

# Funding possibilities for Environmental Research & Innovation in Horizon 2020

## PlasTEP+ "Plasma based exhaust gas cleaning"

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# Strategic orientation of HORIZON 2020

## Objectives of Horizon 2020

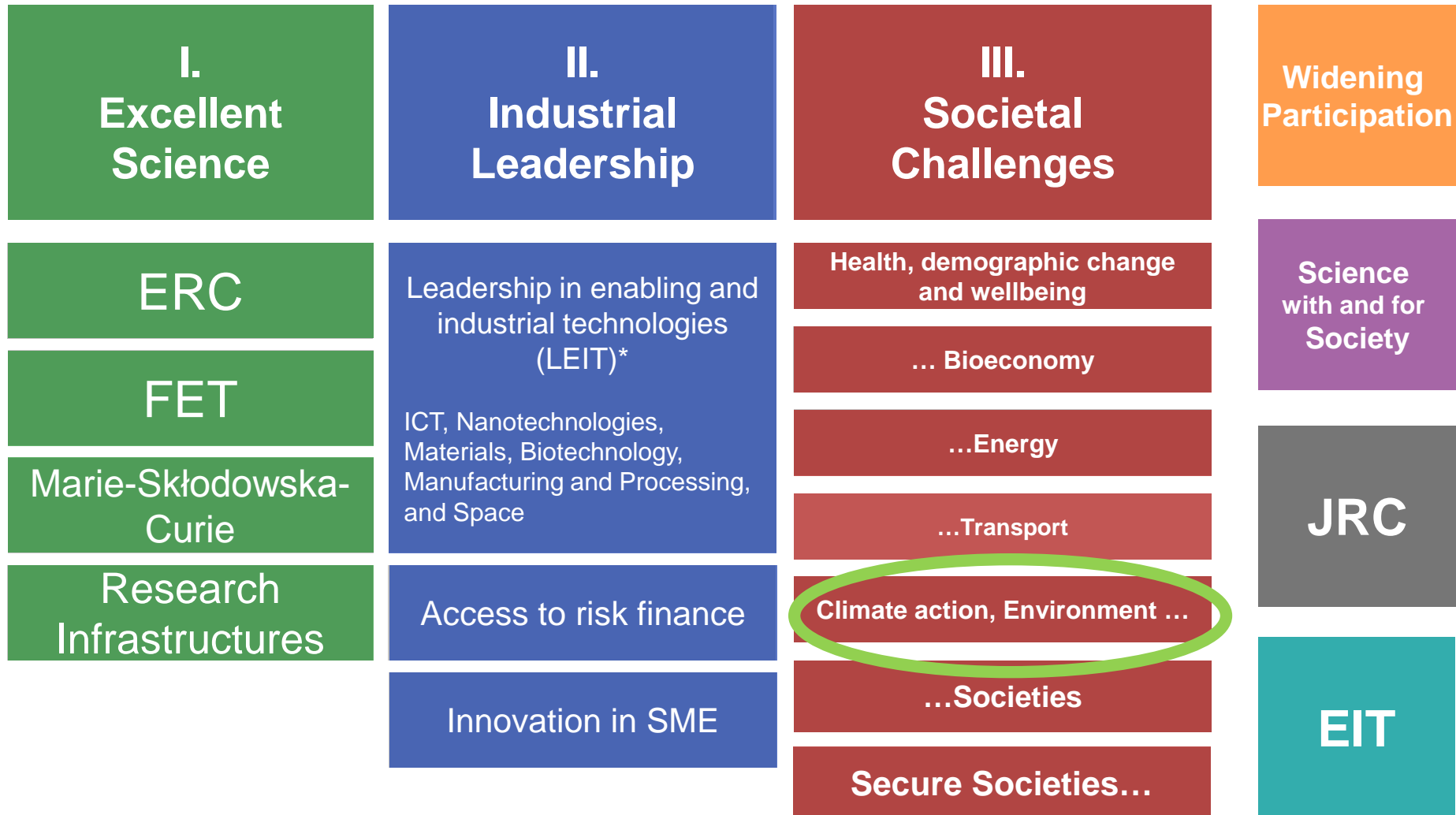
- Overcoming the economic crisis by investing in future **growth and employment**
- Considering concerns of citizens in terms of their existence, safety and environment – **Society**
- Strengthening the EU's global position in research, innovation and technology – **Competition**

