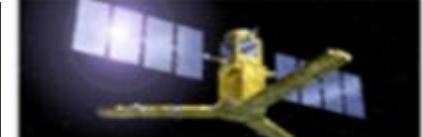




ASPECTOS AMBIENTALES DE “HORIZONTE 2020”

CONTEXTO ESTRATÉGICO

Carolina Rodríguez (carolina.rodriguez@cdti.es)
Representante Española de Clima, Medio Ambiente, Eficiencia de Recursos y Materias Primas- Horizonte 2020



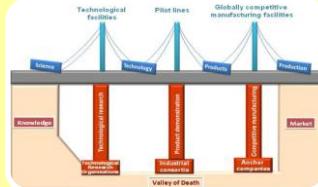
• INDICE

- BLOQUE I. INTRODUCCIÓN, HORIZONTE 2020
- BLOQUE II. APROXIMACIONES CONCEPTUALES
- BLOQUE III. INCENTIVACIÓN Y RESULTADOS



BLOQUE I. INTRODUCCIÓN, HORIZONTE 2020

Programa Marco de Investigación e Innovación (2014-2020)



Excellent Science

European Research Council (ERC)

Future and Emerging Technologies (FET)

Marie Skłodowska-Curie actions on skills, training and career development

European research infrastructures

Industrial Leadership

ICT

Nanotechnology

Biotechnology

Advanced Materials

Advanced Manufacturing & Processing

Space

Access to Risk Finance

Innovation in SMEs

Societal Challenges

Health, demographic change and wellbeing

Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the bioeconomy;

Secure, clean and efficient energy;

Smart, green and integrated transport;

Climate action, environment, resource efficiency and raw materials

Europe in a changing world-Inclusive, innovative and reflexive societies

Secure Societies: Protecting freedom and security of Europe and its citizens



BLOQUE I. INTRODUCCIÓN, HORIZONTE 2020

Presupuestos

Financiación propuesta (mill. EUR, 2014-2020)*

BUDGET	HORIZONTE 2020	79.271
<u>Excellent Science</u>	I. Prioridad «Ciencia excelente» 1. El Consejo Europeo de Investigación (CEI) 2. Las Tecnologías Futuras y Emergentes (FET) 3. Las acciones Marie Curie 4. Las infraestructuras de investigación	24.598 13.268 3.100 5.752 2.478
<u>Industrial Technologies</u>	II. Prioridad «Liderazgo industrial» 1. Liderazgo en tecnologías industriales y de capacitación: 1.1 Tecnologías de la información y la comunicación (TIC) 1.2 Nanotecnologías, 1.3 Materiales avanzados y 1.5 Fabricación y transformación avanzadas 1.4 Biotecnología 1.6 Espacio 2. Acceso a la financiación de riesgo 3. Innovación en las PYME	17.938 13.781 7.939 3.797 509 1.536 3.538 619
<u>Societal Challenges</u>	III. Prioridad «Retos sociales» 1. Salud, cambio demográfico y bienestar 2. Seguridad alimentaria, agricultura sostenible, investigación marina y marítima y bioeconomía 3. Energía segura, limpia y eficiente 4. Transporte inteligente, ecológico e integrado 5. Acción por el clima, eficiencia de los recursos y materias primas 6. Sociedades inclusivas, innovadoras y seguras	31.748 8.033 4.152 5.782 6.802 3.160 3.019
 European Institute of Innovation & Technology	Instituto Europeo de Innovación y Tecnología (EIT)	1.360
	Acciones directas no nucleares del Centro Común de Investigación (JRC)	1.962
	EURATOM (2014-2018)	1.665

