

**INFODAY RETO SOCIAL 5
ZARAGOZA, 29 DE OCTUBRE 2015**

**ACCIÓN POR EL CLIMA,
MEDIO AMBIENTE,
EFICIENCIA DE RECURSOS Y
MATERIAS PRIMAS** } **RETO SOCIAL 5,
H2020**

**PROGRAMA DE TRABAJO 2016-
2017**

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Reto Social 5 - H2020
CDTI

HORIZONTE 2020

H2020-Reto Social 5

- **Objetivos**
- **Programa de Trabajo 2016-2017**
 - **Bloques y “topics”**
- **Algunos “detalles” del Programa de Trabajo**
- **De las propuestas**

Apoyo a la participación

CDTI es....

Centro para el Desarrollo Tecnológico Industrial (www.cdti.es)

- Creado en 1977
- Entidad pública empresarial
- Ministerio de Economía y Competitividad (a través de la SEIDI)
- Principales líneas de actuación:

Evaluar + financiar proyectos de I+D desarrollados por empresas españolas

Servicios de soporte para desarrollar proyectos de I+D+I / explotación comercial de productos tecnológicos fuera de España

Promover transferencia de tecnología y cooperación público-privada en I+d+i

Soporte a la generación + desarrollo de nuevas empresas de base tecnológica

Representar, gestionar y promover la participación de entidades españolas en programas de cooperación tecnológica internacional (en particular H2020)

Gestionar y apoyar la obtención de contratos industriales de alto contenido tecnológico por parte de empresas españolas

HORIZONTE 2020

H2020-Reto Social 5

- **Objetivos**
- **Programa de Trabajo 2016-2017**
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Apoyo a la participación

Estrategia Europa 2020

Transformar la UE en una **economía inteligente, sostenible e inclusiva**, para alcanzar altos niveles de empleo, productividad y cohesión social.

• **Smart**

2030 Framework for CLIMATE and ENERGY policies →

- Reducing greenhouse gas emissions by 40%
- Increasing the share of renewable energy to at least 27%
- Increasing energy efficiency by 30%

2. R&D.

- 3% of the GDP invested in R&D

3. Climate change and energy sustainability.-

- greenhouse gas emissions 20% (or even 30%, if the conditions are right) lower than 1990
- 20% of energy from renewables
- 20% increase in energy efficiency

4. Education

- Reducing the rates of early school leaving below 10%
- at least 40% of 30-34-year-olds completing third level education

5. Fighting poverty and social exclusion

- at least 20 million fewer people in or at risk of poverty and social exclusion



¿Qué es Horizonte 2020?

El Programa Marco para la Investigación y la Innovación (2014-2020)



HORIZON 2020



<http://ec.europa.eu/programmes/horizon2020/en>



Key priorities for 2016-2017

- A new **Boost for Jobs, Growth and Investment**
- A **Connected Digital Single Market**
- A **Resilient Energy Union** with a **Forward-Looking Climate Change Policy**
- A Deeper and Fairer Internal Market with a **Strengthened Industrial Base**
- A **Stronger Global Actor**, Towards a New Policy on Migration, and An Area of Justice and Fundamental Rights Based on Mutual Trust

Presupuesto H2020



HORIZONTE 2020

Coord. MINECO*

74.828

I. Prioridad «Ciencia excelente»

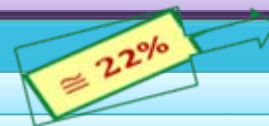
| | |
|---|--------|
| 1. El Consejo Europeo de Investigación (CEI) | 24.232 |
| 2. Las Tecnologías Futuras y Emergentes (FET) | 13.095 |
| 3. Las acciones Marie Skłodowska-Curie | 2.585 |
| 4. Las infraestructuras de investigación | 6.162 |
| | 2.390 |



II. Prioridad «Liderazgo industrial»

Coord.CDTI

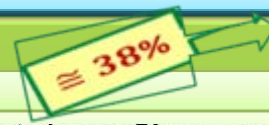
| | |
|--|--------|
| 1. Liderazgo en tecnologías industriales y de capacitación: | 16.466 |
| 1.1 Tecnologías de la información y la comunicación (TIC) | 13.035 |
| 1.2 Nanotecnologías, 1.3 Materiales avanzados y 1.5 Fabricación y transformación avanzadas | 7.423 |
| 1.4 Biotecnología | 3.741 |
| 1.6 Espacio | 501 |
| 2. Acceso a la financiación de riesgo | 1.403 |
| 3. Innovación en las PYME | 2.842 |
| | 589 |



III. Prioridad «Retos de la sociedad»

Coord.CDTI

| | |
|--|--------|
| 1. Salud, cambio demográfico y bienestar | 28.630 |
| 2. Seguridad alimentaria, agricultura y silvicultura sostenibles, investigación marina, marítima y de aguas interiores y Bioeconomía | 7.257 |
| 3. Energía segura, limpia y eficiente | 3.708 |
| 4. Transporte inteligente, ecológico e integrado | 5.688 |
| 5. Acción por el clima, medio ambiente, eficiencia de los recursos y materias primas | 6.149 |
| 6. Europa en un mundo cambiante – Sociedades inclusivas, innovadoras y reflexivas | 2.956 |
| 7. Sociedades seguras – Proteger la libertad y la seguridad de Europa y de sus ciudadanos | 1.258 |
| | 1.613 |



IV. Difundir la excelencia y ampliar la participación

816

V. Ciencia con y para la sociedad

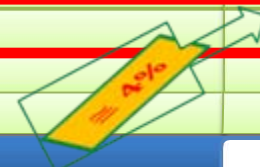
445

VI. Acciones directas no nucleares del Centro Común de Investigación (JRC)

1.856

VII. Instituto Europeo de Innovación y Tecnología (EIT)

2.383



*

Horizon 2020 – «Cross-cutting issues»

- International Cooperation
- Social and economic science and humanities
- Climate change and sustainable development

- At least, **60% of overall Horizon 2020 budget** should be related to **sustainable development**
- **35% to climate-related expenditure**

- SME involvement in research and innovation and the

20% Industrial Leadership and Societal Challenges budget should go to **SMEs** (including the SME instrument).

