# THE ECO-INNOVATION ACTION PLAN IN AN ENVIRONMENTAL POLICY CONTEXT



### **EXECUTIVE SUMMARY**

UPTAKE OF ECO-INNOVATION New insights on eco-innovation are coming from a number of European countries, with UK, Netherlands, Germany and Scandinavia leading the way. The latest achievements relating to resource efficiency, agriculture, improved solutions and services have already shown results in reducing environmental impacts as well as enhancing life-cycle and sustainable innovation process development. At the European level, such activities are covered by the Eco-innovation Action Plan (EcoAP).

FOR QUALITY OF LIFE

The uptake of eco-innovation is the result of numerous supporting initiatives and policies launched and implemented at the European and national levels during the past years. These policies and actions are focusing on specific challenges, bottlenecks and opportunities addressing the demand and supply sides of eco-innovation.

REAL DEMAND, EDUCATION, SUPPORTING FINANCIAL TOOLS AND INCENTIVES However, there is still an obvious gap in raising awareness of the added value of ecoinnovation, a defragmentation in the value chain, lack of investment and technological readiness as well as awareness of the importance of the role of public procurement. The uptake of eco-innovation as well as its sustainability is pending on the creation of the real demand, education on its benefits along the value chain, development of supporting financial instruments and incentives that would help companies obtain financing in short term and for investors to reduce risks on the return on their investment. Overall, experiences show that there is still a need for better understanding of potential and markets when eco-innovation is considered.

STAKEHOLDERS ESSENTIAL

The support of stakeholders at national and EU levels is of great importance as sets of standards are essential for the successful implementation and sustainability of eco-innovation actions. Uniform sets of standards are, however, not applicable as specific measures need to be addressed at the regional and national levels taking into account country specific priorities and challenges.

**BENCHMARKING** 

Moreover, there are a number of initiatives and projects ongoing with a focus on ecoinnovation (greenXpo, for instance), a significant number of case studies already



**FOCUS OF ECOAP** 

The Eco-innovation Action Plan (EcoAP) addresses the challenges and opportunities described above by shifting focus from environmental technologies to eco-innovation, thus leading towards positive environmental, economic and employment impacts, in coherence with the Europe 2020 initiative. Social impacts are also expected in terms of quality of life and health in particular.

EcoAP complements three other Flagship Initiatives - Resource efficient Europe, Industrial policy for a globalised era, and Agenda for new skills and jobs - with a goal to put eco-innovation at the forefront of EU actions to reduce pressure on the environment, bridge the gap between innovations and the market, and increase opportunities for the creation of green jobs.

INNOVATION IS DIFFERENT FROM POLICY

This policy brief underlines the main objectives of the Eco-innovation Action Plan (Eco-AP) as well as its related actions and moreover provides comparison to other EC environmental policies. The policy brief argues that while social impacts have been taken into account when addressing EcoAP actions, the element of public participation engagement requires attention.

### INTRODUCTION

STABLE MARKET FOR ECO-INNOVATON The Eco-innovation Action Plan (EcoAP) includes seven actions to help build stronger and more stable market demand for eco-innovation. These actions focus particularly on market supply and demand, on research and industry, and on policy and financial instruments with the aim to bring together stakeholders, the private and public sectors, and the European Commission.

POSITIVE IMPACT ON ECONOMY AND SOCIETY

EcoAP succeeds the Environmental Technologies Action Plan (ETAP) adopted in 2004, under which Europe's eco-industries grew to an estimated annual turnover of €227 billion or around 2.2% of the EU's gross domestic product. These figures put the eco-industry above the European aerospace or pharmaceutical industries and provide employment to 3.4 million people.

From 2014 to 2020, the main source of support for EcoAP will be the Horizon 2020 EU Research and Innovation programme, providing the financial means for implementing the EcoAP and strengthening the role of eco-innovation.

FOR AND TOWARDS A CIRCULAR ECONOMY Moreover, EcoAP will in 2015 enter a new phase that will focus on a systematic approach towards eco-innovation: a cross-sectoral approach engaging multistakeholder levels (individuals, public and private players) towards circular economy (Council Conclusion from October 2013 and Resolution of the European Parliament from December 2013). Research and innovation will have an important role in the new phase with goals to enable a long-term transformation, to integrate and coordinate R&I programmes as well as to involve and engage regions and public authorities.



