

Consultation document

EU environment policy priorities for 2020: Towards the seventh EU Environment Action Programme

Towards a seventh environment action programme: addressing today's realities

Environment Action Programmes have guided the development of EU environment policy since the early seventies. During this period, environment legislation was consolidated and completed to cover almost all environmental media, with the exception of soil. However, as the state of the European environment report has shown, implementing this legislation has some way to go before it results in improved outcomes on the ground for a number of environmental objectives.¹

The European Commission has just adopted a Communication setting out its views on how to improve the delivery of benefits from EU environment measures.² In recent months, it has also adopted a number of strategic initiatives which build on the environment acquis and aim at improving Europe's competitiveness and enhancing its ecological resilience as an integral part of the Europe 2020 Strategy for smart, sustainable and inclusive growth. The European Semester offers a unique opportunity to integrate environment and climate policies into other areas, in order to contribute to the promotion of sustainable, resource efficient and low-carbon economy in line with the objectives of the Europe 2020 Strategy.

The 7th environment action programme should be a strategic document providing an overarching framework for these initiatives and securing broad commitment from Member States and other actors to the "priority objectives to be attained" (art. 192.3 TFEU) over the period up to 2020.

In particular, a 7th EU environment action programme should secure commitment to:

- **improving the implementation track record** in order to deliver better environmental outcomes
- **further integrating climate and environment** into other policies and instruments and **strengthening policy coherence** to deliver multiple benefits
- **aligning existing policy and practice** to latest scientific knowledge
- **filling significant policy gaps** in the field of environment where justified by the latest scientific information and in line with the precautionary approach.

In preparing its proposal for a 7th Environment Action Programme, the Commission will be guided by the challenges highlighted in the European Environment Agency's State of the Environment Report 2010, the conclusions of the 6th EAP Final Assessment, the progress Report on the implementation of the European Environment and Health Action Plan 2004-2010

Facing complex challenges

The world faces challenges of a more complex and systemic nature than ever before. These include changing demographic patterns, accelerating rates of urbanisation and technological development, deepening market integration, evolving economic power shifts and the increasingly severe consequences of climate change. The European Environment Agency's

1 <http://www.eea.europa.eu/soer>

2 COM (2012) 95 final

report on the European environment – state and outlook 2010 describes how these 'global megatrends' are already affecting and will continue to affect Europe's environment, economy and social fabric. However, while many countries are struggling to cope with the economic and financial crisis, the need for economic reforms offers new opportunities for countries to move rapidly towards a more sustainable growth.

These various trends are complex and inter-related, and their implications for Europe are significant. For instance, Europe's consumption of renewable natural resources exceeds their domestic production by approximately a factor of two. As such, it must import a significant proportion of the resources it consumes, making it increasingly vulnerable to external price and availability changes. Meanwhile, changing consumption patterns resulting from rapidly expanding middle classes in developing countries are also putting mounting pressure on natural resources and ecosystems. This is driving further land conversion and deforestation, increasing the cost of and competition for essential raw materials, minerals and energy (with global energy demand expected to rise by 40% over the next 20 years under a business-as-usual scenario), and generating more pollution and waste, greenhouse gas emissions and loss of biodiversity.

If current global rates of resource use persist, by 2050 we will need, on aggregate, the equivalent of more than two planets to sustain us. Already today, some non-renewable resources are close to their known limits while many renewable resources are being irreversibly degraded or used beyond their regenerative capacity. As pointed out in the recent report of the UN High-Level Panel on Sustainability, "*We can no longer assume that our collective actions will not trigger tipping points as environmental thresholds are breached, risking irreversible damage to both ecosystems and human communities.*"³

On current trends, there is likely to be a shortfall of 40% in water available for us by 2050, and nearly two-thirds of the world's ecosystems are in decline. The links between land degradation, water efficiency, biodiversity loss, damage to oceans and unsustainable energy patterns pose risks for global food production, and the food security of the most vulnerable populations. And this will impact also the European economy and society.