Instrumentos ("Types of Action")*

Research & Innovation Actions 100%

Innovation Actions 70%**

* **Except for "non-profit" organizations → 100%

Coordination & Support Actions 100%

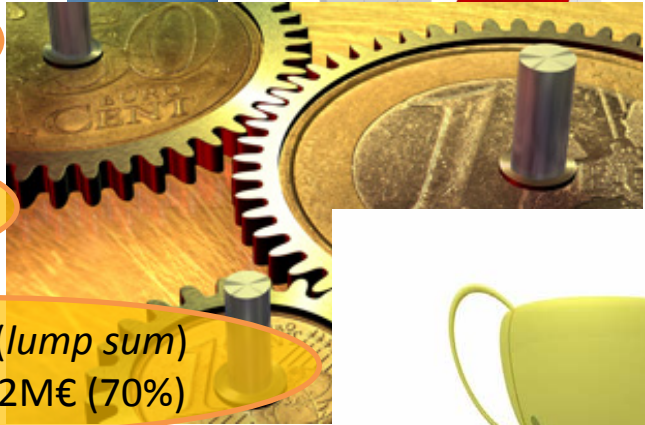
ERA-Net CoFund 33%

PCP & PPI 90-35%

SME Instrument
Fase I: 50 k€ (lump sum)
Fase II: 0,5 – 2M€ (70%)

Fast Track to Innovation (2015)
Max.: 3M€ (70%)

Prizes 0,5M€



HORIZONTE 2020

H2020-Reto Social 5

•Objetivos

•Programa de Trabajo 2016-2017

- Bloques y “topics”

•Algunos “detalles” del Programa de Trabajo

•De las propuestas

Apoyo a la participación

H2020 - Reto Social 5

Acción por el clima, medio ambiente, eficiencia de los recursos y materias primas

2.956 M€

4,00% de H2020

OBJETIVOS →

- lograr una economía más eficaz y eficiente en el uso de los recursos (incluyendo el agua);
- el aumento de la resiliencia ante los efectos del cambio climático;
- el abastecimiento sostenible de materias primas, para afrontar las necesidades de una población global creciente de forma compatible con la sostenibilidad de los recursos naturales del planeta.



“We need to decouple economic growth from resource use. Part of answer: helping build a green economy, a circular economy in sync with the natural environment”.



H2020 – Reto Social 5 → Líneas de Actividad*

5.1 Lucha contra el cambio climático y adaptación al mismo



5.2 Protección del medio ambiente, y gestión sostenible de los recursos naturales, del agua, de la biodiversidad y de los ecosistemas



5.3 Garantía de un abastecimiento sostenible de materias primas no agrícolas y no energéticas



5.4 Posibilitar la transición hacia una economía y una sociedad verdes a través de la ecoinnovación



5.5 Desarrollo de sistemas completos y duraderos de observación e información sobre el medio ambiente mundial



5.6 Patrimonio cultural



* Ver Anexos

erial

HORIZONTE 2020

H2020-Reto Social 5

- **Objetivos**
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Apoyo a la participación

Reto Social 5 – Programas de Trabajo

Programa 2014-2015, continuista respecto a FP7

- Prioridades (“focus areas”): Residuos y Agua

***Call – Water Innovation:
Boosting its value for Europe***

***Call – Waste: A Resource to Recycle,
Reuse and Recover Raw Materials***

***Call - Growing a Low Carbon, Resource Efficient
Economy with a Sustainable Supply of Raw Materials.***

- *Fighting And Adapting To Climate Change*
- *Protecting The Environment, Sustainably Managing Natural Resources, Water, Biodiversity And Ecosystems*
- *Ensuring The Sustainable Supply Of Non-energy And Non-agricultural Raw Materials*
- *Enabling The Transition Towards A Green Economy And Society Through Eco-innovation*
- *Developing Comprehensive And Sustained Global Environmental Observation And Information Systems*

Contribución a otras *Focus Areas*:

Blue Growth, Energy Efficiency, Disaster Resilience.

Reto Social 5 – H2020:

Resultados Preliminares 2014-

2015

| "Calls" | 2014 | | | | 2015 |
|---------|--|---------------|--------------------------|-------------|-------------|
| | Participación en actividades aprobadas | Coordinadores | Subvención obtenida (M€) | Retorno (%) | Retorno (%) |
| WASTE | 8 (67%) | 4 | 9,43 | 14,0 | 11,0 |
| WATER | 14 (70%) | 8 | 12 | 19,9 | 10,9 |
| SC5 | 19 (73%) | 3 | 11 | 7,45 | |
| Total | 41 (71%) | 15 | 32 | 11,8 | |

Faltan resultados "calls" two-stages

| 2014 | |
|-------------------------|-------------|
| Tipología de entidad | Retorno (%) |
| Empresa | 30,23 |
| Centro de investigación | 22,20 |
| Centro Tecnológico | 16,20 |
| Universidad | 14,04 |
| Ad. publica | 9,69 |

Reto Social 5 – Programa de Trabajo

Programa 2014-2015, continuista respecto a FP7

- Prioridades (“focus areas”): Residuos y Agua

Programa 2016-2017,..... cambio de filosofía

- Transición a una **economía circular/sostenible** requiere **“innovación sistémica”**: multi- y trans-disciplinaridad, integración de tecnología-modelos de negocio-legislación-innovación social, multiplicidad de actores.

- Se buscan **soluciones para el futuro**, capaces de atraer inversiones públicas yprivadas.

- **Demostraciones a gran escala** que tengan potencial para ser **replicadas** (50% del presupuesto, IAs).

- Otros “topics”, de investigación y acciones de coordinación, complementan a las Acciones de Innovación.



Reto Social 5 – WP 2016-2017.- Prioridades

Climate Action:

- Climate Services
- Low-Carbon Europe
- Artic Dimension

Nature-based solutions:

- For Territorial Resilience
- For Sustainable Cities

Systemic Eco-Innovation for a Circular Economy

Raw Materials

“Mainstreaming” Water R&I

Sustainable Growth:

- Observación de la Tierra
- Patrimonio Cultural

H2020 – Reto Social 5

Programa de Trabajo → Fuentes + Inputs



29/10/2015

Reto Social 5 – Programa de Trabajo 2016-2017

DOCUMENTOS Relevantes

1. [From Niche to Norm \(Circular Economy\)](#)
2. [A European Research and Innovation Roadmap for Climate Services](#)
3. [Towards an EU research and innovation policy agenda for nature-based solutions & re-naturing cities](#)
4. [Getting cultural heritage to work for Europe](#)
5. [Strategic Implementation Plan \(SIP\) – EIP Raw Materials](#)

Reto Social 5 – Programa de Trabajo 2016-2017

DOCUMENTOS Relevantes



From Niche to Norm

Suggestions by the Group
Approach to Eco-
a low-carbon,



Towards an EU Research and Innovation policy agenda for Nature-Based Solutions & Re-Naturing Cities

Final Report of the Horizon 2020
Expert Group on 'Nature-Based Solutions
and Re-Naturing Cities'
(full version)



