

HORIZONTE 2020

oportunidades em 2017 na temática da água, eficiência de recursos, biodiversidade e alterações climáticas



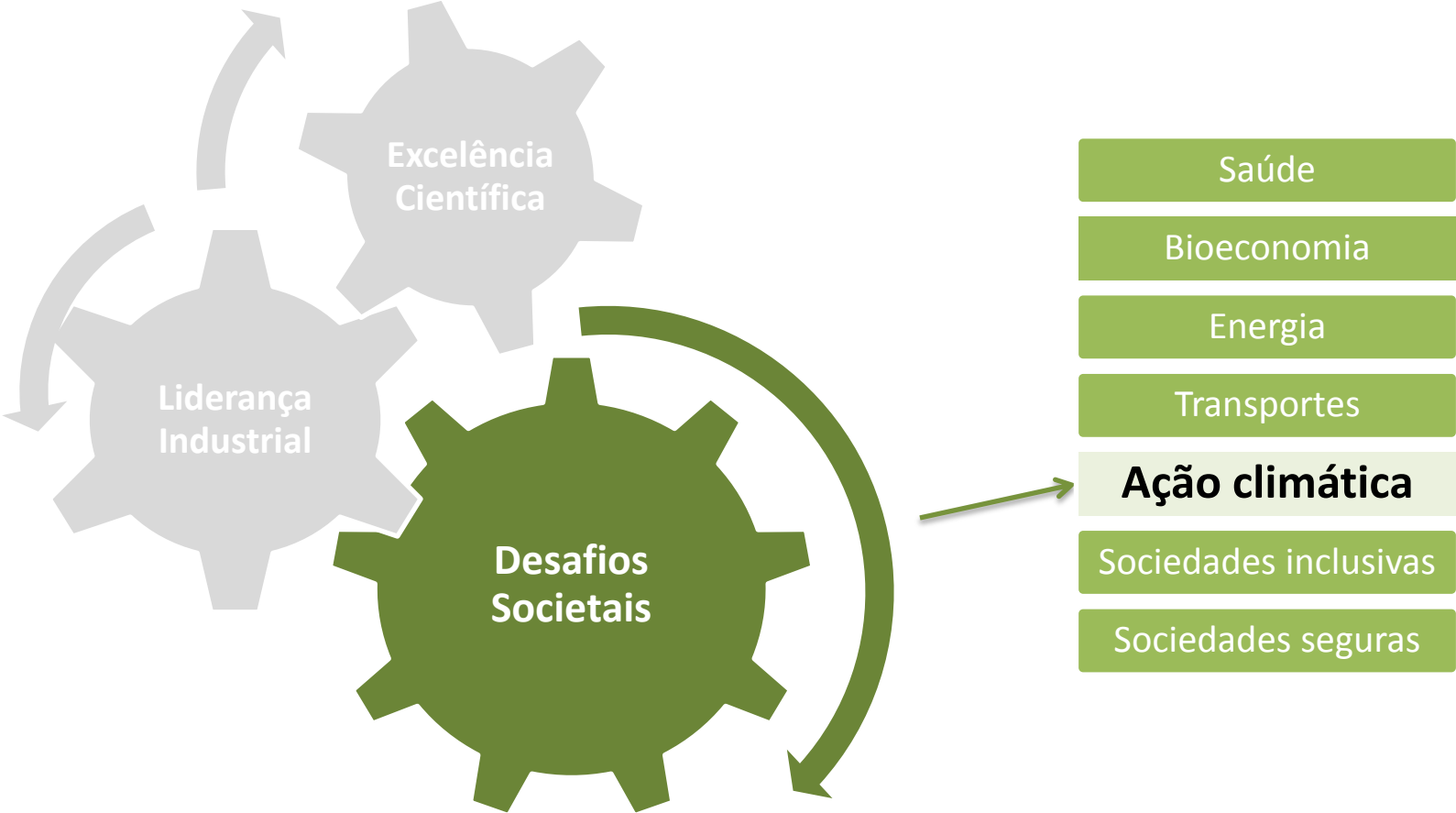
Anabela Carvalho | Cristina Gouveia

Desafio Societal Ação Climática do Horizonte 2020



HORIZONTE 2020

oportunidades do Desafio Societal Ação Climática



Desafio Societal Ação Climática

grandes linhas de orientação

Orçamento proposto (2014-2020): 3081 M€
(4% orçamento H2020)