## Strategic orientation of HORIZON 2020 (contd.)

### Important Features of HORIZON 2020

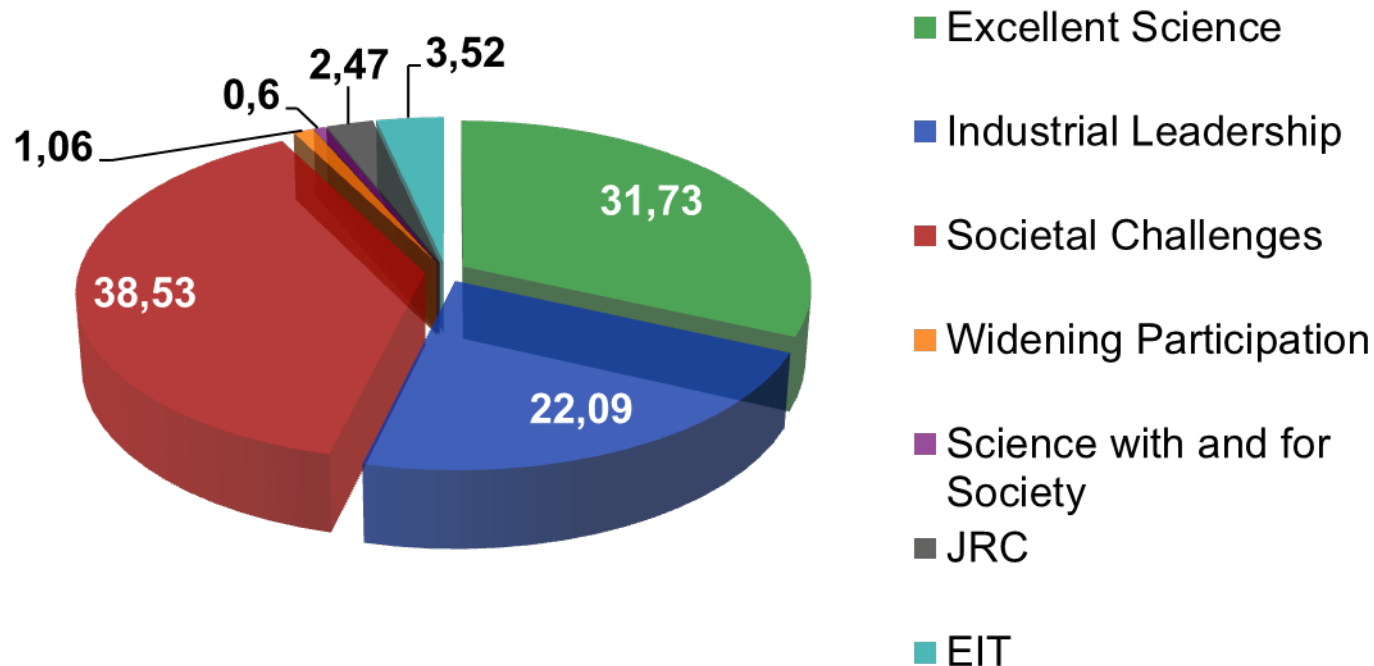
- Focus on **more innovation** – from research to market, all forms of innovation
- Focus on **societal challenges** („challenge based approach“) of the EU, e.g. Health, clean energy and transportation
- **Simplified access** – for all companies, universities and institutes in all EU countries and beyond
- Work program is planned for **two years**

## Programme Structure of Horizon 2020



## Budget distribution in Horizon 2020

### Budget distribution in %



## Overview of Challenge 5:

Climate action, environment, resource efficiency and raw materials

### Sub-Challenges:

- 5.1: Fighting and adapting to climate change
- 5.2: Protection of the environment, sustainably managing natural resources, water, biodiversity and ecosystems
- 5.3: Ensuring the sustainable supply of non-energy and non-agricultural raw materials
- 5.4: Enabling the transition towards a green economy through eco-innovation
- 5.5: Developing comprehensive and sustained global environmental observation and information systems
- 5.6: Cultural heritage

## Focus Areas

- Personalising health and care
- Sustainable food security
- **Blue growth**: unlocking the potential of the oceans
- Smart cities and communities
- Competitive low-carbon energy
- **Energy efficiency**
- Mobility for growth
- **Waste**: a resource to recycle, reuse and recover raw materials
- **Water innovation**: boosting its value for Europe
- Overcoming the crisis: new ideas, strategies and governance structures for Europe
- **Disaster-resilience**: safeguarding and securing society, including adapting to climate change
- Digital security

## Context between Challenge 5 and Focus Areas

	SC5	Waste	Water	Blue G. (SC2)	Disaster (SC7)	Energy (SC3)
5.1. Climate						
5.2. Ecosyst.						
5.3. Raw Materials						
5.4. Green Ec						
5.5. Inf. Systems						
5.6. Cult.						



