

#innovacion  
#financiacion  
#asesoramiento  
#internacionalizacion



# CONVOCATORIAS 2020 RETO SOCIAL 5

## Acción por el clima, medioambiente, eficiencia de los recursos y materias primas

Juan Carlos García Carrasco  
PNC Reto Social 5

 [juancarlos.garcia@cdti.es](mailto:juancarlos.garcia@cdti.es)

 @JCGarcia\_CDTI

**ESHORIZONTE2020**

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

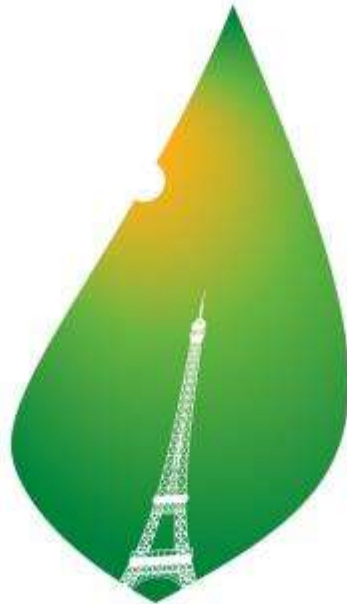
@EsHorizonte2020

# HORIZONTE 2020, 75 000 M€ PARA I+D+I

<b>HORIZONTE 2020</b>		<b>74.828</b>
<b>I. Prioridad «Ciencia excelente»</b>		<b>24.232</b>
1. El Consejo Europeo de Investigación (CEI)		13.095
2. Las Tecnologías Futuras y Emergentes (FET)		2.585
3. Las acciones Marie Skłodowska-Curie		6.162
4. Las infraestructuras de investigación		2.390
<b>II. Prioridad «Liderazgo industrial»</b>		<b>16.466</b>
1. Liderazgo en tecnologías industriales y de capacitación:		13.035
1.1 Tecnologías de la información y la comunicación (TIC)		7.423
1.2 Nanotecnologías, 1.3 Materiales avanzados y 1.5 Fabricación y transformación avanzadas		3.741
1.4 Biotecnología		501
1.6 Espacio		1.403
2. Acceso a la financiación de riesgo		2.842
3. Innovación en las PYME		589
<b>III. Prioridad «Retos de la sociedad»</b>		<b>28.630</b>
1. Salud, cambio demográfico y bienestar		7.257
2. Seguridad alimentaria, agricultura y silvicultura sostenibles, investigación marina, marítima y de aguas interiores y Bioeconomía		3.708
3. Energía segura, limpia y eficiente		5.688
4. Transporte inteligente, ecológico e integrado		6.149
5. Acción por el clima, medio ambiente, eficiencia de los recursos y materias primas		2.956
6. Europa en un mundo cambiante – Sociedades inclusivas, innovadoras y reflexivas		1.258
7. Sociedades seguras – Proteger la libertad y la seguridad de Europa y de sus ciudadanos		1.613
<b>IV. Difundir la excelencia y ampliar la participación</b>		<b>816</b>
<b>V. Ciencia con y para la sociedad</b>		<b>445</b>
<b>VI. Acciones directas no nucleares del Centro Común de Investigación (JRC)</b>		<b>1.856</b>
<b>VII. Instituto Europeo de Innovación y Tecnología (EIT)</b>		<b>2.383</b>

≈ 4%

# GRANDES OBJETIVOS A NIVEL GLOBAL



**PARIS2015**  
UN CLIMATE CHANGE CONFERENCE  
COP21·CMP11



# OTRAS POLÍTICAS- NIVEL GLOBAL



UN World Conference on  
Disaster Risk Reduction

2015 Sendai Japan



**United Nations**  
Framework Convention on  
Climate Change



**UNISDR**

Oficina de las Naciones Unidas para la Reducción  
del Riesgo de Desastres



# OTRAS POLÍTICAS- NIVEL EUROPEO



## EIP Water

Boosting opportunities – Innovating water



## ESTRUCTURA WP 2018-2020

### Call-Building a low-carbon, climate resilient future: climate action in support of Paris Agreement

- Decarbonization
- Climate adaptation, impacts and services
- Inter-relation between climate change, biodiversity and ecosystem services
- The Cryosphere
- Knowledge gaps
- Earth observation

Contribution to “Competitive, Low Carbon and Circular Industries”

### Call-Greening the economy in line with the Sustainable Development Goals (SDGs)

- Connecting economic and environmental gains – the circular economy
- Raw materials
- **Water for our environment, economy and society**
- Innovating cities for sustainability and resilience
- Earth observation
- Nature-based solutions, disaster risk reduction and natural capital accounting
- Heritage alive

BUILDING A LOW-CARBON, CLIMATE RESILIENT FUTURE:  
CLIMATE ACTION IN SUPPORT OF THE PARIS AGREEMENT



PARIS2015  
UN CLIMATE CHANGE CONFERENCE  
COP21·CMP11

# DECARBONISATION

LC-CLA-10-2020: Scientific support to designing mitigation pathways and policies

- A. Assessing and designing climate policies for the coming decade
- B. Decarbonisation and lifestyle changes
- C. Science underpinning the preparations of NDCs after the 2023 Global Stocktake at a global scale





# DECARBONISATION

LC-CLA-11-2020: Innovative NBS solutions for carbon neutral cities and improved air quality