A European research
and innovation

Roadmap for Climate Services

for

Research and
Innovation

Getting cultural heritage to work for Europe

Report of the Horizon 2020 Expert Group on
Cultural Heritage



Reto Social 5 – Programa de Trabajo 2016-2017

Líneas de Actividad

- 5.1 Lucha contra el cambio climático y adaptación al mismo
- 5.2 Gestión sostenible de los recursos naturales y los ecosistemas
- 5.3 Garantía de un abastecimiento sostenible de materias primas no agrícolas y no energéticas
- 5.4 Ecoinnovación como camino hacia una economía «verde»
- 5.5 Desarrollo de sistemas completos y duraderos de observación e información sobre el medio ambiente mundial
- 5.6 Patrimonio cultural



Call
**INDUSTRY 2020 IN
THE CIRCULAR
ECONOMY**



Call
**SMART AND
SUSTAINABLE CITIES**



Call
GREENING THE ECONOMY



Contribuciones a otros Retos Sociales

Portal del participante

<http://ec.europa.eu/research/participants/portal/desktop/en/home.html>

The screenshot shows the 'Participant Portal' for 'RESEARCH & INNOVATION'. The header includes the European Commission logo and navigation tabs: HOME, FUNDING OPPORTUNITIES, HOW TO PARTICIPATE, EXPERTS, and SUPPORT. A red arrow points from the SUPPORT tab to a red-bordered box on the right containing a list of services: Horizon 2020 Helpdesk, Enterprise Europe Network, National Contact Points, Glossary, FAQ, IT Helpdesk, Other Help Services, and Terms and Conditions. A green-bordered box highlights a central menu with options: H2020 Online Manual, Reference Documents, Beneficiary Register, Financial Viability Self-Check, and SME Participation. A blue-bordered box on the left highlights the 'EU Programmes 2014-2020' section, which includes a search bar, updates, and calls. At the bottom, there are six icons representing different portal sections: WHAT'S NEW?, FUNDING OPPORTUNITIES, HOW TO PARTICIPATE, WORK AS AN EXPERT, MY PERSONAL AREA, and INFORMATION AND SUPPORT.

29/10/2015



European Commission

European Commission > Res

HOME FUND

- H2020 Online Manual
- Reference Documents
- Beneficiary Register
- Financial Viability Self-C
- SME Participation



Work Programmes

2014-15

2016-17

Main WP

1. Introduction 2016-17 >
2. Future and Emerging Technologies (FETs) 2016-17 >
3. Marie Skłodowska-Curie actions (MSCA) 2016-17 >
4. Research infrastructures (including e-Infrastructures) 2016-17 >
5. Introduction to Leadership in enabling and industrial technologies (LEITs) 2016-17 >
- 5i. Information and communication technologies (ICT) 2016-17 >
- 5ii. Nanotechnologies, advanced materials, advanced manufacturing and processing, biotechnology 2016-17 >
- 5iii. Space 2016-17 >
6. Access to risk finance 2016-17 >
7. Innovation in SMEs 2016-17 >
8. Health, demographic change and wellbeing 2016-17 >
9. Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the bioeconomy 2016-17 >
10. Secure, clean and efficient energy 2016-17 >
11. Smart, green and integrated transport 2016-17 >
12. Climate action, environment, resource efficiency and raw materials 2016-17 >
13. Europe in a changing world - inclusive, innovative and reflective societies 2016-17 >
14. Secure societies - protecting freedom and security of Europe and its citizens 2016-17 >
15. Spreading excellence and widening participation 2016-17 >
16. Science with and for society 2016-17 >
17. Cross-cutting activities (Focus Areas) 2016-17 (NEW) >
18. Fast Track to Innovation Pilot 2016-17 >
19. Dissemination, Exploitation and Evaluation 2016-17 >

General Annexes to the Main WP

Reto Social 5 -Programa de Trabajo 2016-2017

- **Call – Industry 2020 in the Circular Economy**

- *Circular Economy*

- **Call – Smart and Sustainable Cities**

- *Sustainable cities through nature-based solutions*

**17-Cross Cutting
Activities**

- **Call – Greening the Economy**

- *Climate services*

- *Towards a Low-Carbon Europe*

- *Nature-Based Solutions for Territorial Resilience*

- *Water*

- *Raw Materials*

- *Earth Observation*

- *Cultural Heritage for Sustainable Growth*

- *Support to Policy and Preparing for Innovation Procurement*

**12-Societal
Challenge 5**

Contribución a otros Retos Sociales:

Blue Growth (SC2), Sustainable Food Security (SC2), Competitive low-carbon energy (SC3)

Reto Social 5 –Programa de Trabajo 2016-2017

INTRODUCCIÓN de 12. “Climate action, environment, resource efficiency and raw materials”

“In addition to the call [H2020-SC5-2016-2017 'Greening the economy'](#), activities relating to climate action, environment, resource efficiency and raw materials are also found in the calls:

• ***H2020-IND-CE-2016/17 'Industry 2020 in the Circular Economy'*** (on eco-innovation),

• ***H2020-SCC-2016/17 'Smart and Sustainable Cities'*** (on sustainable cities through nature-based solutions),

• ***H2020-BG-2016-2017 'Blue growth – demonstrating an ocean of opportunities'*** (on the Arctic),

• ***H2020-SFS-2016-2017 'Sustainable Food Security – Resilient and resource-efficient value chains'*** (on Earth Observation for Africa),

• ***H2020-LCE-2016-2017 'Competitive low-carbon energy'*** (on applied geosciences)

• ***and in the SME Instrument call [H2020-SMEInst-2016-2017](#).***”

HORIZONTE 2020

H2020-Reto Social 5

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Apoyo a la participación

TÍTULO

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

RETO ESPECÍFICO

Establece el contexto, el problema que se abordará, por qué es necesaria la intervención.

Specific challenge: The majority of the European population lives in urban environments where citizens are frequently exposed to levels of air pollutants exceeding the limit important role. Air pollution and climate change are strongly connected and there is therefore a need to consider both environmental and climate considerations when designing emission abatement strategies. Integrated approaches are needed to find long-term, sustainable solutions in the EU.

ALCANCE

Delimita el problema, especifica los límites del potencial de la acción, pero sin describir enfoques específicos.

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 and climate change governance in EU Member States, with the aim of designing and implementing adequate abatement strategies and practices. The specific circumstances of the different regions and cities of areas. Furthermore, awareness-raising actions and policy support activities should be included. Proposals should include the participation of SMEs, as far as possible.

The Commission considers that proposals requesting a contribution from the EU of between EUR 6 and 8 million would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

IMPACTO ESPERADO

Describe los elementos claves de lo que se espera lograr, de los resultados, en relación con el problema específico.

Expected impact: Reduction of the negative effects on health and climate together with green and low carbon economy. Improved air quality in EU cities in the medium- to long-term.

