SUSTAINABLE DEVELOPMENT IN THE FRAME OF THE 7th ENVIRONMENT ACTION PROGRAMME

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This paper presents the 7th EAP — the new general Union Environment Action Programme to 2020. Through this Programme, the EU has agreed to step up its efforts to protect our natural capital, stimulate resource-efficient, low-carbon growth and innovation, and safeguard people's health and wellbeing — while respecting the Earth's natural limits. It's a common strategy that should guide future action by the EU institutions and the Member States, who share responsibility for its implementation and the achievement of its priority objectives. It identifies three key objectives: a) to protect, conserve and enhance the Union's natural capital; b) to turn the Union into a resource-efficient, green, and competitive low-carbon economy; c) to safeguard the Union's citizens from environment-related pressures and risks to health and wellbeing.

Keywords: sustainability, resource-efficient, natural capital, low-carbon economy, wellbeing

INTRODUCTION

The term “sustainable development” first appeared in a document signed by 33 African countries in 1969, under the auspices of the International Union for Conservation of Nature (IUCN). In the same year, the Environmental Protection Agency was set up in the US; its guidelines have had a huge impact on developing theories and practice in global environmental policies. These two aspects are what characterized “the Brundtland Report”, which was produced by a commission led by Dr. Gro Harlem Brundtland and published in 1987.

The Report defines sustainable development as meeting: “*the needs of the present without compromising the ability of future generations to meet their own needs*” (World Commission on Environment and Development, United Nations, 1987).

In the book “The limits to growth”, D.H. Meadows *et al.* (1987) present the need for sustainable development (Figure 1):

Figure 1. The need for sustainable development (Meadows *et al.*, 1987)

Sustainable development should be viewed from three different angles: economic activity, ecological factors and social responsibility (Schmel, 2015) (Figure 2):

- **Economic:** An economically sustainable system must be able to produce goods and to avoid extreme sectoral imbalances which damage agricultural or industrial production.
- **Environmental:** An environmentally sustainable system must maintain a stable resource base, avoiding over-exploitation of renewable resource systems or environmental sink functions, and depleting non-renewable resources only to the extent that investment is made in adequate substitutes. This includes maintenance of biodiversity, atmospheric stability, and other ecosystem functions not ordinarily classed as economic resources.
- **Social:** A socially sustainable system must achieve distributional equity, adequate provision of social services including health and education, gender equity, and political accountability and participation.

Figure 2. Correlation among key components of sustainable development (Schmel, 2015)

There are many models for the sustainable development system.

The “Daly Rules” approach (Womersley, 2002) is a closed thermodynamic system in which economic systems sit inside of social systems, both of which are inside of our one environment; this means that sustainable development must involve the health of all three systems. (Figure 3 and 4):

Figure 3. Closed thermodynamic system

Figure 4. “Daly Rules” for sustainability of natural resources

The Herman E. Daly (possibly founded on ecological/thermodynamic principles) suggests the following criteria of sustainability:

- **Renewable resources** (e.g. fish, soil, groundwater) must be used no faster than the rate at which they regenerate.
- **Non-renewable resources** (e.g. minerals, fossil fuels) must be used no faster than renewable substitutes for them can be put into place.

- **Pollution and wastes** must be emitted no faster than natural systems can absorb them, recycle them, or render them harmless.

Figure 5. Criteria of sustainability suggested by Herman E. Daly (Womersley, 2002)

Some other authors suggest that sustainability indicators should be holistic in nature, measuring sufficiency of well-being for all, sustainability of natural resources and efficiency (<https://www.youtube.com/watch?v=RCN6it0LZvY>; <https://www.youtube.com/watch?v=jnH9o8Ajd0>; <https://www.youtube.com/watch?v=Q3tJL4JRgnA>).

THE 7TH EAP — THE NEW GENERAL UNION ENVIRONMENT ACTION PROGRAMME TO 2020

Since the mid-1970s, EU environment policy has been guided by action programmes defining priority objectives to be achieved over a period of years. The 7th EAP was adopted by the European Parliament and the Council of the European Union in November 2013 and covers the period up to 2020.

The new programme includes an “enabling framework” with the next four priority objectives to help Europe deliver on these goals: better implementation of legislation, better information by improving the knowledge base, more and wiser investment for the environment, and full integration of environmental requirements and considerations into other policies.

“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”.

Figure 6. The long-term vision of the 7th EAP (<http://ec.europa.eu/environment/action-programme/>)

Priority objectives and what the EU needs to do to achieve them by 2020 (<http://ec.europa.eu/environment/action-programme/>):

- to protect, conserve and enhance the Union's natural capital;
- to turn the Union into a resource-efficient, green, and competitive low-carbon economy;
- to safeguard the Union's citizens from environment-related pressures and risks to health and wellbeing;
- to maximise the benefits of the Union's environment legislation by improving implementation;
- to increase knowledge about the environment and widen the evidence base for policy;
- to secure investment for environment and climate policy and account for the environmental costs of any societal activities;
- to better integrate environmental concerns into other policy areas and ensure coherence when creating new policy;
- to make the Union's cities more sustainable;
- to help the Union address international environmental and climate challenges more effectively.

Thematic Priorities

The programme identifies three priority areas where more action is needed to protect nature and strengthen ecological resilience, boost resource-efficient, low-carbon growth, and reduce threats to human health and wellbeing linked to pollution, chemical substances, and the impacts of climate change (<http://ec.europa.eu/environment/pubs/pdf/factsheets/7eap/en.pdf>).