- Assess the direct and indirect contribution of NBS (diverse structures and configurations) to combat air pollution, reducing allergy potential of urban environment and mitigating GHG emissions
- Develop tools, models, design guidelines, standards and protocols to integrate solutions



## LC-CLA-12-2020: Advancing climate services

# CLIMATE CHANGE ADAPTATION

- A. Mapping European coastal infrastructure at risk from sea-level rise
- B. Detection and attribution of extreme events using Artificial Intelligence
- C. Impacts of overshooting

## LC-CLA-13-2020: Climate resilience of European coastal cities and settlements

**CLIMATE  
CHANGE  
ADAPTATION**

- Capitalise on past and current initiatives and knowledge to improve integrated spatial planning, management and adaptation of EU's coastal cities.
- Provide scientific insight, tools, methodologies...to develop coastal resilience plans

LC-CLA-23-2020: Towards a comprehensive European mountain research strategy

- Coordinate and support mountain regions research in EU
- Develop a comprehensive EU Mountain Research Strategy

**CLIMATE  
CHANGE  
ADAPTATION**

# LC-CLA-14-2020: Understanding climate-water-energy-food nexus and streamlining water-related policies

Develop and test innovative solutions, improved operations and integrated management and planning for achieving water, energy and food security





## LC-CLA-15-2020: Forest Fires risk reduction: towards an integrated fire management approach in the EU

- Generate the knowledge, tools, capacity and guidance to underpin an Integrated Fire Management strategy
- Assess changes in fire regimens under various climate, vegetation and land use change scenarios
- Understand extreme wildfire events, their structural causes, various impacts



## LC-CLA-16-2020: Multi-hazard risk management for risk-informed decision-making in the EU

- Define a common framework for risk and vulnerability assessments for areas exposed to multiple natural hazards
- Develop quantitative scenarios on present and future risks, on potential direct and indirect effects
- Develop mapping tools and user-friendly ICT open interfaces



# THE CRYOSPHERE

A satellite-style image of Earth showing the cryosphere. The Arctic region is visible at the top, with a large white ice cap. The Antarctic continent is visible at the bottom, also covered in white ice. The surrounding oceans are a deep blue, and the landmasses are shown in a light grayish-brown color. The image is used as a background for the text boxes.

LC-CLA-17-2020: Polar climate: understanding the polar processes in a global context in the Arctic and Antarctic Regions

Assess key physical and chemical processes in the ocean and atmosphere and the key ocean-atmosphere-ice interactions



# THE CRYOSPHERE

A satellite view of Earth showing the cryosphere, including the Arctic and Antarctic regions. The image is used as a background for the text boxes.

LC-CLA-21-2020: Coordination of European Polar research

Provide a platform to co-develop the strategies to advance and further coordinate the European Polar Research action and its contribution to the policy-making processes

## KNOWLEDGE GAPS

LC-CLA-18-2020: Developing the next generation of Earth System Models

Address in a novel way one or more of the competing demands that surround the advancement of Earth System Models (ESMs)



LUMP-SUM



## KNOWLEDGE GAPS

LC-CLA-22-2020: Enhancing the Belmont Forum Collaborative Research Action on Climate, Environment and Health

Develop and provide support mechanisms to advance and boost the global added value of the Belmont Forum's Collaborative Research Action on Climate, Environment and Health

# EARTH OBSERVATION

A satellite in orbit above Earth, showing the planet's curvature and a portion of the satellite's structure. The background is the blackness of space.

LC-CLA-19-2020: Integrated GEOSS climate applications to support adaptation and mitigation measures of the Paris Agreement

