markets for secondary raw materials are developed
5. Non-toxic materials cycles are achieved
6. Market-based instruments including EPR are applied
7. Limiting energy recovery to non-recyclable waste
8. Phase out landfilling of waste
9. Hazardous waste (HW) is safely managed and generation reduced
10. Public information campaigns are required to build awareness and understanding of waste policy and to stimulate a change in behaviour

Introduction

The 7th EAP aims to drive a sustainable and resource efficient economy within the EU. The programme focuses on the circular economy and the ‘need for a framework that gives appropriate signals to producers and consumers to promote resource efficiency’, with the objective of seeing waste as a resource. Full implementation of the EU waste legislation is a cornerstone of the programme.

Current situation

The new EU legal framework

Since the programme was adopted, the Commission has made substantial progress in providing an approved legal framework for the rapid transition of the EU towards a circular economy. It has also continued to carry out actions to address the existing implementation gap amongst Member States.

One of its biggest achievements was the adoption of the new **circular economy package**. The actions set out in the package will help ‘closing the loop’ of product life cycles through greater recycling and re-use, and will benefit both the environment and the economy.

As part of its circular economy package, the Commission presented new legislative proposals on modern waste management in Europe which were identified by the European Parliament, the Council and the Commission as a joint legislative priority. In May 2018, ambitious environmental objectives and targets were adopted by the European Parliament and the Council. These include higher recycling targets for municipal waste (55 % by 2025, 60 % by 2030 and 65 % by 2035) and an overall target for packaging waste (65 % by 2025 and 70 % by 2030) with individual targets for the following by 2025 and 2030: plastic (50-55 %), wood (25-30 %), ferrous metals (70-80 %), aluminium (50-60 %), glass (70-75 %), and paper and cardboard (75-85 %). By 2035, the amount of municipal waste landfilled must be reduced to 10 % or less of the total amount of municipal waste generated.

Building on the existing separate collection obligation for paper and cardboard, glass, metals and plastic, new separate collection rules will boost the quality of secondary raw materials and their uptake: hazardous household waste will have to be collected separately by 2022, bio-waste by 2023 and textiles by 2025.

The new legislation fosters the use of effective economic instruments and other measures in support of the waste hierarchy. Minimum extended producer responsibility requirements will lead to better performance and governance of these schemes. Mandatory extended producer responsibility schemes have to be established for all packaging by 2024. It also focuses on waste prevention and introduce important objectives in relation to food waste in the EU and halting marine litter in order to contribute to the UN Sustainable Development Goals in these two areas. Furthermore, it sets a number of priorities for the coming years through review clauses for the End-of-Life Vehicles Directive in 2020, waste oil recovery targets (2022) and food waste reduction targets (2023), including a major review of the waste legislation in 2024.

Regularly, the RoHS Directive (2011/65/EU) is modified to introduce new prohibited substances. For example, as of July 2019, the RoHS Directive will thus restrict the use of total ten **hazardous substances** in electrical and electronic equipment, further contributing to minimising the content of hazardous chemicals in products, the reuse of products/ preparation of reuse of waste.

Waste prevention is also promoted with, for example, the recast Waste Electrical and Electronic Equipment (WEEE) Directive. Producers are obliged to promote product design and related information to facilitate reuse and repair. Aspects such as durability, reparability and recyclability of products are also being considered when drawing up or reviewing requirements under the Directive - 2019/125/EU on eco-design.

Another way to prevent the generation of waste in Member States is by adopting and implementing meaningful waste prevention programmes as requested in Directive 2008/98/EC on waste. The European Environmental Agency has assessed such programmes for compliance. The promotion of the reuse of products is a key area in the prevention of waste and should be part of these waste prevention programmes. Under the recast WEEE Directive, producers are to provide relevant product-related information to help reuse operators prepare, as well as encourage product design and related information that facilitate reuse and repair.

EU legislation has also been adopted in other areas such as **ship recycling**. The EU Regulation¹²⁴ adopted in 2013 is designed to reduce the negative impacts linked to the recycling of ships flying the flag of Member States. It brings forward the requirements of the 2009 Hong Kong Convention for the Safe and Environmentally Sound Recycling of Ships, and includes additional safety and environmental requirements as authorised by the Convention. Pursuant to this Regulation, the Commission adopted the first EU list of ship recycling facilities in December 2016, which is updated regularly¹²⁵. To be included in the list, facilities need to comply with certain minimum environment and safety requirements. Since 31 December 2018, large commercial seagoing vessels flying the flag of an EU Member State may be recycled only in ship recycling facilities included in this list.

In accordance with the 2014 amendment of the **Waste Shipment Regulation**, by 2017 Member States had established inspection plans that include a minimum set of elements and are based on a risk assessment that covers specific waste streams and sources of illegal shipments. It is expected that in the coming years the effect of these inspection plans in reducing illegal waste shipments will become increasingly visible. In line with legal requirements, an evaluation of the Waste Shipment Regulation is scheduled by the end of 2020. As a preparatory step, the Commission is in the process of preparing an evaluation of the Regulation to identify the good and bad practices in its implementation and to assess whether it has met its objectives using a set of criteria. In support of this evaluation, an 18-month study was launched in April 2017. This includes various actions, including workshops as well as public and targeted stakeholder consultations.

Waste electrical and electronic equipment generated in the EU in 2014 was estimated to be around 10 million tonnes (0.4 % of the total waste produced), and is expected to grow to more than 12 million tonnes by 2020. This waste stream is a complex mixture of materials and components. It includes various substances, which, if not properly managed, pose high risks to the environment and human health. Moreover, production of modern electronics requires the use of scarce and valuable resources, illustrating the importance of eco-design and prevention for this waste stream.

The recast WEEE Directive aims to further improve the collection, treatment and recycling of electronics at the end of their life. In 2013-2015, the amount of waste equipment collected

¹²⁴ Regulation (EU) No 1257/2013

¹²⁵ <http://ec.europa.eu/environment/waste/ships/list.htm>

from private households in the EU-28 grew by 8 %. The new ambitious collection targets, together with the broadening of the Directive's scope, from August 2018 and preparation for reuse/recycling targets, represent considerable challenges for the Member States., This is why the Commission has focused on promoting targeted compliance in this area.

As stated above, **the Packaging and Packaging Waste Directive** was reviewed as part of the circular economy waste package. This resulted in more ambitious reuse/recycling targets for 2030 as well as provisions on waste prevention and littering and making extended producer responsibility compulsory at EU level.

In terms of the effectiveness of the Directive, the average overall packaging recycling rate in the EU has steadily increased since 2005 (65.7 % in 2015). However, packaging waste grew by 6 % across the EU between 2013 and 2015, suggesting that more effort is needed on waste prevention. In 2015, total packaging waste in the EU amounted to around 85 million tonnes, which is around 3.5 % of the total waste generated. The more ambitious overall recycling targets for packaging introduced by the 2018 review of the Directive will require increased efforts across the EU to organise separate collection schemes more efficiently in order to capture more recyclables, including through improved extended producer responsibility schemes.

On **extractive waste**, the Commission has contracted a study on the elaboration of guidance on best practices in extractive waste management plans to foster the prevention and reduction of extractive waste production and its harmfulness as well as the recovery of extractive waste by means of recycling, reusing or reclaiming such waste. The study was published in March 2019. In addition, the Commission has organised an exchange of information to identify Best Available Techniques for the management of wastes from the extractive industries. The results of this information exchange was published in December 2018.

As being the main source of the serious environmental threat of marine litter, **plastic waste** has been prioritised in the Commission's agenda as an area that needs to be addressed urgently. The Directive [2015/720/EU](#) on plastic carrier bags, which aims to substantially reduce the consumption of lightweight plastic carrier bags, is now transposed in all Member States. Success can already be noted in some Member States as a result of the instruments introduced, charging (in most cases) or bans. Following the 2018 EU plastic strategy, which forms part of the circular economy action plan, the Commission adopted a proposal for a directive on reducing the impact of certain plastic products (single use plastics and fishing gear) on the environment in May 2018. The objective is to prevent and reduce the impact of single-use plastics on the environment, in particular the aquatic environment, and on human health. It also aims to promote the transition to a circular economy with innovative business models, products and materials, thereby also contributing to the efficient functioning of the single market.

Classifying waste correctly is the first step to sound management of waste. For this reason, the Commission adopted guidelines in 2018 on the correct interpretation and application of EU legislation on the classification of waste. It covers a comprehensive overview of relevant EU legislation, gives examples of waste types for which classification is considered difficult by stakeholders, and provides step-by-step information on how to assess whether waste displays hazardous properties and on how to classify it.

In particular, **hazardous waste**, although it represents only 3 % of all generated waste, can have a considerable impact on human health and the environment. [A 2017](#) study on behalf of

the Commission found out that the quality and effectiveness of hazardous waste management practices is not uniform in the EU and the authorities are not always able to properly follow and control such waste. How Member States perform in implementing the waste hierarchy for hazardous waste varies and could be improved. Other serious implementation and enforcement challenges include inadequate planning, data inconsistencies and statistical gaps between generation and treatment, or misclassification of waste.

On the achievement of non-toxic material cycles, work has been undertaken to address the **interface of chemical, product and waste legislation**. Some chemicals found in waste can hamper recycling, while others are hazardous to humans or the environment. A recent communication¹²⁶ addresses the different challenges, options and actions necessary to help ‘closing the loop’ of product life cycles through greater re-use and recycling to the benefit of both the environment and the economy. The aim is to extract the maximum value and use from all raw materials, products and waste, fostering energy savings and reducing greenhouse gas emissions while activating secondary raw materials markets.

In line with the EU circular economy, the Energy Union, the EU commitments under the Paris Agreement and the 2030 Agenda for Sustainable Development, the Commission adopted a communication on the role of **waste to energy**¹²⁷ in setting policy objectives. As governed by the waste hierarchy, waste that cannot be recycled should be subject to energy recovery processes in order to extract the energy and materials embedded in it. The communication sets a priority of choices for waste-to-energy processes available with the most energy efficiency (e.g. combined heat and power) and where materials can also be extracted (e.g. co-incineration in cement kilns, and anaerobic digestion of biodegradable waste). It warns about overcapacities of capital-intensive energy recovery infrastructure with a long lifespan (e.g. incinerators) that may hamper the recycling of waste.

Are we on track to meet the 7th EAP’s objectives and sub-objectives?

Addressing the implementation gap

Focused action has been undertaken on the legal implementation front, namely, on municipal waste, hazardous waste, electric and electronic waste, scrapped vehicles and extractive waste. In the case of **municipal waste**, this represents around 10 % of the total waste generated in the EU. However, it is one of the most complex streams to manage due to its diverse composition, fragmentation of responsibilities and large number of waste producers. In 2016, an average European citizen generated 480kg of municipal waste, 3kg more than in 2013 although the EU average recycling rate (including composting) was at 46 % , a 3 % improvement since 2013; the average landfilling rate was 24% - falling by 18% since 2013. There are still large differences across the EU: in 2016, 10 Member States still landfilled over 50 % of municipal waste, while 4 Member States reported rates higher than 70 %.

As stated in the revised EU waste legislation, the Commission will issue an ‘**early warning report**’ 3 years before the recycling targets are due. This assessment has already been carried out on the 2020 municipal waste recycling target. The Commission identified that 14 Member States are at risk of missing the target. Depending on the specific problems and needs of each Member State and how far they are from achieving the 2020 target, national and local authorities should implement country-specific key priority actions. Some of these actions include effective separate collection schemes, efficient extended producer responsibility

¹²⁶ COM(2018) 32

¹²⁷ COM(2017) 34

schemes, economic instruments such as landfill and incineration taxes, efficient use of EU funds to support the waste hierarchy, as well as improved data quality.

On waste electrical and electronic equipment 6.21 kg of waste equipment per inhabitant was collected from private households on average in 2014, against the then valid target of 4 kg per inhabitant, which was met by 23 Member States. Some Member States collected as much as 12 kg while some still missed the target by a wide margin. From 2016, each Member State has to comply with a collection target of 45 % of equipment sold and, as a second step from 2019, a target of 65 % of equipment sold, or 85 % of electronic waste generated each year. Meeting the final collection target will correspond to around 10 million tonnes or roughly 20 kg per capita of waste in 2020.

On **packaging waste**, most Member States comply with current overall recycling targets, although 2 Member States missed them by a wide margin. Several Member States fell behind on one or more material-specific targets: 1 for paper and cardboard, 4 for wood, 2 for metal, and 7 for glass.

To address the existing **implementation gap**, the Commission has been holding conducted compliance assistance seminars since 2012. These target 18 Member States with poor and average waste management. The Commission has issued roadmaps based on successful waste management methods implemented in frontrunner Member States and adapted to each individual case. The roadmaps feature where relevant the use of economic instruments such as landfill taxes, pay-as-you-throw schemes and minimum requirements for extended producer responsibility. Targeted compliance promotion initiatives have also been carried out on **hazardous waste** and specific waste streams, such as **waste electrical and electronic equipment, scrapped vehicles and extractive waste**. These have resulted in recommendations and good practice examples to Member States, as well as the identification of follow-up actions to further support implementation.

In parallel, the Commission has also used EU funds to address the **investment gap** that exists in some Member States. Particular attention has been paid to fulfilment of the waste enabling conditions designed to ensure that Member States that present waste management projects for co-funding meet the legal obligations related to waste management plans and waste prevention programmes and have taken measures to meet the 2020 recycling targets. The Commission has prioritised funding projects that tackle waste management at the highest ranks of the waste hierarchy (waste prevention, separate collection and recycling). It has also rejected some projects that could lead to overcapacities of infrastructure involved in treating residual waste and therefore hamper recycling in Member States.

Summary

State of implementation of the policy area
<input type="checkbox"/> No progress
<input type="checkbox"/> Limited progress
<input checked="" type="checkbox"/> Some progress
<input type="checkbox"/> Substantial progress
<input type="checkbox"/> Fully implemented

Overall, there has been **significant progress** in the EU legal framework and **some progress** in the overall implementation of EU waste legislation across the EU. However, further efforts and actions in both fields are still needed: in the former, to develop secondary legislation (implementing and delegated acts); in the latter, more legal, technical and financial help targeted at individual Member States to improve their waste management systems.

At EU level, overall statistics show that EU waste legislation is driving considerable improvements in waste management. However, an implementation gap still exists among Member States. The causes range from governance issues and, insufficient public and/or private investments and initiatives through to the absence of integrated and functional waste management systems. To make progress in these Member States, full implementation of EU waste legislation is crucial to reap the environmental and economic benefits of the circular economy and compete in a world of increasingly scarce resources.

Good progress is possible if the Member States concerned take urgent action to implement the actions identified in the report on EU waste legislation adopted in September 2018 and the accompanying country-specific reports. Sound integrated waste management systems start with robust separate collection in place as a precursor to quality recycling. This together with efficient extended producer responsibility schemes and economic instruments such as landfill and incineration taxes are all crucial to ensuring compliance with EU waste legislation.

Some Member States have proved that it is possible to improve significantly their waste management. Although further action is required in waste management, this cannot be detached from actions in the production phase.

3 PRIORITY OBJECTIVE 3: To safeguard the Union’s citizens from environment-related pressures and risks to health and wellbeing

3.1 Air quality

Sub-objectives:

- Air pollution and its impacts on ecosystems and biodiversity are further reduced with **the long-term aim of not exceeding critical loads and levels;**
- Outdoor air quality in the Union has significantly improved, moving closer to **WHO recommended levels**, while indoor air quality has improved, informed by the relevant WHO guidelines;

Actions:

- Strengthening efforts to reach full compliance with **Union air quality legislation and defining strategic targets and actions beyond 2020;**
- **Implementing an updated Union air quality policy**, aligned with the latest scientific knowledge, and developing and implementing measures to combat air pollution at source taking into account the differences between the sources of indoor and outdoor air pollution;

Introduction

Air pollution has serious and harmful effects on human health, from respiratory and cardiovascular diseases to premature deaths, and contributes to eutrophication.

The EU's overall objective is to safeguard citizens from environment-related pressures (in this case, air pollution) and risks to health and well-being. This translates into three key topics in the air policy area: (i) air quality standards regarding the concentration levels of air pollutants in the ambient air; (ii) air emission reduction targets at national level; and (iii) emission standards for key pollution sources.

Building on EU action over the past few decades to reduce air pollution and improve air quality, the 7th EAP re-confirmed a two-fold objective to further reduce air pollution with the long-term objective of not exceeding critical loads and levels (i.e. maximum levels that ecosystems can tolerate without degrading), and moving European outdoor and indoor air quality closer to World Health Organisation (WHO) recommended levels.

Current situation

The EU clean air policy follows a three-pronged approach aimed at protecting citizens across the EU from significant adverse impacts – as outlined in two communications on a ‘clean air programme for Europe’ of 2013, and a ‘Europe that protects: clean air for all’ of 2018.¹²⁸

1. Ambient air quality standards have been established for 12 key air pollutants deemed to be most relevant. The Ambient Air Quality Directives were used to set these standards. Over the past 5 years, key outputs have included amendments to the legislative framework by way of Directive 2015/1480/EC to further improve harmonised monitoring and reporting of air quality as well as acceleration of the implementation and enforcement action to meet air quality standards.
2. The National Emission Ceilings Directive set national emission limits for the most important trans-boundary air pollutants to reduce emissions and concentrations. Over the past 5 years key outputs have included agreed revised targets per Member State for 2025 and 2030 by way of Directive 2016/2284 as well as the publication of the First Clean Air Outlook to track progress towards air emission reduction objectives.
3. Emission standards for key pollution sources have been established e.g. through legislation on fuel quality, vehicle emissions, or industrial emissions. Over the past 5 years emission standards for new medium combustion plants have been adopted; several BAT conclusions have been agreed for key sectors (including for large combustion plants; waste treatment; pigs and poultry; mineral oil and gas; pulp, paper and board), plus new emission testing for cars under real-world conditions and a strengthened framework for the type-approval of vehicles have been introduced.

In addition, the last 5 years have seen an acceleration of the implementation support mechanism, including the launch of the Clean Air Forum and Clean Air Dialogues. Significant funding has been made available through various EU funding streams to facilitate investments with direct and/or indirect air quality benefits. This includes EUR 1.8 billion to support air quality measures under the European structural and investment funds, with further indirect contributions.

Over the past 5 years, the EU's clean air policy has made further progress towards reducing air pollution and improving air quality. However, this is not enough so to secure outdoor air quality throughout the EU and meet agreed air quality standards, let alone move closer to the levels recommended by the WHO or not exceed critical loads and levels for ecosystems.

In 2000-2015, emissions of key air pollutants decreased by between 8 % (ammonia) and 72 % (sulphur dioxide) largely thanks to EU measures on fuel quality, vehicle emissions and

¹²⁸ COM(2013) 918; COM(2018) 330.

industrial emissions. At the same time, however, 23 Member States (and more than 130 cities) reported exceeding at least one air quality limit value set in the Ambient Air Quality Directive (which for most pollutants are not as stringent as the levels recommended by the WHO).

The 2013 clean air programme for Europe, the revised national air emission targets agreed in 2016, as well as better implementation support and enforcement efforts by the Commission outlined in Communication 2018/330 have put the EU on track to achieve a reduction in health impacts (by more than 50%) and move closer to the levels recommended by the WHO by 2030.

On indoor air pollution, following the Council’s recommendation on smoke-free environments (2009/C 296/02), the Commission published a staff-working document in 2013 on implementation of the recommendation and continues to monitor the implementation, functioning and impacts of its measures¹²⁹. In 2016, it also adopted a proposal to amend the Directive on the protection of workers from the risks related to exposure to carcinogens or mutagens at work¹³⁰. The proposal aimed to improve workers’ health protection, while increasing the effectiveness of EU legislation in this area and providing more clarity and a better level playing field for economic operators. Apart from these deliverables, the Commission does not intend to launch any new initiatives in this area during the current mandate. The table below from the European Environment Agency’s 2017 Environmental Indicator Report provides an overall overview of the current situation on air quality in the EU.

Figure 11: Air quality

Indicator	EU Indicator past trend (*)	Selected objective to be met by 2020	Outlook for the EU meeting the selected objective by 2020
1. Exceedance of air quality standards in urban areas (nitrogen dioxide: NO ₂ ; dust particles: PM ₁₀ ; ozone: O ₃ ; fine particulate matter: PM _{2.5})	 	Meet Air Quality Directive standards for the protection of human health — Air Quality Directive (EU, 2008c)	
There have been reductions in urban population exposure to exceedances of air quality standards for particles and nitrogen dioxide, while the trend for the ozone standard is unclear. Because of their widespread exceedance levels in urban areas, it is unlikely that the air quality standards for these pollutants will be met by 2020			
2. Emissions of the main air pollutants in Europe (sulphur oxides: SO ₂ ; nitrogen oxides: NO _x ; ammonia: NH ₃ ; non-methane volatile organic compounds: NMVOCs; fine particulate matter: PM _{2.5}) (*)	 	Reduce air pollutant emissions in accordance with the requirements of the amended Gothenburg Protocol and of the new EU National Emission Ceilings Directive by the following percentages: SO ₂ 59 %, NO _x 42 %, NH ₃ 6 %, NMVOCs 28 %, PM _{2.5} 22 % compared with 2005 levels (UNECE, 2012 and EU, 2016)	
Air pollutant emissions have declined and current projections suggest that the EU is on target to meet its 2020 EU and international air pollutant emission reduction commitments. However, since ammonia emissions increased the past two years (2014 and 2015), it has become uncertain if the ammonia reduction commitment will be met by 2020			

Source: EEA (2017), *Environmental Indicator Report 2017*

Summary

State of implementation of the policy area

¹²⁹ SWD(2013) 56.
¹³⁰ COM(2016) 248.

<input type="checkbox"/> No progress
<input type="checkbox"/> Limited progress
<input checked="" type="checkbox"/> Some progress
<input type="checkbox"/> Substantial progress
<input type="checkbox"/> Fully implemented

The justification for this assessment ('some progress') is that we have seen downwards trends for most air pollutants in most Member States over the last 5 -10 years, which have translated into improved (but not necessarily 'significantly' improved) air quality in many areas across Europe. Nevertheless, there remains a substantial gap between the observed air quality and WHO recommended levels. Policy has made some progress in accelerating this, among other things by way of the clean air programme¹³¹, revised national emission reduction targets set out in Directive EU/2016/2284 or Directive EU/2015/2193 on a medium combustion plan. Furthermore, the Commission has increased implementation support and tackled breaches of the clean air acquis. The Commission has done its part by delivering an updated air pollution policy in 2016 in line with the 7th EAP actions.

At the same time, however, a large compliance gap with existing air quality legislation remains. The Commission is currently carrying out a fitness check of the Ambient Air Quality Directive to establish what could have been done better in the context of air quality. The European Court of Auditors also published a policy performance audit of the air quality policy realm in 2018. Preliminary indications are that there is insufficient or delayed implementation of air quality measures by Member States. There are also negative side-effects of other national policy decisions (e.g. fiscal regimes that favour diesel fuel, insufficient recall rates of cars equipped with defeat devices prohibited by EU legislation, or lack of administrative fines imposed on car manufacturers as a result of the breach of EU law following cheated emissions tests).

3.2 Noise

<p>Sub-objectives:</p> <ul style="list-style-type: none"> Noise pollution in the Union has significantly decreased, moving closer to WHO recommended levels;
<p>Actions:</p> <ul style="list-style-type: none"> Implementing an updated Union noise policy aligned with the latest scientific knowledge, and measures to reduce noise at source, and including improvements in city design;

Introduction

As stated in the 7th EAP, according to the WHO, noise is the second largest environmental cause of premature death in the EU, after air pollution: at least 15,900 people die prematurely in Europe every year due to environmental noise. Prolonged exposure to excessive noise can lead to serious health effects, such as sleep disturbance, cardiovascular diseases, annoyance (a feeling of discomfort affecting general well-being), cognitive impairment and mental health problems. It can also cause direct effects such as tinnitus.

Directive 2002/49/EC on the assessment and management of environmental noise (the Environmental Noise Directive) aims to define a common approach to avoid, prevent or

¹³¹ COM(2013) 18.

reduce on a prioritised basis the harmful effects due to exposure to environmental noise. The Directive applies to noise to which humans are exposed, particularly in built-up areas, in public parks or other quiet areas in an agglomeration, in quiet areas in open country, near schools, hospitals and other noise-sensitive buildings and areas. It does not apply to noise that is caused by the exposed person himself, noise from domestic activities, noise created by neighbours, noise at work noise from transport or due to military activities in military areas.

Environmental noise is not only regulated due to its negative impact on human health, but also because of its single market implications relating to competition for transport modes and industrial installations. The Environmental Noise Directive acts as a framework directive to determine ‘noise at source legislation’, which regulates vehicles, trains, airports and industrial installations.

Current situation

The Environmental Noise Directive has led to: (i) the achievement of common methods for noise management; (ii) the consistent preparation of noise maps throughout Europe; and (iii) the consistent adoption of action plans at national or local level, including raising the awareness of public authorities and citizens.

The evaluation of the Directive in 2016¹³² showed it can help achieve the 7th EAP objective of reducing noise. It found that whenever the action plans are implemented, benefits were typically 29 times the level of costs. The Directive itself does not constitute a burden for the Member States, it is relevant as the noise problem is still sizeable and the Directive aims to oblige Member States to follow the same process, but leaves it up to them to choose which or any specific measures to take.

Road traffic noise, both inside and outside agglomerations, remains the most dominant source that affect human exposure above the reporting levels defined by the Directive, with an estimated total (inside and outside agglomerations) of around 100 million people (nearly 70 million inside and 30 million outside agglomerations) exposed to road traffic noise above 55 dB Lden (day evening night level). Railways are the second biggest noise source with a total of more than 18 million people (around 10 million inside and 8 million outside agglomerations) exposed to noise above 55 dB Lden, followed by aircraft noise with a total of nearly 4 million people (nearly 3 million inside and 1 million outside agglomerations) exposed to noise above 55 dB Lden. Industrial noise within urban areas exposes around 1 million people to noise levels above 55 dB Lden.

This exposure data implies that 14.1 million adults are severely affected by environmental noise: it causes sleep disturbance in 5.9 million adults, 69 000 hospital admissions and 15,900 cases of premature mortality each year.

As the WHO recommendations are stricter than the Directive thresholds, anyone falling under the scope of the Directive is non-compliant with the recommended WHO values. The analysis of the European Environment Agency¹³³ shows that there has been little or no improvement and that the 7th EAP objective will be difficult to achieve without further measures at both Member State and EU level.

¹³² SWD(2016) 454

¹³³ <https://www.eea.europa.eu/themes/human/noise/sub-sections/noise-in-europe-updated-population-exposure>

This stems, among other things, from the delays in implementing the action plans and the non-implementation of adopted action plans, which has led to no measures being taken. To foster implementation of the Directive a set of 16 legal procedures was introduced to oblige Member States to better implement the Directive. Thanks to infringements, many pending adoptions of action plans are moving forward, and three cases have already been closed without the need for court proceedings. Among those still open, the improvements in adopting the action plans are significant.

Summary

State of implementation of the policy area
<input type="checkbox"/> No progress
<input checked="" type="checkbox"/> Limited progress
<input type="checkbox"/> Some progress
<input type="checkbox"/> Substantial progress
<input type="checkbox"/> Fully implemented

In recent years, the Environmental Noise Directive has therefore highlighted the overall problem, raised awareness and initiated a process of adoption and revision of action plans so that the public authorities consider the issue and start tackling it. The 7th EAP target nevertheless remains far from being reached. Instead, actions remained scattered with a wide range of ambition between different action plans. Overall exposure to noise changed only slightly.