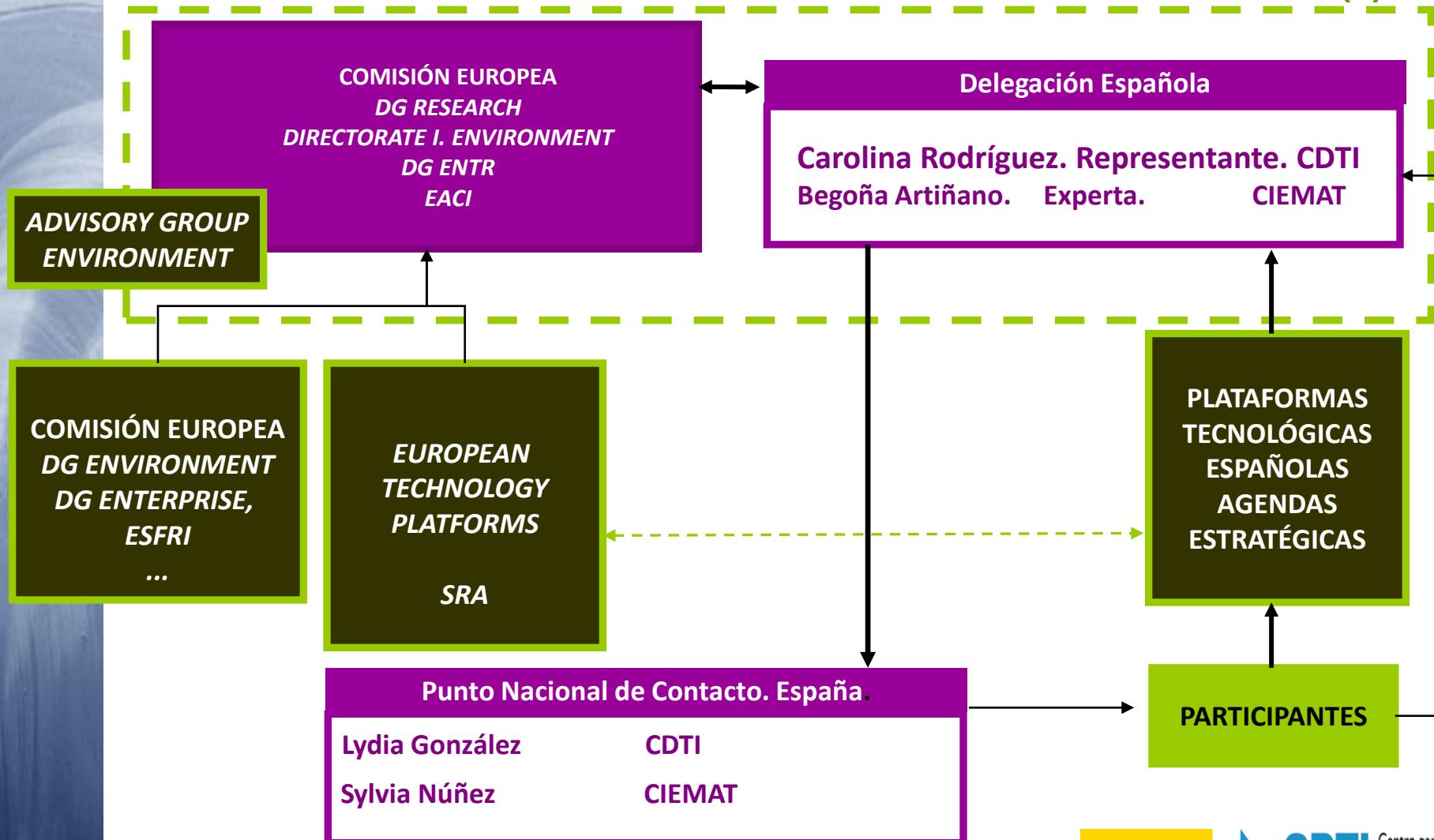
Datos en ejecución a 2011 en SAC

- * Financiación adicional para la seguridad nuclear a partir de las actividades del Tratado Euratom (2014-2018)

BLOQUE I. INTRODUCCIÓN, HORIZONTE 2020

LA GESTIÓN

COMITÉ DE GESTIÓN DEL RETO (5)



BLOQUE I. INTRODUCCIÓN, HORIZONTE 2020

ESTRATEGIA DE NEGOCIACIÓN CON LA COM

DIRECTA. CONTENIDOS Y PRESUPUESTOS DE LAS CONVOCATORIAS

- 3 *Shadow Committees* EEMM: septiembre, octubre, noviembre 2013. Futuro comité: marzo 2014
- 3 *Advisory Groups*: octubre 2013, enero 2014, marzo 2014.