Innovation, notably through the rapid development of nanoscience and nanotechnologies, biotechnologies and life-sciences, is likely to offer new solutions for remedying environmental problems and mitigating some impacts from broader systemic challenges. However, this requires stepping up the pace of eco-innovation and investments in resource efficiency. Businesses, and in particular SMEs, should be supported in their transition towards more sustainable production methods. Delayed action can lead to higher costs of remediation. Moreover, managing the risks to the environment and human health arising from these technologies is a challenging task which needs to be addressed.

These complex, systemic and global trends and challenges cannot be resolved through environment policy alone. But environment policy can offer part of the solution by driving efforts to enhance Europe's ecological resilience and thereby its ability to cope with external risks and challenges, while delivering benefits for the health and wellbeing of its citizens and strengthening economic resilience.

These objectives have guided the development of a number of recent initiatives proposed by the Commission.

The flagship initiative for a resource-efficient Europe points the way towards sustainable growth and supports a shift towards a resource-efficient, low-carbon economy. The **Roadmap**

³ "Resilient People, Resilient Planet: A future worth choosing" <http://www.un.org/gsp/report> .

for a Resource-Efficient Europe, adopted by the Commission on 20 September 2011, is a cornerstone of this effort.

The **EU Biodiversity Strategy to 2020**, adopted in May 2011, aims to safeguard Europe's natural capital and enable the EU to achieve its target of halting biodiversity loss in the EU by 2020, restoring ecosystems where possible, and stepping up efforts to avert global biodiversity loss in line with high level commitments made at EU and global level.

The EU domestic contribution to the global objective of avoiding dangerous climate change and therefore limiting average temperature increase to less than 2°C above pre-industrial levels is laid down in the 2009 **EU Climate and Energy package**. It includes the 20-20-20 targets for 2020: 20% greenhouse gas emissions reductions, and a more ambitious target of 30% if the conditions are right; 20% renewables in our energy consumption; and a 20% improvement of energy efficiency. For the long-term, the **Roadmap for moving to a competitive low carbon economy in 2050** sets out a plan to ensure the EU meets the objective of reducing domestic emissions by 80 to 95% by mid-century as required by developed countries as a group for an emission pathway that is compatible with the 2°C objective and agreed by European Heads of State and governments. Stakeholders and the public were extensively consulted on each of these initiatives.⁴

In the coming months, the Commission plans to adopt a **Blueprint to safeguard Europe's waters**, undertake a comprehensive **review of air quality legislation** and develop a comprehensive **EU Adaptation strategy** to respond to the impacts of climate change.

The optimal policy approach is one that prevents environmental damage from occurring in the first place. This is best achieved through effective integration of environmental concerns and considerations into other policies. The EU has made significant strides towards mainstreaming environment across the policy spectrum, but there is still room for improvement. In particular, these considerations should be reflected in the design and application of policy instruments and tools that cut across several policy fields, such as planning and funding instruments, market-based instruments, research and development, and tools and instruments aimed at bringing about changes in behaviour.

An appropriate mix of policy instruments should be mobilised to enable and stimulate European businesses and consumers to understand and manage the impact of their activities on the environment. These include economic incentives and market based instruments, as well as voluntary tools and measures are needed to complement legislative frameworks and engage stakeholders at different levels in delivering this agenda. The European Semester provides an ideal opportunity to ensure actions in the area of fiscal policy, such as the phasing out of environmentally harmful subsidies and green taxation, can support environmental objectives.

Ensuring policy coherence has become more relevant than ever in light of the broader systemic trends and challenges set out above, but remains difficult to achieve because of the need to reconcile trade-offs between different policy objectives. Truly integrated policy approaches, such as those set out in the Roadmap for a Resource-Efficient Europe, can help to better manage trade-offs, enhance synergies and deliver multiple benefits, thus ultimately resulting in more effective policies.