3.3 Drinking and bathing waters

Sub-objectives: <ul style="list-style-type: none"> • Citizens throughout the Union benefit from high standards for safe drinking and bathing water;
Actions: <ul style="list-style-type: none"> • Increasing efforts to implement the Water Framework Directive, the Bathing Water Directive (65) and the Drinking Water Directive (66), in particular for small drinking water supplies;

Introduction

The EU has a long history of water policy development – the overall objective being to ensure access to good quality water in sufficient quantities for all EU citizens. - Europe’s bathing water quality has vastly improved thanks to the **Bathing Water Directive**¹³⁴. Effective monitoring and management introduced under the Directive has led to a sharp reduction in untreated or partially treated municipal and industrial waste water ending up in water. As a result, more and more bathing water sites not only meet the minimum quality standards, but have also improved their quality. The **Drinking Water Directive**¹³⁵ has been instrumental in protecting consumer health from the possible negative impacts of

¹³⁴ Directive 2006/7/EC.

¹³⁵ Council Directive 98/83/EC of 3 November 1998 on the quality of water intended for human consumption.

contaminated drinking water. Recent reporting on the quality of drinking water in the EU confirms high compliance. In all Member States, compliance rates in large water supplies are above 99%.

Current situation

Drinking water

The Drinking Water Directive¹³⁶ deals with the quality of water intended for human consumption. Its objective is to protect human health from the adverse effects of any contamination of water intended for human consumption by ensuring that it is wholesome and clean. The Directive lays down the essential quality standards at EU level. A total of 48 microbiological, chemical and indicator parameters must be monitored and tested regularly. In general, WHO guidelines on drinking water¹³⁷ and the opinion of the Commission's Scientific Advisory Committee¹³⁸ are used as the scientific basis for the quality standards in the drinking water.

The Commission identified a possible implementation issue with small drinking water supplies in 2010-2011. **Small water supplies** are those below 1 000 m³ a day as an average or serving less than 5,000 people.

The Commission identified that there are around 85 000 small water supplies in the EU that provide drinking water to some 65 million Europeans. Voluntary data collection showed that more than one third of the small water supplies in the EU were not properly monitored or delivered drinking water that failed to comply with all quality standards. The assessment at that time that some Member States were struggling to manage small water supplies in a safe way, which could potentially affect between 11.5 and 15.5 million people, led to the inclusion of the issue in the 7th EAP.

As a result, the Commission took a number of actions. As an important legislative follow-up, the Commission proposed a revision of the monitoring Annexes II and III to allow Member States, on the basis of a risk assessment, flexibility in monitoring parameters and the frequency of sampling, to ensure better protection of citizens' health. The new monitoring and control system, adopted in 2015, means a reduction in unnecessary analyses and the ability to concentrate on the controls that matter.

The evaluation of the Directive performed in 2015-2016 found among other things that the risk-based approach offers opportunities to focus time and resources on risks that matter and to avoid analyses on non-occurring parameters, in particular in small water supplies with risks that are easy to survey. As a result, the Commission included a mandatory risk-based approach in its recast proposal published in early 2018. To respect proportionality, the Commission proposed that small water suppliers have more time to implement the risk-based approach, and to update on-line information. The proposal updates existing safety standards in line with the most recent WHO recommendations.

Bathing water

The Bathing Water Directive lays down provisions for the monitoring and classification of bathing water quality at designated bathing sites, the management of those sites, and the

¹³⁶ Council Directive 98/83/EC of 3 November 1998 on the quality of water intended for human consumption.

¹³⁷ https://www.who.int/topics/drinking_water/en/

¹³⁸ https://ec.europa.eu/health/scientific_committees/environmental_risks_en

provision of information to the public on bathing water quality. The Directive incorporates into EU law the approaches drawn up at global level by the WHO, including those related to monitoring and quality assessment activities.

Annual EU bathing water quality reports and country reports of the European Environment Agency and the Commission, based on the data provided by the Member States, provide an overview of the results of the monitoring and reporting obligations set out in the Bathing Water Directive. They serve as the source for the analysis of trends. According to the report on the quality of bathing water in 2017 (published in May 2018), **96 % of EU bathing sites met the minimum quality requirements and 85 % of bathing sites met the Bathing Water Directive’s most stringent ‘excellent’ quality standards.** From 2014 to 2017, the quality of bathing waters across the EU has been steadily improving. Specific results in the 2018 bathing water report based on the monitoring data reported by the Member States for the 2017 bathing season showed a small decline in EU sites meeting the highest ‘excellent’ quality standards and the minimum quality requirements set out in the Bathing Water Directive. **‘Excellent’ quality standards across Europe dropped marginally from 85.5 % in 2016 to 85 % last year.** Similarly, those meeting minimum ‘sufficient’ standing fell from 96.3 % to 96 %. The reason for the slight drop was due mostly to the effect of summer rain on test results as well as changes in testing methodology in Romania and Sweden.

Summary

State of implementation of the policy area – <u>drinking water:</u>	State of implementation of the policy area – <u>bathing water</u>
<input type="checkbox"/> No progress	<input type="checkbox"/> No progress
<input type="checkbox"/> Limited progress	<input type="checkbox"/> Limited progress
<input type="checkbox"/> Some progress	<input checked="" type="checkbox"/> Some progress
<input checked="" type="checkbox"/> Substantial progress	<input type="checkbox"/> Substantial progress
<input type="checkbox"/> Fully implemented	<input type="checkbox"/> Fully implemented

The EU action on drinking water has made *substantial progress*. The Drinking Water Directive has been well implemented¹³⁹ in general. Compliance rates in large water supplies are above 99%. in all Member States There has been significant progress by Member States in dealing with monitoring and compliance of small supplies, which was identified as a concern in the 7th EAP. Compliance rates in drinking water quality have increased in all Member States up to 98%.

The explicit designation of small drinking water supplies in the 7th EAP has triggered action at suppliers, Member States, and EU level. The objective envisaged by the 7th EAP is still relevant, as drinking water quality is and remains essential for the protection of human health. At the same time, it is an intrinsic link to the environment and related pressures. One important finding to improve water quality in small supplies was that the risk-based approach can further improve the situation.

¹³⁹ SWD (2016) 428

The EU action on bathing water has made *steady progress*. Over the years, the following has been observed when it comes to the Bathing Water Directive: better implementation of legislation; better information by improving the knowledge base; more and wiser investment in the environment and climate policy; and full integration of environmental requirements and considerations into other policies.

Investments needs in the water sector are high and those with direct impact on the quality of bathing waters are usually linked to waste water management. Mismanagement of waste water is one of the most common reasons for the ‘poor’ quality of bathing sites. Implementation of the Urban Waste Water Treatment Directive and a focus on reducing sewer overflow have successfully led to reduced pollution and improved quality at several low-quality bathing water sites. However, for some bathing water sites the upgrading of wastewater treatment, for example with ultraviolet light disinfection, may still be needed to ensure good bathing water quality. Bathing water affected by water draining from farms/farmland, and from scattered houses with misconnected drains may need detailed inventories to find and stop the sources. In addition to measures to reduce pollution at source and rainwater storage basins, bathing water affected by heavy rains and storm water overflows needs an effective modelling and warning system to advise bathers against entering the water after these short-term pollution incidents.

To conclude, the Bathing Water Directive is perceived as a success story across the EU as years of investments in waste water management resulted in 96 % of bathing sites meeting the minimum requirements set by the Directive. While the annual report attracts a lot of media attention, the Commission is nevertheless aware of the challenges that remain.

3.4 Chemicals

Sub-objectives:

- The combination effects of chemicals and safety concerns related to endocrine disruptors are effectively addressed in all relevant Union legislation, and risks for the environment and health, in particular in relation to children, associated with the use of hazardous substances, including chemicals in products, are assessed and minimised. Long-term actions with a view to reaching the objective of a non-toxic environment will be identified;
- The use of plant protection products does not have any harmful effects on human health or unacceptable influence on the environment, and such products are used sustainably;
- Safety concerns related to nanomaterials and materials with similar properties are effectively addressed as part of a coherent approach in legislation;

Actions:

- Continuing to implement REACH in order to ensure a high level of protection for human health and the environment as well as the free circulation of chemicals within the internal market while enhancing competitiveness and innovation, while being mindful of the specific needs of SMEs. Developing by 2018 a Union strategy for a non-toxic environment that is conducive to innovation and the development of sustainable substitutes including non-chemical solutions, building on horizontal measures to be undertaken by 2015 to ensure: (1) the safety of manufactured nanomaterials and materials with similar properties; (2) the minimisation of exposure to endocrine disruptors; (3) appropriate regulatory approaches to address combination effects of chemicals and (4) the minimisation of exposure to chemicals in products, including, inter alia, imported products, with a view to promoting non-toxic material cycles and reducing indoor exposure to harmful substances;
- Monitoring the implementation of Union legislation on the sustainable use of biocidal products and plant protection products and reviewing it, as necessary, to keep it up to date with the latest

Introduction

The 7th EAP recognised that the chemicals policy area (including legislation and other measures) requires further development to sufficiently protect human health and the environment. Priority areas and policy gaps of particular importance highlighted in the 7th EAP include: (i) combination effects ('unintentional mixtures'); (ii) endocrine disruptors; (iii) nano-materials; (iv) minimising exposure to hazardous substances; (v) chemicals in products (articles) and non-toxic material cycles; and (vi) improving the knowledge base on e.g. exposure as well as activities related to international objectives and conventions on chemicals.

Most of the activities in the chemicals policy area relate to priority objective 3 ('safeguard citizens from environmental pressures'). However, some of the objectives listed below are linked to other priority objectives and actions - such as priority objective 5 on developing better knowledge on nanomaterials and priority objective 9 on sound management of chemicals under relevant international conventions.

Current situation

Continued implementation of REACH

Registrations: The final round of registrations of old chemicals (i.e. phase-in chemicals) on the EU market under the EU Regulation on registration, evaluation and restriction of chemicals (REACH) came to an end in May 2018¹⁴⁰. 21 787 chemicals in total placed on the EU and European Economic Area market in quantities over 1 tonne (per producer/importer and per year) have been registered (figure updated to October 31, 2018). This represents an unprecedented amount of information on chemicals, chemical and toxicological properties, uses and exposures, which can be used as the basis for safe use, restriction and authorisation of these chemicals.

Evaluation: So far, the European Chemical Agency (ECHA) has carried out over 1000 compliance checks on the registration dossiers. However, this process has encountered issues with the compliance of the information submitted by industry during the registration process (recently highlighted in a study by the German Institute for Risk Assessment (BfR)¹⁴¹. Such incompliance hampers the ability of risk managers to take well-informed risk management decisions and measures under the legislation.

Since 1 January 2014, another 46 substances have been identified as substances of very high concern (SVHC)¹⁴² and listed on the REACH Candidate List¹⁴³ (in addition to the 151 substances identified between 2008 and 2013). By February 2019 the list contained a total of 197 substances. Under the SVHC roadmap, 600 substances have been screened; for 159 of them options for suitable risk management have been proposed. A further 500 substances are

¹⁴⁰ <https://echa.europa.eu/-/21-551-chemicals-on-eu-market-now-registered>

¹⁴¹ REACH Compliance Workshop at the BfR, BfR Communication No 030/2018, 25 September 2018: <https://www.bfr.bund.de/cm/349/reach-compliance-workshop-at-the-bfr.pdf>

¹⁴² Substances with the properties as laid down in Article 57 of REACH: Carcinogens, mutagens, reprotoxicants (CMRs, categories 1A/1B), sensitizers, persistent, bioaccumulative and toxic substances (PBTs) or very persistent, very bioaccumulative substances (vPvBs), endocrine disruptors (EDs), and petroleum/coal stream substances that are CMRs or PBTs.

¹⁴³ <https://echa.europa.eu/home>

being assessed or further data generated. The future focus will be to identify new SVHCs by looking at groups of similar substances together¹⁴⁴.

The processes of risk management under REACH via restriction and authorisation of hazardous substances have started. By the end of 2018, around 65 authorisations had been granted, and 69 restrictions on the use of substances or groups of substances has been adopted under REACH. However, progress has been slower than expected. Efforts to address this are being made, as set out in the 2018 REACH review.

Several measures to facilitate compliance, improve the quality of registration information, speed up risk management decisions and reduce the administrative burden are ongoing. Further actions have been identified in the 2018 REACH review and are currently being launched.

Development of an EU strategy for a non-toxic environment: The Strategy for a non-toxic environment has not been delivered by 2018 because a number of evaluations of current EU legislation needed to be finalised first. In particular, the Commission has carried out four important initiatives that have been completed or are in the process of being completed:

- the 2018 Communication on options to address the interface between chemical, product and waste legislation^{145 146}
- the 2018 REACH Review^{147 148}
- the Fitness Check of all chemicals legislation except REACH¹⁴⁹
- the Fitness Check of the EU legislation on plant protection products and pesticides residues¹⁵⁰.

Some of the activities mentioned above are still ongoing and are expected to be finalised during the first half of 2019. Together with a comprehensive study on the issues raised in the action programme¹⁵¹, these initiatives will provide a comprehensive assessment of the situation in the chemicals policy about what works well and does not work well. The Commission has made progress with respect to a number of issues: nanomaterials, endocrine disruptors, combination effects, chemicals in products and non-toxic material cycles.

Nano-materials: A limited number of pieces of EU legislation on chemicals (biocides, cosmetics and food) include specific provisions on nanomaterials that are already operational e.g. regarding risk management decisions. Amendments to the REACH annexes regarding registration of substances in or with nano-forms were adopted on 3 December 2018¹⁵² and will enter into force in 2020. Guidelines for risk assessment of nanomaterials under REACH have been updated by ECHA¹⁵³; further guidance on nano-form is under development in

¹⁴⁴ COM(2018) 116.

¹⁴⁵ COM(2018) 32.

¹⁴⁶ SWD(2018) 20.

¹⁴⁷ COM(2018) 116.

¹⁴⁸ SWD(2018) 58.

¹⁴⁹ http://ec.europa.eu/environment/chemicals/better_regulation/pdf/roadmap_chemicals_fc.pdf

¹⁵⁰ https://ec.europa.eu/food/plant/pesticides/refit_en

¹⁵¹ European Commission (2017). Study for the strategy for a non-toxic environment of the 7th Environment Action Programme: http://ec.europa.eu/environment/chemicals/non-toxic/index_en.htm

¹⁵² Commission Regulation (EU) 2018/1881.

¹⁵³ <https://echa.europa.eu/guidance-documents/guidance-on-information-requirements-and-chemical-safety-assessment>

2019 to reflect the latest amendments to REACH. EFSA has in 2018 updated its guidance on nanotechnologies on food and feed¹⁵⁴. The EU is also active in the development of test guidelines under OECD and different aspects of nanomaterials safety are reflected in comprehensive EU funded research programs such as NanoReg¹⁵⁵. An impact assessment¹⁵⁶ concluded that a Union-wide database for nanomaterials – as advocated for in the 7th EAP – was not needed because there are already existing regulatory measures and national initiatives in place for registering nanomaterials. The Commission has therefore delegated the compilation and dissemination of nanomaterial related information and the EU Observatory for Nanomaterials¹⁵⁷ to ECHA. The Commission's recommendation on the definition of nanomaterials¹⁵⁸ is currently under review, and will include an open public consultation.

Endocrine Disruptors (EDs): Criteria for the identification of EDs under the Biocidal Product Regulation and Plant Protection Product Regulation was adopted¹⁵⁹ in 2017 and 2018 respectively. In addition, a guidance document for their implementation was developed in 2018¹⁶⁰. Beyond that, the Commission has progressed in identifying the gaps in current test guidelines, in prioritising on what to focus on in the further development of test guidelines and in initiating work on new tests and test guidelines^{161 162 163}. Several EDs have been identified under REACH, on a case-by-case basis, by applying article 57(f) (substances of equivalent level of concern). The Endocrine Active Substances Information System (EASIS)¹⁶⁴ has been established and made publicly available as of 2016. The Commission adopted a Communication¹⁶⁵ *Towards a comprehensive European Union framework on endocrine disruptors* on 7 November 2018, setting out amongst other actions a comprehensive screening of the existing relevant legislation on endocrine disruptors. This reflection exercise will allow an assessment of whether EU legislation on endocrine disruptors delivers on its overall objectives to protect human health and the environment. It will ensure citizens' involvement and stakeholders' participation, including through a public consultation, and will support the Commission in bringing the debate forward and deciding whether changes to the legislative framework are necessary

Combination effects ('unintentional mixtures'): In line with the commitments made in the Commission communication on the combination effects of chemicals adopted in 2012¹⁶⁶ as a response to the Council conclusions, the Commission services and EU agencies have, until now, mainly focused on addressing gaps in methodologies and data. EFSA is currently developing the methodology for the cumulative risk assessment of the dietary exposure to

¹⁵⁴ <https://www.efsa.europa.eu/en/efsajournal/pub/5327>

¹⁵⁵ <http://www.nanoreg.eu/>

¹⁵⁶ <http://ec.europa.eu/DocsRoom/documents/23261>

¹⁵⁷ European Union Observatory for Nanomaterials (EUON): <https://euon.echa.europa.eu/>

¹⁵⁸ Information on progress of the review and the links to the supporting JRC reports:

http://ec.europa.eu/environment/chemicals/nanotech/faq/definition_en.htm

¹⁵⁹ https://ec.europa.eu/health/endocrine_disruptors/process_en

¹⁶⁰ <http://www.efsa.europa.eu/en/efsajournal/pub/5311>

¹⁶¹ <https://publications.europa.eu/en/publication-detail/-/publication/58430e34-f4ef-11e7-be11-01aa75ed71a1/language-en>

¹⁶² <https://publications.europa.eu/en/publication-detail/-/publication/472d2c88-a8b1-11e7-837e-01aa75ed71a1/language-en>

¹⁶³ <https://publications.europa.eu/en/publication-detail/-/publication/0abd23e0-ec38-11e6-ad7c-01aa75ed71a1/language-en>

¹⁶⁴ <https://easis.jrc.ec.europa.eu/veil/>

¹⁶⁵ COM(2018) 734 final.

¹⁶⁶ COM(2012) 252 final.

pesticide residues. When completed, it should enable the existing provisions on the cumulative effects of pesticide residues to be applied under the Maximum Residue Level Regulation¹⁶⁷. Furthermore, the Commission teamed up with EU agencies to develop the Information Platform for Chemical Monitoring (IPCHEM)¹⁶⁸ and is continuously populating it with new data on the presence of chemicals in the environment, humans, food, feed and indoor air and environment. This improves our understanding of the chemical mixtures to which human populations and the natural environment are exposed. The Commission services have also carried out a number of reviews^{169 170 171} on existing methodologies and knowledge, and has funded research through Horizon 2020¹⁷².

Chemicals in products (articles) and non-toxic material cycles: In October 2018 the Commission adopted a restriction of the use of 32 CMR substances in textiles by way of Article 68(2) of the REACH Regulation¹⁷³. The legal package that amends the Waste Framework Directive, adopted on 30 May 2018 and published on 14 June 2018, includes a new provision according to which by 5 January 2021 economic operators shall provide ECHA with data on the content of SVHCs in articles. Thanks to a database, this information will be made available to waste treatment operators and consumers upon request. Similar information is already required under Article 33 of the REACH Regulation, but has so far not been easily accessible.

In early 2018, the Commission presented a Communication¹⁷⁴ and a Staff Working Document¹⁷⁵ assessing the interface between chemicals, products and waste legislations, identifying four main challenges in this area and presenting options to address them. The Commission launched an open public consultation on the way forward and the results¹⁷⁶ confirm general agreement among stakeholders on the relevance of the issues identified. They show support for improving substance traceability; better enforcement and use of other measures to ensure a level playing field between EU and non-EU operators; improved harmonisation and mutual recognition of end-of-waste criteria; and support for reinforcing circular economy aspects in instruments such as the Ecodesign directive.

In addition, several studies to inform the policy process on substances in articles were launched: (i) a study on substances of concern in material streams, launched in April 2018, which aims at further improving the knowledge base; (ii) a sub-study conducted in the context of the non-toxic environment strategy on ‘chemicals in articles and non-toxic material

¹⁶⁷ Regulation (EC) No 396/2005 on maximum residue levels of pesticides in food and feed

¹⁶⁸ <https://ipchem.jrc.ec.europa.eu>

¹⁶⁹ JRC Report: Assessment of Mixtures – Review of Regulatory Requirements and Guidance, June 2016.

¹⁷⁰ JRC Report: Scientific methodologies for the assessment of combined effects of chemicals – a survey and literature review.

¹⁷¹ JRC Report: Review of case studies on the human and environmental risk assessment of chemical mixtures, 2016: <https://ec.europa.eu/jrc/en/publication/review-case-studies-human-and-environmental-risk-assessment-chemical-mixtures>

¹⁷² Bopp et al. (2018). Current EU research activities on combined exposure to multiple chemicals, *Environment International*. Volume 120: p. 544-562.

¹⁷³ Commission Regulation (EU) 2018/1513.

¹⁷⁴ COM(2018) 32.

¹⁷⁵ SWD(2018) 20.

¹⁷⁶ Summary Report of the Public Consultation conducted by the European Commission based on the main issues identified in the Commission's Communication on the interface between chemical, product and waste legislation (COM(2018) 32 final) <https://ec.europa.eu/info/sites/info/files/summary-report-public-consultation-chemical-product-waste-legislation.pdf>

cycles'¹⁷⁷; and a study on scientific and technical support for collecting information on hazardous substances in articles and an assessment of currently available tools for this purpose¹⁷⁸.

Minimisation of human and environmental exposure to hazardous substances: The continuous implementation of the EU chemicals acquis over time has been quite effective in reducing and minimising human and environmental exposures, especially of some substances of very high concern. However, hazardous chemicals continue to be released in large quantities. They are ubiquitous in humans and the environment and accumulate in material stocks and products¹⁷⁹. Trends data suggest projected doubling of the global chemicals market between 2017 and 2030, while the output of chemicals in the EU during the same period is projected to increase by 30% (from 0,541 trillion EUR to 0,706 trillion EUR). The growth in chemicals sales outnumbers the population growth, meaning per capita consumption of chemicals is increasing steadily¹⁸⁰.

A range of on-going and emerging health and environmental concerns remain and require further attention^{181 182 183 184}. Exposure to hazardous chemicals continues to be one of several factors behind human health as well as environmental impacts (cancers, reproductive diseases, respiratory sensitisation, decline of insect and bird populations, etc.), although current trends point to a mixed picture¹⁸⁵. Accordingly, it continues to represent a serious cause for concern for human health and the environment.

The 7th EAP also explicitly mentions combination effects and endocrine disruptors in connection to minimisation of exposure and stresses the importance of considering children and sensitive population groups in the context. The minimisation of exposure is a horizontal long-term objective. Tackling it will largely rely on the combined efforts under all the different objectives and actions related to chemicals that are outlined in the 7th EAP.

¹⁷⁷<http://ec.europa.eu/environment/chemicals/non-toxic/pdf/Sub-study%20b%20articles%20non-toxic%20material%20cycles%20NTE%20final.pdf>

¹⁷⁸<https://publications.europa.eu/en/publication-detail/-/publication/58f951af-809b-11e7-b5c6-01aa75ed71a1/language-en/format-PDF>

¹⁷⁹Global Chemicals Outlook II: summary for policymakers. UNEP/EA.4/21. 21 January 2019 <https://www.unenvironment.org/explore-topics/chemicals-waste/what-we-do/policy-and-governance/global-chemicals-outlook>

¹⁸⁰Global Chemicals Outlook II. From Legacies to Innovative Solutions: Implementing the 2030 Agenda for Sustainable Development – Synthesis Report. United Nations Environment Programme, 2019 https://wedocs.unep.org/bitstream/handle/20.500.11822/27651/GCOII_synth.pdf?sequence=1&isAllowed=y

¹⁸¹Towards a comprehensive European Union framework on endocrine disruptors. COM(2018) 734. <http://ec.europa.eu/transparency/regdoc/rep/1/2018/EN/COM-2018-734-F1-EN-MAIN-PART-1.PDF>

¹⁸²Study supporting the Fitness Check on the most relevant chemicals legislation ("Fitness Check +") Final report <https://publications.europa.eu/en/publication-detail/-/publication/07ad8b92-dbca-11e7-a506-01aa75ed71a1/language-en/format-PDF>

¹⁸³Study on the cumulative health and environmental benefits of chemical legislation. Final Report, 2017. <https://publications.europa.eu/en/publication-detail/-/publication/b43d720c-9db0-11e7-b92d-01aa75ed71a1/language-en>

¹⁸⁴European Union Strategic Approach to Pharmaceuticals in the Environment, COM(2019) 128 final http://ec.europa.eu/environment/water/water-dangersub/pdf/strategic_approach_pharmaceuticals_env.PDF

¹⁸⁵Mixed trends, i.e. the exposures to some chemicals from some sources are going down while other exposures remains unchanged or increases.

Sustainable use of pesticides and biocides: A Commission report to the European Parliament and the Council on the sustainable use of biocides was published in 2016¹⁸⁶, and a Commission report on progress in the implementation of Directive 2009/128/EC on the sustainable use of pesticides was published in 2017¹⁸⁷.

Chemical exposure and toxicity knowledge base: An 'Information Platform for Chemical Monitoring' (IPChem) was established and made publically available in 2015. The 'Human biomonitoring for European Union' (HBM4EU)¹⁸⁸ was established in 2016 and funding is currently provided until 2020 under Horizon 2020. The 'Endocrine Active Substances Information System' (EASIS)¹⁸⁹ was established and made publically available as of 2016. Further funding of research related to chemicals, health and environment is provided under Horizon 2020¹⁹⁰ and the LIFE programme¹⁹¹.

International chemicals policy processes and conventions: The EU and its Member States, committed to the UN objective of a sound management of chemicals throughout their life cycle in 2002, often referred to as the 'World Summit of Sustainable Development (WSSD) 2020 goal on chemicals and waste'. In 2006, governments and stakeholders agreed on the Strategic Approach to International Chemicals Management (SAICM)¹⁹², a global policy framework to promote safe chemicals management with the explicit aim of implementing the WSSD 2020 Goal on chemicals and waste. In 2015, the EU committed to the United Nations' 2030 Agenda for Sustainable Development including the Sustainable Development Goals (SDGs)¹⁹³. Several of the SDGs relate directly or indirectly to chemicals and chemical policy (in particular SDGs 3.9, 6.3, 12.4).

The EU plays an active role in the SAICM process, addressing a wide range of issues related to chemicals policy, including information on chemicals in articles. The EU is currently engaged in the SAICM post-2020 process, which seeks to formulate objectives for the period beyond 2020 to help implement the SDGs by 2030. The EU is also a major contributor to SAICM financing as well as the international conventions on chemicals.

Under the Stockholm Convention on Persistent Organic Pollutants, the EU nominated two substances for consideration (in 2013, and in 2015). Under the Rotterdam Convention on Prior Informed Consent (PIC), the EU further submitted eight notifications of final regulatory action between 2013 and 2018, of which four in 2013. The EU also submitted more than 33,000 export notifications to third countries between 2013 and 2018. A report on implementation of Regulation (EU) No 649/2012 on export and import of hazardous chemicals¹⁹⁴, which implements the Rotterdam Convention in the Union, was published in 2018. An update of the Union Implementation Plan on the Stockholm Convention was

¹⁸⁶ COM(2016) 151.

¹⁸⁷ https://ec.europa.eu/food/sites/food/files/plant/docs/pesticides_sup_report-overview_en.pdf

¹⁸⁸ <https://www.hbm4eu.eu/>

¹⁸⁹ <https://easis.jrc.ec.europa.eu/veil/>

¹⁹⁰ <https://ec.europa.eu/programmes/horizon2020/en>

¹⁹¹ European Commission Life Programme: <https://ec.europa.eu/easme/en/life>

¹⁹² Strategic Approach to International Chemicals Management (SAICM): <http://www.saicm.org/>

¹⁹³ <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>

¹⁹⁴ Summary of the Synthesis Report on the operation of Regulation (EU) No 649/2012 concerning the export and import of hazardous chemicals. COM(2018) 697 <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:52018DC0697>

published in 2019¹⁹⁵, while a report on the implementation of Regulation (EC) No 850/2004 on persistent organic pollutants, which implements the Stockholm Convention, is expected to be finalised in 2019.