Combate e
adaptação às
alterações
climáticas

Gestão
sustentável dos
recursos naturais
e ecossistemas

Abastecimento
sustentável de
matérias-primas
não energéticas e
não agrícolas

Transição para
uma economia
verde através da
eco-inovação

Sistemas de
observação e
informação
globais,
abrangentes e
sustentados

Património
cultural



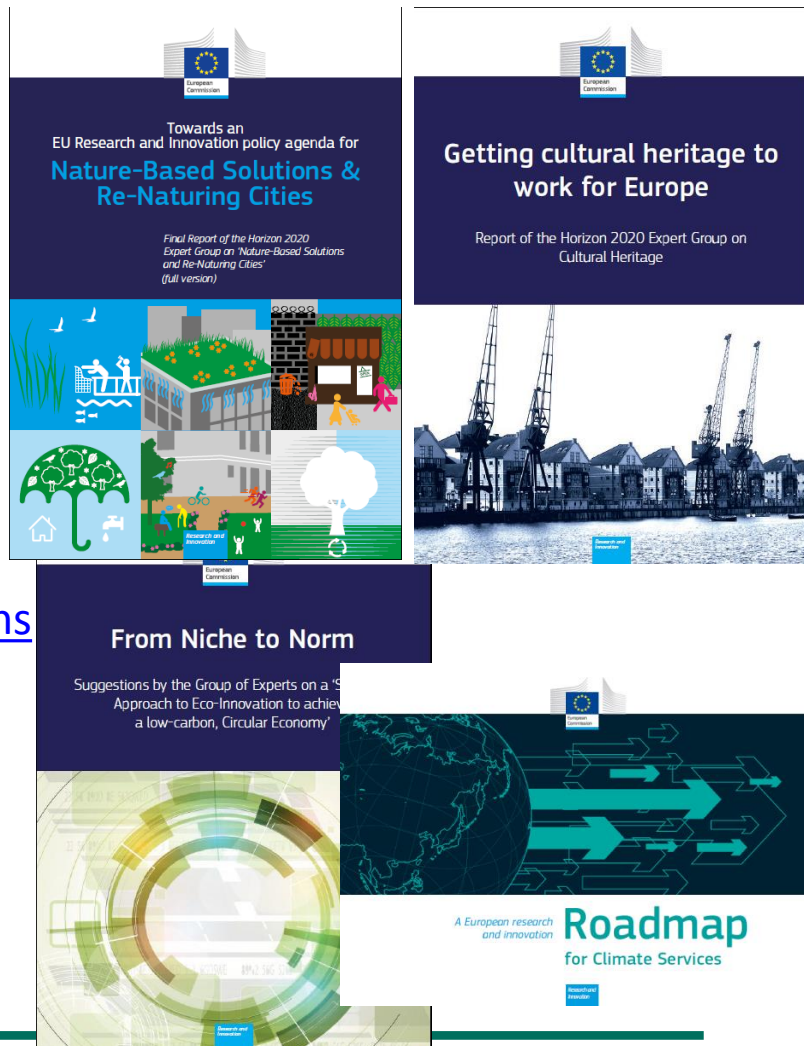
Relatórios produzidos pelo *Advisory Board* do DS Ação Climática base para a definição dos tópicos a concurso em 2016-2017

ECO-INOVAÇÃO : [Systemic Approach to Eco-Innovation to achieve a low-carbon, Circular Economy](#)

SERVIÇOS CLIMÁTICOS: [A European research and innovation Roadmap for Climate Services](#)

CIDADES e BIODIVERSIDADE: [Towards an EU Research and Innovation policy agenda for Nature-Based Solutions & Re-Naturing Cities](#)

PATRIMÓNIO CULTURAL: [Getting cultural heritage to work for Europe](#)



Desenvolvimento sustentável

Programa de Trabalhos 2016-2017 do Horizonte 2020



- ✓ *Increased emphasis on delivering innovative solutions*
- ✓ *Transformative agenda*
- ✓ *Systemic approach to innovation*
- ✓ *Unlocking private and public investment in future solutions*
- ✓ *Large-scale demonstration projects with replication potential*

Desafio Societal 5: objetivos chave para 2016-2017

Climate action

- ✓ **Climate services**
- ✓ **Low-carbon Europe**
- ✓ **Arctic dimension**

Nature-based solutions:

- ✓ for territorial resilience
- ✓ for sustainable cities

Raw materials

Systemic eco-innovation for a circular economy

Mainstreaming water R&I

Sustainable growth by harnessing:

- ✓ Earth observation data
- ✓ Cultural heritage

Estrutura do Programa de Trabalhos 2016-2017



Greening the Economy
call H2020-SC5-2016/2017

*7 de março
2017*

375,6 M€



**Calls Industry 2020 in the
Circular Economy**
Circular Economy



Call Smart and Sustainable Cities
*Sustainable Cities through Nature Based
Solutions*

Estrutura do Programa de Trabalhos 2016-2017

FCT Fundação para a Ciência e a Tecnologia
MINISTÉRIO DA EDUCAÇÃO E CIÊNCIA

HORIZONTE 2020 - Programa de Trabalhos 2016-2017 do Desafio Societal 5 (DS5) "Ação climática, Ambiente, Eficiência de Recursos e Matérias-Primas"
Tópicos de I&I 2017