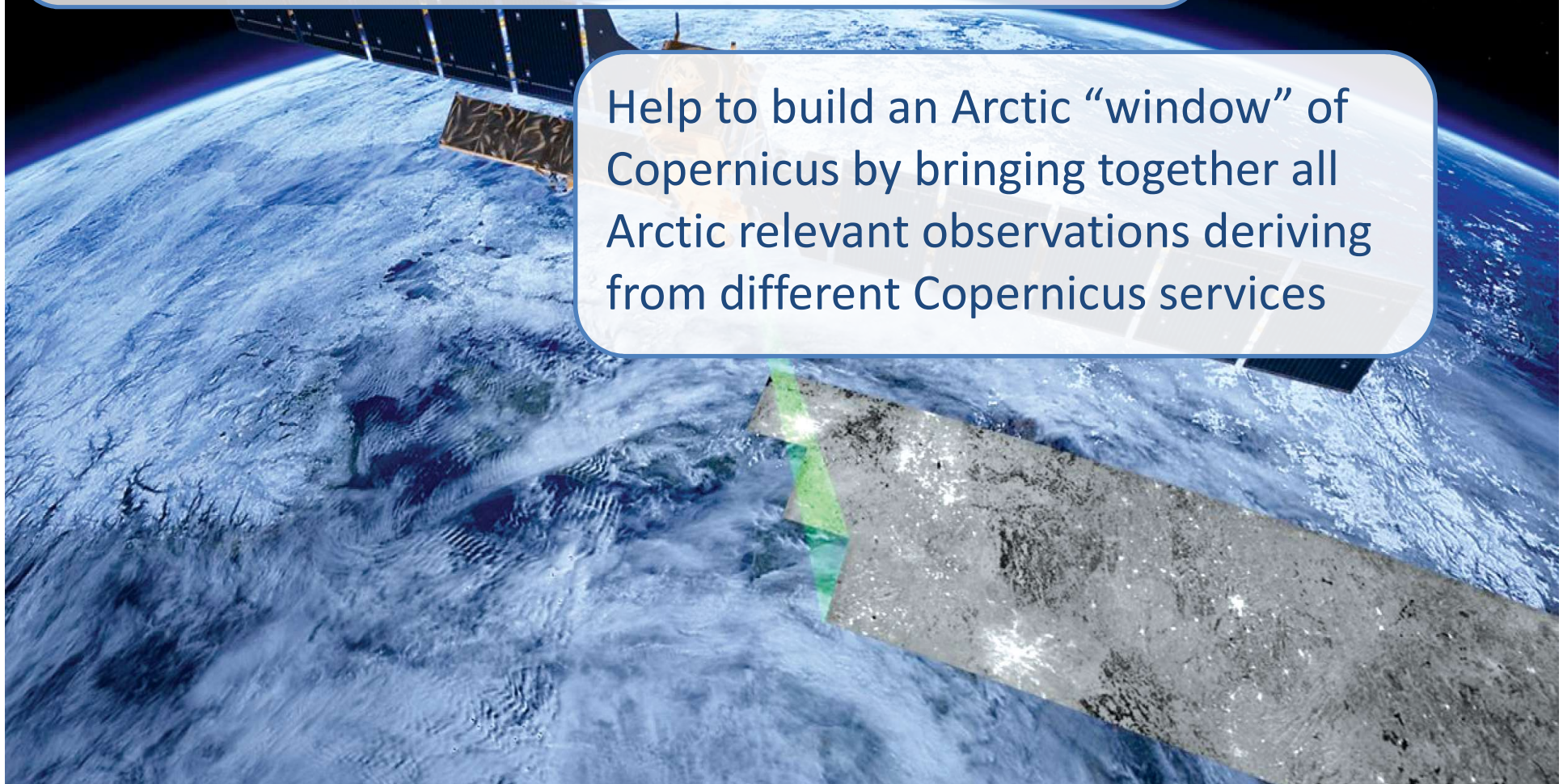
Developing applications in support of users involved in the implementation and mitigation actions in line with the Paris Agreement, integrating Earth Observation data



# EARTH OBSERVATION

LC-CLA-20-2020: Supporting the implementation of GEOSS in the Arctic in collaboration with Copernicus

Help to build an Arctic “window” of Copernicus by bringing together all Arctic relevant observations deriving from different Copernicus services






# GREENING THE ECONOMY



**CE-SC5-24-2020: Improving the sorting, separation and recycling of composite and multilayer materials**



Develop new or improve existing innovative processes for sorting, disassembly/separation, recycling...of materials from composite and/or multi-layer.




CE-SC5-25-2020: Understanding the transition to a CE and its implications on the environment...



Assess the current state and analyse transition scenarios towards the Circular Economy

CE-SC5-28-2020: Develop and pilot circular systems in plastics, textiles and furniture sectors



Develop and pilot systemic CE innovations in plastics, textiles and furniture sectors (one of the three)

CE-SC5-29-2020: A common European framework to harmonise procedures for plastics...



Develop a common EU framework to harmonise procedures for plastics pollution monitoring and assessment

**CE-SC5-30-2020: Plastics in the environment:  
understanding the sources, transport...**



Better understanding on the sources, transport, distribution and impact of plastic pollution. Main entry routes of plastics into the different environmental compartments



A collection of various raw materials, including metal rods, pipes, and bars, arranged on a blue background. The materials are shown in different sizes and colors, including silver, gold, and copper. The text "RAW MATERIALS" is overlaid on the image in a bold, black, serif font.

# RAW MATERIALS



## **SC5-10-2019-2020: Raw materials innovation actions: exploration and Earth observation in support of sustainable mining**

### **c. Mining pilots (2020)**

Develop and demonstrate innovative mining systems to avoid exposure of workers in dangerous operations, to increase efficiency, selectivity and profitability of the mining operations

### **d. Pilots on substitution of critical and scarce raw materials (2020)**

Develop and demonstrate innovative and sustainable solutions for the appropriate substitution of CRMs use in high tech sectors

## **SC5-26-2020: Sustainable management in extractive industries**

Develop a toolkit applicable across the EU Member States for assessing socio-economic and environmental impacts, land-use planning, health and safety issues



**Innovating cities for sustainability and resilience**




**SC5-27-2020: Strengthening international cooperation:  
enhanced natural treatment solutions for water security and  
ecological quality in cities**

- Identify and review examples of innovative natural water treatment systems in EU and beyond...understanding their functioning...and capacity in treating pollution under diverse and uncertain conditions
- Develop methodologies and guidance for design, implementation...



**Protecting and leveraging the value of our natural and cultural assets: Nature-based solutions, disaster risk reduction and natural capital accounting**





**SC5-32-2020: Addressing wild pollinators decline and its effects on biodiversity and ecosystem services**

Develop tools, guidelines and methodologies to better understand, analyse, assess and possibly predict the trends and causes of the wild pollinators decline



**SC5-33-2020: Monitoring ecosystems through research, innovation and technology**

Design an EU-wide framework for monitoring biodiversity and ecosystems services

A collection of various metal rods and pipes of different diameters and finishes, arranged on a blue background. The rods are shown in various orientations, some horizontally and some vertically, creating a sense of depth and variety. The finishes range from bright, polished surfaces to darker, more textured or oxidized surfaces. The background is a soft, light blue gradient, which makes the metallic objects stand out.