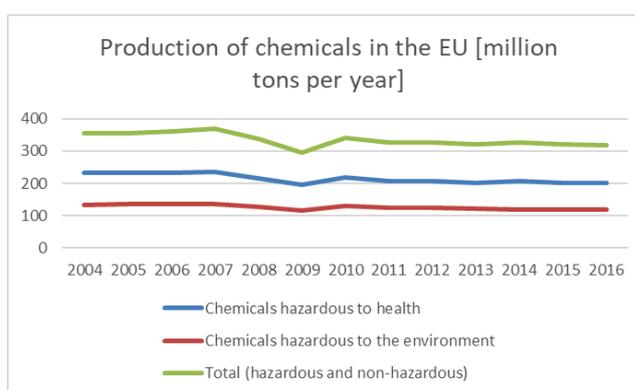
The EU was active in achieving the 2013 agreement on the ‘Minamata Convention’ on mercury, which the EU ratified in 2017. This will contribute to drastically reducing the use of mercury in the EU by adopting a new regulation on mercury, including setting deadlines for the prohibition of all known uses of mercury in industrial processes and introducing a prohibition on novel uses of mercury in products and industrial processes.

Summary

There has been some progress in the chemicals policy area, in particular in the continued implementation of REACH and through initiating actions to address the issues identified in the REACH review. Policy assessments have however also identified some remaining policy gaps, inconsistencies and development needs. Regarding the main issues highlighted in the 7th EAP, progress in terms of concrete policy measures has been made in particular on nanomaterials and endocrine disruptors. Activities on e.g. combination effects, have involved assessments, research and knowledge building while dealing with chemicals in products and minimisation of exposure to some hazardous chemicals have been tackled through implementation of a broad set of EU legislation on chemicals including notably REACH. The action to develop an EU non-toxic strategy for the environment has not been fulfilled.

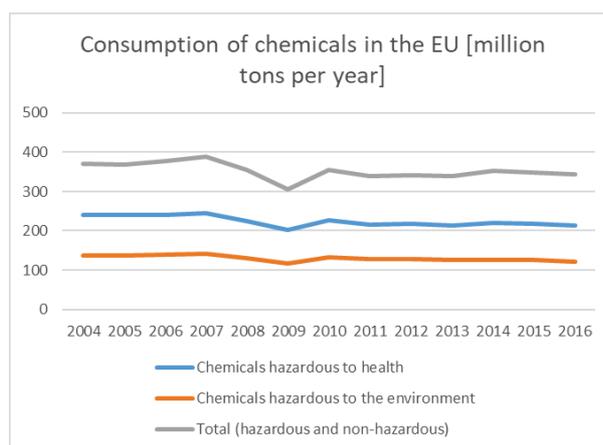
There are no quantitative targets for chemicals in the 7th EAP. One generally agreed indicator is based on the quantities of chemicals produced and used in the EU - by hazard class (see Figure 12¹⁹⁶). The share of different classes of chemicals in EU production and consumption has remained relatively constant over time with around 63% hazardous to health and 43% hazardous to the environment. EU production and consumption are still recovering from the economic crisis in 2009. However, a slight relative decrease in the overall hazardousness of the chemicals consumed in the EU might be detected, although it is too early to determine if this is a lasting trend.

Figure 12: Chemical trends (tonnage produced and used in the EU over time)



¹⁹⁵ On the review and update of the second European Union Implementation Plan in accordance with Article 8 (4) of Regulation No 850/2004 on persistent organic pollutants. COM(2018) 848 <http://ec.europa.eu/transparency/regdoc/rep/1/2018/EN/COM-2018-848-F1-EN-MAIN-PART-1.PDF>

¹⁹⁶ Note that the indicator aggregates data and some pertinent data may be lost eg not all classifications are of equal concern or severity



The above graphs shows production and consumption of chemicals, EU-28, 2004-2016, in total (hazardous and non-hazardous) and for chemicals hazardous to the environment and hazardous to health respectively. Source: Eurostat The share of chemicals hazardous to health and the environment was relatively unchanged over the period 2004–2016. The share of chemicals hazardous to the environment fluctuated between 37 % and 39%, while the share of chemicals hazardous to health fell from about 66 % in 2004 to 62 % in 2016. The analysis shows substitution of hazardous substances by less hazardous substances has not yet occurred to any notable extent. Essentially, the share of industrial chemicals hazardous to health and the environment in the total chemicals production has remained relatively unchanged over last decade.

State of implementation of the policy area
<input type="checkbox"/> No progress
<input type="checkbox"/> Limited progress
<input checked="" type="checkbox"/> Some progress
<input type="checkbox"/> Substantial progress
<input type="checkbox"/> Fully implemented

Overall, chemicals policy is not yet fully on track to achieve the 7th EAP 2050 vision or its Priority Objective 3 on “safeguarding the EU’s citizens from environment-related pressures and risks to health and wellbeing”. Neither is it yet fully sufficient to achieve the SDGs relating to chemicals or the WSSD 2020 goal for chemicals. On the other hand, the EU chemical acquis is already composed by a great number of legislative instruments which are generally fit-for-purpose and can deliver. A number of challenges are currently being identified¹⁹⁷, which could undermine its capacity to deliver its full potential, including the need for Member States to commit adequate resources to its implementation.

¹⁹⁷ A number of evaluations have been carried out or are being finalised by the Commission on chemicals related legislation, including a review of REACH, an evaluation of the Pesticides Regulation and a Fitness Check of all chemicals legislation (except REACH).

3.5 Climate change adaptation

Sub-objectives:

- Decisive progress is made in adapting to the impact of climate change.

Actions:

- Agreeing and Implementing an **EU strategy on adaptation to climate change**,¹⁹⁸ including the integration and mainstreaming of **climate change adaptation and disaster risk management considerations** into key Union policy initiatives and sectors.
- Agreeing and Implementing an **EU strategy on adaptation to climate change**, including the mainstreaming of climate change adaptation into key Union policy initiatives and sectors.

Introduction

Climate change is expected to aggravate environmental challenges by provoking prolonged droughts and heat waves, floods, storms, forest fires, soil and coastal erosion, as well as new and more virulent forms of human, animal or plant disease. Besides efforts to mitigate greenhouse gas emissions, specific action should be taken to ensure that the EU is sufficiently prepared to face the pressures and changes resulting from climate change, and to strengthen its environmental, economic and societal resilience.

To help safeguard Europeans from climate and environment-related pressures and risks to health and wellbeing, the EU developed the EU strategy on adaptation to climate change. The strategy aims to improve the preparedness and capacity to respond to the impacts of climate change at different levels of governance (local, regional, national and EU levels). The strategy seeks to:

- promote action by Member States;
- enable better informed decision-making; and
- climate-proof EU action by promoting adaptation in key vulnerable sectors.

Current situation

Promoting action by Member States

Encouraging all Member States to adopt comprehensive adaptation strategies

The Commission has supported Member States develop their adaptation strategies primarily by developing associated guidelines as well as by providing funding (LIFE programme). When the EU adaptation strategy was adopted in 2013, only 15 Member States had developed national strategies on how to adapt to climate change. As of October 2018, 25 Member States have developed such strategies, with continued efforts being undertaken in the remaining three to finalise theirs (Latvia, Croatia, and Bulgaria).

Provide LIFE funding to support capacity building and step up adaptation action in Europe

The EU also pursues its climate change adaptation objectives through the LIFE programme, the EU's funding instrument for environment and climate action. The programme helps implement the 7th EAP. The LIFE programme supports capacity building and adaptation action in Europe, co-financing projects that help develop and demonstrate the most effective technologies, tools and methodologies that can be used to meet EU's policy targets on climate change. The sub-programme for climate action was successfully incorporated into the

¹⁹⁸ COM(2013) 216.

2014-2020 LIFE Regulation¹⁹⁹ and into its multiannual work programmes for 2014-2017 and 2018-2020. Between 2000 and 2015, EUR 152 million (EUR 307 million with co-financing) of EU funding was allocated to nearly 150 projects that focus fully or partly on climate change adaptation²⁰⁰. As of October 2018, there are at least 65 ongoing adaptation-related LIFE projects on e.g. land and water management and urban adaptation that target implementation across a combined area the size of Germany (more than 350 000 km²).

Introduce adaptation in the Covenant of Mayors framework

Successful adaptation to climate change requires action at all levels of governance: national, regional, local, as well as a transnational level. In 2014, the Commission launched the Mayors Adapt initiative to encourage local action on climate adaptation. After being integrated into the initiative supporting local action on climate change, 1 078 local authorities have declared their intention to develop climate adaptation strategies. As of October 2018, 22 city-level adaptation strategies had already been developed under the Covenant²⁰¹, with the number expected to increase as local authorities prepare their climate strategies for 2030.

In 2016, the Covenant of Mayors merged with the Compact of Mayors to form the Global Covenant of Mayors for Climate & Energy²⁰². The initiative today brings together more than 9 000 cities committed to act on climate change, representing 10 % of the world's population.

The Urban Agenda for the EU further represents a bottom-up initiative in the form of a multi-level working method that promotes cooperation between Member States, cities, the Commission and other stakeholders in order to stimulate growth, liveability and innovation in European cities and to identify and successfully tackle social challenges. The 'Climate Adaptation Partnership' addressed climate adaptation by preparing an action plan on how to promote urban adaptation in the EU.

On promoting action by Member States, early results from the evaluation of the adaptation strategy suggest that steady progress has been made.

Better informed decision-making

Bridge the knowledge gap

Continued efforts have been made to identify and bridge knowledge gaps by funding research and projects related to climate adaptation via Horizon 2020 and the 7th Framework Programme. Under these initiatives, around 120 research projects, reports and articles have been identified that focus on climate adaptation. Furthermore, research has continually been undertaken by the JRC, including the development of preliminary projections on the economic impacts of climate change in sectors of the EU based on bottom-up analysis (PESETA III project), the results of which were published in 2017-2018.

Develop Climate-ADAPT as the 'one-stop shop' for adaptation information in Europe

Since its launch in 2012, the Climate-ADAPT platform²⁰³ has continued to be developed by the European Environment Agency and the Commission as the 'one-stop shop' for adaptation

¹⁹⁹ Regulation (EU) No 1293/2013 of the European Parliament and of the Council of 11 December 2013, L347/185.

²⁰⁰ Ricardo, IEEP, Trinomics, and Alterra. Study to support the evaluation of the EU adaptation strategy, Ricardo/ED62885. Report, Study for the European Commission, 2018.

²⁰¹ <https://www.covenantofmayors.eu/about/covenant-initiative/covenant-in-figures.html>

²⁰² <https://www.globalcovenantofmayors.org/>

information in Europe. Between 1 March 2013 and 31 March 2018, Climate-ADAPT had 409 565 visitors, with 5 000 registered users receiving a newsletter. The European Climate Change Adaptation conference²⁰⁴ is another event that helps disseminate information on climate adaptation.

Climate-proofing EU action: promoting adaptation in key vulnerable sectors

Facilitate the climate-proofing of the common agricultural policy, the cohesion policy and the common fisheries policy

Adaptation has been integrated into a broad range of sectors outlined in the EU adaptation strategy. Two recent studies on the integration of EU funds indicate that adaptation differs across EU funds. Among other things, adaptation seems to have been included in the CAP on a much larger scale than mitigation. Under the European Regional Development Fund (ERDF) and Cohesion Fund, a substantial amount of funding was directed at adaptation-related investments. Furthermore, the Commission only approved major projects if they were climate-resilient. Compared to the ERDF and Cohesion Fund, the focus on adaptation seems to be minor in the European Maritime and Fisheries Fund and European Social Fund. Climate change was integrated into the 2013 legislation establishing an EU civil protection mechanism and into the subsequent work carried out to implement it. Most recently, in the Commission communication ‘Strengthening EU Disaster Management: rescEU Solidarity with Responsibility’ and in the accompanying Decision²⁰⁵, the emphasis was on strengthening Member States’ prevention action, with due consideration for climate change impacts and adaptation measures. Moreover, many of the EU adaptation strategy actions are included in its action plan on the Sendai Framework for Disaster Risk Reduction 2015-2030²⁰⁶.

Ensure more resilient infrastructure

In light of the increasing frequency of extreme weather events, efforts will be needed to ensure more resilient infrastructure and promote insurance and financial products. The Commission has published a guidance document on ensuring more resilient infrastructure²⁰⁷. The Commission has continued to support work on resilient infrastructure by helping develop standardisations related to infrastructure and climate change and by investing in infrastructure through the European Fund for Strategic Investment. Extended until the end of 2020, this fund is the central pillar of the Investment Plan for Europe, with at least 40 % of infrastructure projects and innovation projects aiming to contribute to climate action in line with the Paris Agreement. Previously supported projects include renewable energy and retrofitting urban infrastructure²⁰⁸.

Promote insurance and other financial products for resilient investment and business decisions

Insurance has attracted considerable attention as a tool in climate risk management to mitigate the impact of e.g. extreme weather events on sectors such as agriculture and infrastructure. Risk transfer through insurance can ensure that impacts of events such as

²⁰³ <https://climate-adapt.eea.europa.eu/>

²⁰⁴ <https://www.ecca2019.eu/>

²⁰⁵ COM(2017) 772.

²⁰⁶ SWD(2016) 205.

²⁰⁷ SWD(2013) 137.

²⁰⁸ Better infrastructure, better economy, European Investment Bank, 2016. Retrieved from: www.eib.org/attachments/thematic/better_infrastructure_en.pdf

extreme weather does not turn into long-term economic damage. Thanks to initiatives and reports such as ‘Using insurance in adaptation to climate change’²⁰⁹ and the CAP, the Commission helps adopt climate insurance as a viable risk mitigation method.

On promoting adaptation in key vulnerable sectors, continued progress appears to have been made towards the 7th EAP’s priority objective and sub-objective. An evaluation of the EU adaptation strategy concluded in autumn 2018 that the strategy is fit for purpose and has delivered on its objectives. Progress has been recorded in each of its individual actions, while adaptation needs have increased and diversified since 2014²¹⁰.

Summary

State of implementation of the policy area
<input type="checkbox"/> No progress
<input type="checkbox"/> Limited progress
<input type="checkbox"/> Some progress
<input checked="" type="checkbox"/> Substantial progress
<input type="checkbox"/> Fully implemented

The EU adaptation strategy has enabled substantial progress towards adapting to the impact of climate change. In particular, substantial progress has been made on strategic planning related to climate adaptation at national and subnational level. Almost all Member States now have national strategies on how to adapt to climate change, with continued efforts being undertaken in the remaining three to finalise theirs. A further 1,078 local authorities have declared their intention to develop climate adaptation strategies, and 22 city level adaptation strategies have already been developed under the Covenant.²¹¹

Continued efforts have been made to identify and bridge knowledge gaps by funding research and projects related to climate adaptation via Horizon 2020, the 7th Framework Programme and LIFE. Adaptation has been integrated into a broad range of sectors outlined in the EU adaptation strategy, including the common agricultural policy, the European Regional Development Fund and Cohesion Fund, and the EU Civil Protection Mechanism. Work on resilient infrastructure, standardisation and insurance have further helped ‘climate-proof’ key vulnerable sectors.

Having achieved substantial progress, a 2018 report published by the European Environment Agency identified that additional efforts might be needed on both a national and subnational level to ensure that adaptation actions and risks are developed, implemented and monitored.²¹² The evaluation of the EU adaptation strategy echoed these findings²¹³.

²⁰⁹ https://ec.europa.eu/clima/sites/clima/files/docs/insurance_adaptation_en.pdf

²¹⁰ COM(2018) 738.

²¹¹ <https://www.covenantofmayors.eu/about/covenant-initiative/covenant-in-figures.html>

²¹² 'National climate change vulnerability and risk assessments in Europe', European Environment Agency, (2018).

²¹³ COM(2018) 738.

4 PRIORITY OBJECTIVES 4: Better implementation of legislation

4.1 Compliance Assurance

Sub-objectives:

- The public has access to clear information showing how Union environment law is being implemented consistent with the **Aarhus Convention**;
- **Compliance with specific environment legislation has increased**;
- **Union environment law** is enforced at all administrative levels and a level-playing field in the internal market is guaranteed;

Actions:

- Ensuring that systems at national level actively disseminate information about how Union environment legislation is being implemented, and complementing such information with a Union level overview of individual Member States' performance;
- **Extending binding criteria for effective Member State inspections and surveillance to the wider body of Union environment law**, and further developing **inspection support capacity** at Union level, drawing on existing structures, backed up by support for networks of professionals such as IMPEL, and by the **reinforcement of peer reviews and best practice sharing**, with a view to increasing the efficiency and effectiveness of inspections;

Introduction

The EU has put in place rules to provide society with environmental benefits that include clean water, breathable air and healthy nature. An overwhelming majority of Europeans want the EU to make sure that these rules are applied across Europe.

Environmental compliance assurance describes all the ways in which public authorities promote, monitor and enforce compliance with such rules. It is part of environmental governance.

- promote means to help businesses and others comply;
- monitor means using inspections and other checks to collect information about levels of compliance and provide solid evidence for enforcement;
- enforce means to stop those who disregard the rules, sanction them and oblige them to rectify the damage.

Promotion covers awareness-raising, guidance and advice. Monitoring covers routine environmental inspections, police investigations and environmental audits by public audit bodies. It also includes investigating complaints from the public. Enforcement covers audit recommendations, official warnings, cease and desist orders, administrative fines, criminal prosecutions and demands to take remedial action. Interventions vary according to what works best in a particular region.

Current situation

Binding criteria on inspections and surveillance have not been extended to the wider body of EU environmental law as envisaged in the 7th EAP. However, in other respects, significant progress has been made in delivering this action.

First, in consultation with Member States and practitioners (mainly inspectors, police, prosecutors and judges), the concept of 'environmental compliance assurance' has emerged. While this includes inspections and surveillance, it goes beyond them by also including prevention (or promotion) and enforcement (using administrative and criminal law). This is a

more comprehensive way of tackling complex compliance problems. This reflects the latest thinking among practitioners that different classes of intervention are appropriate for dealing with different types of non-compliant conduct.

Second, the Commission's 2018 environmental compliance assurance initiative²¹⁴ aims to provide the practical support capacity referred to in the 7th EAP. The different dimensions of support capacity were explored with Member States and practitioners in 2017 in particular, and now extend to the following:

- reinforcement of IMPEL peer reviews, as mentioned in the 7th EAP;
- reinforcement of best practice sharing as mentioned in the 7th EAP, among other things by providing support for professional training and development of guidance/documentation on combatting environmental crime, compliance in rural areas and complaints -handling.

Work on this practical support capacity progressed in 2018, with workshops and exchanges taking place with practitioners. Guidance/documentation and other deliverables are due in 2019.

Third place, the Commission set up a new high-level expert group, the Environmental Compliance and Governance Forum, to help steer the environmental compliance assurance initiative. It held its inaugural meeting in March 2018. It brings together top-level Member State administrators in the field of environmental governance and the heads of several European practitioner networks, among them: IMPEL, which represents inspectorates, ENPE, which represents prosecutors, EnviCrimeNet, which represents police; and EUFJE, which represents judges. Thus, support for IMPEL has therefore been in line with the 7th EAP action.

Fourth, the above support to Member States has been strengthened by Commission efforts to assess and communicate how well Member States carry out compliance assurance. The country reports that form part of the Environmental Implementation Review are a means of providing an EU-level brief overview of individual Member States' work on this. One of the nine actions in the 2018 action plan involves preparing an assessment framework, which includes gathering and assesses evidence on compliance assurance practice in each Member State. The first draft country reports were put into consultation in September 2018 and are due to be published in 2019. Another action is the build-up of geospatial intelligence, allowing systemic and ad-hoc monitoring using among others the Copernicus data. Increased use of observation-based evidence seems of large benefit for compliance verification.

Nevertheless, there is evidence that compliance remains far from perfect:

- *Statistics from governance study*
- *Figures from ongoing study on cost of inaction*

Summary

State of implementation of the policy area
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²¹⁴ http://ec.europa.eu/environment/legal/compliance_en.htm

<input type="checkbox"/> No progress
<input type="checkbox"/> Limited progress
<input checked="" type="checkbox"/> Some progress
<input type="checkbox"/> Substantial progress
<input type="checkbox"/> Fully implemented

There has been widespread recognition that compliance assurance should improve and that this would benefit the environment. Compliance assurance also benefits those responsible for the environment (by making compliance easier). The Commission and its Member States have been working together to share best practice and develop and better use capacity. These efforts are having an impact, but further effort is needed.

4.2 Supporting Member States in implementation

Sub-objectives:

Actions:

- Drawing up **partnership implementation agreements on a voluntary basis** between Member States and the Commission, involving local and regional participation where appropriate;

Introduction

The 7th EAP makes reference to partnership implementation agreements, a concept that was not defined but was intended to improve implementation through means other than Commission infringement procedures. The Commission decided that the best way forward was the Environmental Implementation Review (EIR). This is a tool to address the causes of implementation gaps and try to find solutions before problems become urgent. The EIR is a two-year cycle of analysis, dialogue and collaboration, with country reports published and discussions held between the Commission, EU Member States and stakeholders. Country reports are drafted every 2 years and focus on key topics in the area of environmental policy and law in each EU Member State. They are published along with a summary that sets out common trends, recommendations and political conclusions.

Current situation

Key elements of the concept of partnership implementation agreements that are found in the EIR include: (i) a focus on improving implementation; (ii) efforts by the Commission to secure a shared understanding with Member States of what needs to be improved and the best means of doing so; and (iii) the establishment of voluntary mechanisms to help Member States that wish to make tangible progress. Voluntary mechanisms include Commission openness to bilateral dialogues with individual Member States and the creation of a TAIEX Peer2Peer tool²¹⁵ to fund study visits and exchanges of experts between Member States.

On references in the 7th EAP to the involvement of regional and local levels, the EIR country-specific reports take account of each Member State's administrative set-up. At the same time, the Commission has established close contacts with the Committee of the Regions, to help ensure that the EIR process takes full account of the opinions of regions and local authorities.

²¹⁵ http://ec.europa.eu/environment/eir/p2p/index_en.htm

The EIR aims to improve implementation of EU environmental policy and law. The Commission adopted the first EIR country reports²¹⁶ and communication²¹⁷ in 2017. The initiative received the support of the other EU institutions, Member States and key stakeholders. The second EIR package in 2019 will consist of 28 country reports (staff working documents) that reflects updated knowledge about the current situation in the Member States, taking into account successes and challenges identified in the previous reports, and a communication that presents political conclusions and offers guidance to the Member States in the form of priority actions.

Summary

State of implementation of the policy area
<input type="checkbox"/> No progress
<input type="checkbox"/> Limited progress
<input checked="" type="checkbox"/> Some progress
<input type="checkbox"/> Substantial progress
<input type="checkbox"/> Fully implemented

The EIR process greatly helps Member States with implementation. The EIR provides a new opportunity for national authorities and the Commission to have a closer look at underlying root causes for poor implementation. The country reports show that there are root causes common to several Member States.

The EIR builds on the specific situation in each EU country. Based on this specific knowledge, the Commission is ready to help national authorities to fulfil their tasks to implement EU agreed policies and legislation. It supports multi-level collaboration, which is needed because most implementation takes place at regional and local level and each weak link in the decision-making chain can hold up implementation. The initiative also identifies common challenges to do with implementation and tackling root causes across Member States.

4.3 Complaints handling

<p>Sub-objectives:</p> <ul style="list-style-type: none"> • Citizens' trust and confidence in Union environment law and its enforcement is enhanced
<p>Actions:</p> <ul style="list-style-type: none"> • Ensuring consistent and effective mechanisms at national level for the handling of complaints about implementation of Union environment law;

Introduction

²¹⁶ http://ec.europa.eu/environment/eir/country-reports/index2_en.htm

²¹⁷ COM(2017) 63.

It is important to understand that the focus of this action is on complaint-handling mechanisms at *national level*. At EU level, the Commission has had its own complaint-handling mechanism for some time. However, the action is not related to this.

Complaint-handling mechanisms at national level are the responsibility of Member States and are not the subject of detailed provisions of EU environmental legislation (a few pieces of EU environmental legislation make reference to complaints as a source of information, but not in any detail).

The two actions in the environmental compliance assurance action plan (ECA action plan) need to be understood in this context.

Current situation

(1) The first action in the ECA action plan involves preparing documentation on complaints handling to help Member State authorities. Work on this got underway in 2018 following formal adoption of the ECA action plan. DG Environment engaged consultants to help prepare documentation. The process was as follows:

- close consultation of experts drawn from Member States and practitioner networks (inspectors, police, prosecutors and judges);
- three successive expert workshops to develop documentation (the first held in June 2018, the second in October 2018 and the third due in February 2019); and
- presentation of the documentation to a new high-level Commission expert group (the Environmental Compliance and Governance Forum) in conjunction with adoption of the action plan in January 2018 so that it is endorsed by the Forum in 2019.

(2) The second action in the ECA action plan involves preparing 28 country reports on environmental governance, with a section devoted to complaint-handling mechanisms. The methodology involves asking researchers to respond to a common set of questions in order to better understand how national complaint-handling mechanisms work in practice. The process is again guided by a number of workshops involving Member States, the first of which took place in early 2018 and the second in September 2018. This allows Member States and other stakeholders to comment on the draft findings before they are published in the first half of 2019.

Detailed Commission work on this action only started in 2018 following adoption of the action plan. However, decent progress has been made:

- Member States and national practitioners have provided a lot of useful material on good practice at the workshops held in June and October 2018 and substantial progress has been made on drafting the envisaged documentation;
- The assessment framework research is at the stage of draft country reports (October 2018); these show that while complaint-handling systems are generally in place, there are significant differences in the quality of online information available to prospective complainants.

Summary

State of implementation of the policy area
<input type="checkbox"/> No progress

<input checked="" type="checkbox"/> Limited progress
<input type="checkbox"/> Some progress
<input type="checkbox"/> Substantial progress
<input type="checkbox"/> Fully implemented

In January 2018, the Commission adopted a communication to endorse nine actions on environmental compliance assurance, including one action to prepare documentation to help Member States with environmental complaints handling²¹⁸. A further action involves preparing an assessment framework for how Member States carry out environmental compliance assurance and ensure good environmental governance. The accompanying staff working document²¹⁹ explains these actions in more detail.

DG Environment has made arrangements to prepare the documentation on complaints handling before the end of the current Commission mandate in 2019. It has also made arrangements to look at complaint-handling practices in individual Member States as part of the assessment framework.

The Commission is making progress on delivering both the documentation and evidence base in 2019.

4.4 Access to justice

Sub-objectives:

- The principle of **effective legal protection for citizens and their organisations** is facilitated.

Actions:

- Ensuring that national provisions on **access to justice** reflect the case law of the Court of Justice of the European Union. **Promoting non-judicial dispute resolution** as a means of finding amicable and effective solutions for disputes in the environmental field.

Introduction

In 1998, the EU and its Member States signed the Aarhus Convention on access to information, public participation in decision-making and access to justice in environmental matters. It establishes that, in certain cases, well-defined natural and legal persons can bring a case to a court or to other impartial bodies in order to allow for the review of acts or omissions of the private or public sector.

In 2003, the Commission adopted a proposal for a Directive on access to justice in environmental matters. However, the proposal did not gather sufficient support from Member States. The Commission therefore withdrew the proposal in 2014.

Current situation

The Commission's focus has been on ensuring access to justice in line with the case-law of the Court of Justice of the European Union (CJEU). There has been limited progress on the

²¹⁸ COM(2018) 10.