INDIRECTA. CONTENIDOS DE LAS CONVOCATORIAS

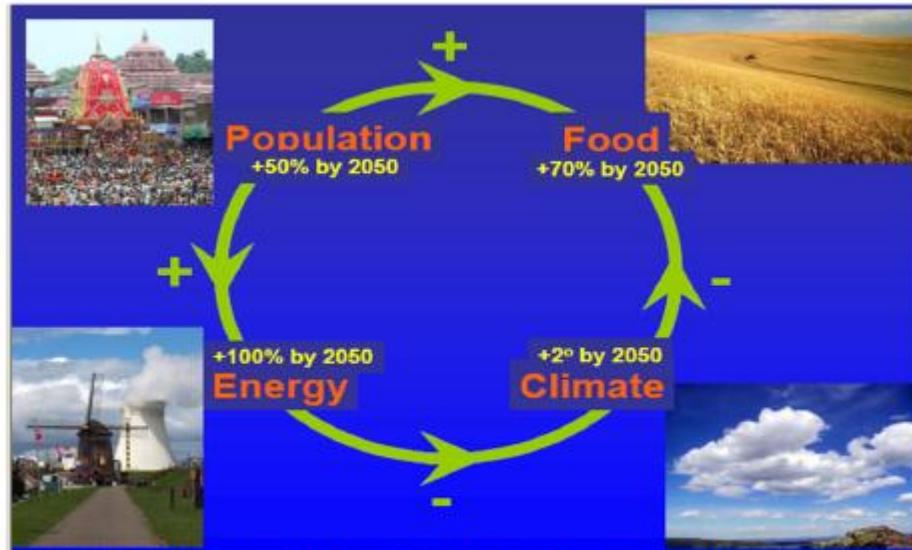
- *High Level Steering Groups y Sherpa Groups de las European Innovation Partnerships on Water, Raw Materials, and Agriculture.*
- PPP SPIRE
- Eco-innovation Action Plan (Eco-AP)
- COPERNICUS, Resource Efficiency Flagship

BLOQUE I. INTRODUCCIÓN, HORIZONTE 2020

...¿Y LA ECO-INNOVACIÓN?

- A efectos prácticos, la eco-innovación se aborda en todos los pilares, en especial en el Reto Social 5 y el Reto Social 2.

El principal conductor político es el *Eco-innovation Action Plan*



Fuente: Patrick Cunningham, KBBE Conference Brussels 14th September 2010

BLOQUE I. INTRODUCCIÓN, HORIZONTE 2020

ESTRUCTURA DEL PROGRAMA DE TRABAJO RS 5

- Estructura: 3 convocatorias por año más contribución a Focus Areas:
 1. ***Focus Area Water***
 2. ***Focus Area Waste***
 3. ***Sub-Challenges:***
 1. Fighting and adapting to climate change
 2. Sustainably managing natural resources and ecosystems
 3. Ensuring the sustainable supply of non-agricultural and non-energy raw materials
 4. ***Enabling transition towards a green economy through eco-innovation***
 5. Developing comprehensive and sustained global environmental observation and information systems

Otras:

- 1. Contribución a ***Focus Areas: Blue Growth, Smart Cities, Energy Efficiency y Disasters resilience.***

BLOQUE I. Horizonte 2020-Reto 5

PRESUPUESTOS, FECHAS 2014-2015

SC5: indicative budgets (€M)

SC5 contribution to Calls	2014	2015
WASTE	61.5	44
WATER	68	93
SC5	168	189
BLUE GROWTH	23	15
DISASTER RESILIENCE & CLIMATE ADAPTATION	18	28
ENERGY EFFICIENCY	5	0
SC5 Other actions	5.5	5.35
Fast Track to Innovation pilot	0	7
TOTAL	349	381.35