# CROSS-CUTTING ACTIVITIES



## **CE-SC5-07-2020: Raw materials innovation for the circular economy: sustainable processing, reuse, recycling and recovery schemes**

- a. Sustainable processing and refining of primary and/or secondary raw materials  
Sistemas nuevos o mejorados sobre tecnologías de proceso y refino para recuperación de minerales y metales
- b. Recycling of raw materials from end-of-life products  
Reciclado y recuperación de materias primas secundarias de producto final
- c. Recycling of raw materials from buildings  
Recuperación de materias primas de edificios
- d. Advanced sorting systems for high-performance recycling of complex end-of-life  
Sistemas innovadores de desmantelado y clasificación que permitan reciclado y recuperación eficiente



**CE-SC5-08-2020: Raw materials policy support actions for the circular economy-Expert network on Critical Raw Materials**

Contribute to improving EU official statistics and to building the RMIS

**CE-SC5-31-2020: Develop, implement and assess a circular economy oriented product information management systems for complex products from cradle to cradle**

There is a need for designing and piloting an information system for raw materials and components in products and their environmental performance

## FECHAS DE CORTE

<b>CALL LOW CARBON</b>	<b>DEADLINES</b>
CSAs	13/02/20
Resto (RIAS/IAs) 1st stage	13/02/20
2nd stage	03/09/20


  

<b>CALL GREENING THE ECONOMY</b>	<b>DEADLINES</b>
CSAs	13/02/20
Resto (RIAS/IAs) 1st stage	13/02/20
2nd stage	03/09/20



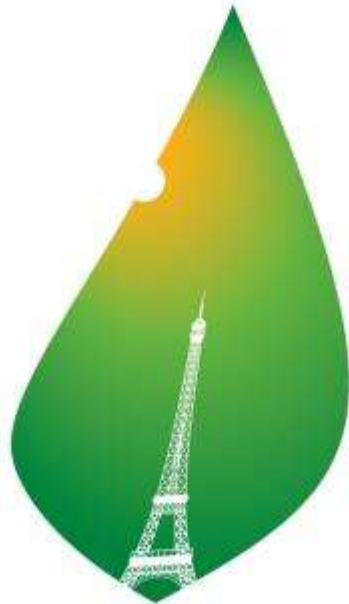
# FECHAS DE CORTE

CALL CIRCULAR INDUSTRIES	DEADLINES
CSAs	05/02/20
Resto (IAs) 1st stage	05/02/20
2nd stage	03/09/20



Cosas a  
tener en  
cuenta...

# GRANDES OBJETIVOS A NIVEL GLOBAL



**PARIS2015**  
UN CLIMATE CHANGE CONFERENCE  
COP21·CMP11





# OTRAS POLÍTICAS- NIVEL GLOBAL



UN World Conference on  
Disaster Risk Reduction

2015 Sendai Japan



**United Nations**  
Framework Convention on  
Climate Change



**UNISDR**

Oficina de las Naciones Unidas para la Reducción  
del Riesgo de Desastres

# OTRAS POLÍTICAS- NIVEL EUROPEO



## EIP Water

Boosting opportunities – Innovating water



# ALGUNOS RECURSOS SOBRE SDGs



**Sustainable Development Report** ABOUT NEWS & INSIGHTS

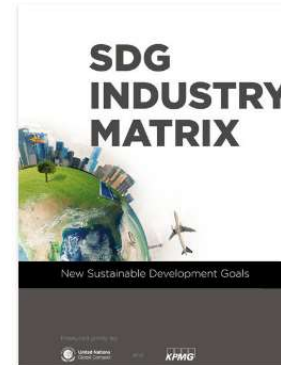


## SDG Index and Dashboards Report for European Cities

May 22, 2019

This 2019 SDG Index and Dashboards Report for European Cities (prototype version) provides an overview of the performance of 45 capital cities and large metropolitan areas on the Agenda 2030 and 17 Sustainable Development Goals (SDGs) adopted by global leaders in September 2015 at the UN Sustainable Development Summit. It builds on previous work conducted by SDSN to monitor the SDGs at national and subnational levels and on TELOS' scoping study "Sustainability Monitoring of European Cities" prepared in collaboration with the European Commission's Directorate-General for Environment.

[Download the report](#)



Report (2015)

### SDG Industry Matrix

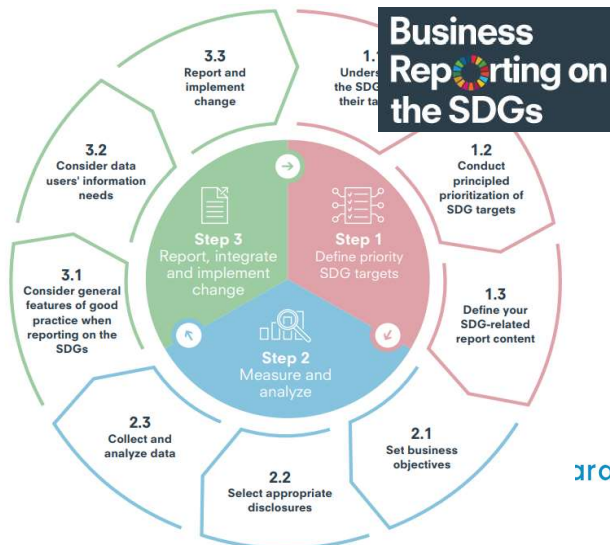
Showcases industry-specific examples and ideas for corporate action related to the SDGs. Presented in a series of publications, each matrix highlights bold pursuits and decisions made by diverse companies for each SDG.