Referência tópico	Título	Ano	Tipo de projeto	M€ por projeto	Concurso	Deadline
Call: greening the economy						
Climate Services						
SCS-01b-2017	Exploiting the added-value of climate services: From climate service concepts to piloting and proof-of-concept	2017	RIA	5	Single Stage	7 Mar 2017
SCS-02-2017	Integrated European regional modelling and climate prediction system	2017	RIA	13	Single-stage	7 Mar 2017
SCS-04-2017	Towards a robust and comprehensive greenhouse gas verification system	2017	RIA	10	Single-stage	7 Mar 2017
Towards a low-carbon Europe						
SCS-06c-2017	Pathways towards the decarbonisation and resilience of the European economy in the timeframe 2030-2050 and beyond: The risks and costs of climate change for Europe	2017	RIA	4-5	Single-stage	7 Mar 2017
SCS-07-2016	Coordinating and supporting research and innovation actions on the decarbonisation of the EU economy	2017	CSA	2,5-3	Single-stage	7 Mar 2017
Nature-based solutions for territorial resilience						
SCS-08-2017	Large-scale demonstrators on nature-based solutions for hydro-meteorological risk reduction	2017	IA	pelo menos 12	Two-stage	1ª fase: 7 Mar 2017 2ª fase: 5 Set 2017
Raw Materials						
SCS-13c-2017	New solutions for sustainable production of raw materials: New sensitive exploration technologies	2017	RIA	3-7	Single-stage	7 Mar 2017
SCS-14b-2017	Raw materials Innovation actions: Processing of lower grade and/or complex primary and/or secondary raw materials in the most sustainable ways	2017	IA	3-7	Two-stage	1ª fase: 7 Mar 2017 2ª fase: 5 Set 2017
SCS-14c-2017	Raw materials Innovation actions: Sustainable metallurgical processes	2017	IA	3-7	Two-stage	1ª fase: 7 Mar 2017 2ª fase: 5 Set 2017
SCS-15b-2017	Raw materials policy support actions: Good practice in waste collection systems	2017	CSA	1,5	Single-stage	7 Mar 2017
SCS-15c-2017	Raw materials policy support actions: Optimising collection of raw materials data in Member States	2017	CSA	1,5	Single-stage	7 Mar 2017
SCS-15d-2017	Raw materials policy support actions: Linking land use planning policies to national mineral policies	2017	CSA	1,5	Single-stage	7 Mar 2017
SCS-15e-2017	Raw materials policy support actions: EU network of mining and metallurgy regions	2017	CSA	3	Single-stage	7 Mar 2017
SCS-15f-2017	Raw materials policy support actions: EU network of regions on sustainable wood mobilisation (wood supply)	2017	CSA	1,5	Single-stage	7 Mar 2017
SCS-16c-2017	Raw materials international co-operation: International network of raw materials training centres	2017	CSA	1	Single-stage	7 Mar 2017
Earth Observation						
SCS-18-2017	Novel in-situ observation systems	2017	RIA	4-5	Single-stage	7 Mar 2017
SCS-19-2017	Coordination of citizens' observatories initiatives	2017	CSA	1	Single-stage	7 Mar 2017
Cultural Heritage for sustainable growth						
SCS-21b-2017	Cultural heritage as a driver for sustainable growth: Heritage-led rural regeneration	2017	IA	10	Two-stage	1ª fase: 7 Mar 2017 2ª fase: 5 Set 2017
SCS-22-2017	Innovative financing, business and governance models for adaptive re-use of cultural heritage	2017	RIA	5	Single-stage	7 Mar 2017
Support to policy and preparing for innovation procurement						
SCS-26-2017	Pre-commercial procurement on soil decontamination	2017	PCP	5	Single-stage	7 Mar 2017

Gabinete de Promoção do Programa-Quadro (www.gppq.pt/h2020/)

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Tópicos de I&I a concurso em 2017



Programa de Trabalhos Desafio Societal Ação Climática 2016-2017

Tópicos 2016-2017

Nature-based solutions for territorial resilience

Soluções baseadas na natureza (NBS) são inspirados pela, apoiadas pela ou copiadas da natureza e, simultaneamente, proporcionam benefícios ambientais, sociais e económicos

Soluções baseadas na natureza, tais como superfícies verdes e não seladas (áreas asfaltadas,...) nas cidades, telhados verdes, e sapais e dunas para proteção costeira, uso das propriedades e funções dos ecossistemas para proporcionar qualidade da água, redução do risco de inundação, adaptação às alterações climáticas, etc.



➤ *positioning Europe as world leader in innovation through nature-based solutions*



Comunidade PT em *Nature Based Solutions* Resultados Inquérito online

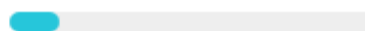
International Profile builder for Portuguese Players in Sustainable Cities Through Nature-Based Solutions

Our aim is to create database of calling cards for Portuguese Players in the area of Nature Based Solutions. This questionnaire will help signal key stakeholders and will be a vital tool for targeted dissemination and information activities.

H2020 calls are competitive but rewarding. We want to help you stand out from the crowd so please be clear when filling-out this questionnaire. It only takes 10 minutes of your time to create a profile that will put you on the international map.

Answers need to be received by the 8th of January 2016.