## What is the further procedure for the topics in 2014?

Call	Publication-date	Call-Deadline Topics with Single- state Evaluation	Call Deadline (1st stage) 2-stages Topics	Call Deadline (2nd stage) 2-stages Topics
Waste-2014	11/12/2013	08/04/2014	08/04/2014	16/09/2014
Water-2014				
SC5-2014				

Please note:

- Topics for 2015 will most probably be published on Dec. 11th, 2013.
- Deadline for these proposals will likely be March 2015.

## Funding instruments with relevance to CH 5

### Two-stage procedure

- Research and innovation action (R&I) – 100 % funding
- Innovation action (I) – 70% funding

### One-stage procedure

- Coordination and support action (CSA) – 100 % funding
- ERA-NET (Programme COFUND action)

### Further Instruments

- Fast track to innovation
- SME Instrument

## Funding instruments with relevance to CH 5 (contd.)

- SME Instrument
  - open call
  - phase 1: lump sum (50.000 €), phase 2: 70%
  - 2014: 3 cut-off dates for phase 1; 2 cut off dates for phase 2
- Fast track to innovation
  - Pilot call planned for 2015
  - thematically located in pillars II and III
  - 3 cut-off dates per year
  - Not more than 5 institutions per project, funding max. 3 Mio. €

## Funding instruments with relevance to CH 5 (contd.)

Actions	Number of topics in SC5 - 2014
Research and innovation actions (2-stage)	<b>11 topics or part-topics</b>
Innovation actions (2stage)	<b>2 topics or part-topics</b>
Coordination and support actions (1-stage)	<b>15 topics or part-topics</b>
SME-Instrument	<b>1 topic</b>

## Complex budget structure – an example from FP7

Participant short name	Funding rate for RTD %	Indirect costs method	RTD/Innovation		Demonstration (50% reimbursement)		Management (100% reimbursement)		Other (100% reimbursement)		Total costs	Requested EU contribution
			Direct costs	Indirect costs	Direct costs	Indirect costs	Direct costs	Indirect costs	Direct costs	Indirect costs		
University A	75	60%	531.250	318.750			175.000	105.000	156.250	93.750	1.380.000	1.167.500
Foundation B	50	20%	625.000	125.000	58.334	11.666			144.896	28.979	993.875	771.375
University C	75	Simplified	481.000	240.500	26.667	13.333			133.334	66.666	961.500	761.125
SME D	75	60%	281.250	168.750	140.625	84.375			43.750	26.250	745.000	520.000
Enterprise E	50	Real	270.270	229.730	162.162	137.838			54.054	45.946	900.000	500.000
SME F	75	Real	390.000	310.000	61.289	48.711			111.433	88.567	1.010.000	780.000
<b>Total</b>			<b>2.578.770</b>	<b>1.392.730</b>	<b>449.077</b>	<b>295.923</b>	<b>175.000</b>	<b>105.000</b>	<b>643.717</b>	<b>350.158</b>	<b>5.990.375</b>	<b>4.500.000</b>

- Before such an FP7 grant could be signed, SMEs D and F would have to provide extensive documentation to prove that they fulfil the conditions for being considered SMEs. The validation would typically require several weeks.
- When submitting cost claims during this project, the consortium would have to provide up to 11 certificates on the financial statements.

## Reduced complexity – an example from H2020

Participant short name	Estimated eligible costs		Total costs	Requested EU contribution (100%)
	Direct costs	Indirect costs (25%)		
University A	862.500	215.625,00	1.078.125,00	1.078.125,00
Foundation B	828.230	207.057,50	1.035.287,50	1.035.287,50
University C	641.001	160.250,25	801.251,25	801.251,25
SME D	465.625	116.406,25	582.031,25	582.031,25
Enterprise E	486.486	121.621,50	608.107,50	608.107,50
SME F	562.722	140.680,50	703.402,50	703.402,50
<b>Total</b>	3.846.564	961.641,00	4.808.205,00	4.808.205,00

## Calls structure in 2014 / 2015

- Call – Waste: A Resource to Recycle, Reuse and Recover Raw Materials
  - 2014: 5 Topics
  - 2015: 2 Topics
- Call – Water Innovation: Boosting its value for Europe
  - 2014: 5 Topics
  - 2015: 5 Topics
- Call – Growing a Low Carbon, Resource Efficient Economy with a Sustainable Supply of Raw Materials (SC5)
  - 2014: 15 Topics
  - 2015: 13 Topics

## Structure of a topic text

### Identification or title

e.g. WASTE-3-2014: Recycling raw materials .....