#### Access Resource

- [Financial Services](#) (English)
- [Food, Beverage & Consumer Goods](#) (English)
- [Climate Extract](#) (English)
- [Healthcare & Life Sciences](#) (English)
- [Industrial Manufacturing](#) (English)
- [Transportation](#) (English)
- [Energy, Natural Resources, Chemicals](#) (English)

#### Resource Author

KPMG  
United Nations Global Compact



para el Desarrollo Tecnológico Industrial

**SUSTAINABLE DEVELOPMENT REPORT 2019**

Transformations to achieve the Sustainable Development Goals  
Includes the SDG Index and Dashboards

Centro para el Desarrollo Tecnológico Industrial

oficial

# ALGUNOS RECURSOS SOBRE SDGs



## TOOL CATEGORY

Integration tools for analysing interconnections, synergies, trade-offs and bottlenecks among SDGs

- Dynamic Simulation Tools
- Indicators and Assessment Tools
- Static Inter-linkage Analysis Tools

Last-mile tools to support meeting the SDGs and targets and unlocking bottlenecks for all segments of society and reaching the furthest behind first

- Community-based Planning, Partnership, and Multi-stakeholder Engagement Tools
- Data Revolution Tools
- Fragility Assessment Tools
- Human Rights Mainstreaming Tools
- Tools for Financing the SDGs
- Vulnerability Assessment Tools

Risk-informed planning tools for resilience building, adaptation and identifying synergies and unlocking bottlenecks

- Disaster Risk Reduction Tools
- Economic Forecasting Tools
- Environmental Degradation Risk Reduction Tools
- Epidemic and Pandemic Analysis Tools
- Peace and Conflict Analysis Tools
- Risk, Foresight and Scenario Tools
- Tools for Financing Resilience



# ALGUNOS RECURSOS SOBRE SDGs



## Inventory of Business Indicators

This inventory maps existing business indicators against the Sustainable Development Goals (SDGs). It allows you to explore commonly used indicators and other relevant indicators that may be useful when measuring and reporting your organization's contribution to the SDGs.

You can use the filters below to explore indicators related to a specific SDG Goal or Target or by Business theme. To continue working with the inventory in MS Excel, you can either download the full inventory or only indicators that match your search or filters.

[Read More](#)

Filter by SDG Goals

Filter by SDG Targets

Filter by Business Themes

Filter by Type

Filter by Source

Filter by Date

Search by Keyword

[Export Data](#) [Clear Filters](#) [Suggest New Indicators](#)

# What is the European Green Deal?

December 2019

#EUGreenDeal

The European Green Deal is about **improving the well-being of people**. Making Europe climate-neutral and protecting our natural habitat will be good for people, planet and economy. No one will be left behind.

## The EU will:



Become climate-neutral by 2050



Protect human life, animals and plants, by cutting pollution



Help companies become world leaders in clean products and technologies



Help ensure a just and inclusive transition

# THE EU GREEN DEAL





# ¿DÓNDE?

Specific objectives	Topic	Project	KPI	Target	
Technical		SDG 7.2. Affordable and clean energy. Increase substantially share of renewable energy in the global energy mix			
Social		Increase the use of renewable energy in cities from XXX% to YYY%			
Market					
Business				% of renewable energy	
Political					YYY%
Other					



# ¿DÓNDE?

SECTOR	TARGET GROUP	IMPACT	KPI
Residential	Building developers	ZZZZZ MW/year supplied by renewable sources in EU residential buildings	MW

FULL, FREE AND OPEN  
ACCESS TO DATA



-  ATMOSPHERE MONITORING
-  MARINE ENVIRONMENT MONITORING
-  LAND MONITORING
-  CLIMATE CHANGE
-  EMERGENCY MANAGEMENT
-  SECURITY