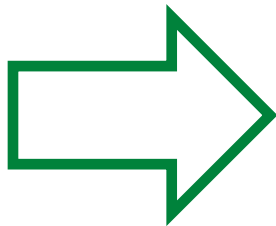
INSTRUMENTO

Type of action: Research and innovation actions

Eco-Innovación para una Economía Circular

- Es una de las **Líneas de Actividad** dentro del Reto Social 5.
- En WP 2014-2015: **“calls” WATER y WASTE** (ecoinnovation, symbiosis industrial..).
- Demostrar que la **economía circular** es:
 - **Medioambientalmente** deseable
 - **Económicamente** viable/posible
 - **Socialmente** aceptada

} **SOSTENIBLE**

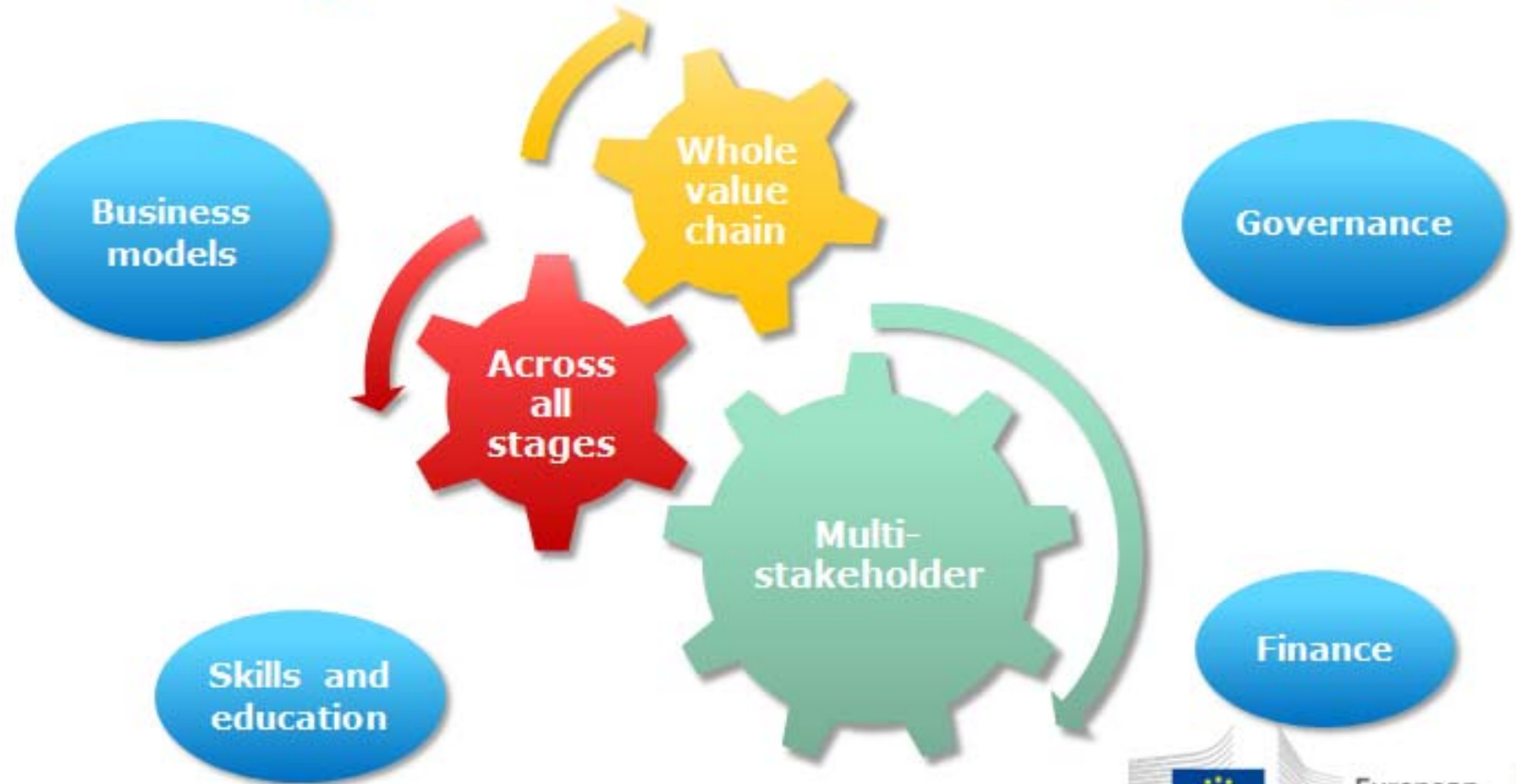


“Systemic Eco-Innovation”



...a new step...

Systemic Eco-Innovation Covering all forms of innovation



HORIZON 2020



Call INDUSTRY 2020 IN THE CIRCULAR ECONOMY: Circular Economy

| TOPIC | TYPE OF ACTION | EVAL. TYPE | EC CONTRIB. Suggested (M€) | PRESUPUESTO (M€) | | COMMENTS |
|---|----------------|------------|----------------------------|------------------|-------|--|
| | | | | 2016 | 2017 | |
| CIRC-1a-2016: Systemic, eco-innovative approaches for the circular economy: large-scale demonstration projects → Design for circular value and supply chains | IA | 2 Stgs | 7-10 | 60,00 | | |
| <i>CIRC-1b-2017: Systemic, eco-innovative approaches for the circular economy: large-scale demonstration projects → Systemic services for the circular economy</i> | IA | 2 Stgs | 4-7 | | 40,00 | |
| CIRC-2a-2016: Water in the context of the circular economy → Demonstrating the potential of efficient nutrient recovery from water | IA | 2 Stgs | 6-8 | 20,00 | | |
| <i>CIRC-2b-2017: Water in the context of the circular economy → Towards the next generation of water systems and services– large scale demonstration projects</i> | IA | 2 Stgs | 10 | | 30,00 | |
| CIRC-3-2016: Smart Specialisation for systemic eco-innovation/circular economy | CSA | 1 Stg | 1-1,5 | 1,50 | | Up to 1. Participants: regional/national/local authorities- RIS3 |
| CIRC-4-2016: New models and economic incentives for circular economy business | RIA | 1 Stg | 3 | 3,00 | | Up to 1 |
| CIRC-5-2016: Unlocking the potential of urban organic waste | RIA | 1 Stg | 3 | 3,00 | | Budget from SC2 |

“Nature-based solutions”



- ✓ Inspiradas o basadas en la naturaleza
- ✓ Beneficios económicos, sociales y medioambientales
- ✓ Intervenciones sistémicas, eficientes en el uso de los recursos y adaptadas localmente
- ✓ Más naturaleza en las ciudades y paisajes

