

Factsheet 2.04 – Eco-innovation

Introduction

Eco-Innovation can be defined as the introduction of a new or significantly improved product (good or service), process, organisational change or marketing solution that reduces the use of natural resources (including materials, energy, water and land) and/or decreases the release of harmful substances across the whole life-cycle. Eco-innovations are vital for helping to solve persistent environmental problems in the EU, for combatting climate change and in particular to act as a catalyst and scale-up in the transition to a circular economy. Product eco-innovation in particular concerns the introduction of less polluting, less resource-intensive products, including the substitution of dangerous substances by 'greener' ones, or the substitution of materials by less resource-intensive materials. Process eco-innovation is about introducing new technology for improved monitoring and reduction/minimisation/control of waste and emissions, both from industry and other sources. Finally, particularly important for circular economy, are eco-innovations regarding the production of new secondary materials from waste.

Perceived challenges in permitting, inspection and enforcement

Between the environmental ambitions and the day to day practice where businesses and authorities try to carry through eco-innovations there is a significant gap. Competent authorities in the Member States face challenges when applying and enforcing current EU environmental legislation. This may cause uncertainty and delays in decision-making.

Possible barriers include:

- Rules which are unnecessarily inflexible, detailed, complex or which change very frequently.
- The absence of rules or standards.
- Rules which in practice are misinterpreted easily or rules setting very general criteria the application of which requires from authorities considerable technical and legal expertise and experience.
- The interface between different directives and regulations, for instance those regarding products, chemicals and waste. In practice these directives and regulations may not be well attuned or there may be gaps.
- Obstacles in case of cross border activities (f.i. marketing products and secondary materials across MS borders), because authorities from different MS interpret and or implement the EU legislation differently.
- Lack of responsiveness (insufficient alertness to eco-innovations, lack of cooperative attitude, lack of understanding of the needs of innovators)
- Lacking capability to properly handle risks related to innovations including weighing different environmental interests and getting timely political backing
- Lack of cooperation between different competent authorities. Unclear allocation of responsibilities to different layers of government and lack of feedback and evaluation from practice to policy makers and vice versa

Possible adjustments in the permitting, inspection and enforcement process to facilitate eco-innovations

Possible adjustments in the permitting, inspection and enforcement processes may include:

- Learn, train and secure in the organisation to recognize eco-innovation and, when necessary scale up towards policy makers timely;
- At an early stage, a standard preliminary consultation involving all relevant competent authorities and stakeholders;
- A coordinator at the competent authority to facilitate and support those who have to deal with an eco-innovation;
- Address eco-innovation explicitly in how permitting, inspections and enforcement are organized and carried out (in work processes and procedures).
 - For permitting: appoint for each major eco-innovation a case manager/single point of contact; engage all relevant competent authorities from the start; share all information between these authorities; escalate timely; seek timely guidance or decision at higher level.
 - For inspections and enforcement: attune inspections and enforcement to the sort of risks foreseen or experiments or pilots authorized; in particular clarify upfront what compliance is expected (possibly what non-compliances under what conditions may be condoned) and how authorities will respond to non-compliances;
- Active feedback and evaluation between practitioners and policy makers on practicability and enforceability of legislation;
- Use of existing room for controlled experimentation;
- Embed in the authority's organization and make accessible for others knowledge on eco-innovations
- Establishing partnerships between authorities and businesses in order to facilitate innovation process.
- Other arrangements on organizational level to facilitate innovations. E.g. to establish a Rapid Response Team: It can be valuable to create a team of experts on a green innovative cases. Such a 'rapid response team' can be used in cases where a) is to be decided quickly; b) vital knowledge is missing from the relevant parties and c) mediation is required.