²¹⁹ SWD(2018) 10.

second part of the action envisaged in the 7th EAP, i.e. non-judicial dispute resolution (which refers in particular to mediation).

Significant progress has been made on the first part. In April 2017, the Commission adopted a Notice on access to justice in environmental matters²²⁰ (. This is the first ever Commission notice (i.e. interpretative communication) in relation to EU environmental law.

The Notice analyses 38 rulings of the CJEU that determine (i) how Member State courts should provide legal standing to individuals and NGOs to challenge decisions, acts and omissions of public authorities; (ii) how they should examine the substantive and procedural legality of contested decisions, acts and omissions; (iii) how they should provide effective remedies where a legal challenge is successful; (iv) and how they should ensure that the costs of litigation are not prohibitively expensive.

The Notice, which is published in all official languages, helps Member States and their judiciaries understand the content and significance of the case-law referred to in the action (as it existed in 2017). In this way, Member States and judiciaries are better able to assess and address any differences between their national provisions and the case-law. To further assist them and stakeholders (including individuals and NGOs), DG Environment published a Citizen's Guide on access to justice in environmental matters²²¹ in all official languages in September 2019. In addition, it has put in place arrangements to keep Member States informed of new case-law (by means of a table and periodic discussion in meetings of Member State experts).

As part of its work on environmental compliance assurance, DG Environment is setting up an assessment framework to look at how Member States, among other things, ensure good governance. Among other matters, the assessment framework looks at access to justice in the individual Member States. Work started in early 2018 and draft country reports had been prepared and were under consultation in September/October 2018. One of the sections focuses on access to justice in environmental matters. This section examines among other things:

- to what extent major barriers to access to justice still exist in individual Member States by referring to key parts of CJEU case-law referred to in the 7th EAP;
- how well Member States provide the public with practical information on access to justice in environmental matters; and
- how well Member States provide for judicial studies and training in the area of environmental law.

Summary

State of implementation of the policy area
<input type="checkbox"/> No progress
<input type="checkbox"/> Limited progress
<input type="checkbox"/> Some progress
<input checked="" type="checkbox"/> Substantial progress

²²⁰ OJC 275, 18 August 2017, p.1

²²¹ http://ec.europa.eu/environment/aarhus/pdf/guide/ENV-18-004_guide_EN_web.pdf

Fully implemented

Initial indications in autumn 2018 were that significant barriers still exist in several Member States and that there is considerable scope for improvement in both practical information and judicial studies and training.

In conclusion, significant steps have been taken. However, the emerging evidence base indicates that more needs to be done at Member State level to deliver this 7th EAP action. This will be a challenge for the follow-up to the 7th EAP.

5 PRIORITY OBJECTIVE 5: Better information by improving the knowledge base

5.1 Environmental knowledge

Sub-objectives:

- Policy-makers and stakeholders have a **more informed basis for developing and implementing environment and climate policies**, including understanding the environmental impacts of human activities and measuring the costs and benefits of action and the costs of inaction;
- **The impact of the Union and its Member States in international science-policy fora** is enhanced in order to improve the knowledge base for international environment policy.

Actions:

- Coordinating, sharing and promoting research efforts at Union and Member State level with regard to addressing **key environmental knowledge gaps, including the risks of crossing environmental tipping-points and planetary boundaries**;
- Intensifying cooperation at international, Union and Member State level on the environment **science-policy interface**.

Introduction

EU environmental policies are built upon scientific findings, and their implementation requires continued monitoring and assessments. Policy evaluations and review, as well as the design of new policy initiatives, require constant updates on the state of the planet and on the links between the environment, human health and the society/economy. Emerging issues may also suddenly be added to the agenda of decision-makers, who need to be ready to react. The Treaty on the Functioning of the European Union also stipulates that, ‘in preparing its policy on the environment, the Union shall take account of available scientific and technical data’ (Article 191).

The general objective was to ensure that EU policy-makers benefit from credible and updated environmental knowledge when taking policy decisions. Key steps have been put in place to maintain and strengthen this knowledge and evidence base on environmental monitoring, data, indicators and assessments linked to the implementation of EU legislation, as well as formal scientific research and ‘citizen science’ initiatives.

Current situation

A number of actions have been put in place to respond to this challenge and improve **coordinating, sharing and promoting research efforts** at EU and Member State level to address key environmental knowledge gaps.

Horizon 2020 (H2020)- the EU programme for research and innovation provides the opportunity to focus research efforts and to deploy Europe's innovation potential in order to improve the state of the environment and knowledge about it. It also focuses on moving to a greener, more resource efficient and climate-resilient economy in sync with the natural environment. This demonstrates a strong commitment to supporting the UN's Sustainable Development Goals and the targets of the COP21 Paris Agreement.

For 2014-2018 (still ongoing), Horizon 2020 has provided EUR 1 868 million to fund projects under the Societal Challenge 'Climate action, environment, resource efficiency and raw materials'. The activities include (i) fighting and adapting to climate change, protecting the environment, sustainably managing natural resources such as water, biodiversity soil ecosystem services and nature-based solutions; (ii) ensuring the sustainable supply of non-energy and non-agricultural raw materials; (iii) enabling the transition towards a green economy and society through the circular economy, eco-innovation and sustainable cities; and (iv) developing comprehensive and sustained global environmental observation and information systems.

For the period 2014-2018 (not yet finished), H2020 has also provided EUR 1.57 billion to fund projects under the Societal Challenge "Food security, sustainable agriculture and forestry, marine, maritime and inland water research and bioeconomy. Research efforts have resulted for example in relevant scientific knowledge for the implementation of the Paris Agreement commitments and the next Intergovernmental Panel on Climate Change (IPCC) assessment cycle, and for the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) assessments. Funded projects include ESMEALDA²²², which is delivering a flexible methodology to provide the building blocks for pan-European and regional assessments of ecosystem services. A number of Commission DGs are also working together on a knowledge innovation project on an Integrated System for Natural Capital and Ecosystem Services Accounting (KIP INCA), which has already triggered funds for the MAIA research project (EUR 3 million),.

There is also intensifying cooperation at international, EU and Member State level **on the environment science-policy interface**. Main outputs under this action have been:

- The regular dissemination of '**science for environment policy**', a free news and information service published by DG Environment and designed to help policymakers keep up-to-date with the latest environmental research findings needed to design, implement and regulate effective policies.
- Horizon 2020, support to the UN's **IPCC** has been stepped up (around EUR 6 million in total), allowing the EU to become one of the main contributors. In addition, new scientific results from EU-funded projects on climate change will provide critical input to the IPCC's 6th Assessment Report.
- Since 2017, the EU is an enhanced observer to the **IPBES**, and DG Environment and DG Research and Innovation (DG RTD) co-lead as representatives of the Commission. EU researchers, also by way of projects

²²² www.esmeralda-project.eu/

supported by Horizon 2020 and former EU research framework programmes, have been actively involved in all IPBES assessments. DG RTD provides financial support to the IPBES Secretariat.

- DG RTD has engaged with the UN Environment Programme's **Science Division** as part of the Memorandum of Understanding (MoU) between both institutions on improving the science-policy interface (Chapter 6 of the Annex of the MoU) to increase synergies in this area. On the occasion of the Third Session of the UN Environment Assembly, DG RTD also organised a workshop at the UN Science-Policy-Business forum on 'nature-based solutions for greener cities'. Speakers from Horizon 2020 projects shared best practices, case studies, and guidance on implementing nature-based solutions in key European cities.
- The Horizon 2020 EKLIPSE project²²³ aims to establish a European knowledge and learning mechanism to improve the policy-science-society interface on biodiversity and ecosystems services.
- Horizon 2020 also promotes international cooperation at global level through active participation in international forums in the area of environment and climate. Examples include the **Group on Earth Observations**, which represents almost 200 countries and organisations and the **Belmont Forum**, which groups more than 20 funding agencies around the world to promote global change and solution-oriented research. The objective is to address global challenges by providing co-designing solutions to be adapted to local contexts and by advocating open access, also to Earth observation data, in order to underpin environmental and climate-related policies. Copernicus allows for a leapfrog advancement on a global scale by providing open access to its satellite data.

In terms of improving **EU governance on environmental knowledge and the capacity to use-generate-share knowledge** and information on the environment for EU policies. Main outputs:

- The Projects for Policy (P4P) initiative is inspiring policy recommendations and reaching out to partners and stakeholders and contribute to a policy making process with a high impact. The P4P report on forest fires was published in November 2018. Other planned P4P reports focus for example on biodiversity and on nature-based solutions. More technical reports that deliver policy recommendations are also being prepared or are nearing completion (e.g. on plastics, water management, cities, nutrients). Two of these – A Circular Economy for Plastics and Accelerating the transition to the circular economy – were published in March 2019.
- The **Environment Knowledge Community (EKC)** improves the way environmental knowledge is generated and shared for policy use. Besides regular coordination, EKC partners have launched specific projects on emerging environmental issues, planetary boundaries, integrated natural capital accounting and citizen science. Two EKC task forces (on environmental data centres and on the interoperability of platforms and catalogues of nature-based solutions) were also set up in 2017 and 2018 to

²²³ <http://www.eclipse-mechanism.eu/>

improve the way environmental data and information are collected and shared for policy use.

- Since 2017, the Joint Research Centre (JRC) coordinates the Knowledge Centre for Bioeconomy (KCB)²²⁴. KCB aims at enhancing the knowledge base for policymaking on the bioeconomy, through identifying and filtering relevant information and making it accessible, bringing together researchers, policymakers and other experts in the field as by analysing, synthesising and communicating available evidence.
- The **European Environment Agency (EEA)** provides sound, independent information on the environment to those involved in developing, adopting, implementing and evaluating environmental policy and also to the general public. The EEA works together with the European Environment Information and Observation Network (**Eionet**), **a network of EEA's member and cooperating countries** involving some 1 000 experts and more than 350 national institutions. The network supports the collection and organisation of data and the development and dissemination of information on Europe's environment. The EEA regularly produces thematic assessments and a state of and outlook report on the European environment (in 2015 and 2019). An evaluation of the EEA is currently taking place.
- Eurostat provides **environmental statistics and accounts** as well as statistics in a large number of other areas linked to environmental policy making. This includes datasets, articles and dedicated websites as well as e.g. indicator sets to monitor the EU's progress towards the circular economy and the Sustainable Development Goals.

Overall H2020 is expected to spend 60 % of its budget on sustainable development and 35 % on climate action. With 26 730 million EUR spent from 2014 to March 2019, the target for sustainable development is exceeded (68 %). Spending for climate action reaches 11 230 million EUR, which amounts to 29 % of the total expenditure. In addition, 1 760 million EUR have been spent on biodiversity-related projects (4.5 % of the total expenditure). From 2014 to 2018 in the H2020 Societal Challenge 'Climate action, environment, resource efficiency and raw materials' 360 projects have been funded. The resulting mobilised resources total around EUR 2 280 million, of which more than EUR 1 868 million as EU funding.

Work on filling knowledge gaps in recent years has progressed in specific areas of work. This includes (i) understanding the health impact of environmental stressors (e.g. chemicals, noise); (ii) the valuation and accounting of ecosystems and their services; (iii) the drivers and impact of climate change; (iv) challenges and opportunities related to the circular economy and the transition to sustainability; and (v) emerging environmental issues, including from new technology developments.

Past work has also led to better use of IT platforms and improved interoperability in terms of knowledge, information and data on the environment. This includes the way they are

²²⁴ <https://ec.europa.eu/knowledge4policy/bioeconomy>

disseminated to policy-makers, stakeholders and the public by means of EU environmental data centres and information systems.

Summary

State of implementation of the policy area (in between some and substantial)
<input type="checkbox"/> No progress
<input type="checkbox"/> Limited progress
<input checked="" type="checkbox"/> Some progress
<input type="checkbox"/> Substantial progress
<input type="checkbox"/> Fully implemented

Overall, substantial progress has been made on environmental knowledge, and has led to many collaborations between Commission's DGs and with external experts and institutions. This work has also opened the way for new concepts to be integrated into Commission policies, e.g. on natural capital accounting, citizen science and planetary boundaries.

However, important knowledge gaps in environmental knowledge still remain. These were highlighted in an EKC symposium in 2017, where a number of key issues were identified, including:

- Numerous specific **knowledge gaps still exist for various environmental and climate policies**, which hamper the EU's capacity to formulate and implement technical, social and policy solutions. The largest gaps include our understanding of the role of natural capital in societal resilience, resource consumption drivers, low-carbon emission pathways, and climate change adaptation (global transboundary effects, long-term lack of water resources, health, biodiversity). **Basic scientific research is crucial** to better understand the numerous complex relationships between climate, nature, resource use, economic development and people's well-being.
- The anticipated transitions have to take into account the EU's particular socio-economic and political position **in global systems of production and consumption**, and in research and innovation ecosystems. The EU can provide a strong and credible set of pathways towards the knowledge and solutions needed in light of global challenges. The EU's updated bioeconomy strategy and its action plan are committed to a full set of actions to better 'understand the ecological boundaries of the bioeconomy'. This includes improving knowledge of the bioeconomy, including biodiversity and ecosystems, and better integrating the benefits of biodiversity-rich ecosystems into primary production²²⁵.
- The EU needs **both technological and social innovation and innovation diffusion**. For this, users, consumers and society need to be at the centre of testing innovations to see if their large scale application is socially acceptable and if there is a market. While 'disruptive' innovations will be crucial for reducing resource consumption, they need to be taken up at company or organisational level

²²⁵ COM(2018)673/2 "A sustainable bioeconomy for Europe: Strengthening the connection between economy, society and environment"

- The development of **effective science-policy and science-society interfaces at all levels** of governance is important, setting the right incentives to steer research and innovation and anticipating how a future legal framework would best support the fast scaling-up of ‘useful innovations’.

5.2 **Emerging environmental risks**

Sub-objectives:

- The understanding of, and the ability to evaluate and manage, emerging environmental and climate risks are greatly improved;

Actions:

- Adopting a systematic and integrated approach to **risk management**, particularly in relation to the evaluation and management of new and emerging policy areas and related risks as well as the adequacy and coherence of regulatory responses. This could help to stimulate further research on the **hazards of new products, processes and technologies**;

Introduction

History shows that the **time lag between early warnings from science and political action** often leads to irreversible damage to human health or the environment.²²⁶ Dramatic case studies call for policy-makers to adopt tools to better connect science and policy in order to respond more rapidly to risks that can have harmful and even catastrophic consequences.

Meanwhile, there is an **increasing demand for new transparent and participatory forms of risk governance in policy-making**, that involve citizens and stakeholders – and not just scientists - in all phases of risk analysis and management. Greater participation would help generate more and better knowledge about risks and foster robust innovations at a lower cost to health and the environment, creating the basis for their public acceptance.

Since the adoption of the 7th EAP, Commission’s DGs have worked together towards the final goal of ensuring, by 2020, that ‘the understanding of, and the ability to evaluate and manage, emerging environmental and climate risks are greatly improved’. Work has focused, in particular, on developing an integrated and participatory system to identify emerging environmental issues and related risks and opportunities from new technology developments. However, a number of complementary actions have been undertaken to improve the understanding of risk assessment and management and the consequences for EU policy-making.

Current situation

The Commission and its partners have continued to work on three inter-related actions linked to the 7th EAP goals on emerging environmental risks.

Action 1 - Establishing an EU system to identify emerging environmental issues

The Commission’s services that formed the EKC’s – ENV, CLIMA, ESTAT, RTD, JRC and EEA - agreed in 2015 to develop a common foresight capacity "to anticipate emerging issues /.../ as well as to monitor and identify opportunities and complex risks and foresee their impact on environment and society"²²⁷. The EKC partners have established a foresight system for the systematic identification of emerging environmental issues (FORENV). Its overall

²²⁶ European Environment Agency, Late lessons from early warnings, Volumes I and II: www.eea.europa.eu

²²⁷ Objective 2, EKC Roadmap (2015).

aim is to identify, characterise and assess emerging issues that may represent risks or opportunities to Europe’s environment. The ultimate aim is to enable policy makers and other stakeholders to prevent or effectively manage emerging risks, and to ensure that opportunities are identified and exploited.

The system was piloted in the field of ‘new technologies in the urban environment’ (July 2017-June 2018), where eight emerging issues were identified and characterised, and regular annual cycles from September 2018. Every year, 10 emerging environmental issues from new technology developments will be identified by the system and communicated to policy-makers and the public at large.

Action 2 – Understanding risk perception

The understanding of risks by the public often differs from the scientific assessment of risks. However, policy-makers have to seriously take public perception into account in order for their policies to be accepted. Public acceptance is also essential for societal take up of innovations and technologies. Specific work has been carried out not only to better understand public perception of environmental risks, but also to test tools that can be used to duly inform policy decisions. This work has also helped develop Action 1.

Action 3 – Improving the understanding of environmental and climate risks and how to manage them, including the precautionary principle

Most EU environment policies are risk-based. However, the understanding of what an environmental risk is, the way scientific knowledge is used for policy-making and the response to scientific uncertainty take very different forms from sector to sector. Work has been carried out in particular by DG ENV and the EEA to deepen the understanding of risk-based policies and the use of the precautionary principle. It also stimulates discussions on how to protect the environment and how to foster innovations.

Since its adoption in 2013, the **EU strategy on adaptation to climate change** has promoted the understanding of climate risks, and how to manage them. In particular, the strategy supports the funding of projects related to climate adaptation through LIFE, Horizon2020, the 7th Framework Programme, and modelling undertaken by the JRC (e.g. PESETA III project). To improve climate risk management, the Commission has directly supported the use of insurance and other financial products for resilient investment and business decisions, e.g. through initiatives and reports such as ‘Using insurance in adaptation to climate change’.

Summary

State of implementation of the policy area
<input type="checkbox"/> No progress
<input type="checkbox"/> Limited progress
<input checked="" type="checkbox"/> Some progress
<input type="checkbox"/> Substantial progress
<input type="checkbox"/> Fully implemented

Good progress has been made on building an integrated system to identify of emerging environmental issues, thanks to the participation of various Commission’s DGs and external experts. The system can now be deployed and will inform policy-makers and stakeholders on

the main risks and opportunities related to emerging issues, for policy decisions and further research.

Further substantial progress is needed in the understanding of the environmental risks associated with technology developments. While, scientific literature on new technologies is dominated by publications on the application of the technology – including the potential benefits for society, health and the environment –very little research focuses on possible trade-offs and risks, especially in the area of environment (impact on biodiversity, ecosystems, environmental media). Initial estimations based on (the JRC text mining tool ‘TIM’ and the EEA’s late lessons from early warning) indicate that only 1 % of scientific publications on new technologies normally address potential environmental and health risks. The FORENV system may help redress the balance once it is operational, especially by pinpointing the areas where further research should be promoted.

5.3 Streamline environment data and information

Sub-objectives:

- The environment science-policy interface is strengthened, including the accessibility of data for citizens and the contribution of citizens’ science;

Actions:

- Simplifying, streamlining and modernising **environmental and climate change data and information collection**, management, sharing and re-use, including the development and implementation of a Shared Environmental Information System;
- Enhancing **Union public information provision, awareness and education on environment policy**. (ENV.A.2)

Introduction

Improving data managements and providing Europeans with broader access to environmental information, while cutting red tape are key priorities for all administrations at Member States and EU level.

Current situation

Improving the knowledge and evidence base for EU environmental policy has many dimensions and there is a multitude of activities implemented and ongoing in the field of environment and climate change policy. It is addressed in a continuous and iterative way – this means that there are many activities that do not necessarily result in Commission initiatives listed under ‘outputs’. While this assessment tends to focus on outputs, other activities with tangible results for this priority objective are also mentioned, as appropriate.

As part of the action ‘simplifying, streamlining and modernising environmental and climate change data and information collection, management, sharing and re-use, including the development and implementation of a Shared Environmental Information System’ many individual activities have been carried out in recent years. The main headline activities are the two fitness checks on environmental reporting and on energy and climate reporting and their related legal proposals²²⁸.

²²⁸ COM(2016) 759; COM(2018) 381.

As a follow-up to the fitness check on environmental reporting, an action plan was put in place covering five areas:

1. getting the right information in the right form at the right time;
2. streamlining the reporting process;
3. promoting active dissemination of environmental information at European and national level;
4. exploiting other data sources and alternative approaches complementing environmental reporting; and
5. improving coherence and cooperation.

In addition, many specific environmental and climate policy areas have been engaged in improving their data and information management. Some of these specific actions are covered in the repeal of the Standardised Reporting Directive.

Research programmes such as Copernicus have proved critical in generating and disseminating knowledge on the environment, in Europe and beyond. The 3rd edition of the World Atlas of Desertification is a comprehensive tool for analysing land degradation as a global problem of human dominance involving complex interactions between social, economic and environmental systems.

Improving the knowledge and evidence base for EU environmental policy is a continuous challenge and remains highly relevant. In particular, modernising the information technology used (e.g. through the EEA's Reportnet 3.0 project) or improving transparency at national level by developing and promoting good practices for national information systems and ensuring that environmental spatial data are available in conformity with the INSPIRE Directive²²⁹ will require further attention. The 7th EAP helped to highlight the importance of improving information on implementation and policy development in the various environmental and climate domains.

Summary

State of implementation of the policy area
<input type="checkbox"/> No progress
<input type="checkbox"/> Limited progress
<input type="checkbox"/> Some progress
<input checked="" type="checkbox"/> Substantial progress
<input type="checkbox"/> Fully implemented

Improving the knowledge and evidence base for EU environmental policy has been at the heart of many activities and outputs across the various policy domains. In particular, the streamlining of reporting in the field of environment, climate and energy policy has resulted in several legislative changes, which aim to:

²²⁹ <https://inspire.ec.europa.eu/about-inspire/563>

- increase transparency of environmental data and information for citizens which also increases accountability of national administrations;
- improve the evidence base for future evaluations and impact assessments; and
- reduce administrative burden and simplification for administrations (at EU and national level) as well as for business and other data providers.

Moreover, the use of modern information technologies is increasingly common and helps environmental information be used in a more effective and efficient way. It also helps tap into newer, complementary data sources such as satellite data (e.g. generated by Copernicus) or data collected by citizens.

6 PRIORITY OBJECTIVE 6: More and wiser investment for environment and climate policy

6.1 Adequate finance to support environment and climate objectives

Sub-objectives:

- Environment and climate policy objectives are achieved in a cost-effective way and are supported by **adequate finance**;
- **Public and private sector funding** for environment and climate-related expenditure is increased;

Actions:

- Phasing out environmentally harmful subsidies at Union and Member State level without delay, and reporting on progress through the National Reform Programmes; increasing the use of market-based instruments, such as Member States' taxation policies, pricing and charging, and expanding markets for environmental goods and services, with due regard to any adverse social impacts, using an action-based approach, supported and monitored by the Commission, inter alia, via the European Semester;
- Facilitating the development of, and access to, innovative **financial instruments and funding for eco-innovation**;
- Adequately reflecting environment and climate priorities in policies and funding strategies to support economic, social and territorial cohesion;
- Making dedicated efforts to ensure the full and efficient use of available Union funding for environmental action, including by significantly improving its early uptake under the Union's **Multiannual Financial Framework 2014-2020** and devoting 20% of the budget to climate change mitigation and adaptation through the mainstreaming of climate action and linking that funding to clear benchmarks, target setting, monitoring and reporting; (ENV.F.1 + ENV.F.2 and CLIMA.A.2 and CLIMA.C.3)
- Developing and applying **a system for reporting and tracking** environment-related expenditure in the Union budget, in particular expenditure on climate change and biodiversity, by 2014; (ENV.D.2)
- Further developing and encouraging **'payments for ecosystem services' schemes**; (ENV.D.2)

- Putting in place incentives and methodologies that stimulate companies to measure the environmental costs of their business and profits derived from using environmental services and to disclose environmental information as part of their annual reporting. Encouraging companies to exercise due diligence, including throughout their supply chain. (ENV.E.1) + (ENV.F.1)

Introduction

In the current multiannual financial framework (MFF), environmental protection considerations are embedded (integrated) across all key EU funds. The most significant of these are the regional development funds, agriculture and rural development funds, maritime and fisheries funds, research & innovation as well as external policy instruments. There is also a specific programme for environment (LIFE) which provides funds for certain activities that are not addressed through the other EU programmes. These environmental considerations take the shape of requirements to prevent or reduce negative impacts on the environment of investments carried out for other purposes as well as investments specifically aimed at improving the state of the environment. Increasingly, efforts are also being made for policy initiatives to proactively seek co-benefits for the environment, the economy and society (for example by improving human health).

Effectively integrating the environment into other policy areas plays an important role in ensuring that EU funds contribute effectively to EU climate and environment objectives and are not damaging the environment. It is crucial to integrate environmental concerns at the initial strategic level when investing in infrastructure since these policy choices can have long-term environmental effects, and wrong choices can take years if not decades to put right. At the same time, investments aligned with climate and environment objectives can achieve other policy objectives, such as more sustainable growth and jobs.

In the environment field, only climate related expenditure is the subject of an overall percentage target in the current Multiannual Financial Framework (MFF). However, there are quantitative environment-related objectives as part of specific funds: the CAP (30 % greening and 30 % of rural development, which includes also climate measures) and Horizon 2020 (at least 60 % is expected to be related to sustainable development, while 35 % is expected to address climate action including activities linked to other environmental aspects, e.g. soil, forest, wetland restoration, water retention). The Commission's objective is to ensure that sufficient funding is available to integrate environmental protection requirements into the implementation of the EU's common agricultural policy.

Current situation

An estimated EUR 212 billion (maximum, in current prices) or around 25 % of the total for these programmes is theoretically meant to be spent on environment during the 2014-2020. It is difficult to determine the actual expenditure, as the data are not always available or comparable. In addition, **the LIFE programme, with a total budget of EUR 3.45 billion for 2014-2020** allows funds to be combined and better aligned with policy priorities in a more strategic and cost-effective way to support of environment and climate related measures.

Climate mainstreaming

Current MFF: Climate mainstreaming under the current MFF has worked well in catalysing investments into energy and climate, and has established quantitative methodologies and procedures. The target of integrating climate considerations into 20 % of EU programmes under the current MFF has driven climate into the design and implementation of all EU

programmes. The current projection that climate issues will be mainstreamed into 19.3 % of EU programmes by the end of 2020 means the EU is more than 95 % of the way towards its target.

The Commission proposal for the 2019 Draft Budget shows that the funding earmarked for climate mainstreaming is expected to reach EUR 32.5 billion in 2019 (or 20,1 % of proposed total commitment appropriations) compared to EUR 31.0 billion in 2018 (or 19.8 % of total commitment appropriations).

Next MFF: Building on the success of the 20 % target, the next MFF proposed a target of 25 % of expenditure contributing to climate objectives. Programme-specific proposals include specific percentage levels of ‘expected contribution’ for major programmes. This means that around EUR 320 billion (in current prices) of commitment appropriations will contribute to climate objectives over the 2021-2027 period, representing an increase of EUR 114 billion compared to the current MFF.

This 25 % target is ambitious but realistic, taking into account the experience with climate-related expenditure in the current period and the expenditure structure proposed for the next MFF.

The individual programmes’ contribution to achieving the overall target will be tracked through the EU climate ‘marker’ system at an appropriate level of disaggregation. More precise methodologies will also be used where available.

Other environmental spending

In the current MFF **most environmental spending is done through mainstreaming** into cohesion policy, agriculture and rural development funds, the maritime and fisheries fund, research & innovation as well as external policy instruments.