➤ **OBJETIVO: Hacer que Europa sea líder mundial en la innovación en soluciones basadas en la naturaleza**



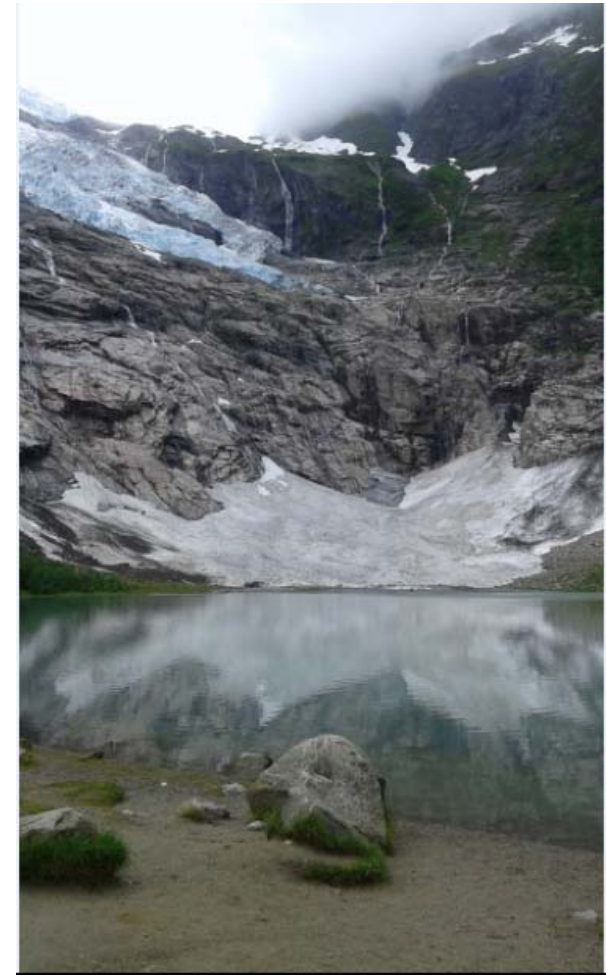
Nature-Based solutions

Dónde encontramos los topics?

- “Sustainable cities through nature-based solutions”
 - ✓ En la convocatoria “cross-cutting”: **'SMART AND SUSTAINABLE CITIES'**
 - ✓ Presupuesto indicativo 2016: €60M
- “Nature-based solutions for territorial resilience”
 - ✓ En la convocatoria **'GREENING THE ECONOMY'**
 - ✓ Presupuesto indicativo 2016: €8M

Servicios Climáticos

- Conocimiento y datos existentes → **“climate services user-driven”**.
- Reforzar el **mercado** de los servicios climáticos.
- Contribuir a la implementación del **“European Research and Innovation Roadmap of Climate Services”**.
- Promover **Copernicus Climate Change Services (C3S)** y contribuir con datos.



Call GREENING THE ECONOMY: Climate Services

| TOPIC | TYPE OF ACTION | EVAL. TYPE | EC CONTRIB. Suggested (M€) | PRESUPUESTO (M€) | | COMMENTS |
|---|----------------|------------|----------------------------|------------------|------|--------------|
| | | | | 2016 | 2017 | |
| SC5-1-2016: Exploiting the added value of climate services → Demonstration of climate services | IA | 2 Stgs | 0,8-5 | 20,00 | | |
| <i>SC5-1-2017: Exploiting the added value of climate services → From climate service concepts to piloting and proof-of-concept</i> | RIA | 1 Stg | 5 | | (*) | |
| <i>SC5-2-2017: Integrated European regional modelling and climate prediction system</i> | RIA | 1 Stg | 13 | | (*) | Up to 1 |
| SC5-3a-2016: Climate services market research → a) Defining the European and international climate service market characteristics and foresight into market growth | RIA | 1 Stg | 1,5 | (*) | | Max. 2 years |
| SC5-3b-2016: Climate services market research → b) Climate services market barriers and enabling conditions | RIA | 1 Stg | 1,5 | | | |
| <i>SC5-4-2017: Towards a robust and comprehensive greenhouse gas verification system</i> | RIA | 1 Stg | 10 | | (*) | |
| SC5-5-2016: A 1.5 million year look into the past for improving climate predictions | CSA | 1 Stg | 2 | (*) | | Up to 1 |

(*) part of a larger budget envelope; the budget for each action is not specified. More details in the Conditions of the Call

Towards a low-carbon Europe



- ✓ Analizar las posibles trayectorias para que Europa pueda alcanzar sus objetivos climáticos a medio y largo plazo, de manera eficaz
- ✓ Maximizando los beneficios sociales y económicos

→ ¿Cómo combinar decarbonización manteniendo el crecimiento económico?

HORIZON 2020

-J.Alquézar, DG-RTD-



La dimensión ártica del cambio climático



- ✓ Región del planeta más afectada por el cambio climático...
- ✓ ... cuyos cambios tienen consecuencias globales e impactos socio-económicos en la UE (incluso oportunidades: nuevas rutas marítimas)
- ✓ Debemos aumentar nuestro conocimiento sobre el Ártico y:
 - ✓ Identificar cómo tratar los problemas ligados al cambio climático
 - ✓ Mejorar nuestra capacidad predictiva



• Topics en “Blue Growth” (Reto Social 2)

- Aproximación más “científica/académica”

HORIZON 2020

-J.Alquézar, DG-RTD-



European
Commission

Water en 2016-2017



- **“Water Issues”**, en el Programa de Trabajo del Reto Social 5, pero tambiénintegrados en otros Programas de Trabajo de Liderazgo Industrial y de varios Retos Sociales.
- **Acciones** encaminadas a **incrementar la innovación** en temas de **agua** en Europa y globalmente, se abordan en **distintas áreas**, p.e. **“circular economy, sustainable cities, climate services, territorial resilience etc”**

IMPORTANTE.- Detalles en la Introducción

Reto Social 5.- WP 2016-2017

Call GREENING THE ECONOMY: Water

SC5-11-2016: Supporting international cooperation activities on water (JPI-Water)

SC5-12-2016: Food systems and water resources for the development of inclusive, sustainable and healthy Euro-Mediterranean societies (PRIMA)

Y también....."other topics with a clear relevance to Water Issues"

Call GREENING THE ECONOMY: Climate Services

SC5-01-2016/2017: Exploring the added value of climate services

SC5-02-2017: Integrated European regional modelling and climate prediction system

SC5-03-2016: Climate services market research

Call GREENING THE ECONOMY: Nature-Based Solutions for Territorial Resilience

SC5-8-2017: Large-scale demonstrators on nature-based solutions for hydro-meteorological risk reduction