Integrated approaches to improve Europe's competitiveness and enhance ecological and societal resilience

Resource efficiency allows the economy to create 'more with less', delivering greater value with less input, using all natural resources in a sustainable way and minimising the impacts of

⁴ See http://ec.europa.eu/environment/consultations_en.htm

their use on the environment. In practice, this requires that the stocks of all environmental assets from which the EU benefits or sources its global supplies are secure and managed well within their biophysical limits. Resource efficiency is a crucial part of an overall strategy to ensure the integrity of the natural environment.

Improving resource efficiency, for example by stimulating innovation, also drives down the costs of production and so improves Europe's productivity and competitiveness. Resources will become scarcer and more expensive in the future, as the world population grows towards 9 billion people and so demand grows. At the same time, Europe is heavily dependent on resource imports for its economy. The result is that the European economy faces a challenge associated with its current resource use, which it needs to manage to ensure its competitiveness. In the EU, an average of 16 tonnes of materials is used per person each year, of which one-fifth is imported. Waste streams are increasing, but on average only 40% of solid waste is re-used or recycled, often with reduced quality, with the rest going to landfill or incineration. 20-40% of Europe's available water is being wasted, yet policy simulations show a water saving potential of 65%.

An integrated approach to resource efficiency needs to ensure that our environment is resilient in the face of pressure and change, for instance from climate change, and that our economy remains competitive. Natural capital plays an essential role in this regard. For instance, there is increasing evidence that the degree of ecosystem diversity plays an important role in ensuring delivery of certain key ecosystem services (for instance pollination, water purification, flood protection, food production and clean air). Species loss can therefore compromise ecosystem functioning, leaving them less resilient to pressure and change. Yet only 17 % of habitats and species and 11 % of key ecosystems protected under EU legislation are in a favourable state. For example, 75% of EU fish stocks are overfished, compared to 25% on average worldwide.

Although there are already a range of policies in place in the EU to improve resource efficiency and enhance ecological resilience, and some progress has been made (notably improvements in resource productivity and relative decoupling of economic growth from increases in greenhouse gas emissions and environmental harm), significant additional efforts are needed to get the EU on course towards attaining the 2050 visions set out in the Resource Efficiency Roadmap, the Low-carbon Roadmap and the Biodiversity Strategy to 2020.

For a start, the implementation of legislation relating to waste, water, the marine environment and nature conservation must be improved. Achieving good status for water and marine ecosystems as required under the Water Framework Directive and Marine Strategy Framework Directive⁵, and adopting the Soil Framework Directive⁶ would bring the EU a long way towards enhancing ecological resilience.

The EU Biodiversity Strategy to 2020 sets out the actions needed to ensure the EU reaches its 2020 biodiversity headline target. The priority is now to ensure their implementation.

Transforming the EU into a more resource efficient economy endowed with resilient, healthy and productive ecosystems requires concerted action across a wide range of policies. In industrialised countries and regions such as the EU, food, housing and mobility have the greatest impacts on the environment. Annual food waste generation in the EU-27 is approximately 89 million tonnes representing 179 kg per capita. The aggregated impacts of housing and infrastructure account for around 15-30% of all environmental pressures of European consumption and contribute approximately 2.5 tonnes of CO₂ equivalent of

⁵ Directive 2000/60/EC and 2008/56/EC.

⁶ COM(2006) 232

greenhouse gasses per capita per year. More than 1,000 km² of land in the EU are taken every year for housing, industry, roads or recreational purposes. About half of this surface is actually 'sealed'.

The Commission has proposed to strengthen environment and climate change requirements in key sectoral policies (e.g. Common Agricultural Policy, Common Fisheries Policy, Cohesion Policy) for the period 2014-2020, and to mainstream climate and environment in the next multi-annual financial framework. If adopted by the Council and European Parliament, these reforms can make a significant contribution to achieving environmental and climate change objectives. However, if we are to achieve the objectives of resource efficiency and ecological resilience and improve the competitiveness of Europe's economy, they need to be integrated across the whole policy spectrum and at all level of governance. Horizon 2020, the new EU framework programme for research and innovation, will further drive the development of new technologies and improve Europe's competitiveness in the global Green Economy.