There is also a specific programme for environment (LIFE) which provides funds for certain activities that are not addressed through the other EU programmes. The LIFE multiannual work programme for 2018-2020 earmarks EUR 1,243 million for work on nature conservation and environmental protection, and a further EUR 413 million for climate action. The multiannual work programme for 2018-2020 will also increase LIFE’s budget for nature conservation and biodiversity by 10%. In parallel, the total number of project topics in the sub-programme for Environment has come down from 87 to 42. Another marked change on previous years is the introduction of a two-stage application procedure for traditional projects under the Environment sub-programme to increase the efficiency of the processes.

Funding for the environment and climate under the **CAP** is provided through a range of different mechanisms, such as earmarking at least 30 % in the first pillar for the greening payment and 30% in the Second Pillar (Rural Development). The recent Commission proposals for the next CAP (2020-2027) aim at introducing a new delivery model, based on higher subsidiarity, while delivering a higher degree of ambition for the environment and climate. In more detail, the mechanisms that will provide the necessary funding to this goal are:

- In the first pillar, each Member State has to use a share of their national direct payments allocation to offer eco-schemes that support farmers in going beyond the mandatory requirements.
- Earmarking at least 30 % of funding in the second pillar for environment and climate measures, excluding funds for areas with natural constraints.

- A higher- EAFRD contribution for environment and climate-related management than the current maximum amount.
- The possibility for Member States to find synergies between the EAFRD and the LIFE Regulation by allocating a certain share of the former to integrated strategic nature projects funded by the latter.
- A number of eligibility and conditions to avoid environmentally harmful investments

Cohesion policy provides a key source of financing for environmental investments. The total allocations (direct and indirect environmental investments) from the European Regional Development Fund, the European Social Fund and the Cohesion Fund for the environment have increased steadily over time, growing from about EUR 41 billion in 2000-2006 to EUR 66 billion in 2007-2013 and EUR 82 billion, 2014-2020 (see **Error! Reference source not found.**² below).

Cohesion policy had not set a specific quantitative objective for environmental investments. Direct environmental investments are stable over time and help fill the implementation gaps in particular in the new Member States where significant funding is needed to help them comply with EU environmental legislation. For instance, in the water sector, thousands of agglomerations across Europe do not have adequate collection and treatment standards and access to water is still problematic in many regions.

Environmental indirect investments supported by cohesion policy show how environmental concerns are increasingly integrated into the other policy areas.

- Allocations for **direct environmental investments** (waste, water, nature, rehabilitation of contaminated sites and air quality) have remained a bit above or below EUR 40 billion in each period, while those for **indirect environmental investments** (sustainable energy, transport, tourism and clean production processes) grew sharply. This reflects a ‘greening’ of cohesion policy investments for key sectors, in particular energy (energy efficiency and renewable energy), transport (shift to low emission mobility) and innovation.
- This trend reflects the evolution of the EU financial framework. For the 2014-2020 financing period, an explicit effort was made to align the objectives of cohesion policy funds to those of the Europe 2020 Strategy. The Europe 2020 Strategy sets targets to reduce greenhouse gas emissions, increase energy efficiency and increase the share of energy from renewables. Investments in sustainable energy and transport respond to these goals.

Regarding **Research and Innovation**, the Regulation establishing **Horizon 2020** provides for a 60 % target of the overall budget to be related to sustainable development, meaning that not only the Societal Challenge 5 (targeted to climate action, environment, resource efficiency and raw materials), but all part so the Work Programme should address environmental protection objectives. The interim evaluation of Horizon 2020 shows that spending to date only reaches 53.3% of the target, and more efforts will be needed in the last Work Programme (2018-2020) to reach the 60%. H2020 Work Programmes should in all sections clearly explain to which of the 17 SDGs the proposals are meant to contribute on the level of the calls themselves.

Table 2 – Environmental mainstreaming spending estimates²³⁰

	Total budget (2014-2020) €billion	Projected environmental spending * (2014-2020) €billion
Cohesion (ERDF, CF, ESF)	351.8	82.7 (24 %) - reflection paper EU finances
CAP	362.8	105 (~30 %) – theoretical 60 - reflection paper EU finances 11 – ENV estimate
Horizon2020	74.8	Sustainable Development – Target / achieved as of 2018 Target 60 % of the total Horizon 2020 budget (€45 billion), but current estimates reach 53 % Climate mainstreaming – target / achieved Target at least 3 5% of the total Horizon 2020 budget, but current estimates reach 30 % Environmental not counting transport and energy – No official target, but internal estimates reach €12 billion (15 %) ²³¹ of which 9 % in the dedicated societal challenges**** and 6% distributed across all parts of Horizon 2020.
EMFF	6.4	3.5 (55 %)
International	55	2.3 (4 %) **
LIFE	3.4	3.4 (100 %)
Total	854.2	118-212 (~25 %)

* figures are approximate; ** excluding climate action, **** “Climate, Environment, resource efficiency & raw material” and “Food, sustainable agriculture, forestry, waters and marine”.

As regards greening the Common Agriculture Policy, the European Court of Auditors (ECA) has concluded that the greening payment, as currently implemented, is unlikely to significantly improve the CAP’s environmental and climate performance²³². The Commission, on the basis of the external evaluation on greening, has concluded that, despite the objectives of the greening measures set out in the Direct Payments Regulation, environmental and climate objectives have not been generally a major factor in the Member States’ choices made in relation to implementing greening measures. The main concern of both Member States and farmers tends to have been minimising the administrative burden of implementation, as well as avoiding any errors with check and enforcement that may lead to at reduction in CAP payments. The overall effects of the greening measures, as currently applied, on farm management practices and the environment/climate are uncertain but appear to be fairly limited. However, there are variations across the Member States, depending on the greening measure, the areas concerned and the way in which they are managed.

²³⁰ Source: based on internal COM/DG ENV calculations

²³¹ Based on SDG mainstreaming target applied on Pillar 3 (societal challenges), i.e. $75/3=25$ and $0.6*25=15$.

²³² http://www.arc2020.eu/wp-content/uploads/2018/03/SR_GREENING_EN.pdf

The assessment by ECA also showed that having the greening measures defined at EU level does provide EU added value, chiefly by setting a higher level of environmental ambition, a greater degree of uniformity and provide a stronger financial incentive than all Member States would if left to choose. There is however considerable scope for divergence in ambition due to the flexibilities in the ecological focus area (EFA)²³³ measure and equivalence schemes.

In the EARDF, the criteria for measures to count under priority 4 are not based on environmental performance. This leads to diverging interpretations on amounts actually spent on the environment. Some measures supported by the EARDF have a direct positive impact on the environment (for example measures to support Natura2000 species and habitats), while other supported measures have only limited, added value for the environment .

A tracking procedure for biodiversity-related expenditure has been developed and integrated in the existing methodology used to measure the performance of EU programmes. The biodiversity tracking methodology is largely based on the ‘Rio markers’ established by the OECD, while taking into account the specificities of each policy area. The total contribution to mainstreaming biodiversity is expected to be EUR 12 810.1 million in 2018 (or 8.2 % of proposed total commitment appropriations) compared to EUR 12 484 million in 2017 (or 8.1 % of total commitment appropriations).

The **Natural Capital Financing Facility (NCFF)** was launched in 2015 and is now fully operational, following a slow start. The main aim of the NCFF is to demonstrate that natural capital projects can generate revenues or save costs, whilst delivering on biodiversity and climate adaptation objectives. Experience with the NCFF shows that there is growing interest in ecosystem-based natural capital investments. Although the take up has been slower than expected, the pipeline is now solid. The first beneficiaries will start investing into concrete projects in the coming months. More projects will be needed in view of replicating such approaches through the Sustainable Infrastructure window of InvestEU.

Sustainable finance

In terms of private sector funding for environment and climate-related expenditure, a major step forward was taken with the Action plan on sustainable finance²³⁴ adopted on 8 March 2018, and the related package of legislative measures²³⁵. In particular, the proposal for a Regulation for the development of a classification system for environmentally sustainable economic activities (or ‘Green Taxonomy’)²³⁶ is expected to trigger substantial private capital flows towards sustainable investments, especially once this is combined with an EU green bond standard and/or an ecolabel for green financial products. Although it is difficult to assess at this point the precise amount of finance involved, let alone the final impact on the environment, the large momentum and strong interest from a wide range of stakeholders is promising.

²³³ The 2013 reform of the common agricultural policy (CAP) introduced a green direct payment scheme 1 (greening’). The aim was to further improve sustainable management of natural resources linked to farming through payments for practices beneficial to the environment and the climate. Besides crop diversification and the maintenance of permanent grassland, greening requires farmers to reserve 5 % of their arable land for ecological focus areas (EFAs). See e.g. COM(2017) 152

²³⁴ COM(2018) 97.

²³⁵ https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance_en#implementing-the-action-plan-commission-legislative-proposals

²³⁶ Proposal for a regulation - COM(2018)353/978670: https://ec.europa.eu/info/law/better-regulation/initiatives/com-2018-353_en

Another benefit of implementing this action plan is that it will stimulate companies to measure the environmental costs of their business and disclose environmental information as part of their annual reporting. While the green taxonomy would provide this stimulation to a certain extent (i.e. to companies which want to comply with this voluntary scheme), the Non-Financial Reporting Directive²³⁷ is the main driving force since it requires large listed companies to disclose material information on key environmental, social and governance factors. In June 2017, the Commission issued guidelines²³⁸, providing much needed guidance to companies for their first report under this Directive. The Action Plan foresees building on these first reports, so as to further improve the guidelines.

The stimulating effect will be further reinforced by another proposal from the ‘Green Taxonomy’ package, which concerns investor duties. Indeed, the proposed Regulation will introduce consistency and clarity on how institutional investors, such as asset managers, insurance companies, pension funds, or investment advisors should integrate environmental, social and governance factors in their investment decision-making process.

Summary

State of implementation of the policy area
<input type="checkbox"/> No progress
<input type="checkbox"/> Limited progress
<input checked="" type="checkbox"/> Some progress
<input type="checkbox"/> Substantial progress
<input type="checkbox"/> Fully implemented

Overall, the Commission’s experience of environmental mainstreaming in the current MFF has been mixed. For some funds, it is difficult to determine the environmental expenditure, as the data are not always available or comparable. Most of the EU financing for the environment is delivered by integrating environmental policy objectives into the main EU funds, in particular cohesion, the CAP, Horizon 2020, the European Maritime and Fisheries Fund and, for the international dimension, through the external funds. This *legal earmarking of funds* has been extremely useful in terms of giving political weight to the principle that EU funds should deliver for the environment and that the EU has allocated a significant financial envelope towards these objectives. In addition, funding is delivered through the LIFE programme, a dedicated instrument to finance nature and biodiversity.

The CAP has an essential role in delivering on a transition towards sustainability. The 2013 CAP reform led to progress, but, a number of evaluations have shown that better integration is needed to deliver on key environmental objectives.²³⁹ The Commission’s recent proposals aim at delivering higher ambition on the environment and climate within a subsidiarity-based delivery model. Under these proposals, Member States will be able to replace the greening payment with greater conditionality. The proposals also oblige Member States to offer eco-

²³⁷ https://ec.europa.eu/info/business-economy-euro/company-reporting-and-auditing/company-reporting/non-financial-reporting_en#how-to-report

²³⁸ https://ec.europa.eu/info/publications/170626-non-financial-reporting-guidelines_en

²³⁹ See for example most recently the Nature Fitness Check and the mid-term review of the EU biodiversity strategy to 2020.

schemes (voluntary for farmers) aimed at achieving these tougher environmental objectives. Mainstreaming of climate and other environmental considerations has worked best when services and administrations (national, regional and within the Commission) responsible for the environment have been involved in how funds are designed and spent.

This has generally been the case for example in the design and implementation of operational programmes for *cohesion policy funds*. **Cohesion policy** had not set a specific quantitative objective for environmental investments, but direct environmental investments have been supported by considerable mainstreaming and indirect environmental spending.

Although public funds have an essential role, it is clear that they will not be sufficient – private capital must play its part. This explains why sustainable finance has grown from a niche topic to a mainstream issue in the financial world, as witnessed by the growth of the green bonds market.

The sustainability transition entails significant investments in the short run and a comprehensive shift in how the financial system works. The investment needs for achieving the SDGs worldwide are estimated to be EUR 4.5 to 6 trillion globally²⁴⁰. Around EUR 180 billion of additional investments are needed to achieve the EU’s 2030 targets agreed in Paris. Beyond energy and climate policy, there is a gap in terms of compliance with the EU environmental law, and bridging this gap will require large amounts of investments.

Beside the legislative measures announced in 2018, the sustainable finance action plan also sets out non-legislative measures that are complementary and expected to have an important impact. These include the development of an EU Green Bonds Standard and of EU Ecolabel criteria for green investment products, as well as the review of disclosure requirements by large companies (e.g. through updating the guidelines to the Non-Financial Reporting Directive).

6.2 Addressing environmental externalities

Sub-objectives:

- **The value of natural capital and ecosystem services**, as well as **the costs of their degradation** are properly assessed and considered in policy-making and investments.

Actions:

- **Phasing out environmentally harmful subsidies** at Union and Member State level without delay, and reporting on progress through the **National Reform Programmes**; increasing the use of **market-based instruments**, such as Member States’ taxation policies, pricing and charging, and expanding markets for environmental goods and services, with due regard to any adverse social impacts, using an action-based approach, supported and monitored by the Commission, inter alia, via the European Semester.

Introduction

Most environment related **market-based instruments (MBI)** in use around the world are price-based instruments, such as environmental taxes, charges and subsidies. Pricing instruments encourage action to reduce environmental damage at least cost and should play their part in any green growth policy. They provide incentives for efficiency gains, green

²⁴⁰ “Reflection paper: Towards a Sustainable Europe by 2030”, European Commission

investment and innovation and shifts in consumption patterns. Increased or more effective use of environmentally related taxes can drive growth-oriented reform by shifting the tax burden away from more distortive taxes such as labour or corporate taxes, and can support deficit reduction.

Environmentally harmful subsidies are a result of a government action that confers an advantage on consumers or producers, in order to supplement their income or lower their costs. However, in doing so discriminates against sound environmental practices. Most often **environmentally harmful subsidies** take the form of a preferential tax treatment. Since tax policy remains in the hands of Member States, the Commission has a limited scope for intervention in situations where a Member State complies with EU legislation. Therefore defining a target remains a challenge and the instruments put in place are mainly guidance/recommendations and best practices exchange.

Assessing and valuing **natural capital** and the wide range of benefits that we derive from nature can inform better decision-making. There is support for this from the financial instruments: in particular, the Natural Capital Financing Facility was launched in 2015 to support projects promoting the preservation of natural capital, including adaptation to climate change.

Current situation

The EU working group on mapping and assessment of ecosystems and their services (MAES) has developed an analytical framework to map and assess the state of ecosystems and their services, and indicators to assess the condition of ecosystems and their services. These approaches are currently being applied by the EU and the 28 Member States.

In parallel, the EU knowledge innovation project on an Integrated System for Natural Capital and Ecosystem Services Accounting (KIP INCA) is developing an integrated natural accounting system for ecosystems and their services and associated data sets. Natural capital accounting is a tool to measure the changes in the stock of natural capital at a variety of scales and to integrate the value of ecosystem services into accounting and reporting systems at EU and national level.

MAES and KIP INCA developments are interconnected and a first EU-wide assessment joining up biophysical mapping and assessment with valuation and accounting and valuation will be delivered by 2020.

At international level, the EU contributes (EUR 7 million) to the UN via the partnership programme for the development of valuation and accounting standards for ecosystems, such as the UN SEEA. Furthermore, the EU contributes (EUR 8.5 million) to the UN via the partnership programme for the implementation of the economics of ecosystems and biodiversity in the agriculture and food sector.

In May 2018, the Commission began implementing key actions announced in its action plan on sustainable finance, which were informed by recommendations by the High Level Expert Group on sustainable finance. These actions include fostering natural capital assessment and disclosure, and making environmental, social and governance issues more specific in investor duties.

The EU Business@Biodiversity (**B@B**) platform is supporting efforts to improve and possibly standardise natural capital assessments by companies and biodiversity foot-printing methodologies and metrics for businesses and financial investments. This will also be

supported by a Horizon 2020 project for mainstreaming natural capital in policies and in business decision-making “We Value Nature” (EUR 2 M EU)

Phasing out environmentally harmful subsidies and increasing the use of market based instruments

The EU Flagship Initiative for a Resource-Efficient Europe calls for **environmental taxes** to account for 10% of total tax and social contribution revenues by 2020. Eurostat data²⁴¹ shows that in 2017 the level of the total environmental tax revenue in the EU was around EUR 25 billion higher than in 2014, having increased by 1.8 % per year (at current prices) on average whereas GDP at market prices rose at an annual average of 2.3 %. As a share in total tax revenues, environmental taxes revenues fell by 0.19 percentage points (6.14 % of total tax collected in 2017). Energy tax revenues constitute the main component of environmental tax receipts for almost all countries, accounting for some 77 % of EU-28 environmental tax revenues. Of these energy tax revenues transport fuel taxes represent around 70 % of receipts followed by non-fuel transport taxes (20 %) and pollution / resources taxes (3 %). A low level of pollution and resource taxes does not necessarily mean that they are not in place: instruments addressing pollution and resource extraction are often implemented at local level (often as levies or charges) and they are not captured by Eurostat data.

There is a commitment to phasing out **environmental harmful subsidies** by the EU and its Member States. This is monitored through the European Semester process, where recommendations in this respect were issued to a number of Member States (mainly linked to transport and energy taxation, in one case to water pricing), were followed (or an announcement was made that they will be implemented) in most of the cases. Changes were introduced in particular in energy taxation (reducing tax gap between diesel and petrol, phasing out tax exemptions to some sectors) and the rules on company cars.

The Commission is establishing regular monitoring of **fossil fuel subsidies** in the EU and expects Member States to use their energy and climate plans to monitor the phase-out of fossil fuel subsidies. The Commission’s biannual report on energy prices and costs in Europe extends the analysis of fossil fuel subsidies to the agriculture and transport sectors²⁴². In this report, the Commission estimates²⁴³ that FFS have increased by 3 % between 2008 and 2016 to EUR 55 billion (in 2017 prices), driven by tax expenditures for consumption of petroleum products in the transport and agriculture sectors. If ‘external costs’ like air pollution and health costs of fossil fuel combustion are counted in, fossil fuel subsidies are around EUR 300 billion a year in the EU.

As regards taxation and subsidies harmful to environment, the Commission has limited powers to oblige Member States to meet the targets set in the 7th EAP. Nevertheless, experience with the use of market based instruments has grown over the past two decades. Recommendations put forward in the European Semester, national budgetary constraints and legislative requirements (for example the Energy Union package and the Plastic Bags Directive), triggered positive changes in certain Member States. Examples of pricing

²⁴¹ https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Environmental_tax_statistics and DG TAXUD (forthcoming) - Taxation trends in the European Union, 2019 edition, https://ec.europa.eu/taxation_customs/business/economic-analysis-taxation/taxation-trends-eu-union_en.

²⁴² Report from the Commission COM(2019) 1 final on Energy prices and costs in Europe and its accompanying Staff Working Document.

²⁴³ Underlying reports and annexes: <https://ec.europa.eu/energy/en/data-analysis/energy-prices-and-costs>

instruments can be found across a wide range of policy areas, and their use is becoming more common (often as part of nudging or behavioural economics policies). The main focus to date has been in the areas of energy, transport and climate, with limited action on pollution and resource use.²⁴⁴

Examples of the use of market-based instruments:

- The Water Framework Directive has encouraged Member States to carry out economic analyses of water pricing, which led to changes in water pricing in some Member States.
- EU Waste legislation provides a global framework for the extended producer Responsibility (EPR). The EPR is an environmental policy approach in which a producer’s responsibility for a product is extended to the post-consumer stage of a product’s life cycle policies. As the Member States are responsible for implementing EPR, the EPR policies are implemented in a heterogeneous manner across the EU.
- An increasing number of Member States have implemented taxes or charges on plastic bags, generally targeting single-use plastic bags. One of the first Member States to introduce a specific levy on plastic bags was Ireland. Since its introduction in 2002, plastic bag use has fallen sharply, and the share of plastic bags as a proportion of litter has fallen from an estimated 5% in 2002 to 0.27% in 2017.
- A number of Member States reflected recommendations put forward by the EU and carried out changes in environmental taxation. Belgium exploited the opportunities for environmental tax reform and removal of environmentally harmful subsidies by raising taxes on diesel fuels addressing a higher environmental impact of the fuel, introducing a kilometre-charge for lorries in all Belgian regions, charges to vehicle circulation and road taxes in Flanders. Portugal carried out a green tax reform aimed at promoting a more sustainable economic development model. The reform introduced a number of changes including on carbon taxation, energy excise duties, vehicle taxation and taxation on plastic bags.

Summary

State of implementation of the policy area
<input type="checkbox"/> No progress
<input type="checkbox"/> Limited progress
<input checked="" type="checkbox"/> Some progress
<input type="checkbox"/> Substantial progress
<input type="checkbox"/> Fully implemented

Natural capital

The Commission has made good progress in supporting Member States through the development of a framework and tools. For example, the forthcoming guidance on ecosystems and decision making should help towards this, supported by concrete follow-up actions to support Member States to implement it. Furthermore, the Commission’s support to

²⁴⁴ IEEP, Capacity Building for Environmental Tax Reform (2017).

TEEB and the Economics of Land Degradation are also contributing to this effort by providing concrete support on integrating natural capital into decision-making. Experience with the natural capital financing facility (NCCFF) shows that there is growing interest in ecosystem-based natural capital investments.

Phasing out environmentally harmful subsidies and increasing the use of market based instruments

As regards **taxation** and **subsidies harmful to environment**, the Commission has a limited role in obliging Member States to comply with the objectives of the 7th EAP, with taxes usually being the responsibility of Member States in line with the principle of subsidiarity. Nevertheless, recommendations put forward in the European Semester, national budgetary constraints and legislative requirements (for example the Energy Union package, Plastic Bags Directive), triggered positive changes in certain Member States. Whilst the overall level of **green taxes** has remained relatively constant over time, green taxes have been used successfully in some contexts (such as to reduce plastic bag littering). Examples of **pricing instruments** can be found across a wide range of policy areas, and their use is becoming more common (often as part of nudging or behavioural economics policies). The main focus to date has been in the area of energy, transport and climate, with limited action in relation to issues of pollution and resource use.²⁴⁵

Overall, in spite of growing interest and positive trends, Member States have not pushed the widespread use of market-based instruments /pricing instruments in the environmental area. Experience in implementing market-based instrument/pricing instruments in a range of environmental areas shows that they can be effective if best practice is learnt from in terms of influencing their acceptability. This includes the importance of certain design aspects such as the definition of tax-payers, tax-base, rates applied and predictability of their increase. The acceptability and effectiveness of the instruments is also linked to the wider policy mix in which they are introduced and implemented, successful engagement and communication with stakeholders, consideration of who pays and affordability, the administrative support provided and administrative burden involved.

6.3 Beyond GDP

Sub-objectives:

- To further develop indicators to monitor economic progress which complement and go beyond GDP. This will help getting a proper evaluation of environmental goods, of natural capital and ecosystems services and of links between environment and economy, and also supports the outcome of Rio+20 and the 2030 Agenda for Sustainable Development.

Actions:

- Developing and applying alternative indicators that complement and go beyond GDP to monitor the sustainability of progress and continuing work to integrate economic indicators with environmental and social indicators, including natural capital accounting.

²⁴⁵ IEEP, Capacity Building for Environmental Tax Reform (2017).

Introduction

In 2009 the Commission adopted a roadmap²⁴⁶ on ‘GDP and beyond’ in view of developing measurement tools to complement the GDP indicator. The initiative received the support of the other EU institutions, the Committee of the Regions and the Economic and Social Committee and an action plan was established. This was followed by an assessment of progress²⁴⁷ in 2013.

Sub-actions set out in the Beyond GDP roadmap include:

- 1) Complementing GDP with environmental and social indicators
⇒ a comprehensive environmental index & quality of life and well-being
- 2) Near real-time information for decision-making
⇒ more timely environmental and social indicators
- 3) More accurate reporting on distribution and inequalities
- 4) Developing a European sustainable development scoreboard
⇒ a sustainable development scoreboard and thresholds for environmental sustainability
- 5) Extending national accounts to environmental and social issues
⇒ Integrated environmental-economic accounting & increasing use of existing social indicators from national accounting.

Current situation

The EU has achieved many of the deliverables in the roadmap, namely:

- adoption of the Regulation on environmental economic accounts, covering six modules (some key environmental indicators ‘beyond GDP’ are derived from these modules, e.g. resource productivity and jobs/added value in green sectors) and work on natural capital accounting;
- developing and using more environmental and social indicators to monitor EU key policies, like circular economy and resource efficiency, the EU pillar of social rights, Energy Union and Sustainable Development Goals, and the European Semester;
- research projects on Beyond GDP: Brainpool, E-Frame and Web-COSI Web communities for statistics for social innovation also delivered interesting results / recommendations.

The **Commission (DG Environment)** also publishes a dedicated website, Beyond GDP²⁴⁸ to track relevant initiatives in this area.

Eurostat has been active in the methodological work (in particular to improve social and environmental indicators and develop the environmental economic accounts) and has worked closely with the national statistical institutes in the Member States. In 2015 the Commission adopted the 2015-2018 action plan for GDP and beyond (2020). This was endorsed by the European Statistical System Committee, and follows a previous one covering 2012-2014. The action plan covers three main areas:

1. multidimensional measurement of the quality of life;
2. household perspective and distributional aspects of income, consumption and wealth ;

²⁴⁶ COM (2009) 433.

²⁴⁷ SWD (2013) 303.

²⁴⁸ http://ec.europa.eu/environment/beyond_gdp/index_en.html

3. environmental sustainability.

Eurostat publishes a website on GDP and beyond²⁴⁹ and a European Statistical System website on measuring progress²⁵⁰.

Since 2012 there have been many initiatives on developing and using Beyond GDP measurements in the Member States. The most relevant ones were from France, Belgium and Italy, which have adopted ‘beyond GDP indicators’ laws. Germany and the Netherlands have also launched major initiatives.

Beyond the Commission, other institutions, in particular the **European Parliament** and the **Committee of the Regions** have shown interest in using Beyond GDP indicators in EU policy making.

Outside the EU, various international organisations (OECD, WB, UNEP, WEF, UNDP) have worked on producing Beyond GDP measures.

Overall, there has been major methodological work on indicators, to improve existing statistics and accounting, and define specific monitoring frameworks to assess progress in key policies.

The Commission currently uses a wide set of indicators, mostly covering economic, social and environmental issue in monitoring tools for high level policies (like the SDGs, the circular economy, resource efficiency, energy union, the Pillar of Social Rights and the European Semester).

However, many indicators lack high statistical quality and new indicators still need to be developed or are a work in progress. New indicators (including on the consumption footprint) should build on existing data and/or new data coming from different sources: official statistics, data from reporting obligations, geospatial data (including Copernicus), research, modelling and citizens science.

Summary

State of implementation of the policy area
<input type="checkbox"/> No progress
<input type="checkbox"/> Limited progress
<input type="checkbox"/> Some progress
<input checked="" type="checkbox"/> Substantial progress
<input type="checkbox"/> Fully implemented

During the last decade, the Beyond GDP concept has been embedded in many initiatives to monitor progress at EU, national and international level, and so is likely to have some influence on the assessment of and design of policy.

²⁴⁹ <http://ec.europa.eu/eurostat/web/gdp-and-beyond>

²⁵⁰ <http://ec.europa.eu/eurostat/web/ess/about-us/measuring-progress> ;

<http://ec.europa.eu/eurostat/documents/7330775/7339383/Measuring-Progress-Well-being-sustainable-development/ef61b63c-02f0-4aa6-8155-42fdc0833018>

There are now multiple data sources to be exploited: official statistics, data from reporting obligations, geospatial data, surveys, research, modelling, citizens' science and big data. Data are getting closer to politicians, who show an increasing interest in using high quality indicators to better understand the problems and challenges, to define the policy measures needed to tackle them and to evaluate progress towards the objectives. These data are being used to produce overall indicators sets such as the SDG Indicators. There are through questions over the influence of these indicator sets and how concretely they feed through into policy design, implementation or evaluation.