- **Specific challenge:**  
Description of the challenge which must be responded to
- **Scope:**  
Focus and boundaries of the challenge; not the means and methods by which the challenge is to be met
- **Expected impact:**  
Desired impact on policy respectively modified status for society
- **Type of action:** Type of project including information on the funding rate



## SC5-20-2014/2015: Boosting the potential of small businesses for eco-innovation and a sustainable supply of raw materials

### Specific challenge:

- Innovative SMEs recognised as engine...green economy
- facilitate transition to a resource efficient, circular economy
- topic targeted at all types of eco-innovative SMEs in all areas of SC5
- All kinds of promising ideas, products, processes, services; business models, notably across sectors and disciplines
- for commercialisation both in a (B2B) & (B2C) context

### Scope:

- phase 1: feasibility study; phase 2: innovation projects
- phase 1: 50.000 € lump-sum
- phase 2: requesting contribution between EUR 0.5 – 2.5 million €

### Expected impact:

- Enhancing profitability & growth performance of SMEs
- by combining and transferring new and existing knowledge into innovative, competitive solutions European & global business opport.
- Market uptake and distribution of innovations

### Type of action:

SME Instrument (70% funding)

## WATER-5-2015: Strengthening international R&I cooperation in the field of water

- Specific challenge:**
- sustainable water supply & sanitation fundamental to food security, health, survival, societal well-being and economic growth
- Scope:**
- c) Development of water supply and sanitation technology, systems and tools, and/or methodologies**
- risks associated with water supply and sanitation and cross-boundary water management issues
  - integrated water resources management systems
  - focused on the non-EU Mediterranean countries and Africa.
  - EU contribution between EUR 2 - 3 million €
- Expected impact:**
- Application of innovative technological approaches/solutions
  - adapted to local conditions, operational and effective application of integrated water management
  - better identification of water vulnerability by policy makers
  - advanced regulatory and economic instruments
- Type of action:** Research & Innovation Actions (100% funding)

## SC5-4-2015: Improving the air quality and reducing the carbon footprint of European cities

### Specific challenge:

- urban environments where citizens frequently exposed to levels of air pollutants exceeding limit values established by European directives
- pollution in cities mainly linked to urban activities: transport & heating
- Integrated approaches needed ... long-term, sustainable solutions in EU

### Scope:

"Development of technological options and strategies to fight against air pollution in urban environments and climate change ensuring the involvement of the main pollution-generation sectors. Proposals should include the development and application of tools in support of integrated air quality"

- include participation SME as far as possible
- Requesting contribution EUR 6 - 8 million €

## SC5-4-2015: Improving the air quality and reducing the carbon footprint of European cities (contd.)

### Expected impact:

- Reduction of negative effects on health & climate together with costs associated with air pollution in EU
- Increase compliance with the EU air quality legislation
- Rapid market deployment: technolog. & non-techn. Innovative solutions

Type of action: Research and Innovation Actions (100% funding)

## Role of SMEs in environmental research and innovation development in H2020

- EU Commission wants to increase **SME participation** to 20% budget share
- **Innovation** (in Challenge 5) can only be achieved through cooperation between research, industry, and users
- **Innovations** are means to reach
  - technical
  - organizational
  - social solutions

## International Cooperation - Dual approach

General openness for the participation of partners from third countries

Targeted international cooperation activities

- Calls where the participation of third country entities is required and/or taken into account
- Joint initiatives with international partners (coordinated/joint calls, ERA-NETs, etc.)
- Horizontal international cooperation activities (policy dialogues, networking, etc.) – in Societal Challenge 6

## International Cooperation in Horizon 2020

### Objectives of international cooperation

- Strengthening the Union's excellence/competitiveness
- Tackling global societal challenges
- Supporting the Union's external policies

### 3 country groups → Differences regarding funding

EU enlargement countries + countries of the European Neighbourhood policy	in general eligible for funding
Developing countries	
Industrialised countries and emerging economies	only funded in exceptional cases

## Consulting services of the NCP Environment

- Acting on behalf of the Federal Ministry of Education and Research (BMBWF)
- Located at Project Management Juelich (PtJ)
- Interface between European and national funding
- Your contact in HORIZON 2020 for the societal challenge 5 (SC5): "climate action, environment, resource efficiency and raw materials"





## Consulting services of the NCP Environment (contd.)

- **Information** on work programs and the current call
  - Own events
  - Participation at external events
- **Consulting** for applicants
  - From draft to final proposal
  - Consultation by phone, email or in person
  - Review of drafts and proposal
- Advice throughout the whole project cycle
- Tailor-made workshops for applicants
- Finding suitable co-operation partners

## Consulting services of the NCP Environment (contd): NCP Environment Newsletter

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