Priorities that could be pursued in this context include:

- Building a Single Market for Sustainable Growth, which would encourage producers to manage their environmental impact and consumers, whether private or public, to make sustainable choices.
- Delivering the EU low carbon and climate resilient development strategy.
- Creating the conditions for a circular economy, notably by giving much higher priority to waste prevention, re-use and recycling, without quality reduction.
- Stepping up efforts and incentives to achieve 20% energy efficiency improvement by 2020.
- Safeguarding and enhancing our natural capital and the ecosystem services it provides.
- Ensuring sufficient quantities of good quality water.
- Redoubling efforts to protect the marine environment.
- Moving to a sustainable use of land.
- Protecting forests and their natural functions.
- Encouraging sustainable food⁷ and housing, notably by better integrating environmental and resource use concerns throughout their life-cycles.

Enhancing societal resilience -- Improving health and wellbeing through a better environment

Human health and social well-being are affected by the quality of the environment. Indeed, the 6th EAP identified environment and health as a priority for environment policy in the EU and eventually led to the development of the 2004-10 EU Environment and Health Action Plan, which is credited with having increased awareness and information on the linkages between environment and health. Under the 6th EAP, comprehensive legislation was adopted in the areas of air, chemicals, pesticides and water. Levels of SO₂, NO_x and lead in air have declined in recent years, demonstrating that it is possible to decouple economic growth from environmental damage.

However, the pace of improvements in air quality, for example, has flattened during the last decade, while some pollutants have become more dangerous. Particulate matter and ozone

⁷ One-third of all environmental impacts are a result of food & drink production and consumption

also remain major concerns. PM10 concentrations in many EU urban areas continue to make a significant contribution to earlier deaths and disability from respiratory diseases, cardiovascular diseases and cancer. Access to water of satisfactory quality is insufficient and represents a risk to health in a number of rural areas. And an estimated 40% of the EU's population live in urban areas with levels of noise at night above the recommended WHO levels. It is therefore no surprise that health impacts of water and air pollution and chemicals remain among the top environmental concerns identified by European citizens.⁸ Climate change will further aggravate this situation, as increasing incidences of extreme weather (e.g. drought, heat waves, floods, forest fires) and infectious diseases affect human health and well being.

Implementation gaps are the main reason for the failure to adequately address air and water quality problems. Full implementation of the existing environmental legislation in these areas can bring substantial further benefits. However, new scientific and technical knowledge demonstrates that other challenges remain, relating in particular to specific sources of air and water pollution for which cost-effective measures and greater policy coherence are needed.

Current general chemicals legislation (REACH and CLP)⁹ provides a good basic regulatory framework for the risk management of intentionally produced chemical substances. However, more needs to be done to ensure their good implementation and adequate responses are needed to address concerns related to the rapid development and wide and diverse application of nanomaterials, potential risks related to endocrine disruptors and exposure to the combination effects of chemicals.

Activities and measures designed to address environmental and climate-related challenges need to be tackled in a way which allows for their impacts on health to be properly assessed and taken into account. Furthermore, the health benefits from measures such as enhancing ecological resilience, including ecosystem restoration or green infrastructure, need to be taken fully into account in addition to their environmental impacts.

Priorities that could be pursued in this context include:

- Moving towards a toxic-free environment, for example by addressing combination effects of chemicals, safety concerns related to endocrine disruptors, nanomaterials and chemicals in products, and promoting full recovery of chemical resources at end of life.
- Cleaning the air we breathe, on the basis of the outcome of the air quality strategy and legislation and of indoor air quality.
- Ensuring water quality.

Meeting the urban challenge

The EU is densely populated, with approximately 116 inhabitants per square kilometre¹⁰. In 2020, 80% of EU citizens are expected to live in urban areas and their quality of life will be directly influenced by the state of the urban environment. Most cities are confronted with a common core set of environmental problems such as poor air quality, high levels of noise, greenhouse gas emissions and waste (solid and water).