7 PRIORITY OBJECTIVE 7: Full integration of environmental requirements and considerations into other policies

7.1 Improving integration and coherence

Sub-objectives:

- Sectoral policies at Union and Member State level are developed and implemented in a way that supports relevant environment and climate-related targets and objectives.

Actions:

- **Integrating environmental and climate-related conditionalities and incentives** in policy initiatives, including reviews and reforms of existing policy, as well as new initiatives, at Union and Member State level;
- Carrying out **ex-ante assessments of the environmental, social and economic impacts of policy initiatives** at appropriate Union and Member State level to ensure their coherence and effectiveness;
- Fully implementing the **Strategic Environmental Assessment Directive and the Environmental Impact Assessment Directive**;
- Using **ex-post evaluation information** relating to experience with implementation of the environment acquis in order to improve its consistency and coherence
- **Addressing potential trade-offs in all policies** in order to maximise synergies and avoid, reduce and, if possible, remedy unintended negative effects on the environment.

Introduction

Environmental integration means ensuring that environmental concerns are fully considered in the decisions and activities of other sectors.

In 2001, the European Council adopted the EU sustainable development strategy, which led the Commission to introduce an impact assessment for all major policy proposals. Impact Assessments provides information on the trade-offs between the economic, social and environmental dimensions of sustainable development to inform decisions and help promote policy coherence. In 2015, the Commission strengthened its system for impact assessments, and also ensured a subsequent evaluation was undertaken systematically through its new commitment to better regulation.

The European Commission is also promoting better regulation principles more widely. EU legislation ensures that environmental assessments are carried out on plans, programmes and projects that are likely to significantly affect the environment. These tools complement and support the subsequent and prior analysis done by Member States in line with their own procedures.

Integration is important because so many environmental impacts occur in other policy sectors. Analysis suggests that energy, food systems, mobility and housing also have a significant impact on the environment. To ensure coherent policymaking environmental concerns need to be properly integrated into these four policy areas.

Current situation

a) Policy assessment in the Commission

The Commission has committed to a more significant and systematic approach in carrying out ex-post evaluations of its own policies, and there has been a considerable increase in such evaluations. The key indicators show that environmental policy is frequently evaluated in order to identify ways to simplify it and improve its implementation. Also, policies in other areas are subject to ex-post evaluations; these evaluations also cover the environmental impacts of these policies. Moreover, when a policy is revised, the Commission undertakes an impact assessment. Both evaluation and impact assessment are required to have proportionate and integrated assessments of economic, social and environmental impacts.

- Over the last 5 years, the percentage of the EU law adopted by DG Environment that was subject (ongoing or finalised) to an ex-post evaluation was 13 % in 2013, rising to 58 % in 2016.

Examples include:

- the **'fitness check' evaluation of the Birds and Habitats Directives**, which concluded that they remain highly relevant and are fit for purpose. However, full achievement of the objectives of these Directives will depend on their implementation substantially improving. Based on the findings, the Commission decided to develop an **action plan**, to address the shortcomings identified during the evaluation and improve the Directives' coherence with broader socio-economic objectives.
- The **REACH evaluation and chemicals fitness check** concluded that chemicals legislation is reducing the health and environmental pressures from chemicals. Again, the evaluation process identified measures to improve the effectiveness of the legislation and reduce the regulatory burden associated with them.
- The impact assessment accompanying the proposal for **'Reducing Marine Litter: action on single use plastics and fishing gear'** identified the single-use plastics as the main problem, as well as proportionate measures to reduce their impact on the environment (including bans for certain products) and the economic, social and environmental impacts associated with them.

However, there is, an issue about how the Commission can further respond to its commitment: *“The Commission will mainstream the Sustainable Development Goals into EU policies and initiatives, with sustainable development as an essential guiding principle for all its policies. Existing and new policies should take into account the three pillars of sustainable development, i.e. social, environmental and economic concerns. The Commission will to this effect ensure that its policies are sustainability-assured through its better regulation tools.”*

²⁵¹

b) Policy assessment in the Member States

²⁵¹ Next Steps for a Sustainable European Future, Commission Communication, November 2016.

Environmental assessment can be undertaken for individual projects, such as a dam, a motorway, an airport or a factory, based on Directive 2014/52/EU (known as 'environmental impact assessment' EIA Directive) or for public plans or programmes based on Directive 2001/42/EC (known as 'strategic environmental assessment' SEA Directive). The Directives aim to provide a high level of protection for the environment and to help integrate environmental considerations into the preparation of projects, plans and programmes in order to reduce their environmental impact. They ensure public participation in decision-making and thereby strengthen the quality of decisions.

The amended EIA Directive entered into force on 15 May 2014 to simplify the rules for assessing the potential effects of projects on the environment. It is in line with the drive for smarter regulation, so it reduces the administrative burden. It also improves the level of environmental protection, which helps to make business decisions on public and private investments more sound, more predictable and sustainable in the longer term.

The 2017 implementation report for the SEA Directive found that it was being widely applied; there is also an ongoing evaluation for this Directive.

- Around 25,000 environmental impact assessments a year are carried out in Europe, along with a number of strategic environmental assessments. The evidence is that these assessments are helpful and are ensuring better environmental integration, albeit with the scope for better implementation. There is though a lack of systematic evaluation and impact assessment undertaken at Member State level – or at least a lack of those that are transparently published and made available to stakeholders.

Surveys that concern Member State evaluations and impact assessment of their policies generally find that they have a commitment in place. However, in many cases they have not committed to an integrated analysis, thus weakening the commitment to coherence. Also, these are often commitments on paper but not in practice, as few Member States systematically undertake such analyses and these are almost never publicly available. The result is that the pipeline of analysis from the Member States to the Commission often does not flow properly, and that the information needed for the Commission analyses is not always available when needed.

c) Policy coherence – example

The policy areas of agriculture, energy and mobility are routinely identified as key policy areas for environmental mainstreaming as they have significant environmental implications and opportunities, whilst clearly serving other policy needs. Stakeholders are often critical of whether the trade-offs have been properly considered and argue for further environmental mainstreaming.

Agriculture: The CAP reform of 2013 introduced a number of elements that reinforced the consistent between this and environmental and climate policies. However, not all of these elements have yielded the intended level of results. The Commission has also undertaken evaluations related to the CAP, one of which concerns the greening payment.

The mechanisms by which the current CAP aims to ensure policy coherence with other policies include:

- cross-compliance, which includes a list of good agricultural and environmental conditions and statutory mandatory requirements;

- greening payments, for practices concerning the protection of a share of permanent grasslands, the declaration of certain surfaces as ecological focus areas for the purposes of protecting biodiversity, and obligations to diversify crops;
- in rural development plans, measures such as agri-environmental commitments, conversion into and maintenance of organic farming, compensation for obligations arising out of the Water Framework and Natura 2000 Directives, and non-productive investments, including forestry and agroforestry schemes;
- a number of eligibility rules and conditions on investments funded by the EAFRD to avoid investments that are harmful to the environment and climate, in areas such as afforestation and irrigation;
- a number of preconditions that Member States had to comply with before receiving certain EAFRD funds.

On 1 June 2018, the Commission published the legislative proposals for the next CAP (2020-2027). These proposals aim to ensure a higher degree of ambition for the environment and climate.

Energy: In 2016, under the Energy Union, the Commission adopted proposals for a number of legislative instruments that will affect the environment. The ‘Regulation on the inclusion of greenhouse gas emissions and removals from land use, land use change and forestry into the 2030 climate and energy framework’ addresses how the EU’s greenhouse gas commitments will take into account changes in the amount of carbon in the EU’s terrestrial ecosystems. The instrument aimed to fill a major gap in climate and energy policies by mandating that the impact of certain activities, such as deforestation, afforestation, the management of forests, and certain agricultural land management activities be accounted for.

In 2018, the recast of the Renewable Energy Directive was adopted for the post-2020 period (RED Recast). Among other things, it reinforced the EU’s sustainability criteria for bioenergy by extending their scope to cover, for the first time, solid biomass and biogas for heat and power, in addition to biofuels for transport and bioliquids for non-transport uses. The recast of the Directive also added specific sustainability criteria for forest biomass and minimum energy efficiency requirements for larger biopower plants.

Furthermore, the Directive continues to set an upper limit to the contribution of food- and feed-based biofuels towards the renewable energy targets. The Directive also includes a specific national limit and a gradual phase out until 2030 for those biofuels associated with the high risk of indirect land use change, which leads to increased GHG emissions and biodiversity loss.

Mobility: EU policy seeks to help European transport systems meet the challenges facing them. These include decarbonisation and the need to reduce the dependency on oil imports (regardless of improvements in energy efficiency, transport still depends on oil for 95 % of its energy needs). The EU supports research & innovation, and the effective deployment of new green transport technologies. For example, new rules require EU countries to promote clean technologies (cars that run on electricity/hydrogen, gas-powered trucks/barges/ships) by building a minimum number of recharging and refuelling stations.

Summary

State of implementation of the policy area
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<input type="checkbox"/> No progress
<input type="checkbox"/> Limited progress
<input checked="" type="checkbox"/> Some progress
<input type="checkbox"/> Substantial progress
<input type="checkbox"/> Fully implemented

The Commission is working hard to ensure policy coherence, and that knowledge and expertise are shared across the board. One of the main tools for doing this has been better regulation, which supports integrated analyses of the economic, social and environmental impacts of Commission policies, supported by transparent stakeholder consultations. Whilst the Commission is recognised as a leader in better Regulation, it needs to ensure its policies are better linked to the SDGs, and to improve its processes.

The objective of the environmental impact assessment and the strategic environmental assessment procedures is to provide a consistent framework in which the responsible national authorities and business can operate while ensuring that relevant environmental information and concerns are taken into account when decisions are made. All EU Member States have adopted environmental assessment procedures at planning, programming and project level. To this end, the objective of the two directives has been accomplished, without prejudice to possible breaches. The Commission delivered its guidance on streamlining the environmental assessments on time as due under the revised EIA Directive. Most Member States have completed the transposition of the revising EIA Directive in time. The Commission is currently evaluating the SEA Directive as part of its regulator fitness and performance programme. More generally, the Member States need to make their evaluations and impact assessment work transparently and make them available to stakeholders.

There are positive examples of sectoral policies that better reflect environmental concerns, for example, in efforts to improve the energy efficiency of the construction sector or to support cleaner cars. Nevertheless, there are some stakeholders that continue to have concerns over some sectoral policies and the lack of consistency with the good intentions to adequately lead to proper greening ‘on the ground’.

7.2 European Semester

Sub-objectives:

Actions:

- **Integrating environmental and climate-related considerations into the European Semester process**, where this is relevant for individual Member States’ prospects for sustainable growth and is appropriate for country-specific recommendations;

Introduction

The European Semester provides a framework for coordinating economic policies across the European Union. It allows EU countries to present and elaborate on their economic and budget plans and monitor progress. The 7th EAP considers the European Semester to be an instrument that supports integration of the environment into economic policies, helping Member States to improve the use of economic instruments to achieve environment policy objectives.

Current situation

The Commission works with Member States to step up the use of economic instruments to achieve environmental policy objectives. In the context of the European Semester process, the Commission advocates the transition to the circular economy, appropriate investments in environmental infrastructure, the greening of tax systems, boosting eco-innovations, phasing out environmentally harmful subsidies and removing other obstacles to green growth.

Progress towards the Europe 2020 target of reducing EU greenhouse gas emissions by 20 % by 2020 is monitored in the European Semester in the form of Member States progress towards their targets under the Effort Sharing Decision. Challenges in reaching the targets are seen in the context of other economic challenges, for example investment needs in the transport and energy sectors.

After a fall in 2015 due to the Semester taking on a more focused approach, the number of environmental references in the Semester country reports and country specific recommendations (including recitals) has gradually increased, reflecting the renewed interest in bottlenecks to sustainable growth triggered by the economic recovery in many European economies. These references concern, for example, the need for a transition to the circular economy, the need to shift taxation towards use of natural resources and away from labour, the need to invest more in water, waste and wastewater infrastructure, and the need to reduce the costs that result from air pollution, floods and forest fires. In 2018, climate-relevant country-specific recommendations were adopted for 2 Member States, and climate-relevant recitals for another 3 Member States. These concerned in particular the need to reduce greenhouse gas emissions from the transport sector. In addition, in 2018, there were environmental CSRs for three countries: on traffic congestion and related air pollution (Belgium, also a recital for Luxembourg), on water infrastructure (Ireland) and waste and water infrastructure (Romania).

In 2013 an Expert Group was established on “Greening the European Semester.” This group meets twice per year and facilitates exchange of data and good practices between the Commission and Member States. As from 2017, the Expert Group also discusses the Environmental Implementation Review (EIR) to promote synergy between it and the Semester. The exchanges in the Expert Group have motivated national ministries to better integrate environmental needs into their national reform programmes, with good results in some countries (e.g. Italy and Belgium).

Summary

State of implementation of the policy area
<input type="checkbox"/> No progress
<input type="checkbox"/> Limited progress
<input type="checkbox"/> Some progress
<input checked="" type="checkbox"/> Substantial progress
<input type="checkbox"/> Fully implemented

The 7th EAP has created support for better implementation through the EIR, as well as greater awareness about better integration (e.g. through the Semester) being a means to achieve

better implementation. Member States have acknowledged that the Semester and the EIR are mutually reinforcing tools, which share a country-specific approach.

However, there have been no calls in the 7th EAP to use the Semester as a means to reach agreement on a lead indicator and target on resource efficiency. The Country Reports and also the Country Specific Recommendations cover environmental topics relevant for sustainable growth. In particular, this applies to climate change, as the carbon emission reduction 2020 target is included in the Europe 2020 Strategy. Topics such as waste, air quality, transport congestion are also discussed and the green tax shift and phasing out of EHS mentioned. Therefore, the Semester has been a useful means of supporting improved implementation complemented by the success of the Environmental Implementation Review (EIR).

8 PRIORITY OBJECTIVE 8: To make the Union's cities more sustainable

8.1 Sustainable cities

Sub-objectives:

- A majority of cities in the Union are implementing policies for sustainable urban planning and design, including innovative approaches for urban public transport and mobility, sustainable buildings, energy efficiency and urban biodiversity conservation.

Actions:

- Agreeing on a set of **criteria to assess the environmental performance of cities**, taking into account economic, social and territorial impacts;
- Ensuring that cities have information about, and better access to, **financing** for measures to improve urban sustainability;
- **Sharing best practice** between cities at Union and international level in relation to innovative and **sustainable urban development**;
- In the context of ongoing Union initiatives and networks, developing and promoting a **common understanding of how to contribute to improved urban environments** by focusing on the **integration of urban planning** with objectives related to resource efficiency, an innovative safe and sustainable low-carbon economy, sustainable urban land-use, sustainable urban mobility, urban biodiversity management and conservation, ecosystem resilience, water management, human health, public participation in decision-making and environmental education and awareness.

Introduction

Cities are where the environmental problems arise, but also, where the solutions are to be found. Progress has been made - many cities have started applying sustainable development approaches – not least thanks to the European Green Capital Award (EGCA)²⁵²/ European Green Leaf Award (EGL)²⁵³ applicants and winners. However, more cities need to be mobilised to achieve real change on a European scale. The EU supports cities not only through continuous policy development in areas that are essential to a city's environmental

²⁵² <http://ec.europa.eu/environment/urban/egc.htm>

²⁵³ <http://ec.europa.eu/environment/urban/egl.htm>

performance, such as air, water or waste, but also through helping to build the capacity and knowledge needed to make cities more sustainable - including the EGCA/EGL, peer-to-peer tools and the Green City Tool²⁵⁴.

Adaptation strategies are needed at local, regional, national, EU and international levels in order to anticipate the adverse effects of climate change and prevent or minimize the damage. Such strategies often have an urban dimension, and cities have a major role in their implementation. The Covenant of Mayors for Climate and Energy is the main channel for EU support to help cities adapt to climate-change. Adaptation is complementary to efforts to cut greenhouse-gas emissions in cities.

Current situation

While the 7th EAP was being implemented more than 15 % of all EU cities eligible for the European Green Capital Award took part. This onerous application process for the award requires the development of a genuinely integrated urban plan based on a sustainable vision for the city. The Green Leaf Award for smaller cities was also launched and has seen its uptake begin to increase. A financial incentive is now available for cities seeking to win the awards.

The Green City Tool was also launched to extend the influence of the environmental criteria needed to apply for the awards to those cities that are unlikely to consider themselves as candidates. This tool establishes a set of key indicators that define what good city governance is in terms of sustainable urban planning. The tool allow cities to perform a simple environmental assessment of their approach and compare their results to those of others.

In 2016, the Pact of Amsterdam was signed and established as the **Urban Agenda for the EU**. Based on the principles of subsidiarity and proportionality, the Urban Agenda focuses on the three pillars of EU policy making and implementation: better regulation, better funding and better knowledge. 14 partnerships were established in key areas of urban policy including air quality, urban mobility and the circular economy. Cities, Member States, the Commission and key businesses and NGOs are working together to produce action plans to make EU policies better suited to cities and to improve the knowledge and financing available for cities. The Commission has also launched a one-stop shop²⁵⁵ for cities to access information on policies and the funding options available to them.

While there is no direct legal basis for action on urban issues, some legislation is very relevant to cities, such as that on clean air, waste management, nature (species and habitats), urban waste and wastewater, drinking water, flood protection, environmental assessment and noise. The EU investment in urban projects under Horizon 2020 (2014-17) amounts to around EUR 1.7 billion for 612 projects across its three pillars, of which around EUR 450 million was for demonstration projects in the area of smart and sustainable cities. As an example, the scheme 'Smart cities and communities with nature-based solutions' was financed, to better take account environmental considerations when making cities 'smart'.

The Covenant of Mayors (launched in 2008 in Europe) has continued to grow throughout the 7th EAP period. Its aim is to gather local governments voluntarily committed to achieving and exceeding the EU climate and energy targets.

²⁵⁴ <https://webgate.ec.europa.eu/greencitytool/home/>

²⁵⁵ http://ec.europa.eu/regional_policy/en/policy/themes/urban-development/portal/

Together with the Covenant of Mayors Office, the Commission **informs, mobilises and supports local authorities in taking climate mitigation and adaptation action**. Both the Commission and the Covenant Office:

- raise awareness,-including on access to financial opportunities;
- encourage political commitment from local authorities to take action;
- promote their local commitments and actions via the Covenant's communication channels;
- assist Covenant signatories via a helpdesk, technical guidance, including for monitoring and reporting, capacity-building events and webinars;
- facilitate peer-to-peer networks and exchange of experiences and good practices;
- manage a city twinning programme; and
- Host online discussion forums and networking events.

The Commission and the Covenant Office also engage other governance levels and stakeholders (States, regions, provinces, national / thematic agencies or organisations, etc.) and co-ordinate work with third parties. The Commission's Joint Research Centre cooperates with the Covenant Office to provide comprehensive technical guidelines, templates and feedback to local authorities for the preparation, implementation and monitoring²⁵⁶ of the latter's commitments.

The Commission mobilises **financial support** for Covenant signatories at EU level. Indeed, the Commission ensures that part of the EU funds and financial instruments (e.g. European Fund for Strategic Investments, European structural and investment funds, (including urban innovative actions and URBACT) LIFE, LIFE Natural Capital Financing Facility, and Horizon 2020) supports Covenant signatories in implementing their commitments on climate change mitigation and adaptation. The Commission also contributes to providing advice and technical assistance through financing local climate change mitigation and adaptation projects, e.g. through URBIS, which is a new dedicated urban investment advisory platform, and the Joint Assistance to Support Projects in European Regions (JASPERS) (also under the ESIF).²⁵⁷

In 2015, the Commission launched the new **Covenant of Mayors for Climate & Energy**, integrating both the Covenant of Mayors and the Mayors Adapt initiatives. The new Covenant therefore covers sustainable energy, climate change mitigation and adaptation, as well as access to energy. In 2017, the Covenant of Mayors for Climate and Energy and the Compact of Mayors merged to form the **Global Covenant of Mayors for Climate and Energy**. Currently **more than 7 000 EU local authorities** from the 28 Member States, **representing almost 200 million inhabitants**, have signed up to the Covenant of Mayors for Climate and Energy, committing to develop, implement and report on sustainable energy and climate change mitigation and/or adaptation plans.

As set out in the 7th EAP, a **set of criteria** to assess the environmental performance of cities has now been established and incorporated into a tool that allows for this assessment to be undertaken. The indicators underpinning the Green City Tool are a newly developed set that

²⁵⁶ At the start of 2017, in consultation with the signatories, the Covenant of Mayors Office developed an updated and integrated monitoring and reporting framework, which includes mitigation and adaptation reporting requirements.

²⁵⁷The EUROPA Cities topic webpage, Climate adaptation in cities, Funding opportunities and advice,: https://ec.europa.eu/info/eu-regional-and-urban-development/topics/cities/priority-themes/climate-adaptation-cities_en#funding-opportunities-and-advice

are based on city governance rather than on specific quantitative indicators. The Green City Tool indicator set was developed to benchmark the progress being made in governance by a city. It included the questions:

- Has it measured and monitored an environmental issue?
- Has it set a target for improvement?
- Has it developed a strategy that is backed financially and politically?
- Was it developed with proper stakeholder/Europeans involvement. The tool also allows the city in question to be benchmarked against others and provides detailed guidance on good urban planning in all the indicator areas covered by the Green Capital and Green Leaf Awards. Fact sheets on best practices in all areas produced by award winners are also available.

Summary

State of implementation of the policy area
<input type="checkbox"/> No progress
<input type="checkbox"/> Limited progress
<input type="checkbox"/> Some progress
<input checked="" type="checkbox"/> Substantial progress
<input type="checkbox"/> Fully implemented

Overall, there has been substantial progress towards meeting the specific actions. The procedure for cities to access information on developing a good sustainable urban planning process has improved significantly:.

- the set of criteria are in place, with a tool for easy access; and
- the Green Capital and Green Leaf Awards are well established and now offer a financial incentive for their use.

A range of new sources of best-practice and guidance are now available, through the Green City Tool, and via programmes such as URBACT. Access to information on Commission policies and financing available to cities has also been established through the Urban Agenda for the EU, with a one-stop-shop now in place for urban matters.

The Covenant of Mayors for Climate and Energy has strengthened the sustainability of the EU's cities by providing them with information on climate action as well as mobilising and supporting them in this area. Estimates show that a majority (around 70%) have adopted a climate mitigation plan, contributing to sustainable urban planning and design. However, regarding climate change adaptation, the proportion of adopted plans would still represent a minority (around 25 %) of EU cities . These proportions will need to continue increasing in the coming years. In this sense, we can see that, where there were binding measures at national level requesting the development of local climate plans the percentage of local authorities with a local adaptation strategy was two to five times higher.

As regards implementing local climate plans, thousands of actions are being carried out in relation to these plans and that a section part of the Covenant community has already significantly reduced greenhouse gas emissions (23 % in 2014 against the baseline year chosen by the city). However, for the moment, we lack a clear and complete picture on the

degree of implementation of local climate plans, since not all cities are part of the Covenant²⁵⁸ and only a minority of Covenant cities have submitted their monitoring reports. Further studies and/or surveys would need to be carried out in order to obtain a clearer and more complete picture on the degree of implementation of local climate plans.

9 PRIORITY OBJECTIVE 9: To help the Union address international environmental and climate challenges more effectively

9.1 Implementation of Rio+20 outcomes

Sub-objectives:

- The outcomes of Rio + 20 are fully integrated into the Union’s internal and external policies and the Union is contributing effectively to global efforts to implement agreed commitments, including those under the Rio conventions and to initiatives aimed at promoting the global transition towards an inclusive and green economy in the context of sustainable development and poverty eradication;

Actions:

- Working as part of a coherent and comprehensive post-2015 approach to the universal challenges of poverty eradication and sustainable development, and through an inclusive, collaborative process, towards the adoption of sustainable development goals that:
 - a) are coherent with existing internationally agreed goals and targets on, inter alia, biodiversity, climate change, social inclusion and social protection floors;
 - b) address, at national and international level, priority areas such as energy, water, food security, oceans and sustainable consumption and production, decent work, good governance and the rule of law;
 - c) are universally applicable, covering all **three dimensions of sustainable development**;
 - d) are assessed and accompanied by targets and indicators, while taking into account different national circumstances, capacities and levels of development, and
 - e) are consistent with, and supportive of, other international commitments, such as those concerning climate change and biodiversity;

Introduction

Rio +20 outcomes are relevant in policy areas such as land degradation, marine biodiversity, water, sustainable energy, sustainable consumption and production and food and agriculture. Also, green economy was recognised as an important instrument towards achieving sustainable development and changes were set in motion towards a better global environment and sustainable development governance and a process started on financing for sustainable development.

Overall, Rio provided fresh impetus to a concept of sustainable development, taken as a holistic notion. Rio+20 reaffirmed the need to amalgamate efforts to eradicate poverty and those to secure sustainability within our planetary limits. To bring this integrated approach forward, Rio+20 launched a process towards the establishment of SDGs.

²⁵⁸ From the 323 EU local authorities with a population of more than 150,000 inhabitants, 84 have signed up to the adaptation component of the Covenant of Mayors.

The 2030 Agenda and its SDGs are an extension of Rio+20, as a way to implement its results. However, the 2030 Agenda goes further in integrating the three dimensions of sustainable development effectively with poverty eradication, peace, and security and human rights as well as governance and rule of law, aiming where possible to set clear targets and timelines.

Current situation

The main output in the policy area was the adoption of the 2030 Agenda and its SDGs in the United Nations in September 2015 where the EU played a central role. Linked to that are internal and external follow-up actions by the EU that are ongoing and are the main EU policy outputs under this sub-objective.

As regards the intent of the 9th priority objective and this sub-objective, the EU is on track to meeting these objectives. The adoption of the 2030 Agenda and its SDGs is a major achievement at global level. It provides drive, coherence and a framework to address effectively poverty eradication and sustainable development in an integrated manner. In this way the 2030 Agenda clearly helps in tackling international environment and climate related challenges.

The outcomes Rio +20 in several policy areas were valuable and Rio in particular provided further boost to addressing poverty eradication and sustainable development, including its environmental dimension, in an integrated manner. Equally important were the further intergovernmental processes, which Rio +20 instigated. They led to establishment of the UN Environment Assembly (UNEA), which is now the world's highest-level decision-making body on the environment. Rio also launched the processes for establishing the SDGs and the financing for sustainable development. The EU played a central positive role in all the Rio+20 follow-up processes.

The 2030 Agenda and its SDGs became the 'operationalisation' of the Rio +20 results, but they went much further in integrating the three dimensions of sustainable development effectively with poverty eradication, peace, security and human rights as well as governance and rule of law setting where possible clear targets and timelines. Furthermore, it brought together international commitments from other processes, such as those concerning biodiversity and climate-change allowing the SDGs to provide a universal, comprehensive, integrated global framework for addressing poverty and sustainable development. It can be said that the objectives and the requirements the 7th EAP set for the SDGs were met in full.

EU had a key role in the process for agreeing the 2030 Agenda. The Council could agree strong and clear EU positions based on Commission initiatives. Finding an EU agreement on all the issues of such a wide-ranging agenda as the 2030 Agenda was a challenge. Having the 7th EAP was very helpful for this as it provided a common agreed starting point within the EU, particularly on the Agenda's environmental aspects. This common starting point was not far from what was eventually needed for the SDG negotiations and together with Rio +20 and other agreed international commitments it helped to formulate a strong EU common position for the 2030 Agenda negotiations.