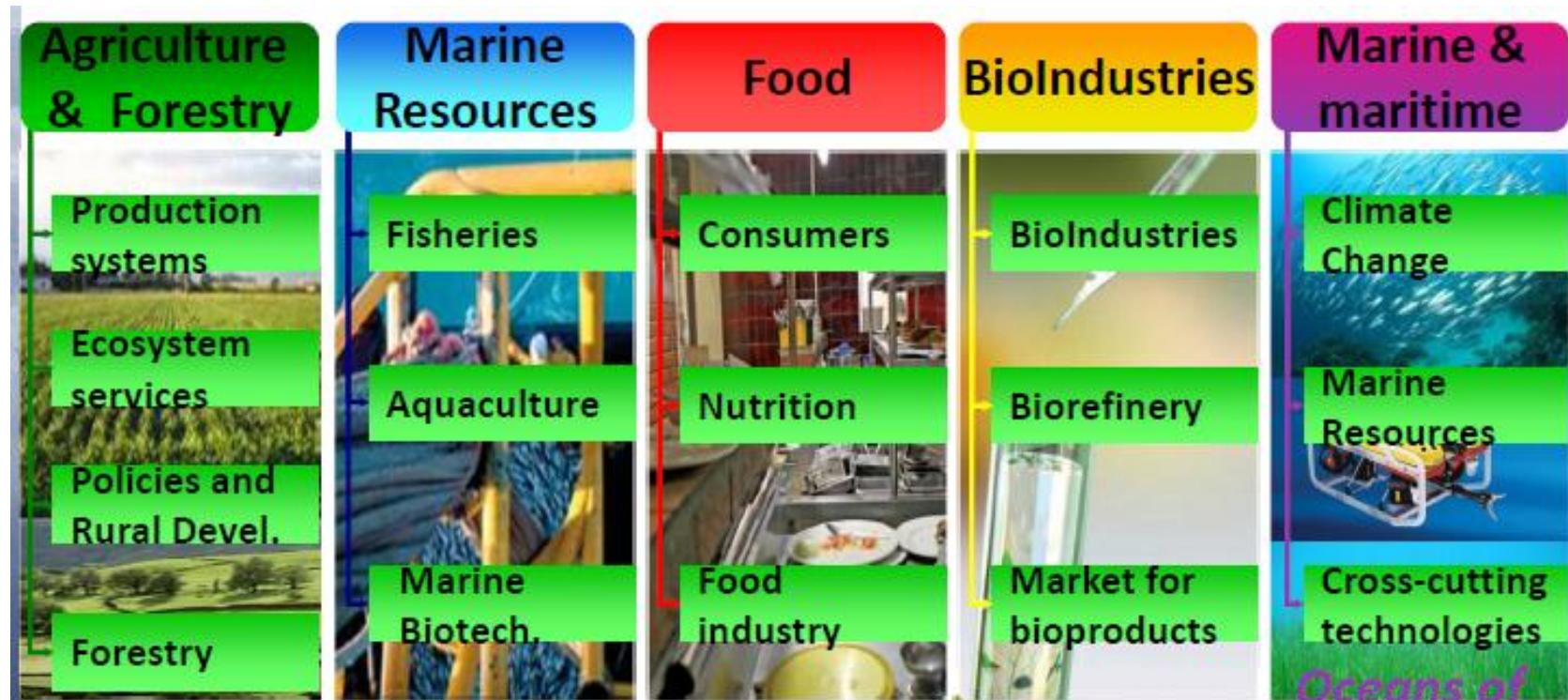
- **OBJETIVO 2014: 9,5%**
- **OBJETIVO 2015: 9%**

SC5 WP: provisional call deadlines

Call	Publication date	Call deadline: topics with single stage evaluation	Call deadline (1 st stage): topics with 2-stage evaluation	Call deadline (2 nd stage): topics with 2-stage evaluation
WASTE-2014	11/12/2013	08/04/2014	08/04/2014	16/09/2014
WATER-2014	11/12/2013	08/04/2014	08/04/2014	16/09/2014
SC5-2014	11/12/2013	08/04/2014	08/04/2014	16/09/2014
WASTE-2015	11/12/2013	10/03/2015	21/10/2014	10/03/2015
WATER-2015	11/12/2013	10/03/2015	21/10/2014	10/03/2015
SC5-2015	11/12/2013	10/03/2015	21/10/2014	10/03/2015

