

EIT Climate-KIC 2018 Priorities

Supplement for Impact Goal 7: Recast materials production, and Impact Goal 9:
Reboot Regional Economies

EIT BUSINESS PLAN 2018 Call 3

Deadline for Application: 28th May 2018

This document provides additional context and specificity for Impact Goal 7: Recast materials production and Impact Goal 9: Reboot Regional Economies. It is a supplement to the annual 2018 priorities issued in December 2017.

Publication Date: 27 March 2018

Version: 1.0

Purpose

The objective of this document is to provide supplementary guidance on EIT Climate-KIC's priorities under Impact Goal 7 - described below. Please note that this guidance covers calls for Earlier-Stage Innovation (Pathfinder & Partner Accelerator), Later-Stage Innovation (Demonstrator, Scaler), Cross-European Innovation Ecosystems, and Education (Online Education, Professional Education)

For more information on how to engage with other programme types not listed in the document, please contact your local EIT Climate-KIC office. Contact list can be found on our website: <http://www.climate-kic.org/locations/>

Impact Goal 7 “Recast Materials Production”

This call is launched within the LOOP Programme of the Sustainable Production Systems (SPS) Theme. The Programme is contributing towards achieving **Climate-KIC's Impact Goal 7 “Recast Materials Production”**.

A key activity within the LOOP Programme is the LOOP Flagship. The Flagship accelerates the circularity of plastic-based material systems and dematerialisation of plastic demand with the vision of carbon-neutral material system in 2050. The flagship thrives for radical digital innovations and their upscaling with focus on waste prevention, e.g. by promoting smart manufacturing solutions, advanced eco-design approaches, new business models and alternative consumption patterns. Also advanced policies and industry standards will be explored to scale-up innovative solutions.

Plastics are ubiquitous in our society. They are often “downcycled”, incinerated or landfilled after their use. Plastic litter ending up in the oceans are a very visible and alarming sign of environmental problems, causing growing public concern. Especially if the very short lifetime of many products made from plastics (e.g. food packaging) is taken into account, the problems with the current approach become obvious. Therefore, the complex value chain of plastics will have to be changed in significant ways. This will require innovative solutions and major efforts by key decision makers, plastics producers, recyclers, manufacturer, retailers as well as consumers. In January 2018, the European Commission highlighted with its “European Strategy for Plastics in a Circular Economy¹” the importance of the problem and outlined challenges, strategies and opportunities for more sustainable and safer consumption and production patterns for plastics.

Against this background and referring to the innovation potential of the “Fourth industrial revolution” or “Internet of Things”, the Flagship project call is looking for radical digital innovations and their up-scaling with focus on plastic waste prevention² and system-wide changes in plastic value chains. The call invites proposals for earlier and later stage projects, ranging from development to implementation in the whole plastic value chain.

¹ <http://ec.europa.eu/environment/waste/prevention/pdf/Waste%20prevention%20guidelines.pdf>

² Prevention is defined according to the EU Waste Framework Directive, Art. 3/12 (see link below for reference).

Waste ‘prevention’ means measures taken before a substance, material or product has become waste, that reduce:

- a. the quantity of waste, including through the re-use of products or the extension of the life span of products;
- b. the adverse impacts of the generated waste on the environment and human health; or
- c. the content of harmful substances in materials and products;

The project proposals could address the following topics:

- a) **Digital technologies that increase interoperability of data used within a circular plastics value chain.**
- b) **New business models that foster prevention of plastic waste and dematerialisation of plastic demand.**
- c) **Digital technologies and Industry 4.0 solutions fostering circularity of plastics.**
- d) **Eco-design approaches that aim at achieving changes in current manufacturing practices.**
- e) **Regulation, industry standards and policies to promote plastic waste prevention.**