Urban areas are also often both drivers of environmental challenges (lifestyles, mobility choices, consumption patterns, etc.) and of many possible solutions (housing and transport

8 Eurobarometer, 2011.

9 Regulation (EC) No 1907/2006 (REACH) and Regulation (EC) No 1272/2008 (CLP)

10 Eurostat, 2008 data.

planning, innovation, education, awareness, influencing consumer behaviour, etc.). Ensuring that the urban dimension is taken into account in policy development, land use and spatial planning and implementation can help address these issues.

The European Initiative on Smart Cities¹¹ is supporting cities and regions in taking ambitious and pioneering measures to improve energy efficiency and reduce greenhouse gases through the integration of energy, transport and ICT policy actions in urban communities. In addition to improved integration of environmental considerations in key sectoral policies, such as transport and construction, ways to promote bottom-up initiatives and best practises, exchanges between cities taking the lead on environmental quality and citizens' health and wellbeing could be further explored as part of the 7th environment action programme.

Working together to improve the implementation of EU rules

The full and even implementation of the environment acquis across the EU is a sound investment for the environment and human health, but also the economy. It ensures a level playing field for economic actors operating in the Single Market, stimulates research and innovation and promotes first mover advantages for European companies in many sectors. As already indicated, however, the implementation track-record is patchy. Significant differences exist between Member States in terms of implementation and enforcement of legislation, with some having surpassed minimum requirements and others lagging far behind. Solutions need to be found to improve the way legislation is implemented and enforced.

The costs of the implementation gap between current legally binding targets set out in the EU environmental acquis and the current level of implementation could be equivalent to around 50 billion Euros per year.¹² A recent study on the costs of not implementing the waste legislation has estimated that full implementation of all waste legislation would lead to an additional waste (and recycling) industry turnover of €42 billion and an additional job creation of about 400,000 jobs.

In implementing environment legislation, Member States should commit to achieving a fully systematic approach to the collection and dissemination of knowledge about implementation and greater responsiveness to problems on the ground. The Commission can also support this process by encouraging networks and promoting measures to help Member States deliver better environmental outcomes.

Priorities that could be pursued in this context include:

- Provision and improvement of structuring and disseminating environmental knowledge in particular, for all key EU obligations in the environmental field.
- Setting up an information system that would allow implementation to be tracked in the most efficient and timely way possible.
- Improving inspection and surveillance regimes.
- Providing citizens with better means to have their complaints dealt with at national level.
- Improving access to justice in respect of all areas of EU environment law.
- Supporting networks of environmental professionals at European level.

¹¹ <http://setis.ec.europa.eu/about-setis/technology-roadmap/european-initiative-on-smart-cities>

¹² See the COWI study with concrete estimates for different environment policy areas: http://ec.europa.eu/environment/enveco/economics_policy/pdf/report_sept2011.pdf.

- Fostering partnerships with Member States in the form of implementation agreements.

The Commission uses legislative reviews, recasts and fitness checks to ensure legislation is fit for purpose and reflects latest science and innovation. The choice of legal instrument may provide scope for improving the delivery of environmental benefits. Legal obligations which are sufficiently clear and precise should as a general rule be set out in Regulations, which have direct and measurable effect and lead to fewer inconsistencies in implementation.

Improving the scientific evidence base for environment policy

The scientific evidence base underpinning environment policy is vast and complex. Although there are some gaps in knowledge relating in particular to new and emerging challenges, a great deal of data and information already exists for most aspects of environment policy. Horizon 2020 will provide further support for efforts to gather scientific evidence for environment policy, whether to inform the development of new policy initiatives or in evaluating whether existing policy is fit for purpose. Information gathered for the purpose of assessing environmental impacts of plans, programmes and projects (e.g. through Environmental Impact Assessment and Strategic Environmental Assessment) can also contribute towards improving the evidence base for policy.

Gathering reliable, up-to-date data and information is one part of the challenge. Another is to ensure it is made accessible to those who need it in a user-friendly format. Advanced information technology platforms designed to optimise environmental information management can go a long way towards ensuring different target groups have access to the information they need. They include policy-makers, administrations and businesses responsible for implementation, as well as the public, which has an important role to play in verifying compliance. A number of developments in recent years are already contributing towards these objectives (e.g. SEIS¹³, INSPIRE¹⁴, GMES¹⁵, GEOSS¹⁶, as well as EyeonEarth¹⁷).