BLOQUE I. INTRODUCCIÓN, HORIZONTE 2020

ESTRUCTURA DEL PROGRAMA DE TRABAJO RS 2 + LEIT



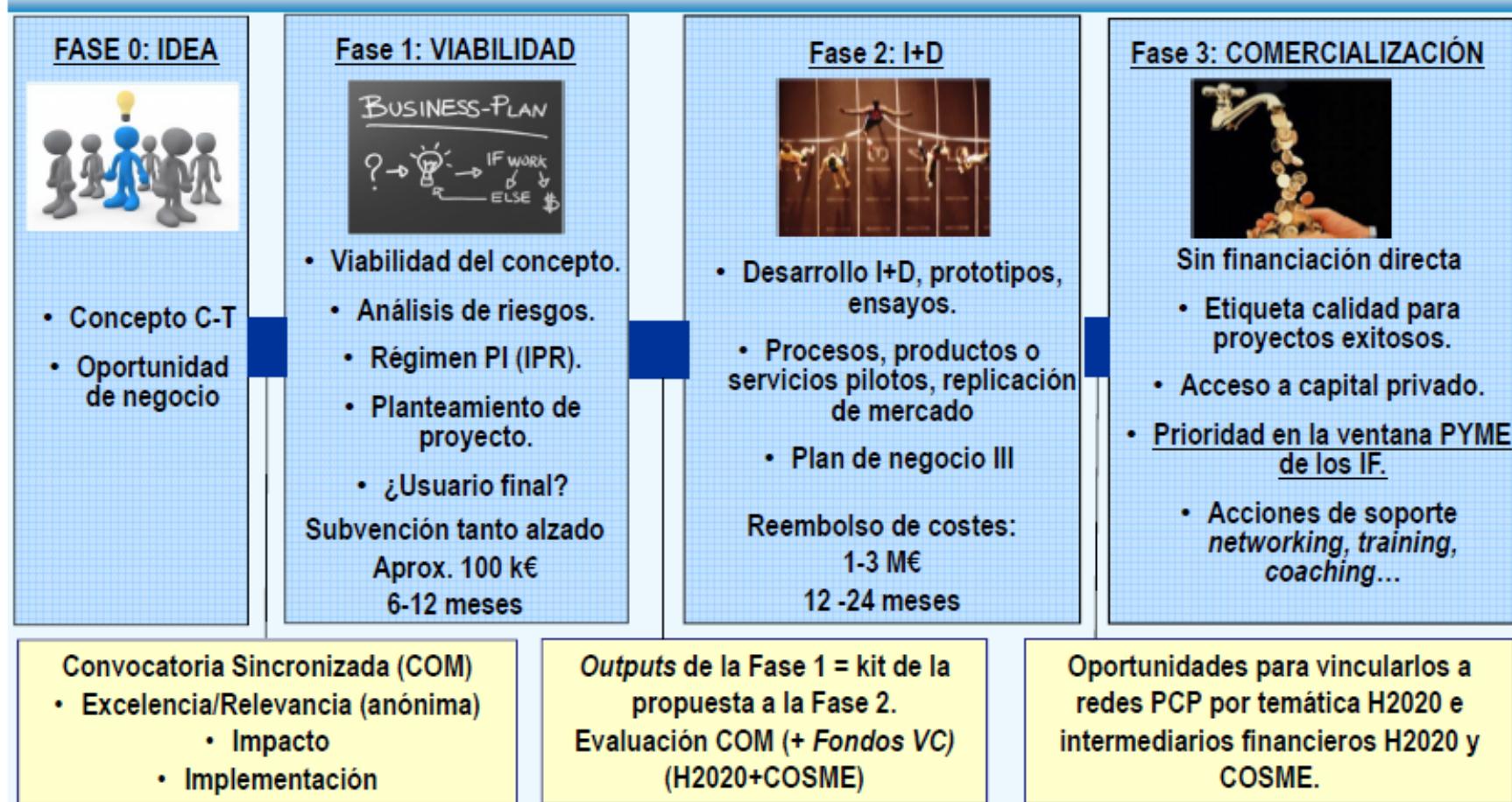
BLOQUE II. Horizonte 2020

ESQUEMAS FINANCIEROS

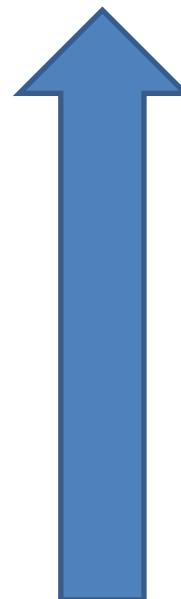
- *Research and Innovation Actions (100%)*
- *Innovation Actions (70%)*
- *Coordination and Support Actions*
- ***SME instrument***
- *ERA-NET (COFUND)*
- *Fast Track to Innovation*
- *Public Procurement*
- *Inducement for a Prize*
- “The Commission **considers** that proposals requesting a contribution from the EU of between EUR 8 and 10 million would allow this specific challenge to be addressed appropriately. **Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.**”
- **Fund up-to 1 project**

BLOQUE II. Horizonte 2020-Reto 5

ESQUEMAS FINANCIEROS (Instrumento PYME)



BLOQUE II. APROXIMACIÓN CONCEPTUAL



Bottom-up

....«acotado» en base a iniciativas político-estratégicas y proyectos pasados/en marcha!

BLOQUE II. APROXIMACIÓN CONCEPTUAL

COMPLEMENTARIEDADES