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### RESOURCE EFFICIENT EUROPE

Circular economy implies a full systematic change, with focus on the whole eco-system rather than only technology and taking into account its integral parts: organisation, society, policies and finance. There are already good examples coming from France, UK, Netherlands and Germany as well as the business initiative Circular Economy 1000 created by the Ellen McArthur Foundation that can be used as best practices when it comes to project implementation as well as to support business in unlocking commercial opportunities.

EcoAP treats eco-innovation as powerful instrument, combining reduced negative impacts on the environment with a positive impacts on the economy and society.

#### LEVEL OF INTERVENTION

IN LINE WITH EUROPE 2020

The Europe 2020 strategy is setting up the course of the perspective EU's economy for the next decade. As this strategy aims at resource-efficient, low-carbon economy, its focus is set at smart and sustainable growth. The EcoAP, in support of the Flagship initiatives Resource efficient Europe, Industrial policy for a globalised era, and Agenda for new skills and jobs and Innovation Union in addition, aims at expanding the focus of innovation policies towards green technologies and eco-innovation and overcoming the gap between innovation and the market for the purpose of accelerating its uptake.

## COORDINATION OF NATIONAL AND EU POLICIES

As strengthening the governance and the awareness of eco-innovation policies are essential for the successful implementation of envisioned measures of EcoAP, the intention of the European Commission is to provide strong governance with support of Member States.

In order to achieve that goal, a High-Level Working Group has been established and is supported by a Multi-Stakeholder Group, which is engaging other public and private actors in initiating a dialogue between business and civil society. This dialogue is an integral element for the eco-innovation uptake and sustainability of its actions.

The Commission and Member States will also coordinate national and EU policies on eco-innovation for which a range of useful tools will be available, including Eco-innovation National Roadmaps and Eco-innovation Fora. An Eco-innovation Scoreboard will gather data on eco-innovation performance across the EU and beyond, thus helping to monitor and evaluate progress made by 2020.

EUROPEAN INNOVATION PARTNERSHIPS In addition, as addressed in action 7 of EcoAP, the European Innovation Partnerships aim to bring together public and private actors in key sectors where eco-innovation could contribute to greater resource efficiency. Partnerships are being set up for raw materials, sustainable agriculture, and water.

### INTERNATIONAL COOPERATION

International cooperation is envisioned in Action 5 of EcoAP for the purpose of broadening markets for eco-innovation uptake and widening of opportunities for European eco-investors. China, Brasil and India have been looked at as potential partners being the representatives of the emerging economies.



### **COMPARING WITH ENVIRONMENTAL POLICIES**

### INDUSTRY AND TECHNOLOGY

The Eco-innovation Action Plan is one of the numerous environmental policies of the European Commission. It is considered to relate to industry and technology, thus proactively highlighting activities rather than ecological ends relating to subjects such as air, land use and water.

### ACTIVITIES IN FOCUS

The Eco-innovation Action Plan differs from the other environmental policies in the domain of industry and technology in that it addresses innovation directly. It boosts innovation and bridges the gap between innovation and the market. Policies supporting the activities of business actors such as retailing and small and medium sized enterprises are close to the Eco-innovation Action Plan.

The other EC environmental policies in the domain of industry and technology have different kinds of means and focuses. Policies highlighting information and standardization rather the innovation activities rely on labelling, management and audit schemes, technology verification, product policy and public procurement. Similarly, policies concerned with reducing emissions from industrial installations highlight legislation.

### PROMOTES GROWTH

Compared to other EC environmental policies, the Eco-innovation Action Plan focuses on the promotion of innovation activity in the direction of sustainable development rather than a reduction of recognized adverse effects of current development. An innovation action plan is more growth oriented and open ended by nature.

#### **SEVEN ACTIONS**

Sevens actions target building market demand for eco-innovation: 1) putting eco-innovation at the heart of EU legislation and regulation, 2) funding demonstration projects to support the leap of eco-innovation technologies from the laboratory to the market, 3) setting standards to benefit eco-innovation, 4) strengthening funding for eco-innovation and helping SMES to exploit eco-innovation, 5) promoting the establishment of business and technology centres to support European businesses seeking to expand their market, 6) equipping tomorrow's labour force with skills and knowledge and facilitating training schemes on eco-innovation, and 7) setting up European innovation partnerships bringing together public and private actors in key sectors.

