



I.FAST Task 12.1 regular meeting

Prof. Toms TORIMS / RTU & CERN

21.07.2021

Environmental topics #HorizonEU

«menu»

- Society needs / strong visibility and impact



EU Missions

R&I Missions

Relating EU's research and innovation better to society and citizens' needs; with strong visibility and impact

https://ec.europa.eu/info/sites/default/files/research_and_innovation/funding/presentations/ec_rtd_he-investing-to-shape-our-future.pdf

HORIZON EUROPE

SPECIFIC PROGRAMME IMPLEMENTING HORIZON EUROPE & EIT*

Exclusive focus on civil applications



Pillar I EXCELLENT SCIENCE

European Research Council

Marie Skłodowska-Curie

Research Infrastructures



Pillar II GLOBAL CHALLENGES & EUROPEAN INDUSTRIAL COMPETITIVENESS

Clusters

- Health
- Culture, Creativity & Inclusive Society
- Civil Security for Society
- Digital, Industry & Space
- Climate, Energy & Mobility
- Food, Bioeconomy, Natural Resources, Agriculture & Environment

Joint Research Centre



Pillar III INNOVATIVE EUROPE

European Innovation Council

European Innovation Ecosystems

European Institute of Innovation & Technology*

WIDENING PARTICIPATION AND STRENGTHENING THE EUROPEAN RESEARCH AREA

Widening participation & spreading excellence

Reforming & Enhancing the European R&I system

Environmental topics #HorizonEU

«menu»

Five Missions Areas



Adaptation to
climate change,
including societal
transformation



Cancer



Healthy oceans,
seas, coastal &
inland waters



Climate-neutral
& smart cities



Soil health &
food

HORIZON EUROPE PILLAR II - Global challenges & European industrial competitiveness

CLUSTER 1: Health	CLUSTER 4: Digital, Industry & Space	CLUSTER 5: Climate, Energy & Mobility	CLUSTER 6: Food, Bioeconomy, Agriculture, ...
Innovative Health Initiative	Key Digital Technologies	Clean Hydrogen	Circular Bio-based Europe
Global Health Partnership	Smart Networks & Services	Clean Aviation	Rescuing Biodiversity to Safeguard Life on Earth
Transformation of health systems	High Performance Computing	Single European Sky ATM Research 3	Climate Neutral, Sustainable & Productive Blue Economy
Chemicals risk assessment	European Metrology (Art. 185)	Europe's Rail	Water4All
ERA for Health	AI-Data-Robotics	Connected and Automated Mobility (CCAM)	Animal Health & Welfare*
Rare diseases*	Photonics	Batteries	Accelerating Farming Systems Transitions*
One-Health Anti Microbial Resistance*	Made in Europe	Zero-emission waterborne transport	Agriculture of Data*
Personalised Medicine*	Clean steel – low-carbon steelmaking	Zero-emission road transport	Safe & Sustainable Food System*
Pandemic Preparedness* <i>Co-funded or co-programmed</i>	Processes4Planet	Built4People	

Horizon Europe: cluster 5

“Climate, energy and mobility”

- Climate: a core priority for the European Union
- The cluster 5 is divided into six ‘destinations’, the first four of which are related to climate and energy (ENVIRONMENT):
 - Climate sciences and responses for the transformation towards climate neutrality (Destination 1)
 - Cross-sectoral solutions for the climate transition (Destination 2)
 - Sustainable, secure and competitive energy supply (Destination 3)
 - Efficient, sustainable and inclusive energy use (Destination 4)

Climate, Energy and Mobility work programme

- *It is all about GHG emission reduction*
- climate neutral and clean solutions in the shipping sector,
- reduce its environmental impact (on biodiversity, noise, pollution and waste management),
- improve its system efficiency,
- leverage digital and EU satellite-navigation solutions and
- contribute to the competitiveness of the European **waterborne sector**

Climate, Energy and Mobility work programme

- *The main impacts to be generated by topics targeting waterborne transport under this Destination are:*
- [...]
- Strong technological and operational momentum towards achieving climate neutrality and the **elimination of all harmful pollution to air and water.**
- [...]
- Competitive waterborne industries, including the globally active European **maritime technology sector**, providing the **advanced green and digital technologies** which will support jobs and growth in Europe.



Food, Bioeconomy, Natural Resources, Agriculture and Environment work programme

- *Destination - Clean environment and zero pollution:*
- [...]
- (waste) water treatment
- sewage sludge treatment
- [...]
- post-harvest treatment

A European Green Deal

Actions



Climate



Environment and oceans



Energy



Transport



Agriculture



Finance and regional development



Industry



Research and innovation

Widening participation and strengthening the European Research Area

- to building research and innovation capacity for countries lagging behind
- Teaming: Support/create centres of excellences as role models to stimulate excellence, new investments and reforms of national research and innovation systems.
- [...]
- European Cooperation in Science and Technology (COST), cross-border scientific network helping excellent researchers and innovators get access to the European and international networks.

iFAST



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