**12-Societal
Challenge 5**

Call INDUSTRY 2020 IN THE CIRCULAR ECONOMY: Circular Economy

CIRC-2-2016/2017: Water in the context of the circular economy

- a) Demonstrating the potential of efficient nutrient recovery from water
- b) Towards the next generation of water systems and services– large scale demo projects

Call SMART AND SUSTAINABLE CITIES: Sustainable cities through nature-based solutions

SCC-2-2016/2017: Demonstrating innovative nature-based solutions in cities

- a) Demonstrating innovative nature-based solutions for climate and water resilience in...
- b) Nature-based solutions for inclusive urban regeneration

**17-Cross Cutting
Activities**

Yen otros WPs 2016-2017

NMBP→

- SPIRE-01-2016**: Systematic approaches for resource-efficient water management systems in process industries (**Part 17**)

Reto Social 3, Energía→

- LCE-26-2016** Cross-thematic ERA-NET on Applied Geosciences. (**Part 10**)

Reto Social 2, Bioeconomía →

Topics in the calls (**Part 9**):

- **H2020-SFS-2016-2017** 'Sustainable Food Security – Resilient and resource-efficient value chains' and
- **H2020-RUR-2016-2017** 'Rural Renaissance – Fostering innovation and business opportunities' also address issues related to **water management in agriculture and/or food production.**

Call GREENING THE ECONOMY: Water

| TOPIC | TYPE OF ACTION | EVAL. TYPE | EC CONTRIB. Suggested (M€) | PRESUPUESTO (M€) | | COMMENTS |
|---|----------------|------------|----------------------------|------------------|------|----------|
| | | | | 2016 | 2017 | |
| SC5-11-2016: Supporting international cooperation activities on water (JPI on Water) | CSA | 1 Stg | 2 | (*) | | Up to1 |
| SC5-12-2016: Food systems and water resources for the development of inclusive, sustainable and healthy Euro-Mediterranean societies (PRIMA) | CSA | 1 Stg | Up to 2 | 2,00 | | Up to1 |

(*) Part of a larger budget envelope; the budget for each action is not specified. More details in the Condition of the Call

SC5 Call 'Greening the economy'. Published 13 October 2015!

Raw materials

- New solutions for sustainable production of raw materials (2 RIA)
- Raw materials Innovation actions (1 IA)
- Raw materials policy support actions (1 CSA)
- Raw materials international co-operation (2 CSA)
- ERA-NET Cofund on Raw materials (1 ERA-NET)

Budget

- 2016: €64 million

EIP Raw Materials SIP

Deadlines:

- 8 Mar 2016 (RIA, CSA, and First stage of IA)
- 6 Sep 2016 (Second stage of IA)



Call GREENING THE ECONOMY: Raw Materials (I)

| TOPIC | TYPE OF ACTION | EVAL. TYPE | EC CONTRIB. Suggested (M€) | PRESUPUESTO (M€) | | COMMENTS |
|--|----------------|--------------|----------------------------|------------------|--------------|----------|
| | | | | 2016 | 2017 | |
| SC5-13a-2016: New solutions for sustainable production of raw materials → Sustainable selective low impact mining | RIA | 1 Stg | 3-7 | 26,00 | | |
| SC5-13b-2016: New solutions for sustainable production of raw materials → New technologies for the enhanced recovery of by-products | RIA | 1 Stg | 3-7 | | | |
| <i>SC5-13c-2017: New solutions for sustainable production of raw materials → New sensitive exploration techniques</i> | <i>RIA</i> | <i>1 Stg</i> | <i>3-7</i> | | <i>10,00</i> | |
| SC5-14a-2016: Raw materials Innovation actions → Intelligent mining on land | IA | 2 Stgs | 8-13 | 28,00 | | |
| <i>SC5-14b-2017: Raw materials Innovation actions → Processing of lower grade and/or complex primary and/or secondary raw materials in the most sustainable ways</i> | <i>IA</i> | <i>1 Stg</i> | <i>8-13</i> | | <i>56,00</i> | |
| <i>SC5-14c-2017: Raw materials Innovation actions → Sustainable metallurgical processes</i> | <i>IA</i> | <i>1 Stg</i> | <i>8-13</i> | | | |

(*) Part of a larger budget envelope; the budget for each action is not specified. More details in the Condition of the Call

Observación de la Tierra



- ✓ Crear los máximos beneficios a los ciudadanos europeos a través de la infraestructura de Observación de la Tierra
- ✓ Para ello, hay que desarrollar servicios innovadores, por ejemplo relacionados con el cambio climático o con la gestión de riesgos
- ✓ Completar el componente in-situ de GEOSS and Copernicus
- ✓ Permitir el acceso y uso total de los datos de observación de la Tierra
- ✓ Colaboración con el sector privado para el uso de la tecnologías y el desarrollo de servicios

Patrimonio Cultural “for Sustainable Growth”

Objetivos:

- Desarrollar/Buscar **nuevas oportunidades** de innovación e inversión en este campo.
- De la conservación y restauración → **“factor de producción” y un recurso estratégico.**
- **Catalizador** de regeneración, desarrollo sostenible, crecimiento económico y calidad de vida.
- Desarrollar un **marco europeo de referencia y evidencia** de los “todos” los beneficios derivados, **“benefits of cultural heritage lead regeneration”**).



SC5-21-2016/2017, Cultural heritage as a driver for sustainable growth: a) Heritage- led urban regeneration

- Large scale **multi-stakeholder 'living labs' demonstration** projects to develop and demonstrate **novel heritage-led regeneration pathways** and **assess their impact** for sustainable growth, new jobs and wellbeing;
- **'Role models'** and **'Replicators'** approach (six 'Role models' and three 'Replicators' from different Member States);
- **'Role models'**: **showcases** of **successful heritage-led urban regeneration** projects; can, if they so wish, continue their regeneration activities
- **'Replicators'**, under the mentoring of 'Role models' commit to develop and pursue **within the duration of the project** and as **'living labs'**, a heritage-led regeneration project replicating successful 'blueprints' contextualised to their local conditions;
- **International co-operation: 'Role models'** from non-EU countries and regions (e.g. Latin America) are **encouraged** to participate to enhance the evidence base and replicability potential of regeneration paradigms on a global scale;
- **Type of action.- Innovation Action**

SC5-21-2016/2017, Cultural heritage as a driver for sustainable growth: a) Heritage- led urban regeneration

Proposals should provide evidence about:



- **Systemic trans-disciplinary approach with multi-level innovation**, e.g. in the regeneration approach, business, finance and governance models and social innovation
- Long-term **political and financial commitment**;
- **Mobilisation and leveraging of investments** securing adequacy and sustainability of financing
- **Commitment by 'Role models'** in 'mentoring' 'Replicators' (e.g. through staff exchanges) and transferring knowledge to cities beyond the project;
- Robust **monitoring** and documentation: at least 2 years within the project; longer term commitment will count favourably for the proposal;
- A well-defined **“baseline”** at the time of the proposal (or early stage of the project) for proper **assessment of the impact** of the “intervention”;
- Effective **documentation and dissemination** of heritage-led **regeneration “paradigms”** and the social, economic, environmental and cultural **impact** of the intervention;

SC5-21-2016/2017, Cultural heritage as a driver for sustainable growth: a) Heritage- led urban regeneration

Consortio:

Partnerships should involve:

- local and regional authorities,
- planners,
- enterprises,
- academics and
- local communities

The participation of **social sciences and humanities disciplines** such as architecture, archaeological sciences, cultural anthropology, law, economics, governance, planning, cultural and historical studies, **is critical** to properly address the complex challenges of this topic.