### INDUSTRY, MARKETS AND LABOR

The seven actions bring together innovation measures often related to industrial policy (demonstration, funding, centres and partnerships), market regulation (regulation, and standards) and labor policy (skills, knowledge and training). It is in the nature of the Eco-innovation Action Plan to target business opportunities, jobs and growth rather than direct environmental impact.

Direct environmental policy concerns are addressed in many other of the other and complementary EC policies.

While the Eco-innovation Plan promotes sustainable innovation, it does not particularly emphasize public participation when doing so. Public participation relates to citizen demands for a better environment and to consumers adopting environmentally



friendly innovations.

HORIZON 2020 SHOWCASES PUBLIC PARTICIPATION There is, however, one major exception to the distant relation to public participation: the Horizon 2020 i.e. the EU programme for research innovation. Horizon 2020 highlights public participation as a key factor in innovation activities. It showcases that industrial policy, market regulation as well as labor and education policy can benefit from public participation.

### RESOURCE EFFICIENCY

SYNERGIES AND BENCHMARKS

### **RECOMMENDATIONS FOR POLICY-MAKERS**

Eco-innovation should be considered as priority action due to the continuous demand for resource efficiency and novel solutions. Additional positive effects lead towards boosting competitiveness, development of respective economies and socio-economic growth if there is a clear demand and the proper eco-system established addressing all bottlenecks. EcoAP has the right set of tools to move things forward and if it could take advantage of synergies between different projects and initiatives using them as benchmarks, it would be capable of coming up with applicable standards and sets of actions that would give results both in short and long term. But again, raising awaraness of eco-innovation challenges, opportunities as well as benefits are essential.

- Public participation is essential for the uptake and sustainability of ecoinnovation, thus it needs to be comprehended as an integral part;
- Be aware that eco-innovation approaches environmental concerns differently than regular environmental policies;
- More research and education in the field of eco-innovation for both, SME's and financiers is needed, as there is still a clear gap in understanding the real potentials and markets;
- Eco-innovation policies, its promotion and implementation should be evenly addressed in all European countries taking into account the opportunities of peer learning and sharing of best practices addressing them at national and regional level;
- Creation of real demand, design of supporting financial instruments as well as incentives is essential for eco-innovation uptake;
- Public procurement and public pre-commercial procurement is to be assessed
- Policy recommendations that have been identified through INTERREG IVC "Eco-Regions" Project implemented by European Regions Research and Innovation Network (ERRIN) should be used as an asset and a base for further actions and activities of EcoAP

CASI policy briefs shall address eco-innovation at a national level in 12/2014.

### **FURTHER READING AND REFERENCES**

- European Commission, The Eco-innovation Action Plan: http://ec.europa.eu/environment/ecoap/index\_en.htm
- European Commission, Impact Assessment, Innovation for a sustainable Future
   The Eco-innovation Action Plan (Eco-AP):



- European Commission, The Environmental Technology Verification (ETV) initiative Helping Eco-Innovations to reach the Market:
   <a href="http://ec.europa.eu/environment/ecoap/pdfs/etv\_cswp-sec-2011-1600\_final\_en.pdf">http://ec.europa.eu/environment/ecoap/pdfs/etv\_cswp-sec-2011-1600\_final\_en.pdf</a>
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- Rennings, Klaus (2000) Redefining innovation eco-innovation research and the contribution from ecological economics, *Ecological Economics* 32 pp. 319-332.

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#### **CASI: PROJECT DESCRIPTION**

PROJECT TITLE: Public Participation in Developing a Common Framework for Assessment and

Management of Sustainable Innovation (CASI)

COORDINATOR: ARC Fund, Bulgaria: Zoya Damianova.

CONSORTIUM: The CASI consortium consists of 19 partners representing 12 European countries.

Country correspondents extend the reach to 28 countries.

FUNDING SCHEME: Coordination and support action, funded under the 7th Framework

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DURATION: 42 months, 1/2014-6/2017 BUDGET: 4.5 M€, 428 person month

REFERENCE: Tregner-Mlinaric, Anita & Petteri Repo (2014) The Eco-innovation Action Plan in an

Environmental Policy Context. CASI Policy Briefs. CASI-PB-2.2014 EUROPE.

WEBSITE: www.casi2020.eu