 **opernicus**  
Europe's eyes on Earth

# ACCESO A LOS DATOS

## THE DIAS-Data and Information Access Services

**CREODIAS**

WWW.CREODIAS.EU

**sobloo**

WWW.SOBLOO.EU

**mundi**  
WEB SERVICES

WWW.MUNDIWEBSERVICES.COM

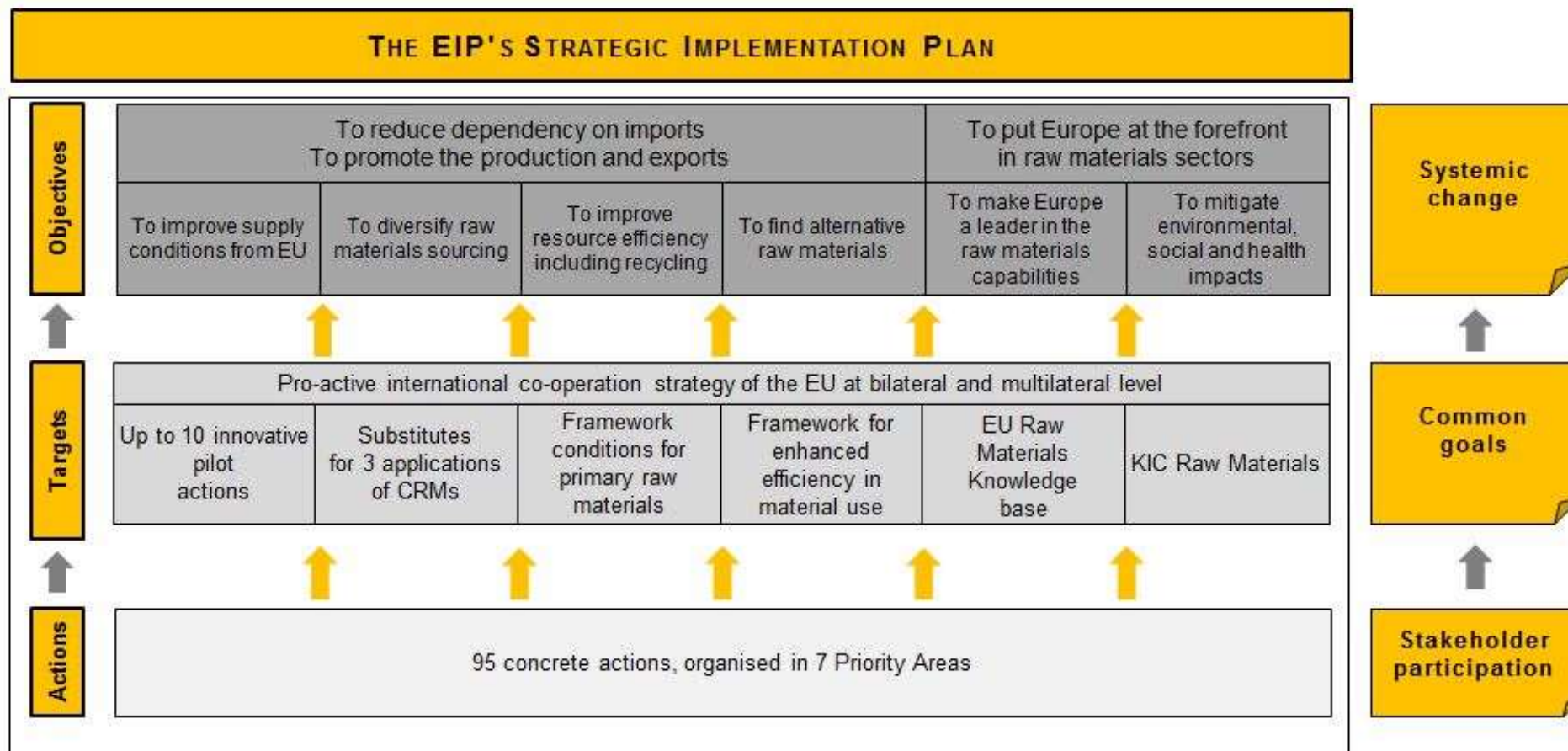
**ONDA**

WWW.ONDA-DIAS.EU

**WEKEO**  
BY INTELLIGENCE

WWW.WEKEO.EU

# EIP ON RAW MATERIALS







European Commission

# EU SCIENCE HUB

## Raw Materials Information System (RMIS)

European Commission > EU Science Hub > RMIS



OVERVIEW



POLICY & LEGISLATION



TERMINOLOGY & LIBRARY



CRITICAL RAW MATERIALS



RM SCOREBOARD & OTHER MONITORING SYSTEMS



SECONDARY RAW MATERIALS & CIRCULAR ECONOMY



ENVIRONMENTAL & SOCIAL SUSTAINABILITY



ECONOMICS & TRADE



INDUSTRY & INNOVATION



RAW MATERIALS' PROFILES & SUPPLY CHAINS



COUNTRY PROFILES



RAW MATERIALS KNOWLEDGE GATEWAY (RMKG)