PRÓXIMA



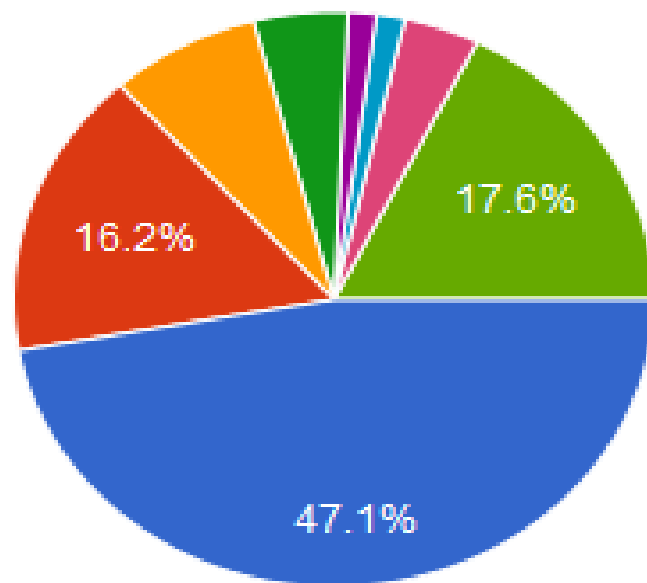
14% concluído



Comunidade PT em *Nature Based Solutions*

Resultados Inquérito online

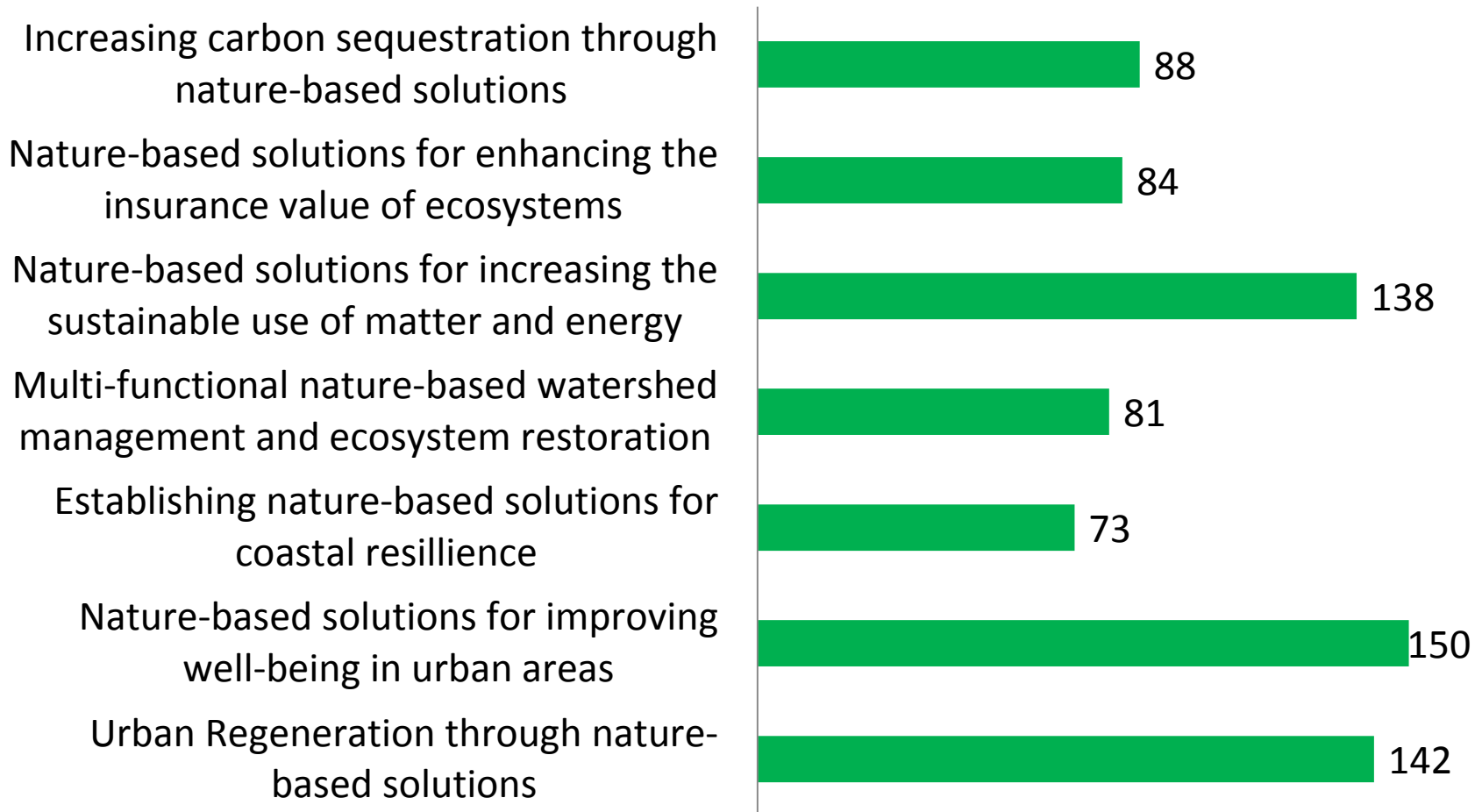
~200
respostas



- Higher Education Establishment
- SME
- Municipality
- Public Administration
- End User
- Large Enterprise
- NGO
- Other

Comunidade PT em *Nature Based Solutions*

Resultados Inquérito online



Cross-Cutting Call Smart and Sustainable Cities

SCC-02-2017 Demonstrating innovative nature-based solutions in cities - Nature-based solutions for inclusive urban regeneration

- Projects should adopt a **'front-runner' and 'follower' cities**
- **'frontrunner' cities as 'living laboratories'** innovative, replicable and locally attuned nature based solutions
- **assist 'follower' cities** that commit to proactively seek advice, expertise, assistance, capacity building and mentoring from the 'front-runners' and develop, within the duration of the project, a sustainable urban planning
- set up a **robust monitoring scheme** to monitor, for a period of at least 2 years within the life of the project, the performance and assess the impact of the deployed solutions
- develop methodologies for **replication and up-scaling**
- identify and assess potential **regulatory, economic, social and technical barriers**

→ **nature-based solutions for inclusive urban regeneration – including regeneration of deprived districts, or neglected or abandoned areas**

→ **reduce crime and security costs, and enhance human health, wellbeing and social cohesion**

→ **role of social innovation, and hence the participation of SSH**

7 março
2017
40 M€

- Pelo menos 10 M€ por projeto
- *Innovation Action (IA)*



Call Greening the Economy

Nature-based solutions for territorial resilience

SC5-08-2017 Large-scale demonstrators on nature-based solutions for hydro-meteorological risk reduction



