



EU funding opportunities for Eco-Innovation Research and Innovation

*Circular economy & Industrial Networks,
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Issues at stake

- Current patterns of growth lead to irreversible damage to planet's natural environment
- Global consumption of materials is expected to triple by 2050
- Prices of resources are difficult to predict and Europe is dependent on imports
- Lack of involvement and awareness of individuals lock in traditional unsustainable consumption patterns



Eco-Innovation : supporting the transition to resource-efficient economy

Eco-Innovation is any form of innovation resulting in or aiming at significant and demonstrable progress towards the goal of sustainable development, through reducing impacts on the environment, enhancing resilience to environmental pressures, or achieving a more efficient and responsible use of natural resources.

Source: The Eco-innovation Action Plan



Eco-Innovation : a contribution to Europe 2020 flagship initiatives

- **"Innovation Union"**: addresses growing societal challenges like scarcity of resources, climate change, aging, etc. through innovation;
- **"A resource efficient Europe"**: integrates resource efficiency and eco-innovation in the strategic initiatives of the EU (energy, transport, construction, agriculture, climate change, water, biodiversity, taxation);
- **"Industrial policy for a globalised era"**: identifies development and deployment requirements for key environmental technologies; enhances coordination and cooperation in developing and deploying these technologies
- **"An Agenda for new skills and jobs"**: sets employment targets for 2020. Eco-innovation means also: (1) equipping people with the right skills for the jobs of today and tomorrow (2) improving the conditions for job creation



Eco-Innovation and Waste in the FP7 Environment Theme

- Strong support to related research and demonstration projects (total EC contribution of about 150 M€)
- Boosting and disseminating eco-innovation
 - **ECO-INNOVERA, ECO-PRO, EcoWeb**
- Focus on technologies
 - **SORT-IT**
- Link to social innovation
 - **BURBA**
- Looking at a systemic approach
 - **ZeroWIN**



Eco-Innovation in Horizon 2020

- Horizon 2020 will strengthen support to eco-innovation
 - e.g. CIP and its eco-innovation part is now included in Horizon 2020
- Eco-innovation is a strong component of Societal Challenge "Climate action, environment, resource efficiency, and raw materials"
 - **Objective:** "to achieve a resource – and water – efficient and climate change resilient economy and society, the protection and sustainable management of natural resources and ecosystems, and a sustainable supply and use of raw materials, in order to meet the needs of a growing global population within the sustainable limits of the planet's natural resources and eco-systems."



What is Horizon 2020

- Research and innovation funding programme (2014-2020) of €70.2 billion
- A core part of Europe 2020, Innovation Union & European Research Area
- A single programme bringing together three separate programmes/initiatives (FP7, CIP, EIT)
- Coupling research to innovation – from research to retail, all forms of innovation
- Focus on societal challenges facing EU society, e.g. health, clean energy and transport
- Simplified access, for all companies, universities, institutes in all EU countries and beyond



Climate action, resource efficiency and raw materials (SC5)

Broad lines of the activities

- Fighting against and adapting to climate change
- Sustainably managing natural resources and ecosystems
- Sustainable supply of non-energy and non-agricultural raw materials
- *Transition towards a green economy through eco-innovation*
- Global environmental observation and information systems
- Cultural heritage

Overall Budget: € 3.081 billion



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Waste: A resource to recycle, reuse and recover raw materials

- Areas covered

...towards a zero waste society



- Moving towards a circular economy through industrial symbiosis (WASTE-1-2014)
- A systems approach for the reduction, recycling and reuse of food waste (WASTE-2-2014)
- Recycling of raw materials from products and buildings (WASTE-3-2014)
- Towards near-zero waste at European and global level (WASTE-4-2014/2015)
- Preparing and promoting innovation procurement for resource efficiency (WASTE-5-2014)



Other Eco-Innovation related topics in SC5

- Bridging the gap: from innovative water solutions to market replication (WATER-1-2014/2015)
- New solutions for sustainable production of raw materials (SC5-11-2014/2015)
- Innovative and sustainable solutions leading to substitution of raw materials (SC5-12-2014/2015)
- Coordinating and supporting raw materials research and innovation (SC5-13-2014/2015)
- Consolidating global knowledge on the green economy in support of sustainable development objectives in the EU and internationally (SC5-14-2014)
- Boosting the potential of small businesses for eco-innovation and a sustainable supply of raw materials (SC5-20-2014/2015, SME instrument)



The need for a systemic approach to eco-innovation

- Impacts of eco-innovations often incremental and too local; insufficient to achieve absolute decoupling of growth from resource use and environmental impact.
- Lock-in effects of traditional production and consumption patterns.

→ a shift towards sustainable consumption and production pattern needs to be supported by society as a whole!



What to achieve in EU in the future

- 2 years: Approach for systemic eco-innovation and European reference framework including all relevant policy fields.
- 10 years: Demonstrating the benefits of systemic eco-innovation for the European society by large pilot actions in different Member States.
- Long-term perspective: Systemic eco-innovations established among policy makers and societal stakeholders.



Future EU policy framework

- *EU framework towards an effective and quick systemic eco-innovation needed:*
 - Analysis of recent policy initiatives, support mechanisms, and needs;
 - Monitoring trends and developments on systemic eco-innovation;
 - Legislation, soft policy measures, and financial instruments (e.g. Horizon 2020, Structural Funds, EIB, SMEs business support, etc.);
 - Identification of large-scale pilot actions demonstrating the feasibility and importance.



Thank you for your attention!

Find out more:

www.ec.europa.eu/research/horizon2020