EU played a major role in the UN negotiations for the 2030 Agenda. The process leading to the adoption of the Agenda and the resulting SDGs meets the objectives set out in the actions for this sub-objective in full.

The EU is fully committed to implementing the SDGs. For its external policies the new European Consensus on Development (June 2017) is the EU’s main response to the 2030 Agenda and it is structured accordingly. The overall EU external policy priorities as set out in the EU global strategy (2016) also include the SDGs and climate. Consequently, the 2030 Agenda has been integrated into the multilateral and bilateral international work of the EU, including in the field of environment.

Furthermore, the European Consensus confirms the EU’s commitment to promote the green economy and highlights its importance in achieving key EU development objectives. Internally, the green economy is addressed most noticeably through EU’s circular economy action plan, the circular economy being an essential component of the green economy.

Hence, the integration of Rio +20 outcomes - in practice through the 2030 Agenda – into the EU’s external policies is well advanced. As for the internal policies²⁵⁹ overall efforts are ongoing to integrate the SDGs into EU policies and initiatives with sustainable development as an essential guiding principle for all policies. Sustainability is being assured through the better regulation tools. Reflection work is ongoing developing a longer-term vision for SDG implementation in a post-2020 perspective.

These policies and measures have improved the coherence and effectiveness of the EU’s contribution to global efforts to implement agreed commitments and to addressing the international environmental challenges.

As for the specific internal environmental policies and actions relevant for this, they are described elsewhere in this evaluation. Likewise they are the actions related to the Rio Conventions

The consistency between different internal policies and well as between the internal and external policies will have to be further monitored and assessed while the SDGs are being implemented.

Summary

State of implementation of the policy area
<input type="checkbox"/> No progress
<input type="checkbox"/> Limited progress
<input type="checkbox"/> Some progress
<input checked="" type="checkbox"/> Substantial progress
<input type="checkbox"/> Fully implemented

Having a jointly agreed common framework for sustainable development at global level (2030 Agenda) enables the EU’s internal and external policies to be effective and coherent. Having these kinds of frameworks at global level can focus action and encourage cooperation among partners, as the objectives at global level are already agreed. This is already present to a certain extent in EU external action and development cooperation policy due to the Millennium Development Goals, which have now de facto been replaced by the

²⁵⁹ COM(2016) 739.

much more comprehensive SDGs bringing in a wider array of issues and a strong environmental dimension. This transformation brought by the 2030 Agenda has been well reflected and integrated in the new European Consensus on Development and taken into account in the EU global strategy, which together provide an overall framework for EU external action and support for sustainable development.

Making a similar transformation in EU internal policies is much more complex and challenging as the EU already has policies in place in all the areas covered by the SDGs. However, as the SDGs strongly reflect the EU's own objectives, as partly defined in the 7th EAP, the starting point for EU implementation of the SDGs is strong and the level of divergence is not substantial. For implementing the 2030 Agenda the EU has adopted a two-phase approach with the immediate integration of the SDGs into EU policies and initiatives, with sustainable development as an essential guiding principle for all policies using the existing better regulation tools. This is followed by reflection work developing a longer-term vision for implementing the SDGs in a post-2020 perspective *to be further developed in the Commission Reflection paper expected in early 2019*.

In environment, good progress has been made in adopting and adapting policies and taking action in support of the SDG implementation. These are described in more detail elsewhere in the document, but the recent EU flagship policies on environment certainly contribute strongly to the SDGs and follow an integrated approach with economic and social dimensions built in with the environmental dimension. Examples include action on key issues and priorities such as the circular economy; plastics; water, nature and biodiversity; sustainable finance, as well as some success stories in anchoring the environment into e.g. urban, energy and agriculture policies.

It is clear that despite a good starting position and solid progress in external and internal policies the EU needs to do more to implement the SDGs and to address the environmental challenges at all levels. The EU monitoring and reporting processes put in place for the 2030 Agenda will help to determine where action is needed most. Policy coherence is essential for achieving sustainable development as well as to create and profit from synergies and co-benefits and minimise the need for trade-offs. Policy coherence for sustainable development is required between the different internal policies of the EU as well as between its internal and external policies and actions in order to achieve sustainable development and to tackle the environmental challenges globally and in the EU as effectively as possible.

Furthermore, most environmental challenges can only be tackled effectively through combining internal and global action, such as that relating to the circular economy, climate change and biodiversity. Implementing the Rio+20 outcomes and the 2030 Agenda are important for demonstrating EU's firm commitment to and support for global governance, international rule-based order and multilateralism.

9.2 Cooperation with third countries

Sub-objectives:

- the Union is providing effective support to national, regional and international efforts to address environmental and climate-related challenges and to ensure sustainable development;

Actions:

- Engaging with partner countries in a more strategic way, for example by focusing cooperation with:
 - a) **strategic partners** on the promotion of best practice in domestic environment policy and

legislation and convergence in **multilateral environmental negotiations**;

- b) **countries covered by the European Neighbourhood Policy** on gradual approximation with key Union environment and climate policy and legislation and on strengthening cooperation to address regional environmental and climate-related challenges;
- c) **developing countries** to support their efforts to protect the environment, fight climate change and reduce natural disasters, and implement international environmental commitments as a contribution to poverty reduction and sustainable development;
- Promoting the further development and implementation of **emissions trading schemes** around the world and facilitating the linking of such systems;

Introduction

The EU's external policy involves working closely with third countries to tackle pressing environmental challenges at the:

- global level through initiatives such as the United Nations
- regional level through initiatives such as the Union for the Mediterranean or Eastern Partnership
- bilateral level through implementing the numerous cooperation agreements as well as the bilateral dialogues that we have with third countries.

This cooperation is supported by the policy driven external financial instruments.

Current situation

There has been an opening of new lines of cooperation with a number of third countries and regional organisations as well as strengthening or revitalising cooperation and dialogue with a number of others. Examples of this cooperation include:

- enabling candidate countries to the EU to transpose and implement the EU rules and regulations that they will need to apply so they can assume the responsibilities of EU membership;
- helping neighbouring countries of the EU to implement the environmental reforms to which their governments have committed;
- assisting third countries to develop and implement policies and regulations influenced by those of the EU;
- working with third countries through multilateral environmental agreements (MEAs) to ensure that they meet the most pressing global challenges.

The outputs from this cooperation take many forms. Examples include

- new policies put in place drawing upon EU experience (numerous examples under the European Neighbourhood Policy²⁶⁰)
- better implementation of environmental regulations in third countries (for example, study visits by the Chinese judiciary have been made to the EU).
- new approaches developed at international level (such as natural capital accounting) helped by supportive EU interventions.

The drivers for relations with third countries and regions are three-fold:

²⁶⁰ https://eeas.europa.eu/diplomatic-network/european-neighbourhood-policy-enp_en

- EU external policy (for example, Iran where broader political developments and strengthened foreign policy cooperation interests have led to enhanced environmental cooperation).
- International pillars of new internal policy initiatives where particular regions-countries require particular attention in order to be able to reach our own policy objectives (for example, marine litter cooperation with South East Asia).
- The EU's strategic priorities (strategic partners, neighbourhood, development cooperation mainstreaming).

Over recent years the EU's external policy has become increasingly structured and this has been associated with developing the environmental arm by mainstreaming environmental considerations into many policy and strategy documents. Recent examples include the EU global strategy, the EU's approach to resilience or the EU Asia connectivity strategy. Bilateral examples include the China and India country strategies; and the environment is now also embedded in the EU's Economic Diplomacy Agenda. Mainstreaming of environment into EU development cooperation has been improved through tools such as the Mainstreaming Guidelines, and the work of a dedicated mainstreaming facility. The 2015 circular economy package has also meant increasing linkages to the EU business community established in third countries or those businesses seeking to begin operating outside the EU, including through the new tool of the circular economy mission.

Summary

State of implementation of the policy area
<input type="checkbox"/> No progress
<input type="checkbox"/> Limited progress
<input type="checkbox"/> Some progress
<input checked="" type="checkbox"/> Substantial progress
<input type="checkbox"/> Fully implemented

The EU has made substantial progress towards meeting the 7th EAP objectives of a more strategic cooperation with partner countries and regions even though external policy developments continue to influence with whom and to which degree we cooperate significantly. It is of course unclear to what extent the 7th EAP has driven forward these international actions. However, through EU external policy, MEAs etc. there has been substantial progress towards meeting the 7th EAP objectives of a more strategic cooperation with partner countries and regions across all of the policy areas mentioned in the 7th EAP (strategic partners, European Neighbourhood countries, developing countries).

9.3 Engagement in international environment and climate change negotiations

<p>Sub-objectives:</p> <ul style="list-style-type: none"> • The Union is providing effective support to national, regional and international efforts to address environmental and climate-related challenges and to ensure sustainable development;
<p>Actions:</p> <ul style="list-style-type: none"> • Working towards a more effective UN structure for sustainable development, in particular its environmental dimension by: <ol style="list-style-type: none"> a) further strengthening the United Nations Environment Programme (UNEP) in line with the

outcome of Rio + 20, building on the decision by the UN General Assembly to change the designation of the Governing Council of the UNEP to the **UN Environment Assembly of the UNEP**, while continuing to strive for an upgrade of the UNEP's status to that of a specialised Agency;

- b) supporting efforts to enhance synergies between **multilateral environmental agreements**, in particular in the chemicals and waste cluster and the biodiversity cluster; and
- c) contributing to ensuring a strong and authoritative voice for the environment in the work of the **High-Level Political Forum**;
 - Strengthening the impact of various sources of funding, including taxation and domestic resource mobilisation, private investment, new partnerships and innovative financing sources, and creating options for using development aid to leverage those other sources of financing as part of a sustainable development financing strategy, as well as in the Union's own policies, including international commitments on climate and biodiversity finance;
 - Engaging in existing and new multilateral environmental and other relevant processes, in a more consistent, proactive and effective way, including through the timely outreach to third countries and other stakeholders, with a view to ensuring that commitments for 2020 are met at Union level and promoted globally, and to agree on international action to be taken beyond 2020, and **ratifying and boosting efforts to implement all key multilateral environmental agreements well before 2020. Implementing the 10-year Framework of Programmes on Sustainable Consumption and Production**;

Introduction

Since the inception of the 7th EAP, the EU has provided effective support to national, regional and international efforts and processes aimed at addressing environmental and climate-related challenges and to ensuring sustainable development. This support has taken various forms and was provided in multiple settings and fora by tackling issues from various angles, as described below.

Current situation

UNEP's upgraded mandate, strongly advocated by the EU in the context of Rio+20, sets the global environmental agenda, promotes the coherent implementation of the environmental dimension of sustainable development within the UN system and serves as an authoritative advocate for global governance. Although the EU would have preferred it to have been strengthened more extensively, UNEP will become a stronger voice for the environment thanks to:

- the replacement of its Governing Council with the UN Environment Assembly (UNEA), which has universal membership;
- increased financial resources;
- its empowerment to lead efforts to formulate UN system-wide strategies on the environment; and
- strengthened stakeholder participation.

The UNEP reform with a preparatory process for UNEA based on proposals for decisions developed by the open-ended Committee of Permanent Representatives and a stronger role for the UNEA Member States provides an opportunity to work towards more focused and stronger outputs from UNEA in comparison to the former UNEP Governing Council. The EU has actively contributed to the shaping of the agendas and outcomes of UNEA in all three sessions that took place after its inception.

Apart from participating in the work of UNEA, the EU continued to work closely with UNEP. The 2014 Memorandum of Understanding between the Commission and UNEP provides for high level meetings (HLMs) aimed at regular policy dialogue and providing strategic guidance on collaboration. Thematic dialogues are also held regularly to feed/complement the HLM discussions and cover more in-depth areas of cooperation. The last HLMs took place in December 2016 and June 2018. These regular meetings with UNEP enable the Commission to advance the EU international environmental agenda as issues are being discussed such as preparations for the High Level Political Forum on sustainable development, the UNEA, the Post-2020 biodiversity and chemicals/waste frameworks, and green/sustainable finance. The outcomes of the dialogues with UNEP also translate into concrete programmatic cooperation to promote EU international environmental objectives, including through voluntary contributions to multilateral environmental agreements.

When it comes to **multilateral environmental agreements (MEAs)**, the EU has to date ratified all key MEAs. The most recent achievements concern accession to the Convention on International Trade in Endangered Species of Wild Fauna and Flora as well as the ratification of the Minamata Convention, which ultimately enabled its entry into force. As part of its work on implementing numerous MEAs, the EU has also strived to increase **synergies** between them. In particular, the EU is funding a UNEP managed portal – InforMEA – which offers access to MEA treaty texts, decisions of its governing bodies, national reports and plans submitted under respective MEAs. The portal also hosts the largest glossary of international environmental law and provides free online courses targeted at the environmental community at large. In the context of strengthening synergies in the biodiversity cluster, the EU has also been encouraging the need to streamline reporting under biodiversity-related and Rio conventions by funding a special data reporting tool under InforMEA. It has been actively contributing to the development of global biodiversity indicators to monitor progress on the implementation of the global strategic plan for biodiversity 2011-2020 and SDGs 14 and 15 by funding the Biodiversity Indicator Partnership.

With regard to the synergies in chemical and waste cluster, they are being developed in particular between the Basel, Rotterdam and Stockholm Conventions and the Minamata Convention regarding mercury waste management, thanks especially to technical and operational cooperation being established. This is based in particular on the synergies between the Minamata provisions on waste and the Technical Guidelines for the environmentally sound management of wastes consisting of elemental mercury and wastes containing or contaminated with mercury, developed under Basel Convention.

There has also been significant progress on **funding for the international environmental agenda**. With the growth of the world's population, rapid urbanisation, and unsustainable production and consumption patterns leading to the depletion of natural resources, the need to invest in protecting the environment is very clear. Natural capital, including productive land, water resources, forests, fish stocks and biodiversity are the backbone of many countries' economies. The EU is therefore supporting partner countries' efforts to integrate environment, biodiversity and climate change into their policies, plans and budgets, notably through the UN Poverty and Environment Initiative and the Global Climate Change Alliance. Since 2016, in line with the new European Consensus on Development and the Paris Agreement, the EU has also strengthened its efforts to integrate environment, biodiversity and climate change more systematically into all EU financing instruments and programmes.

For instance, the External Investment Plan (EIP) was adopted in September 2017 to help boost investment in partner countries in Africa and the European Neighbourhood, with the aim of contributing to sustainable development. It will leverage public and private investment by covering part of the investment risk. The EIP focuses on a number of priority investment areas, including sustainable energy and sustainable connectivity, sustainable agriculture, sustainable cities and digitalisation for sustainable development. To this end, the EIP's investment arm, the European Fund for Sustainable Development, merges the existing blending platforms with a new guarantee.

The EU is also very active in the field of sustainable finance. Its action plan on sustainable finance 'Financing Sustainable Growth' will help to mobilise private capital and anchor sustainability considerations in financial markets, both in the EU and given that these markets are global outside the EU. In particular, the EU taxonomy, once adopted, would define which economic activities count as environmentally sustainable, regardless of where they take place. This will direct private capital flows towards sustainable activities both within and outside the EU.

On taxation and domestic resource mobilisation, the EU has increasingly promoted market-based instruments (MBIs) such as indirect taxation, targeted subsidies or tradable emission rights – to address resource scarcity and to promote a shift towards a sustainable economy. MBIs are flexible and cost-effective means to address environmental externalities and provide a revenue source.

Moreover, the EU participated in the G7/G20 process for the reform of environmental harmful subsidies, which aims to phase them out. Such an approach puts a price on environmental externalities and creates revenues to finance sustainable development.

The EU has consistently supported **environment-led processes** in the G7 and G20 agendas . In 2016 it backed the G7 German Presidency in launching the G7 Resource Efficiency Alliance and the G7 action plan to combat marine litter. The Alliance provides a common vision and a guide for future actions to deepen G7 efforts on resource efficiency and the 3Rs (reduce, reuse, recycle). These have been recently complemented by the Toyama Framework on Material Cycles²⁶¹ (adopted at the 2016 G7 Environment Ministers' meeting in Toyama, Japan) and the five-year Bologna roadmap (adopted at the 2017 G7 Environment Ministers' meeting in Bologna, Italy). The EU has co-organised a number of workshop in support of the Alliance, including on remanufacturing, refurbishment, repair and direct reuse in the circular economy (Brussels, February 2017, and Montreal, June 2018) and plastics (Brussels, March 2018). With the EU's active involvement, the G20 Resource Efficiency Dialogue and the G20 marine litter action plan were launched in 2017. The aim is to advance resource efficiency and ocean protection throughout the G20 members, representing 85 % of the world's GDP. The EU has championed sustainable consumption and production (SCP) in the run-up to the 2012 Rio+20 UN Sustainable Development Conference and has been instrumental in launching the 10-year framework of programmes on sustainable consumption and production (10YFP). The EU has provided crucial funding for the operation of the 10YFP Secretariat and supported the implementation of the 10YFP in synergy with the EU's Switch to Green programmes and more generally with the EU's development cooperation policy.

²⁶¹ <https://www.mofa.go.jp/files/000159928.pdf>

Most recently, the EU together with its Member States expressed support for the ‘Global Pact for the Environment’ initiative under the UN, which could lead to overarching treaty enshrining basic environmental principles beyond specific MEAs.

The Commission is currently seeking agreement for the EU become a member of the Global Plastic Platform ‘Fighting Plastic Pollution: A Global Race to the Top’ established by UNEP. The Platform is a partnership between UNEP, national governments and regional organisations to reduce plastic pollution. The Platform’s objectives are consistent with those of the European strategy on plastics (COM(2018) 28), notably on the transition to a more circular economy, supporting innovative plastic product design, production, and consumption, and reducing plastic pollution around the world. The Council will have to agree to the EU becoming a member of the Platform.

Since July 2014 the EU and 16 other members of the World Trade Organization have been negotiating an environmental goods agreement to remove barriers, reduce or eliminate tariff and non-tariff barriers, and to trade in environmental or "green" goods that are crucial to protecting the environment and mitigating climate change. The negotiations have stalled with no progress reported in the last 2 years.

Summary

State of implementation of your policy area
<input type="checkbox"/> No progress
<input type="checkbox"/> Limited progress
<input checked="" type="checkbox"/> Some progress
<input type="checkbox"/> Substantial progress
<input type="checkbox"/> Fully implemented

The EU is actively participating in the UNEA’s work, and working closely with UNEP. This is effective in advancing the EU international environmental agenda on issues such as sustainable development, biodiversity and chemicals/waste frameworks. This is complemented by the ratification of the key MEAs, and significant progress on funding for the international environmental agenda. The EU has also supported environment-led processes in the G7 and the G20 agendas as highlighted by its support for the Global Pact for the Environment mentioned earlier. There has therefore been some progress, highlighted by the development of a multilateral environmental agenda that is being translated into change on the ground.

9.4 Reducing the external impact of the EU consumption

<p>Sub-objectives:</p> <ul style="list-style-type: none"> The impact of consumption in the Union on the environment beyond the Union’s borders is reduced.
<p>Actions:</p> <ul style="list-style-type: none"> Assessing the environmental impact, in a global context, of Union consumption of food and non-food commodities and, if appropriate, developing policy proposals to address the findings of such assessments, and considering the development of a Union action plan on deforestation and forest degradation;

- Ensuring that economic and social progress is achieved within the carrying capacity of the Earth, by increasing understanding of **planetary boundaries**, inter alia, in the development of the **post-2015 framework in order to secure human well-being and prosperity in the long-term.**

Introduction

The EU wants to lead by example and steer a global transition toward a sustainable future. A sound domestic sustainability agenda is pivotal to addressing international environment and climate-related challenges. In this respect, the EU circular economy action plan (CEAP), adopted in 2015, sets the groundwork for a number of actions aimed at creating a resource-efficient, circular and low-carbon economy both at home and abroad. Through the CEAP, the EU can significantly reduce the impact of its consumption on the environment with positive effects beyond its borders.

The EU action for sustainable consumption and production includes a number of policy tools and initiatives that enable people in the EU to thrive within the Earth's carrying capacity. While the CEAP's contribution is extensively covered in the policy area assessment on SCP, this policy area assessment profiles the EU's work on **consumption of food**²⁶², on **deforestation** and on **increasing understanding of planetary boundaries**. In addition, this assessment also profiles the EU efforts to harness globalisation to promote the circular economy and SCP practices at international level.

Current situation

Addressing international environment and climate-related challenges by reducing the external impact of the EU's consumption will imply a significant **reduction of food waste** and a shift toward healthy and nutritious diets.

The Roadmap to a Resource Efficient Europe (2011)²⁶³ includes a theme '*Addressing Food*' in which it is noted that the average European citizen wastes 180 kg of food per year, much of which is food that is still suitable for consumption. The Roadmap notes that 'a combined effort by farmers, the food industry, retailers and consumers through [...] sustainable food choices (in line with WHO recommendations on the amount of animal proteins, including meat and dairy products consumed per person) and reduced food waste can contribute to improving resource efficiency and food security at a global level'.

The EU revised waste legislation, adopted in May 2018, requires Member States to reduce food waste at each stage of the food supply chain, and to monitor and report annually on food waste levels. The Directive also requires the Commission to adopt legislation on food waste measurement by the end of March 2019. The new measurement obligations will generate consistent data on food waste levels throughout the EU and provide a major contribution towards the SDG 12.3 targets.

Another important aspect regarding EU consumption and strongly connected with food production and consumption is **deforestation and forest degradation**²⁶⁴. According to the

²⁶² This policy area assessment is limited to illustrate the EU work on food consumption. The non-food commodities are addressed under Sustainable Consumption and Production.

²⁶³ COM(2011) 571.

²⁶⁴ The UN Food and Agriculture Organisation (FAO) explains that deforestation is the direct human-induced conversion of forested land to non-forested land, including areas of forest converted to agriculture, pasture,

estimates from the UN's Food and Agriculture Organisation, around 7.6 million hectares of forests were lost every year at the global level between 2010 and 2015. The causes of deforestation and forest degradation depend on the context specific and they vary across regions and countries. A broad range of EU initiatives addresses these causes:

- The **EU FLEGT action plan**, designed to tackle illegal logging and strengthen forest governance in producer countries, including the EU Timber Regulation and FLEGT Voluntary Partnership Agreements between the EU and timber-producing countries.
- **EU action plan against wildlife trafficking** is designed to address wildlife trafficking within the EU.
- EU activities to combat **illegal, unregulated and unreported fishing**. As with combatting wildlife trafficking these activities contribute to improving governance, law and order, livelihoods and security.
- Biodiversity development cooperation: the EU is one of the world's largest contributors to biodiversity related development assistance outside Europe. As such it is contributing significantly to double biodiversity-related financing in line with international commitments.
- **REDD+ activities**, which aim to reduce greenhouse gas emissions from deforestation and forest degradation and improve the sustainable management of forests and the conservation and management of forest stocks.
- **EU renewable energy policy** specifies sustainability criteria that liquid biofuel feedstocks must meet to qualify for financial and regulatory support (this will be expanded to all bioenergy uses under the post-2020 framework).
- Other policy areas relevant to **deforestation** include **Green Public Procurement**, the **Circular Economy Package**, the **EU Forest Strategy** (all in the area of environment), trade policies (such as free trade agreements and Aid for Trade)²⁶⁵.

The EU has an objective to step up action against tropical deforestation and forest degradation by developing a more coherent and comprehensive approach to the problem. In 2018, the Commission announced an initiative for an integrated EU approach to combat deforestation, protect forests and promote sustainable supply chains²⁶⁶.

The EU supports forest and land restoration (e.g. through the African-led Great Green Wall initiative), as well as the conservation of essential ecosystem services by increasing protected areas and strengthening their sustainable management.

By reducing its consumption on the environment, the EU can ensure a sustainable economic and social development that respects our **planetary boundaries**. The concept of planetary boundaries was first introduced in 2009 by a group of scientists and researchers led by Professor Johan Rockström²⁶⁷ from the Stockholm Resilience Centre. The concept sets *nine planetary boundaries within which humanity can continue to develop and thrive for*

water reservoirs and urban areas. Forest degradation is the decline of the capacity of a forest to supply products and services. Human activities that drive forest degradation include overgrazing, demand for fuel wood, charcoal, excessive logging, overexploitation of forest fauna and flora, and human-induced fires, whilst natural causes of degradation include insect pests, storm damage and natural fires.

²⁶⁵ Feasibility study on options to step up EU action against deforestation.

²⁶⁶ https://ec.europa.eu/info/law/better-regulation/initiatives/ares-2018-6516782_en

²⁶⁷ Professor Johan Rockström is the former Director of the Stockholm Resilience Centre and in-coming Director of the Potsdam Institute for Climate Impact Research.

*generations to come*²⁶⁸. The nine planetary boundaries include: 1) stratospheric ozone depletion, 2) loss of biosphere integrity (biodiversity loss and extinctions), 3) chemical pollution and the release of novel entities, 4) climate change, 5) ocean acidification, 6) freshwater consumption and the global hydrological cycle, 7) land systems change, 8) nitrogen and phosphorus flows to the biosphere and oceans; and 9) atmospheric aerosol loading. Through their research, scientists have tried to define what is a safe operating space for humanity. Transgressing one or more planetary boundaries may lead to *non-linear, abrupt environmental change within continental to planetary-scale systems*²⁶⁹.

Despite the growing recognition of the planetary boundaries framework as a guiding principle for global sustainable development, putting the concept of planetary boundaries into practice at the regional, national and local level remains a challenge. Integrating the planetary boundaries framework in EU policy-making and measuring Europe's performance against these biophysical limits require a better understanding of not only the concept of planetary boundaries itself, but also how to translate the global perspective at the national and local level, while ensuring consistency between governance systems, policy areas and sectors.

In July 2018, the Stockholm Resilience Centre published a report for the European Environment Agency "Operationalising the concept of a safe operating space at the EU level – first steps and explorations"²⁷⁰. This report and the ongoing EU work under the Within Limits of the Planet (WiLoP) project help EU policy-makers better understand the concept of planetary boundaries for EU policy making. The report's results show the following

- 'Based on equal-per capita allocation of the global safe operating space, the EU does not appear to be 'living within the limits of our planet' for most of the boundaries analysed.
- From a consumption-based (footprint) perspective, Europe's per-capita contribution to the different planetary boundaries is significantly higher than the global average.
- Regarding past trends, decreases in Europe's territorial pressures are mostly outweighed by increasing environmental pressures in other regions, thereby externalising the EU's environmental footprint. As a result, Europe's total consumption-based environmental performance does not show improvement as regards most planetary boundaries.
- The social and ecological impacts of pressures on planetary boundaries can be more severe in the locations to which the pressures are externalised, compared to the same pressure exerted within Europe.
- Data and information limitations present challenges, but the initial planetary boundaries downscaling and benchmarking has been possible using available data, and is an informative exercise for both policy implementation and future research.'

In line with the policy framework provided by the planetary boundaries, the EU is a strong advocate for a **global transition toward a circular economy**. However, it will not be possible for the EU to attain a circular economy in isolation. A global transition to the circular economy model is in the EU's interest, as it is a major economic block, a leading

²⁶⁸ <https://www.stockholmresilience.org/research/planetary-boundaries.html>

²⁶⁹ Rockström et al. (2009), "Planetary Boundaries: Exploring the Safe Operating Space for Humanity": https://pdxscholar.library.pdx.edu/cgi/viewcontent.cgi?article=1063&context=iss_pub

²⁷⁰ <https://www.stockholmresilience.org/publications/artiklar/2018-07-03-operationalizing-the-concept-of-a-safe-operating-space-at-the-eu-level---first-steps-and-explorations.html>

exporter and importer of goods and services, and deeply embedded in global value chains. For developing countries, improving the environmental sustainability of their economies is at least as important as for the developed ones, considering that the costs of further environmental degradation are likely to lock them further into poverty. On the other hand, sustainable practices can deliver multiple economic benefits, such as improved competitiveness and market penetration. The EU circular economy action plan recognises the importance of the global dimension and states that the Commission will co-operate closely with international organisations and other interested partners as part of the global efforts to implement the 2030 Agenda and to attain the SDGs. This resonates in the new European Consensus on Development, which states: "the EU and its Member States will promote resource efficiency and sustainable consumption and production, including the sustainable management of chemicals and waste, with a view to decoupling economic growth from environmental degradation and enabling the transition to a circular economy policy".