7 março
2017
65 M€

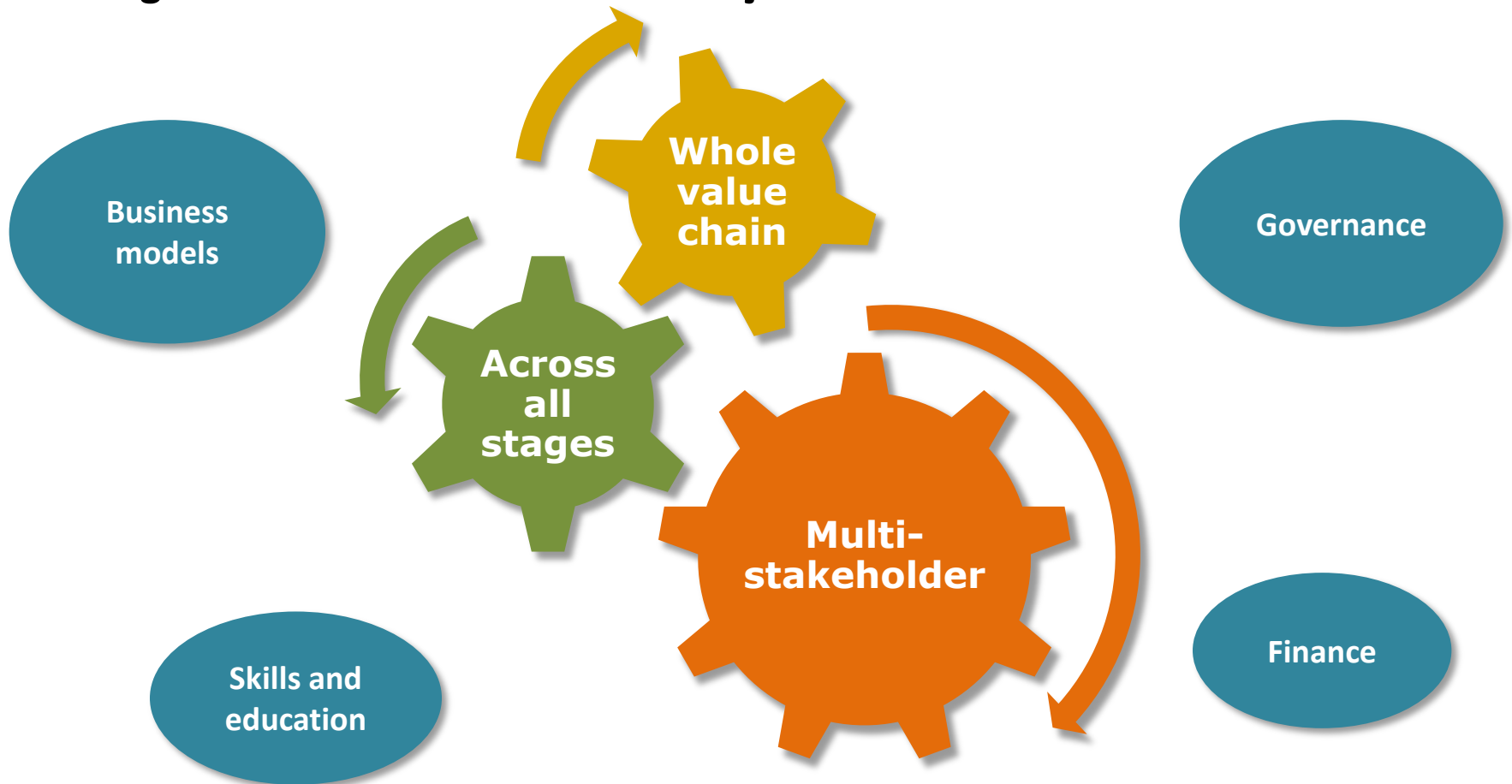
- Pelo menos 12 M€ por projeto
- *Innovation Action (IA)*

Cross-Cutting Call

Industry 2020 in the Circular Economy

...uma nova abordagemEco-inovação sistémica
Abrangendo todas as formas de inovação

7 março
2017
70 M€



Cross-Cutting Call

Industry 2020 in the Circular Economy

CIRC-01-2017 Systemic, eco-innovative approaches for circular economy: large scale demonstration projects - Systemic services for the circular economy

- 4-7 M€ por projeto
- *Innovation Action (IA)*

CIRC-02-2017 Water in the context of the circular economy: Towards the next generation of water systems and services – large-scale demonstration projects

- 10 M€ por projeto
- *Innovation Action (IA)*



Call Greening the Economy

7 março
2017
43 M€

CLIMATE SERVICES & towards a low-carbon Europe

Serviços Climáticos → transformação de dados relacionados com o clima - juntamente com outras informações relevantes - em produtos personalizados, tais como projeções, previsões, informações, tendências, análise económica, avaliações (incluindo a avaliação das tecnologias), aconselhamento sobre as melhores práticas, desenvolvimento e avaliação de soluções e qualquer outro serviço relativo ao clima que possa seja útil para a sociedade em geral



Call Greening the Economy

SC5-1b-2017 Exploiting the added value of climate services - From climate service concepts to piloting and proof-of-concept

- 5 M€ por projeto
- *Research and Innovation Action (RIA)*

SC5-2-2017 Integrated European regional modelling and climate prediction system

- 13 M€ por projeto
- *Research and Innovation Action (RIA)*

SC5-6c-2017 Pathways towards the decarbonisation and resilience of the European economy in the timeframe 2030-2050 and beyond - The risks and costs of climate change for Europe

- 4-5 M€ por projeto
- *Research and Innovation Action (RIA)*

SC5-7-2017 Coordinating & supporting R&I actions on decarbonisation of EU economy

- 2,5-3 M€ por projeto
- *Coordinating and Supporting Action (CSA)*



Call Greening the Economy

Observação da Terra



- ✓ *maximising the benefits for European citizens of the Earth observation infrastructure*
- ✓ *developing innovative services to support more sustainable production and consumption patterns and resilient societies*
- ✓ *completing the in-situ component of GEOSS and Copernicus*
- ✓ *enabling the sharing and full, open and unrestricted access to validated Earth observation datasets*
- ✓ *engaging with the private sector to leverage emerging technologies and develop services*

Programa de Trabalhos Desafio Societal Ação Climática 2017

7 março
2017
15 M€

Earth Observation

- Maximizar as infraestruturas de observação da Terra desenvolvendo **serviços inovadores** para o suporte a sociedades mais resilientes
- Desenvolver **soluções inovadoras para completar a componente *in situ* do GEOSS** (*Global Earth Observation System of Systems*) e do Copernicus e **tornar disponível um sistema (aberto, completo e sem restrições a dados validados)** de informação operacional