HORIZONTE 2020

H2020-Reto Social 5

- **Objetivos**
- **Programa de Trabajo 2016-2017**
 - **Bloques y “topics”**
- **Algunos “detalles” del Programa de Trabajo**
- **De las propuestas**

Apoyo a la participación

Reto Social 5 – WP 2016-2017...algunos DETALLES

Important notice on the second Horizon 2020 Work Programme

This Work Programme covers 2016 and 2017. The parts of the Work Programme that relate to 2017 are provided at this stage on an indicative basis. Such Work Programme parts will be decided during 2016.



IMPORTANTE.-

Información **relevante**, además del “topic”, en:

- **Introducción** del Programa de Trabajo
- **Introducción** de las “calls” y de los bloques (“sub-calls”)
- **“Call-conditions”** al final de cada convocatoria

Reto Social 5 – WP 2016-2017...algunos DETALLES

IMPORTANTE.....

Mirar para encontrar **más/otras oportunidades:**

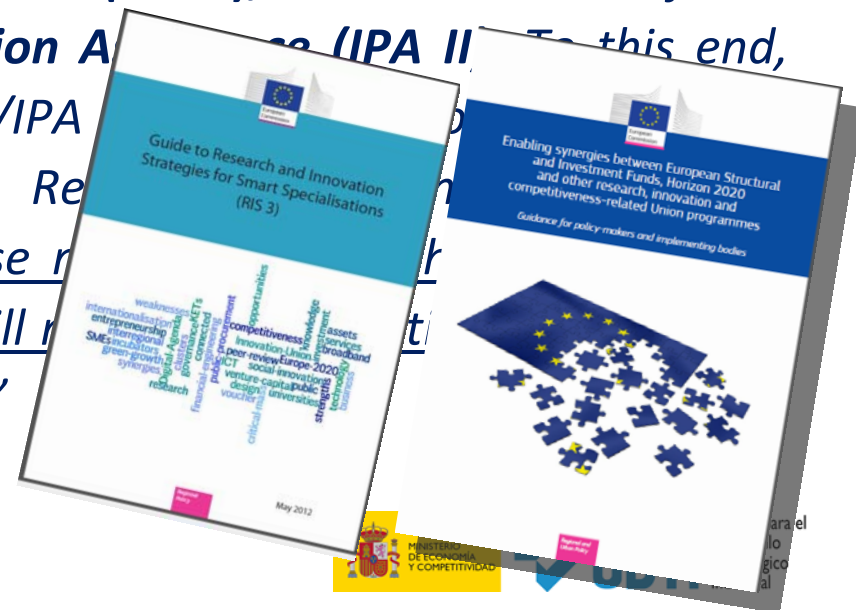
- **Blow Growth (SC2)**
- **Sustainable Food Security (SC2),**
- **Competitive Low-carbon Energy (SC3)**
- **Understanding Europe - Promoting the European Public and Cultural Space (SC6)**
- **Fast Track to Innovation**
- **.....otras**

Reto Social 5 – WP 2016-2017...algunos DETALLES

En los “demonstration projects” (Innovation Actions)

Sinergias con otros fondos

“Because of the substantial investments that might be necessary for implementing, additional or follow-up funding (private or public) should be sought, including from relevant regional/national schemes under the European Structural and Investment Funds (ESIF), in particular under the European Regional Development Fund (ERDF), or other relevant funds such as the Instrument for Pre-accession Assistance (IPA II). To this end, projects could seek contact with ERDF/IPA authorities, as well as the authorities who developed the Regional Specialisation Strategies (RIS3)*. Please note that the score in the evaluation of the proposal.”



Reto Social 5 – WP 2016-2017...algunos DETALLES

Introducción “calls” Reto Social 5_WP 2016-2017

“Pilot on Open Research Data” en H2020 →

*“A **novelty in Horizon 2020** is the Pilot on Open Research Data which aims to improve and maximise access to and re-use of research data generated by projects. Projects under the Societal Challenge 5 ...Work Programme 2016-17 will **by default participate in the Pilot on Open Research Data in Horizon 2020**, except for topicsProjects funded under the other calls of this Work Programme may participate in the Open Research Data Pilot in Horizon 2020 on a voluntary basis.*

*Projects have the possibility to **opt out** of the Pilot. Participation in the Pilot is not taken into account during the evaluation procedure.....*

*A **further new element in Horizon 2020** is the **use of Data Management Plans (DMPs)** detailing what data the project will generate, whether and how it will be exploited or made accessible for verification and re-use, and how it will be curated and preserved. **The use of a DMP is required for projects participating in the Open Research Data Pilot.** Other projects are invited.....*

*Beneficiaries in projects participating in the Pilot on Open Research Data are invited to follow the **GEOSS Data Sharing Principles** and to register in GEOSS the geospatial data, metadata and information generated as foreground of the project. ...”*

Open Access en H2020 – Definición

Qué se entiende por OA?

Providing on-line access free of charge to the end-user,

- to peer-reviewed scientific publications

Es obligatorio para los beneficiarios de H2020 depositar en abierto todas las publicaciones científicas que se elaboren en el marco de la investigación financiada por este programa.

- to research data*

En H2020 la CE ha lanzado un piloto que afecta a 6 áreas de conocimiento para el depósito en abierto de los datos de investigación producidos en el marco de los proyectos.

* 'Research data' refers to information, in particular facts or numbers, collected to be examined and considered and as a basis for reasoning, discussion, or calculation. In a research context, examples of data include statistics, results of experiments, measurements, observations resulting from fieldwork, survey results, interview recordings and images. The focus is on research data that is available in digital form.