Summary

State of implementation of the policy area
<input type="checkbox"/> No progress
<input checked="" type="checkbox"/> Limited progress
<input type="checkbox"/> Some progress
<input type="checkbox"/> Substantial progress
<input type="checkbox"/> Fully implemented

The EU has made *limited progress* in reducing the impact of consumption on the environment outside the EU. Considerable progress has been made in assessing and deepening the understanding of the EU's environmental impacts at home and abroad and the circular economy action plan greatly contributes to address these externalities. The 7th EAP officially recognises the importance of the planetary boundaries framework and stresses the key role that the EU should play in lowering pressure on the global natural resource base. This triggered greater action by the EU at international level. However challenges persists.

The EU strongly believes in circularity as the gateway to the future envisaged by the 2030 Agenda and the Paris Agreement. However, the EU is still missing a coherent international approach on how to lead and support this transition. To date there is no clear understanding in the EU of how the global uptake of circular approaches should be accomplished, which actors to engage with and what instruments to deploy. In this light, more efforts should be dedicated to fill this knowledge and policy gap. An orderly global transition to a low-carbon, resource efficient and circular economy should build on a sound knowledge-based, dialogue ongoing with third countries and an integrated approach in line with the 2030 Agenda and the Paris Agreement.

In addition to this, it is worth stressing that transitioning to the circular economy model will require a profound shift in individuals' mind-sets. The sustainable and circular management of resources in developed countries may need a reduction in consumption ("lowering the ceiling") so that economic growth is decoupled from resource use, as indicated in the Commission's reflection paper *Harnessing Globalisation*²⁷¹. This needs to be recognised as a

²⁷¹ COM(2017) 240.

logical consequence of a finite natural resource base and planetary boundaries. Behavioural change and sufficiency policies should be part of sustainable consumption and production practices.

Annex 7 – coherence between environmental policy and Juncker priorities and SDGs

The different strategies

Since the 7th EAP was adopted, some key policy agendas have been developed. Within the EU, the President of the European Commission, Jean-Claude Juncker, in 2014 profiled 10 Commission priorities for 2015-2019 as his ‘agenda for jobs, growth, fairness and democratic change’. At international level, under the aegis of the United Nations (UN), Heads of State and Government and High Representatives in September 2015 adopted the 2030 Agenda for Sustainable Development (UN 2015), a universal programme for action consisting of 17 Sustainable Development Goals (SDGs) and 169 targets.

The 7th EAP is thus flanked by the policy guidance offered by the 10 Juncker priorities and the SDGs. The three policy agendas have some overlap and can be expected to interact, both in synergetic and in conflicting ways (‘policy interaction’); the latter renders ‘policy coherence’ a challenge. While in some instances it is easy to recognise shared objectives and links between these three policy frameworks (e.g. the low-carbon future envisaged by the 7th EAP, SDG 7 on clean energy and the Juncker priority to make energy more secure, affordable and sustainable), in other cases further reflection is needed to identify synergies, complementarities and trade-offs. Taking into account the 7th EAP’s long-term vision (until 2050), it is important for current and future environmental and climate policy to assess how the EAP could contribute to and scale up the objectives of the SDGs and the Juncker priorities beyond 2030.

The **Juncker priorities** include the following:

- jobs, growth and investment via a digital single market;
- a resilient energy union with a forward-looking climate change policy;
- a deeper and fairer internal market with a strengthened industrial base;
- a deeper and fairer economic and monetary union (EMU);
- A balanced and progressive trade policy to harness globalisation;
- an area of justice and fundamental rights based on mutual trust;
- a new policy on migration;
- strengthening Europe’s role as a global actor; and
- ensuring the EU is a union of democratic change.

The **2030 Agenda for Sustainable Development** is a set of 17 SDGs as well as 169 related targets to be achieved between 2015 and 2030. The broad and integrated set of goals ranges from the eradication of poverty and inequality to the protection of the environment and climate and the sustainable use of resources. The listed goals and targets are to be implemented on global, regional, national and local levels by governments together with the private sector and civil society.

The core questions for any such analysis include:

- Are there overlaps and areas of coherence (including synergy) or incoherence between the 7th EAP and the Juncker priorities (i.e. are they complementary or in conflict)?
- Are the 7th EAP priority objectives reflected in the SDGs (and vice versa)? Are there overlaps and/or examples of coherence or incoherence between the 7th EAP and the SDGs (i.e. are they complementary or in conflict)?

Table Y: Potential interactions between the 7th EAP and the Juncker priorities

EAP priority objectives Juncker priorities	1. to protect, conserve and enhance the Union's natural capital	2. to turn the Union into a resource-efficient, green, and competitive low-carbon economy	3. to safeguard the Union's citizens from environment-related pressures and risks to health and well-being	4. to maximise the benefits of the Union's environment legislation by improving implementation	5. to improve the knowledge and evidence base for Union environment policy	6. to secure investment for environment and climate policy and address environmental externalities	7. to improve environmental integration and policy coherence	8. to enhance the sustainability of the Union's cities	9. to increase the Union's effectiveness in addressing international environmental and climate-related challenges
1. A new boost for jobs, growth and investment	x	x	x	x	x	x	x	x	0
2. A connected digital single market	x	x	x	0	0	0	0	0	0
3. A resilient energy union with a forward-looking climate change policy	x	x	x	0	0	x	0	x	x
4. A deeper and fairer internal market with a strengthened industrial base	x	x	x	0	0	0	0	0	0
5. A deeper and fairer economic and monetary union (EMU)	x	x	x	0	0	0	0	0	0
6. A balanced and progressive trade policy to harness globalisation	x	x	x	x	0	0	0	0	0
7. An area of justice and fundamental	x	0	x	x	0	0	0	x	0

rights based on mutual trust										
8. Towards a new policy on migration	0	0	0	0	0	0	0	0	0	0
9. Europe as a stronger global actor	0	0	0	0	0	0	x	0		x
10. A union of democratic change	x	x	x	x	0	0	0	0		0

Source: own.

Table 1: Potential interactions between the 7th EAP and the SDGs

SDGs \ EAP priority objectives	1. to protect, conserve and enhance the Union's natural capital	2. to turn the Union into a resource-efficient, green, and competitive low-carbon economy	3. to safeguard the Union's citizens from environment-related pressures and risks to health and well-being	4. to maximise the benefits of the Union's environment legislation by improving implementation	5. to improve the knowledge and evidence base for Union environment policy	6. to secure investment for environment and climate policy and address environmental externalities	7. to improve environmental integration and policy coherence	8. to enhance the sustainability of the Union's cities	9. to increase the Union's effectiveness in addressing international environmental and climate-related challenges
1. End poverty in all its forms everywhere	x	x	x	x	x	x	x	x	x
2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture	x	x	0	0	0	0	0	x	0
3. Ensure healthy lives and promote well-being for all at all ages	x	x	x	0	0	0	0	x	0
4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	x	x	x	x	x	x	x	x	x
5. Achieve gender equality and empower all women and girls	x	x	x	x	x	x	x	x	x
6. Ensure availability and sustainable	x	x	x	0	0	0	0	x	0

management of
**water and
sanitation** for all

7. Ensure access to
affordable,
reliable,
sustainable and
modern **energy
for all**

x

x

x

0

0

0

0

x

x

SDGs	EAP priority objectives	1. to protect, conserve and enhance the Union's natural capital	2. to turn the Union into a resource-efficient, green, and competitive low-carbon economy	3. to safeguard the Union's citizens from environment-related pressures and risks to health and well-being	4. to maximise the benefits of the Union's environment legislation by improving implementation	5. to improve the knowledge and evidence base for Union environment policy	6. to secure investment for environment and climate policy and address environmental externalities	7. to improve environmental integration and policy coherence	8. to enhance the sustainability of the Union's cities	9. to increase the Union's effectiveness in addressing international environmental and climate-related challenges
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8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	x	x	x	0	0	0	0	0	x	0
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9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	x	x	x	0	x	0	0	0	x	0
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10. Reduce inequality within and among countries	x	x	x	0	0	0	0	0	0	0
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11. Make cities and human settlements inclusive, safe, resilient and sustainable	x	x	x	0	0	0	0	x	x	0
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12. Ensure sustainable consumption and production patterns	x	x	x	0	0	0	x	0	x	0
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13. Take urgent action to combat climate change and its impacts	x	x	x	0	0	x	x	x	0
14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development	x	x	x	0	x	x	0	x	0

SDGs	EAP priority objectives	1. to protect, conserve and enhance the Union's natural capital	2. to turn the Union into a resource-efficient, green, and competitive low-carbon economy	3. to safeguard the Union's citizens from environment-related pressures and risks to health and well-being	4. to maximise the benefits of the Union's environment legislation by improving implementation	5. to improve the knowledge and evidence base for Union environment policy	6. to secure investment for environment and climate policy and address environmental externalities	7. to improve environmental integration and policy coherence	8. to enhance the sustainability of the Union's cities	9. to increase the Union's effectiveness in addressing international environmental and climate-related challenges
15. Protect, restore and promote sustainable use of terrestrial ecosystems , sustainably manage forests , combat desertification , and halt and reverse land degradation and halt biodiversity loss		x	x	x	0	0	x	x	x	x
16. Promote peaceful & inclusive societies for sustainable development, provide access to justice for all, build effective, accountable & inclusive institutions at all levels		x	x	x	x	0	0	0	x	0
17. Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development		0	0	0	0	x	x	x	0	x

Relations between these three policy agendas can take the form of ‘overlaps’ (full or partial identity of objectives), ‘coherence’ (no negative interaction or even positive interaction – i.e. synergy – between objectives) and ‘incoherence’ (trade-offs between objectives). The analysis shows the following.

Overlaps

There are a limited number of overlaps between the 7th EAP and the Juncker priorities. They relate mainly to a resource-efficient, green, and competitive low-carbon economy (objective 2 of the 7th EAP) — which has been highly promoted by the high placement of the circular economy on this Commission’s agenda — and to climate action.

Furthermore, almost all EAP priority objectives are reflected in the SDGs. The notable exception is EAP 9 (“To increase the Union’s effectiveness in addressing international environmental and climate-related challenges”).

On the other hand, objectives linked to natural capital have not been strongly reflected in the Juncker priorities (which were adopted prior to the 7th EAP).

Policy overlaps support the implementation of objectives. This is because an objective is legitimised in different contexts and its achievement possibly driven forward by different responsible bodies or individuals. Where there is no supportive policy-overlap with other agendas (see bullet points above), extra attention needs to be paid to the implementation of the respective objectives.

Coherence & incoherence

Two objectives can be both coherent and incoherent with each other, depending on the implementation pathway. For instance, whether SDG 2.3 on doubling the agricultural productivity of small-scale farmers is consistent with EAP 1 on protecting the Union’s natural capital depends on the specific agricultural practices employed. Another example is the interaction between Juncker priority 1 and the EAP, which may be both negative (due to environmental impacts of economic growth) and positive (through investments in ‘green’ projects and sectors under Juncker’s “Investment Plan for Europe”).

As regards the *direction of policy interaction*, the Juncker priorities are more likely to affect the implementation of the 7th EAP rather than the other way around. The major exception is the growth and job potential resulting from environmental policies, which may contribute to the achievement of Juncker priority 1.

As regards the *results of policy interaction*, there are many instances of coherence and even synergies between the three policy agendas. There seems to be more synergy than incoherence.

Conclusions

Very generally, any environmental action programme should be aware of synergies and inconsistencies with the most relevant ‘competing’ policy agendas. It should attempt to reduce potential inconsistency and strengthen potential synergies with these.

Clearly, the 7th EAP helps to deliver the 2030 Agenda. Also, parts of the 7th EAP contribute directly to the Juncker priorities (circular economy to growth and jobs). The main concern seems to be that economic growth will be bad for the environment, but in fact the 7th EAP actions should mitigate this risk, whilst supporting growth and jobs.

Annex 8 - Analysis of Member State environmental action programmes

The table below lists a number of the national environmental strategies and national SDG strategies that are in place in EU Member States. The majority of countries also have in place an overarching document that pulls together and explains all of the different strands of environmental. Most of the countries also have a number of sectoral plans, especially in the field of climate policy; however, due to the large number of such policy plans, this table is limited to the overarching environmental and SDG strategies.

At least 15 EU Member States have in place or are currently preparing an overarching national environmental strategy. The list could be expanded; for example, Denmark, as a member of the Nordic Council, helped to develop the Nordic Environmental Action Plan 2013-2018 but has not developed its own national strategy. Moreover, since 2012 at least 15 EU Member States have adopted or revised existing national SDG strategies or are currently in the process of drafting such documents.

Most of the strategies and action plans listed below do not make any direct reference to the 7th EAP. However, national environmental strategies may have been influenced by EU environmental policy. For instance, the new National environmental policy (PEP) in Poland will link the 2030 Agenda for Sustainable Development, the Polish strategy for responsible development and the 7th EAP. The structure of the draft PEP evidently corresponds to the three thematic priority objectives and the enabling framework of the 7th EAP.

EU Member State	Environment strategy	National SDG strategy /action plan (adopted or revised after 2012)
Austria	National environmental plan ²⁷² (time frame: 1996-2025)	
Belgium		National sustainable development strategy (NSDS) (2014, adjusted in 2016)
Bulgaria	<i>Draft National Environmental Strategy 2009-2018</i> (not adopted)	National development programme Bulgaria 2020 (adopted in 2016) ²⁷³
Cyprus		
Czech Republic	The State environmental policy of the Czech Republic 2012-2020 ²⁷⁴	Czech Republic 2030 (adopted in 2017) ²⁷⁵
Germany		National sustainable development strategy (updated in 2016) ²⁷⁶
Denmark	Nordic environmental action plan 2013–2018 (Nordic Council of Ministers) ²⁷⁷	Action plan for Denmark’s follow up on the Sustainable Development Goals (adopted in 2017)

²⁷² <https://www.parlament.gv.at/PAKT/VHG/XX/II/00637/index.shtml>

²⁷³ <https://www.eufunds.bg/archive/documents/1357828564.pdf>

²⁷⁴ https://www.mzp.cz/en/state_environmental_policy

²⁷⁵ https://www.vlada.cz/assets/ppov/udrzitelny-rozvoj/projekt-OPZ/Strategic_Framework_CZ2030.pdf

²⁷⁶ <https://archiv.bundesregierung.de/archiv-de/meta/startseite/germany-s-national-sustainable-development-strategy-276504>

²⁷⁷ <http://norden.diva-portal.org/smash/get/diva2:701437/FULLTEXT01.pdf>

Estonia	Estonian environmental strategy 2030 (approved in 2007) ²⁷⁸	
Netherlands	<i>National Environmental Policy Plan (NEPP)</i> (first adopted in 1989)	
Spain		The action plan for implementing the 2030 Agenda in Spain (approved in 2018)
Finland	Strategy 2030 - A better environment for future generations (adopted in 2018) ²⁷⁹	
France	3rd national plan for environment and health ²⁸⁰	
Greece	Development strategy guidelines in the policy areas which fall under the responsibility of the Ministry of Environment, Energy and Climate Change	
Croatia	Currently in preparation: New action plan for environmental protection (it will integrate environmental aspects of global SDGs)	
Hungary	Fifth national environmental protection programme setting out the environmental policy aims and relevant measures for the period 2015-2020	National sustainable development strategy framework (2012-2024) ²⁸¹
Ireland		'Our Sustainable Future' the framework for sustainable development in Ireland (launched in 2012) ²⁸²
Italy		<i>Environment action strategy for sustainable development in Italy</i> ²⁸³ (adopted in 2002)
Lithuania	National environmental protection strategy 2015	
Luxemburg		3rd national plan for sustainable development 2018 ²⁸⁴
Latvia	Environmental policy strategy for 2014-2020 (2015)	Latvia 2030 - sustainable development strategy of Latvia (2010)
Malta	National environment policy (NEP) 2012-2020 ²⁸⁵	Currently in preparation: Vision 2050

²⁷⁸ https://www.envir.ee/sites/default/files/keskkonnastrateegia_inglisek.pdf

²⁷⁹ [http://www.ym.fi/en-](http://www.ym.fi/en-US/The_Ministry/Goals_and_results/Strategy_2030/Strategy_2030__A_better_environment_for_(46921))

[US/The_Ministry/Goals_and_results/Strategy_2030/Strategy_2030__A_better_environment_for_\(46921\)](http://www.ym.fi/en-US/The_Ministry/Goals_and_results/Strategy_2030/Strategy_2030__A_better_environment_for_(46921))

²⁸⁰ <https://www.ecologique-solidaire.gouv.fr/plan-national-sante-environnement-et-plans-regionaux-sante-environnement>

²⁸¹ <http://sdgtoolkit.org/tool/national-framework-strategy-on-sustainable-development-of-hungary/>

²⁸² <https://www.dccae.gov.ie/en-ie/environment/topics/sustainable-development/our-sustainable-future/Pages/default.aspx>

²⁸³ <http://www.minambiente.it/pagina/strategia-dazione-ambientale-lo-sviluppo-sostenibile-italia>

²⁸⁴ <https://indr.lu/presentation-de-lavant-projet-du-pnnd/>

²⁸⁵ <https://msdec.gov.mt/en/decc/Pages/environment/natenvpol.aspx>

Poland	Currently in preparation: National environmental policy (PEP)	Strategy for responsible development (published in 2017)
Portugal		
Romania		Currently under revision: National strategy for sustainable development (issued in 2008)
Sweden	The environmental objectives system (adopted in 1999 and which is continuously developed) Nordic environmental action plan 2013-2018 (Nordic Council of Ministers) ²⁸⁶	Action Plan for the 2030 Agenda ²⁸⁷ (key political measures for the years 2018-2020)
Slovenia	Currently in preparation: National environment protection action programme 2030	Slovenian development strategy 2030 (adopted in 2017) ²⁸⁸
Slovakia	Currently in preparation: Environmental policy strategy by 2030 (Envirostrategy 2030)	
UK	An environment plan exists for each of England, Scotland and Wales. England: A green future: our 25 year plan to improve the environment (2018) ²⁸⁹	

²⁸⁶ <http://norden.diva-portal.org/smash/get/diva2:701437/FULLTEXT01.pdf>

²⁸⁷ <https://www.government.se/press-releases/2018/06/the-government-adopts-swedens-action-plan-for-the-2030-agenda/>

²⁸⁸ http://www.vlada.si/en/projects/slovenian_development_strategy_2030/

²⁸⁹ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693158/25-year-environment-plan.pdf

Annex 9 –Development of EAPs over time

Since the early 1970s, the EAPs have guided future environmental legislation in a coherent manner by providing loose objectives to tackle vertical and sectoral ecological problems. The first EAP (1973-1976) was a reaction to increasingly noticeable ecological damage which had to be detected and explained scientifically. Over time the EAPs have developed: for example, the first four programmes relied almost exclusively on legislative measures, whilst the resolution on the 5th EAP proposed a mix of instruments that would acknowledge the shared responsibility for environmental protection of everyone in society. Instruments included:

- legislative measures;
- market-based instruments;
- cross-cutting measures (improving information and environmental statistics, scientific research and technological development, improving sectoral and spatial planning, public information, professional training); and
- financial support mechanisms (LIFE programme, Structural Funds, Cohesion Fund, EIB loans).

The table below provides a summary of the objectives, key areas, structure and key features of the 1st to the 5th EAP.

Table EAPs summary table

EAP	Contextual drivers	Objective	Areas / Specific sectors	Key features	Form & structure
1st EAP (1973-1976)	Perceptible ecological damage; Stockholm Conference (1992)	To improve the setting and quality of life, and the surroundings and living conditions of the peoples of the Community	- Water - drinking water quality, waste prevention - Air - air quality	- Harmonisation of activities and standards across the EU - Minimum standards to limit pollution - Mainly legislative measures	- Resolution
2nd EAP (1977-1981)	Perceptible ecological damage; Stockholm Conference (1992)	To improve the setting and quality of life, and the surroundings and living conditions of the peoples of the Community	- Water - drinking water quality, waste prevention - Air - air quality	- Harmonisation of activities and standards across the EU - Minimum standards to limit pollution - Mainly legislative measures	- Resolution
3rd EAP (1982-1986)	Increasing importance of prevention (over mitigation); Lack of integration across policy areas	The protection of human health, the long-term availability of all the resources which determine the quality of life (quality & quantity) namely, water, air, space, climate, raw materials, the built environment, and the natural and cultural heritage, as well as the maintenance and	- Fresh water and sea water - Atmospheric pollution - Noise - Chemicals - Waste - Technology and pollution	- Preventative principle - Resource efficiency - Environmental Impact Assessments - Environmental standards - Mainly legislative measures	- Resolution

EAP	Contextual drivers	Objective	Areas / Specific sectors	Key features	Form & structure
		restoration of the natural environment.			
4th EAP (1987-1992)	Lack of integration across all policy areas; Insufficient enforcement/effective implementation by Member States and lack of harmonisation between Member States (threatening the functioning of the common market)	The protection of human health, the long-term availability of all the resources which determine the quality of life (quality & quantity) namely, water, air, space, climate, raw materials, the built environment, and the natural and cultural heritage, as well as the maintenance and restoration of the natural environment.	<ul style="list-style-type: none"> - Fresh water and sea water - Atmospheric pollution - Noise - Chemicals - Waste - Technology and pollution 	<ul style="list-style-type: none"> - The importance of safeguarding the Internal Market - Effective implementation of legislation - Mainstreaming of environmental policy across all other policy areas - Mainly legislative measures 	<ul style="list-style-type: none"> - Resolution - Sectoral approach
5th EAP (1993-2000)	Lack of integration across all policy areas; Sustainable development; Perceived need for shared responsibility of various actors in society	Sustainable development – Improved and continued welfare of citizens whilst ensuring the long-term success of the Internal Market through adequate industrial, energy, regional development, agriculture, transport policies that deliver goods.	<ul style="list-style-type: none"> - 5 target sectors (industry, energy, transport, agriculture and tourism) - 7 themes (climate change, acidification/air quality, urban environment, coastal zones, waste management, water resources, and biodiversity). 	<ul style="list-style-type: none"> - Sustainable development - Shared responsibility - Mix of instruments: Legislative, Market-based, horizontal measures, financial support mechanisms 	<ul style="list-style-type: none"> - Resolution - First time an EAP had a thematic structure

Lessons from the 6th EAP

The key reference on the lessons learnt from the 6th EAP is the final assessment²⁹⁰ of the programme. This consisted of an external assessment which drew from the EEA report ‘The European Environment - State and Outlook 2010’ (SOER 2010), which provided an overview of the progress made on attaining EU environmental objectives. The assessment also included opinions collected via a public stakeholder consultation on the 6th EAP.

According to the final assessment, the 6th EAP was helpful in that it provided a comprehensive overarching framework for environmental policy. The co-decision process gave the 6th EAP more legitimacy than previous programmes as stakeholders felt a wider sense of ownership of subsequent policy proposals. However, although the large majority of actions set out in the programme had been - or were in the process of being - completed by the time the evaluation was carried out, objectives across the programme’s priority areas were not always met.

²⁹⁰ COM(2011) 531

The final assessment also identified a number of factors that led to objectives not being achieved. These factors included:

- the level of ambition in achieving objectives (e.g. too ambitious regarding nature conservation, not ambitious enough regarding climate);
- external factors such as the lack of commitment of Member States; and
- the inadequate implementation and enforcement of EU environmental legislation.

Moreover, according to the final assessment, timing had been an issue in two ways. While the 6th EAP influenced the 2007-2013 MFF, the timing of its adoption in 2002 was too late for the MFF period of 2000-2007. The 10-year timeframe of the 6th EAP (2002 – 2012) was also considered as not always being appropriate.

On the thematic strategies, which became a central governance mechanism of the 6th EAP, views on the external assessment²⁹¹ range from mixed to positive. Other than the issue of having absorbed considerable financial and human resources, the strategies were overall considered to have contributed in several ways.

From the 6th to the 7th EAP: New challenges

The 6th EAP final assessment shed light on the challenges posed to the 7th EAP based on the shortfalls in the 6th EAP and new developments. Sustainable growth required the transformation to a green, resource-efficient, competitive and low-carbon economy, which would reduce EU dependency on raw materials and natural resources. The importance of product design in relation to products' environmental impact called for more eco-design. Consumer behaviour was regarded as a field for further research. The 7th EAP had to (i) build a case for action and justify the costs of inaction by increasing the knowledge base including data and statistics, (ii) better understand the drivers and barriers of environmental policy, and (iii) to develop reliable indicators to measure progress. The EU's growing external footprint also called for the Union to play a greater role in shaping international policy.

The prior impact assessment of the 7th EAP highlighted four underlying problems that were hindering the achievement of the key environmental objectives:

- 1) inadequate implementation of and gaps in the existing environment policy;
- 2) lack of coherence in addressing increasingly interlinked challenges across inter-related policy fields;
- 3) problems related to incentives for investment in environment-related measures; and
- 4) insufficiently coordinated data and information on the environment and gaps in the knowledge base.

Conclusions

The main source of inspiration for the 7th EAP were the lessons learnt from the 6th EAP. These can be summarised as the need for further effort in enforcing implementation,

²⁹¹ Ecologic (2011), Final Report for the Assessment of the 6th Environment Action Programme; https://www.ecologic.eu/sites/files/attachments/Projects/2010/ecologic_6eap_report.pdf

integrating environmental objectives into other policy areas and engaging stakeholders and the public in environmental action.

Overall, the programme moved from supporting a few individual environmental activities (1st and 2nd EAPs) to a more comprehensive concept of environmental policy (5th, 6th and 7th EAPs). This widening of the scope of action also brought about changes in the structure of the programmes. While the first four EAPs were structured around specific objectives, the EAPs that followed introduced new concepts such as priority sectors and priority themes (5th EAP), and thematic strategies (6th EAP). This enabled a wider area of action to be scoped out across a wider group of topics. From the 5th EAP onwards, also, the programmes were given a name which represented their objectives.

Over time, the EAP developed a more long-term focus and the duration of the programmes changed – they became longer and the timeframe was eventually adjusted to match the period of the MFF. This approach was recommended in subsequent evaluations of the EAP, which for reasons related to funding, considered the longer duration (in line with the MFF) an advantage. Other than that, it can be argued that the EU budget did not influence the EAPs, probably because the EAP does not propose concrete policy measures. The policy instruments that the EAP suggests be used to achieve environmental objectives also evolved. Until the 5th EAP these policies were purely regulatory measures. Afterwards, market related (fiscal) instruments, such as green taxes and eco-labels, were introduced.

The process of drafting the EAPs also became more sophisticated, cooperative and better informed – partly resulting from the EU-wide expansion in the use of evaluations. The 6th EAP systematically built on the thorough assessment of the 5th EAP and the same goes for the 7th EAP with respect to its predecessor. The gaps in implementation and priority objectives identified by these assessments have successfully come back in the priority objectives and areas of following programmes. Also, the involvement of a wider pool of players has been sought. This is in line with the recommendations in recent EAP assessments on involving a wider pool of stakeholders (including non-governmental stakeholders) in environmental policy to ensure there is more commitment to achieving the programmes objectives. The non-prescriptive nature of the EAP (as opposed to legislation) is a significant factor affecting the level of stakeholder cooperation regarding the programme's ambitious nature.