SC5-18-2017 Novel in-situ observation systems

- 4-5 M€ por projeto
- *Research and Innovation Action (RIA)*

SC5-19-2017 Coordination of citizens' observatories initiatives

- 1 M€ por projeto
- *Coordination and Supporting Action (CSA)*



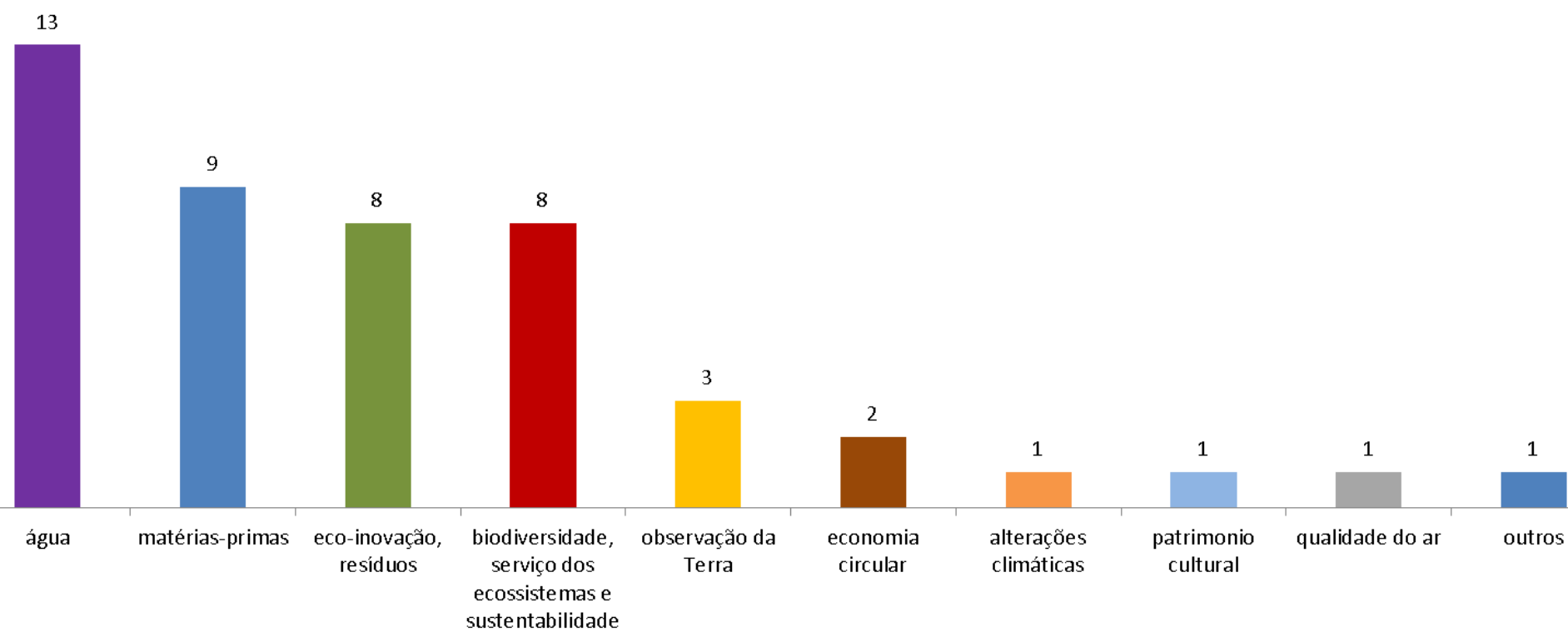
Participação Nacional – DS Ação Climática

- Propostas: 173
- Projetos aprovados: 47
- **Projetos coordenados: 3**
 - BINGO → LNEC
 - NextGEOSS → DEIMOS
 - ERA-MIN2 → FCT
- Financiamento: **21,9 M€ (2,9%)**
- **Taxa sucesso PT: 27,2% (UE – 20,4%)**



Participação nacional no concurso 2014 -2015 e 2016 (single-stage)

Desafio Societal Ação Climática



Projetos financiados ao nível NACIONAL no concurso 2014 e 2015 do Desafio Societal Ação Climática



Gabinete de Promoção do Programa Quadro de I&DT
Fundação para a Ciência e Tecnologia | Agência Nacional de Inovação

HORIZONTE 2020

Desafio Societal 5 - Ação Climática, Ambiente, Eficiência de Recursos e Matérias-Primas



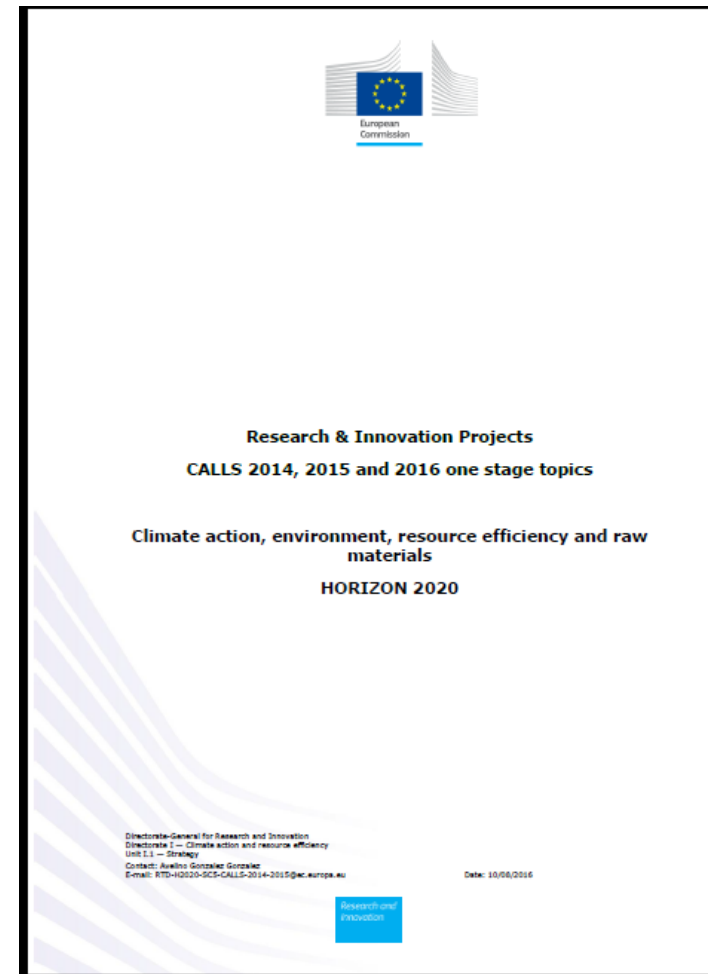
PROJETOS APROVADOS com PARTICIPAÇÃO NACIONAL
(2014-2015)