Reto Social 5 – WP 2016-2017...algunos DETALLES

| | |
|--|-------------------------------|
| Presupuesto 2016-2017 → 3 CALLs | 287 M€ <i>(293)</i> |
| CALL - Industry 2020 in the Circular Economy - Circular Economy 17-Cross Cutting Activities | 84,5 M€ <i>(70)</i> |
| CALL - Smart and Sustainable Cities - Sustainable cities through next generation solutions 17-Cross Cutting Activities | 60 M€ <i>(40)</i> |
| CALL - Greening the Economy Climate services / Towards a Low-Carbon Europe / Nature-Based Solutions for Territorial Resilience / Water / Raw Materials / Earth Observation / Cultural Heritage for Sustainable Growth / Support to Policy and Preparing for Innovation Procurement 12-Societal Challenge 5 | 143M€ <i>(183)</i> |

Reto Social 5 – WP 2016-2017...algunos DETALLES

Greening the Economy (12-Societal Challenge 5)

Sustainable cities through nature-based solutions (17-Cross Cutting Activities)

Circular Economy (17-Cross Cutting Activities)

| AÑO | | FECHA APERTURA | FECHA CIERRE Single Stage o 1st Step (Two Stages) | FECHA CIERRE 2nd Step (Two Stages) |
|------|--------------|----------------|--|---------------------------------------|
| 2016 | Single Stage | 10/11/2015 | 08/03/2016 | |
| 2016 | Two Stages | 10/11/2015 | 08/03/2016 | 06/09/2016 |
| 2017 | Single Stage | 08/11/2016 | 07/03/2017 | |
| 2017 | Two Stages | 08/11/2016 | 07/03/2017 | 05/07/2017 |

EXCEPCIONES

| TOPICS | FECHA APERTURA | FECHA CIERRE |
|-------------------|----------------|--------------|
| SC5-12-2016 (CSA) | 15/10/2015 | 16/01/2016 |
| SC5-24-2015 (CSA) | 15/10/2015 | 16/01/2016 |
| SC5-29-2016 (FPA) | 14/04/2016 | 08/09/2016 |

Reto Social 5 – WP 2016-2017...algunos DETALLES

Conditions for the Call - Industry 2020 in the Circular Economy

•Circular Economy

Evaluation criteria, scoring and threshold: The criteria, scoring and threshold are described in part H of the General Annexes to the work programme with the following exceptions:



For single-stage and second-stage evaluations, the threshold for the criteria Excellence and Impact will be 4. The overall threshold, applying to the sum of the three individual scores, will be 12.

In case of equal overall scores in the ranked list, the priority order of proposals will be established in accordance with part H of the General Annexes, except that proposals will be ranked on the basis of individual scores for the Impact criterion before the Excellence criterion.

HORIZONTE 2020

H2020-Reto Social 5

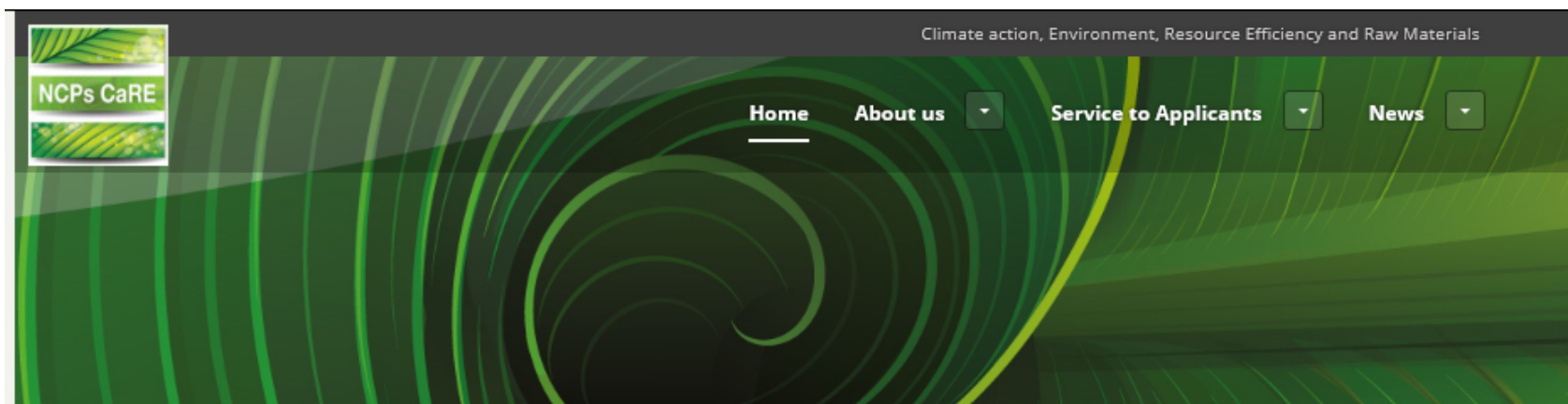
- Objetivos
- Programa de Trabajo 2016-2017
 - Bloques y “topics”
- Algunos “detalles” del Programa de Trabajo
- De las propuestas

Apoyo a la participación

Apoyo a la Participación



Apoyo a la Participación: NCPs CaRE



NCPs CaRE, Red de NCPs del Reto Social 5.- <http://www.ncps-care.eu/>



Forum

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[Read more](#)



Partner search tool

Are you looking for a suitable project partner in Horizon 2020? This tool helps you to find the best opportunities.

[Read more](#)



Useful guides

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

[Read more](#)

29/10/2015

Información y Apoyo



Portal español del Programa Marco de Investigación e Innovación de la Unión Europea

www.eshorizonte2020.es



- [Listas de Distribución](#)
- [Puntos Nacionales de Contacto](#)

**Puntos Nacionales de Contacto - Reto Social 5,
«Acción por el Clima, Medio Ambiente, Eficiencia de Recursos y Materias Primas»**

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29/10/2015



Próximos eventos de interés

(...algunos)



- 12-13/11/15, "Exchange of good practices on metal by-products recovery – technology and policy challenges"
- 23-24/11/15, "WssTP Brokerage and Working Groups Event"
- 9-10/12/15, 3rd High Level Conference of the European Innovation Partnership (EIP) on Raw Materials and Horizon 2020 Brokerage Event on Raw Materials

Información (i) ...y posibles socios



- [InfoDay de la CE, Convocatorias 2016-Reto Social 5](#) (21/09/2015, presentaciones y video del evento disponibles)
- [Jornada Informativa Reto Social 5-Convocatorias 2016](#) (16/10/2015)
- [Innovating Cities with Nature and Culture](#) (20/10/2015, presentaciones y “brokerage event”)
- [CORDIS - EU research projects](#)
- [EIP de Agua](#) → Strategic Implementation Plan (SIP)
- [Action Groups EIP-Water](#) y el “On-line Market Place”
- [EIP de Materias Primas](#) → SIP
- [Commitments EIP-Raw Materials](#)

.....otros

29/10/2015



Gracias por su atención

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