1. The first action area is linked to **“natural capital”** –from fertile soil and productive land and seas to fresh water and clean air – as well as the biodiversity that supports it. Natural capital includes vital services such as pollination of plants, natural protection against flooding, and the regulation of our climate. The Union has made commitments to halt biodiversity loss and achieve good status for Europe's waters and marine environment. Moreover, it has put in place the means to achieve this, with legally-binding commitments including the Water Framework Directive, the Air Quality Directive, and the Habitats and Birds Directives, together with financial and technical support.

2. The second action area concerns the conditions that will help transform the EU into a **resource-efficient, low-carbon economy**. This requires: a) full delivery of the climate and energy package to achieve the 20-20-20 targets and agreement on the next steps for climate policy beyond 2020; b) significant improvements to the environmental performance of products over their life cycle; c) reductions in the environmental impact of consumption, including issues such as cutting food waste and using biomass in a sustainable way. There is a special focus on turning waste into a resource, with more prevention, re-use and recycling, and phasing out wasteful and damaging practices like landfilling. Water stress is increasingly affecting more parts of Europe – not least because of climate change – and the need for further action towards more efficient use of water is highlighted.

In the context of rising natural resource prices, scarcity and dependency on imports, Europe's competitiveness and capacity for sustainable growth will depend on improving resource efficiency across the economy. The EAP calls for indicators and targets for resource efficiency to be established, to guide public and private decision-makers.

The benefits of a resource-efficient economy are being felt in many sectors. Environmental technologies and services are a major success story, with employment growing at 3 % per annum. The global market for eco-industries, currently valued at a trillion euros, is forecast to double over the next 10 years.

3. The third key action area covers challenges to **human health and wellbeing**, such as air and water pollution, excessive noise, and toxic chemicals. According to the World Health Organisation, environmental factors could be responsible for up to 20 % of all deaths in Europe. Europe already has high standards for air quality, but in many cities, pollution remains above acceptable levels. The EAP sets out commitments to improve implementation of existing legislation, and to secure further reductions in air and noise pollution. The EAP also sets out a long-term vision of a non-toxic environment and proposes to address risks associated with the use of chemicals in products and chemical mixtures, especially those that interfere with the endocrine system. In parallel, a more predictable framework combined with more investment in knowledge is intended to encourage innovation and the development of more sustainable solutions.

4. Better implementation of existing legislation will bring numerous benefits. A study prepared for the Commission in 2012 estimated that full implementation of EU waste legislation would save €72 billion a year, increase the annual turnover of the EU waste management and recycling sector by €42 billion and create over 400,000 new jobs by 2020. If properly implemented, EU environment legislation creates a level playing-field and opportunities in the single market for sustainable investments, in addition to environmental benefits.

5. Scientific research, monitoring and reporting environmental developments mean that our understanding of the environment is constantly increasing. This knowledge base should be made more accessible to citizens and policymakers to ensure policy continues to draw on a sound understanding of the state of the environment. The EAP aims to address these challenges by improving the way data and other information is collected, managed and used across the EU, investing in research to fill knowledge gaps, and developing a more systematic approach to new and emerging risks.

6. Adequate investments and innovation in products, services and public policies will be needed from public and private sources, in order to achieve the objectives set out in the programme. This can only happen if impacts on the environment are properly accounted for and if market signals also reflect the true costs to the environment. This involves applying the polluter-pays principle more systematically, phasing out environmentally harmful subsidies, shifting taxation from labour towards pollution, and expanding markets for environmental goods and services. As a concrete example, the EAP calls for a minimum 20 % share of the EU budget 2014-2020 to be devoted to climate change mitigation and adaptation. Companies increasingly see advantages in expanding eco-innovation and taking up new technologies, in measuring the environmental impact of their businesses and disclosing to their investors and customers environmental information in their annual reporting. The EAP sets out some ways in which this can be further developed.

7. The fourth enabling condition in the programme is **better integration of environmental concerns into other policy areas**, such as regional policy, agriculture, fisheries, energy and transport. Systematically assessing the environmental, social and economic impacts of policy initiatives and full implementation of Environmental Impact Assessment legislation will ensure better decision-making and coherent policy approaches that deliver multiple benefits.

8. The first is to help **cities become more sustainable**. Europe is densely populated and 80 % of its citizens are likely to live in or near a city by 2020. Cities often share a common set of problems such as poor air quality, high levels of noise, greenhouse gas emissions, water scarcity, and waste. The aim is to ensure that by 2020, most cities in the EU are implementing policies for sustainable urban planning and design, and are using the EU funding available for this purpose.

9. The final priority concerns wider **global challenges**. Many of the priority objectives in the EAP can only be achieved in cooperation with partner countries or as part of a global approach. The EU and its Member States are committed to engage more effectively in working with international partners towards the adoption of Sustainable Development Goals as a follow-up to the Rio+20 conference. The EAP also proposes to explore further steps that could be taken to reduce impacts on the environment beyond EU borders. «**Living well, within the limits of our planet**» is a global aim.

CONCLUSION

Through the Environment Action Programme (EAP), the EU has agreed to step up its efforts to protect our natural capital, stimulate resource-efficient, low-carbon growth and innovation, and safeguard people's health and wellbeing – while respecting the Earth's natural limits.

The new programme includes an “enabling framework” with the next four priority objectives to help Europe deliver on these goals: better implementation of legislation, better information by improving the knowledge base, more and wiser investment for the environment, and full integration of environmental requirements and considerations into other policies.

It's a common strategy that should guide future action by the EU institutions and the Member States, who share responsibility for its implementation and the achievement of its priority objectives.

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