http://www.gppq.pt/h2020/docs/brochuras/env/projetos_pt_h2020_ambiente_2014-2015.pdf



Projetos financiados ao nível EUROPEU no concurso 2014, 2015 e 2016 (*one-stage*) do Desafio Societal Ação Climática

- sumário do projeto
- consórcio



http://www.gppq.pt/h2020/docs/brochuras/env/research_and_innovation_sc5_projects_2014-2016.pdf



HORIZON 2020 INFORMATION DAY

Climate Action, Environment,
Resource Efficiency & Raw Materials

14 September 2016



<https://ec.europa.eu/easme/en/horizon-2020-information-day-climate-action-environment-resource-efficiency-raw-materials>

Infoday & Brokerage Event

14 set 2016, Bruxelas

Siga o evento através de webstream!!!

European Commission

HORIZON 2020 Information Day & Brokerage event

Societal Challenge 5

"Climate Action, Environment, Resource Efficiency & Raw Materials"

- 2017 Calls for Proposals -

Wednesday, 14 September 2016
European Commission – Charlemagne building, Brussels

DRAFT AGENDA

PLENARY SESSION – De Gasperi room
Chair: Arnoldas MILUKAS, European Commission, Executive Agency for SMEs (EASME)

9:00 - 9:10 **Welcome**
Didier GAMBIER, European Commission, Executive Agency for SMEs (EASME)
Jack METTHEY, European Commission, Directorate-General for Research & Innovation (DG RTD)

9:10 - 9:35 **Policy framework of Societal Challenge "Climate Action, Environment, Resource Efficiency & Raw Materials"**
Renzo TOMELLINI, European Commission, Directorate-General for Research & Innovation (DG RTD)

Chair: Marcin SADOWSKI, European Commission, Executive Agency for SMEs (EASME)

9:35 - 10:10 **Cross-cutting issues & best practices in writing proposals**
Jonas HEDBERG, European Commission, Executive Agency for SMEs (EASME)

10:10 - 10:20 **Open data**
Daniel SPICHTINGER, European Commission, Directorate-General for Research & Innovation (DG RTD)

10:20 - 10:30 Questions & Answers

COFFEE BREAK

PARALLEL SESSIONS: Policy introductions & presentation of topics

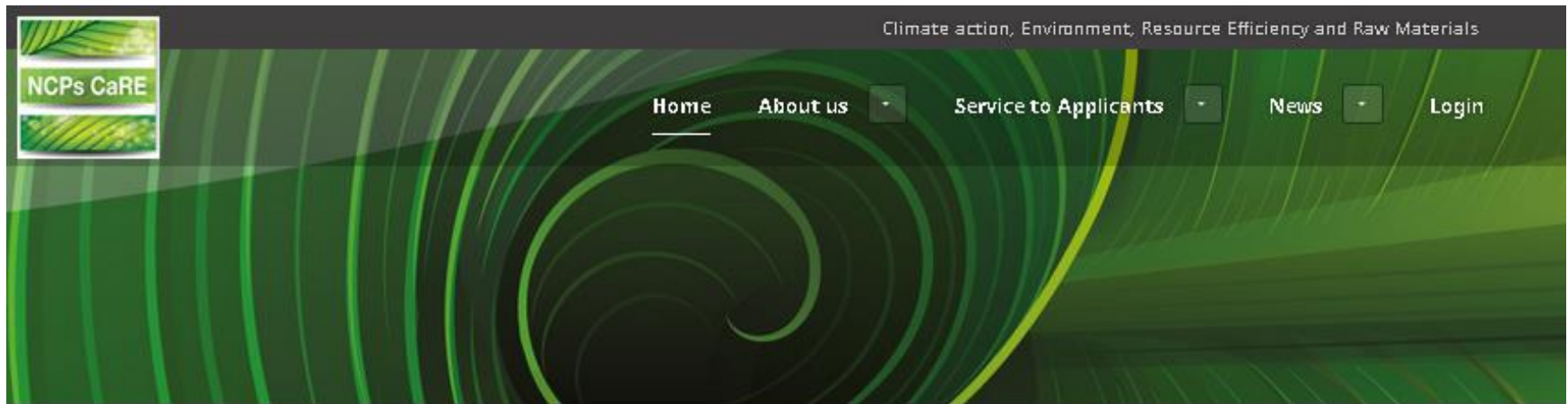
11:00 - 13:00	De Gasperi room	Jenkins room	Marshall room
	Circular economy	Climate services & decarbonisation,	Raw Materials
	CIRC-1b-2017	The Arctic dimension & Earth	SC5-13c-2017
	CIRC-2b-2017	observation	SC5-14b-2017
	From 11-45	SC5-1b-2017	SC5-14c-2017
	Nature-based solutions &	SC5-2-2017	SC5-15b-2017
	Cultural heritage for sustainable	SC5-4-2017	SC5-15c-2017
	growth	SC5-6c-2017	SC5-15d-2017
	SCC-2b-2017	SC5-10-2017	SC5-15e-2017
	SC5-8-2017	SC5-19-2017	SC5-15f-2017
	SC5-21b-2017	SFS-43-2017	SC5-16c-2017
	SC5-22-2017	BB-11-2017	
	SC5-25-2017	SC5-07-2017	
	SC5-25-2017		
	SC5-26-2017		