There is also scope for further streamlining and coordinating data and information in line with the principle 'produce once, use many times'. For instance, data generated as part of reporting obligations under one piece of legislation is often relevant also to others, as in the case of state-based reporting obligations under the Water Framework Directive, Marine Strategy Framework Directive, and Habitats Directive.

More effort should also be devoted to improving our understanding of the way individual behaviour, values and choices interact in determining the effectiveness of environment policy. Policy initiatives aimed at changing the behaviour of consumers to relieve pressures on the environment should be informed by and reflect real consumer understanding and behaviour. This can help provide insights into how research findings supporting environmental policy can be disseminated in a user-friendly format to consumers to ensure effectiveness.

Finally, the potential contribution of new approaches to data and information gathering and dissemination should also be recognized and promoted, such as voluntary citizen science initiatives which are also important in engaging and informing the public.

13 <http://ec.europa.eu/environment/seis/>

14 <http://inspire.jrc.ec.europa.eu/>

15 <http://ec.europa.eu/enterprise/policies/space/gmes/>

16 http://ec.europa.eu/research/environment/index_en.cfm?section=geo&pg=geoss

17 <http://www.eyeonearth.org>

The EU and the global environment

Given the global dimension of the complex challenges highlighted above, the EU's environment policy will have limited effect if it is not part of a global effort. Furthermore, ensuring that the legitimate aspirations of a growing world population are met will require a global transformation towards a green economy in which the problems of food security and poverty are addressed.

As the largest single market in the world, the EU has the necessary leverage to significantly decrease environmental pressures and contribute to resource efficiency not only in the EU, but also outside, for instance by defining new conditions to reduce environmental impacts of products placed on the EU market during their whole life cycle. At the same time, as a leading provider of environmental goods and services the EU can benefit from opportunities provided by worldwide efforts to tackle environmental challenges. European businesses and civil society are already seizing these opportunities and engaging actively in the transition towards a global green economy.

The EU can support this process by strengthening the external focus of its climate and environmental policies, sharing and learning from best practice and assisting partner countries to address environmental challenges through preventive action and decouple economic growth from growing greenhouse gas emissions and environmental degradation. It is also imperative that the EU speak with one voice in international fora. By showing global leadership and delivering on environmental commitments, such as on climate change and biodiversity, the EU can help convince others to join in global efforts to tackle shared challenges.

The 7th environment action programme will unfold during a key phase in international climate negotiations and can therefore contribute to enhancing the EU's international credibility through domestic environmental policy. With the new Durban Platform for Enhanced Action, the UN has agreed a negotiating roadmap for a comprehensive legal instrument to be agreed by 2015, which will be implemented as of 2020.

The forthcoming Rio+20 Summit should result in clearer objectives related to the green economy, which also covers the maritime (or "blue") economy, and offers a unique opportunity to secure renewed political commitment for sustainable development. Rio can mark the start of an accelerated and profound, world-wide transition towards a green economy and launch the needed reform of international sustainable development governance – objectives to which the EU fully aspires.¹⁸ The EU will be expected to contribute and deliver its fair share as part of this process.

This Public Stakeholder Consultation

The purpose of this consultation is to collect the views of all stakeholders, at EU and national level, and the public at large on the environment policy priorities up to 2020. Informed opinions are sought on the priority areas to be addressed and on the most effective tools for the EU to employ in addressing the challenges described in this consultation document.

The European Commission has consulted stakeholders recently on a number of themes addressed in this paper, including resource efficiency, 2050 low-carbon economy, biodiversity, water, air and sustainable consumption and production.¹⁹ Although some overlap between these various consultations is inevitable, in order to avoid duplication the questions set out in the accompanying questionnaire are deliberately broad and strategic in nature.

¹⁸ COM(2011) 363 final

¹⁹ <http://ec.europa.eu/environment/consultations/>