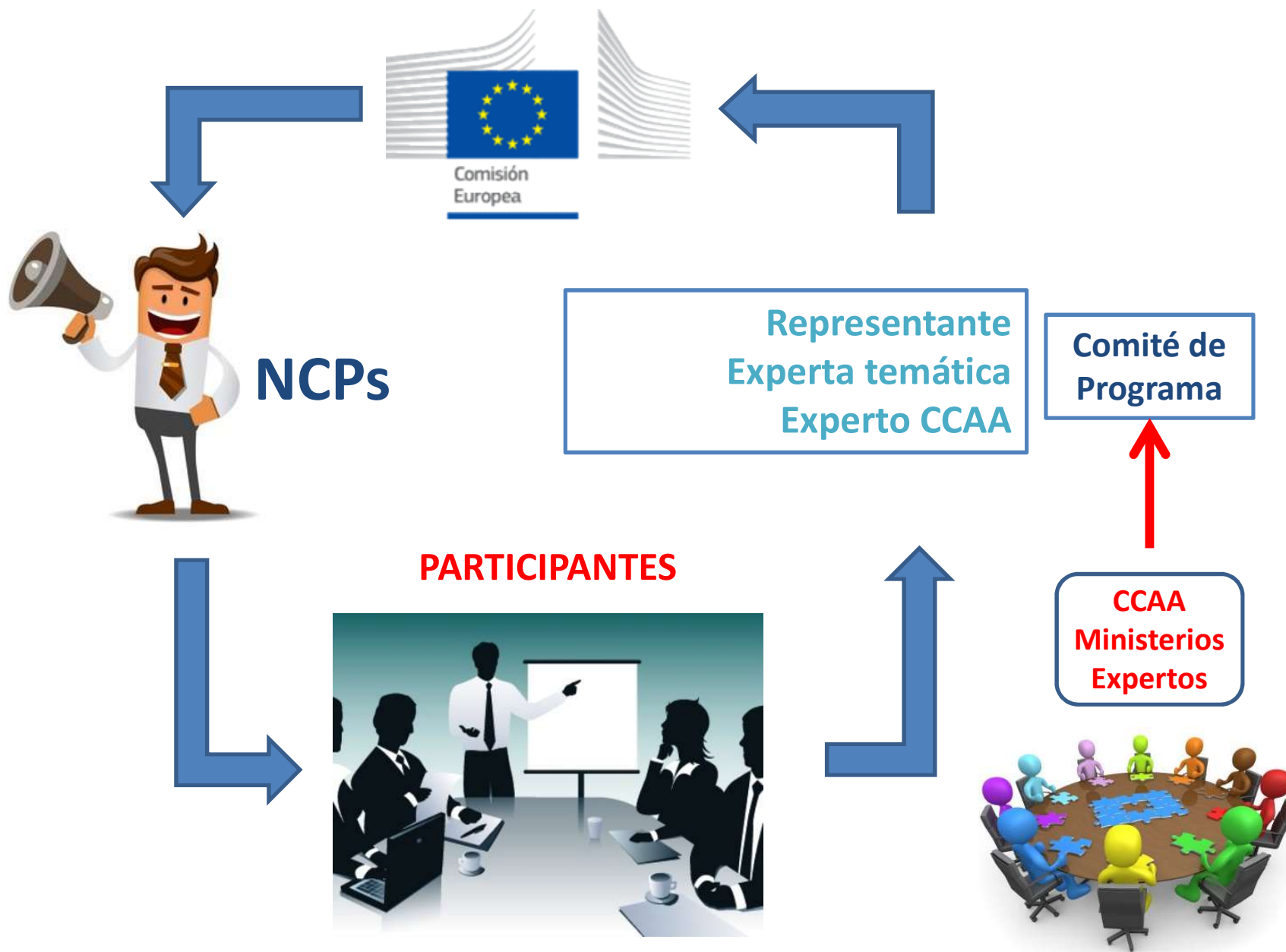
# CROSS-CUTTING CALL- BUSINESS MODEL

## ¿Dónde lo pongo?

• Executive Summary	.....	Abstract
• Opportunity	.....	1. Excellence
• Promoting Team	.....	3. Consortium
• <b>Business Model</b>	.....	2.1 + 2.2 Impact
• <b>Sector Analysis</b>	.....	2.1+2.2 Impact
• <b>Implementation:</b>		
– Comercial and Marketing Strategy	.....	2.2 Impact
– Operational Plan	.....	Work Plan/Tasks
– Capacities and Human Resources	.....	3. Consortium
• Legal Structure	.....	2.1+2.2+3.2
• Economic and Financial Analysis	.....	2.1+2.2
• <b>Risks Analysis</b>	.....	2.1+3.2