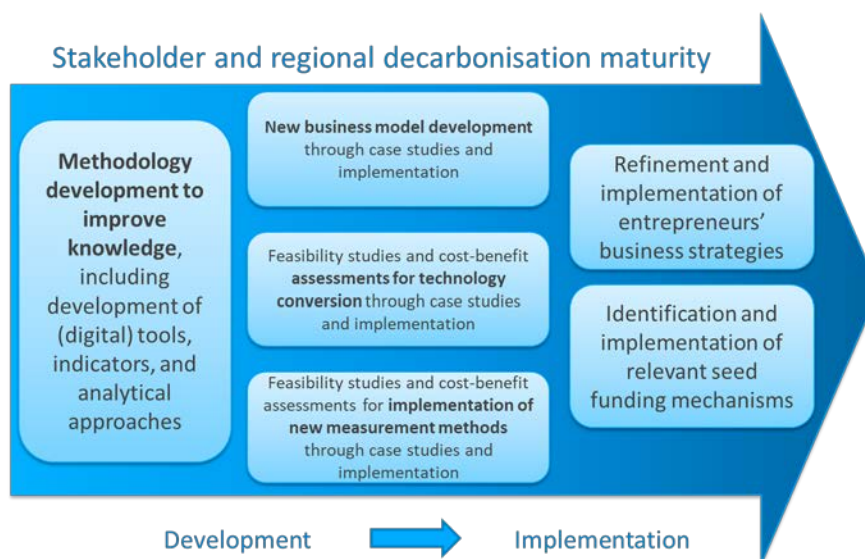
Ambitious project ideas with high impact and strong focus on dematerialization and prevention of plastic waste will be preferred. Furthermore, project consortia are encouraged to actively engage with the manufacturing and IT industry (large enterprises, SMEs, start-ups and industry associations) to assure for the capability of bringing change to the economy and ensure the scalability of the results.

Proposals will be subject to the standard requirements as described in the EIT Climate-KIC Proposal Guidelines for Call 3, with a deadline of 28th May 2018. For more information, please refer to: <http://www.climate-kic.org/calls-for-proposals/>.

Impact Goal 9 Supplemental Guidance

A key part of the ‘Re-Industrialise’ cause-related programme under Impact Goal 9 is a Flagship. The mission of the Flagship is to support authorities/agencies and companies from European industry regions with high carbon emissions or municipalities within these regions in planning, developing and rolling-out their low carbon transformation. The transformation pathways shall be designed in a ‘just transition’ way, simultaneously minimising economic, environmental and social risks. Therefore, the Flagship supports and enables the development of innovative solutions at the interface of economic development and decarbonisation.

For 2018, the Flagship seeks projects that address both authorities/agencies and companies which are at an early-stage of transformation (e.g., still need to identify carbon hotspots or understand potential transformation pathways) as well as those which are at a more advanced transformation level and have a clear view on their challenges, needs and potential pathways. Accordingly, the Flagship invites project ideas at various levels of maturity, ranging from development to implementation, as illustrated below.



Candidate projects could include:

- **Development of tools/methodologies/indicators** to close knowledge gaps and reduce transformation risks, e.g., for identifying or prioritising pathways, systematically assessing technology or policy options or setting up roadmaps/action plans for implementing a region's or company's 'just transition'.
- **Case studies and pilots** that pave the way for success stories of 'just transitions' in high-carbon regions, e.g., through study/implementation of new business models, technology conversion, or measurement/reporting systems for companies in industry regions which integrate social and environmental benefits with economic ones and help the companies and regions to build a decarbonisation strategy.
- **Support toward implementation of entrepreneurial solutions in high-carbon regions** and business strategies for low-carbon activities, e.g., development / improvement of business models, identification of relevant funding mechanisms and/or proof-of-concept realisation.

Project ideas need to incorporate a systemic approach toward the addressed challenge, considering the economic, environmental and social dimensions when possible. Furthermore, project consortia are encouraged to actively engage with the target audience of their project idea or to outline a strategy how to engage with it through the course of the project.

Proposals will be subject to the standard requirements as described in the EIT Climate-KIC Proposal Guidelines for Call 3, with a deadline of 28th May 2018. For more information, please refer to: <http://www.climate-kic.org/calls-for-proposals/>.