LUNCH BREAK

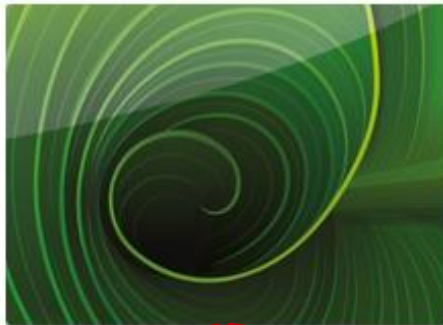
14:30 - 17:00 **BROKERAGE SESSION & NETWORKING**
Organised by NCPs CoRE, the network of National Contact Points for Horizon 2020 Societal Challenge 5



Apoio à participação no DS Ação Climática: rede de NCPs ao nível Europeu NCPsCaRE



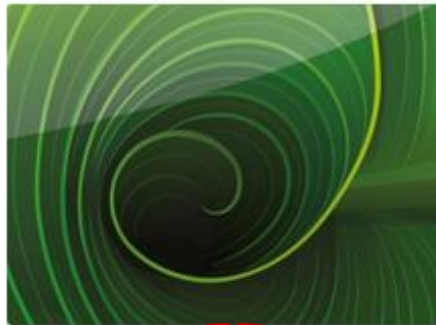
<http://www.ncps-care.eu/>



Forum

Meet people like you, share ideas & get feedback. Join our community and share your experiences!

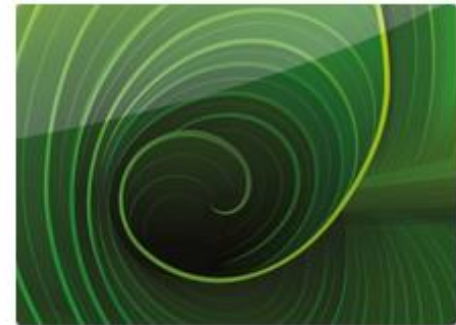
[Read more](#)



Partner search tool

Are you looking for a suitable project partner in Horizon 2020? Then the partner search tool helps you...

[Read more](#)



Useful guides

Find the guides developed by the NCPs Network, and simplify your Horizon 2020 experience

[Read more](#)

Programa de Trabalhos 2018-2020: *First Orientations*

Climate Action, Environment, Resource Efficiency and Raw Materials - Work Programme 2018-2020 preparation

- ***Climate action***
- ***Circular economy***
- ***Water***
- ***Innovating cities***
- ***Raw materials***
- ***Earth observation***
- ***Heritage alive***
- ***Nature-based solutions, disaster risk reduction and natural capital accounting***

Climate Action, Environment, Resource Efficiency and Raw Materials - Work Programme 2018-2020 preparation

Article [Newsroom](#)

How the work programme 2018-2020 for Societal Challenge 5 "Climate Action, Environment, Resource Efficiency and Raw Materials" is being shaped.

The multiannual work programme will take into account the political priorities of the European Union and foresight exercises.

Consultation of stakeholders is an integral part of the programming process. Therefore, a [targeted consultation of stakeholders](#) was held until 8 April 2016. As background material the following documents were provided:

- [Council Decision of 3 December 2013 establishing the specific programme implementing Horizon 2020](#)
- The report on strategic foresight and its three annexes: [report](#), [annex I-III](#)

The consultation received 200 responses from European and international stakeholders, such as European Technology Platforms (ETPs), Joint Programming Initiatives (JPIs), academic institutions and associations, industry representatives and associations. One third of the proposals were made on a personal basis.

Respondents generally supported the evolution of the previous two SC5 Work Programmes, in line with the spirit of Horizon 2020. Further details on the results of the consultation can be found in the [short analysis](#) of the contributions.

Furthermore, the challenge will consider in particular the following inputs:

- Advisory Group: Report on "[Solutions-oriented research and innovation agenda for Horizon 2020](#)" (April 2014) and input on the [strategic orientations for 2018-2020](#) (June 2016)
- Advice from group of experts, on issues including:
 - [Nature-based solutions and re-naturing cities](#)
 - [Systemic approach to eco-innovation to achieve a low-carbon, circular economy](#)
 - [Cultural heritage](#)
 - [Follow-up to Rio+20](#), notably the SDGs
 - [Climate services](#)
 - [Green economy](#)
- E-consultation of stakeholders on [Nature based solutions](#)
- European Innovation Partnership on Raw Materials: Strategic Implementation Plan, [Part I](#) and [Part II](#), [New call for commitments](#) open until 1 March 2016.
- European Innovation Partnership on Water: [Strategic Implementation Plan](#)
- Joint Programming Initiative 'Water challenges for a changing world': [Strategic Research and Innovation Agenda](#)



Gabinete de Promoção do Programa-Quadro (GPPQ)

Explore o calendário de eventos de disseminação e workshops para preparação de propostas do Horizonte 2020 que está disponível no site do GPPQ

www.gppq.pt/h2020



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