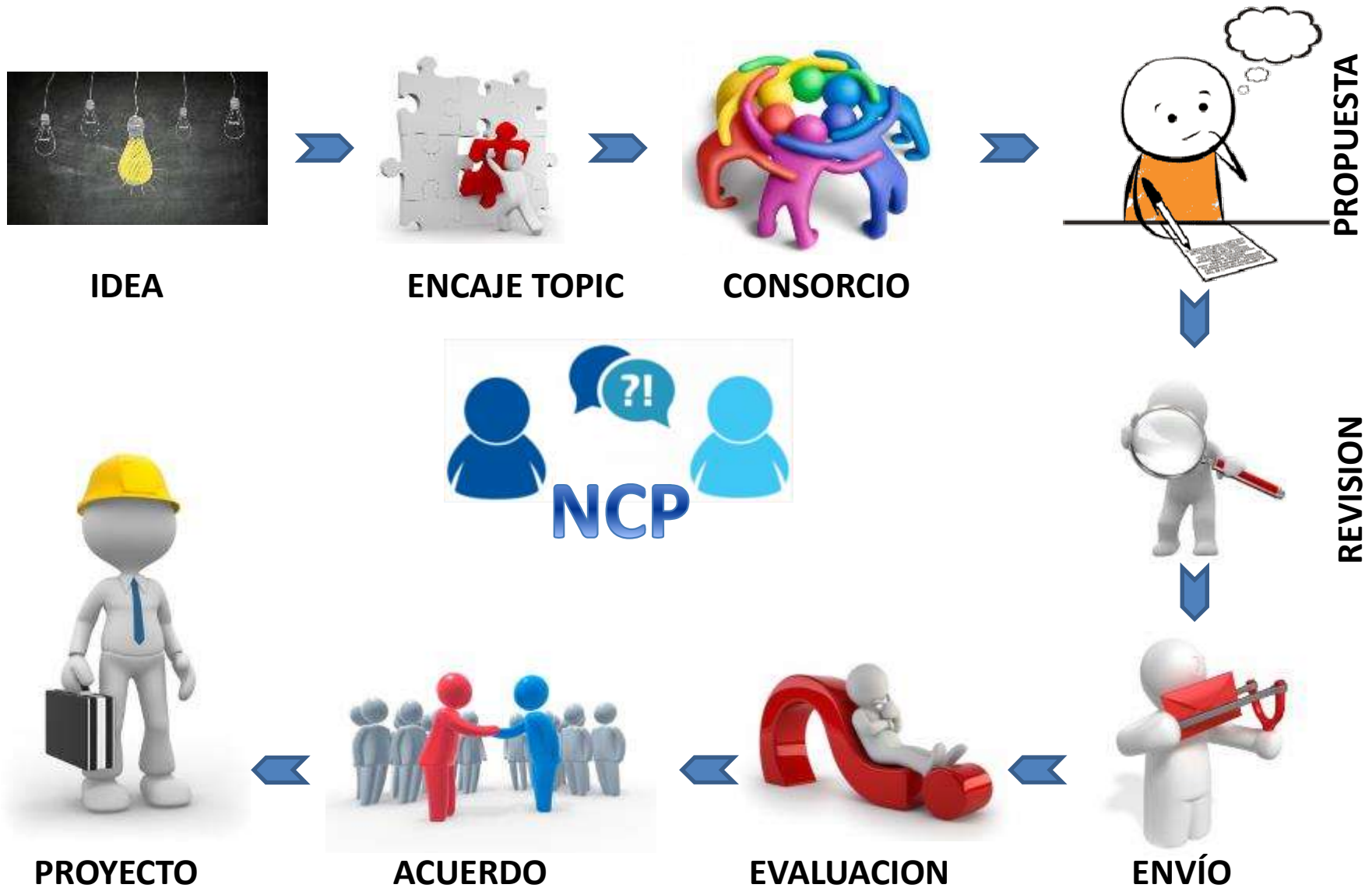


# ¿QUÉ HACEMOS EN CDTI?





# SOPORTE A LOS PARTICIPANTES



# Red Exterior CDTI: presencia en 28 países







# PARA ACABAR

- SE BUSCAN EXPERTOS PARA EVALUAR PROYECTOS

<https://ec.europa.eu/research/participants/portal/desktop/en/experts/index.html>

- LISTAS DE DISTRIBUCIÓN CDTI y H2020

<http://eshorizonte2020.es/suscripcion>



División de  
Programas de la UE

@EsHorizonte2020

CDTI Centro para el Desarrollo Tecnológico Industrial | E.P.E.



@CDTIoficial



## Reto Social 5: Acción por el clima, medioambiente, eficiencia en los recursos y materias primas



### Contactos en España

#### Representante en el Comité de Programa

- ✓ **Lydia González (CDTI)**  
lydia.gonzalez@cdti.es

#### Puntos Nacionales de Contacto (NCP)

- ✓ **Juan Carlos García (CDTI)**  
juancarlos.garcia@cdti.es
- ✓ **Ana María Tardón (CIEMAT)**  
AnaMaria.Tardon@ciemat.es

**SC5 Work Program** [https://ec.europa.eu/research/participants/data/ref/h2020/wp/2018-2020/main/h2020-wp1820-climate\\_en.pdf](https://ec.europa.eu/research/participants/data/ref/h2020/wp/2018-2020/main/h2020-wp1820-climate_en.pdf)

**Cross-Cutting activities:** [https://ec.europa.eu/research/participants/data/ref/h2020/wp/2018-2020/main/h2020-wp1820-cc-activities\\_en.pdf](https://ec.europa.eu/research/participants/data/ref/h2020/wp/2018-2020/main/h2020-wp1820-cc-activities_en.pdf)

# ENLACES DE UTILIDAD

- [Business Reporting on the SDGs](#)
- [Sustainable Development Report 2019](#)
- [SDG index and dashboards report for European cities](#)
- [Aplicación de la Agenda 2030 en las organizaciones. El caso del MAPAMA](#)
- [Localizando los ODS](#)
- [SDG Industry Matrix](#)
- [Sustainable Development Goals Acceleration Toolkit](#)
- [Supporting the Sustainable Development Goals across the world: The 2019 Joint Synthesis Report of the European Union and its Member States](#)
- [Inventory of Business Indicators](#)
- [Directiva UE 2019/904 Reducción impacto de determinados productos plásticos en el medio ambiente](#)
- [Atlas of EU Water Oriented Living Labs](#)

# ENLACES DE UTILIDAD

- [Societal Readiness Levels](#)
- [European Resource Efficiency Knowledge Centre](#)
- [Circular Plastics Alliance pledges](#)
- [Copernicus-DIAS](#)
- [Climate Data Store-Copernicus](#)
- [Conventional Data Access Hubs-Copernicus](#)
- [Copernicus Services](#)
- [Presentación Comisión Horizon Europe](#)



+ info sobre programas y ayudas  
para la  
internacionalización de la I+D+I española

[www.eshorizonte2020.es](http://www.eshorizonte2020.es) - [www.cdti.es](http://www.cdti.es)



@EsHorizonte2020 - @CDTIoficial