- A 2020 timeframe and 2050 vision

- 9 Priority objectives

3 THEMATIC:

1. Natural capital
2. Resource efficient, low-carbon growth
3. Health & environment

4 'ENABLING':

4. Implementation
5. Knowledge/evidence base
6. Investment
7. Integration

2 'SPATIAL':

8. Urban environment
9. International



4. The tools: Integrated Projects

Budget:

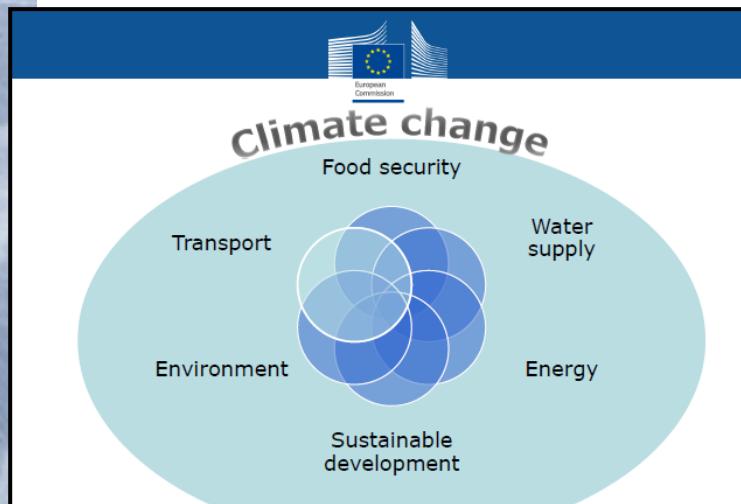
- 30% ceiling of the funds dedicated to projects
- Max. €855 million for 7 years (of which around €637million in the sub-programme for Environment)

Other aspects:

- Technical assistance in support of IPs possible for potential applicants
- Provisions regarding exchange of experience, best practices, and National Contact Point support enhanced
- Active dissemination of examples and good practices by LIFE and in the specific working groups and committees for the sectors concerned

BLOQUE II. APROXIMACIÓN CONCEPTUAL

COMPLEMENTARIADES



LIFE main tools for funding:

- € Action Grants, both traditional and larger, Integrated Projects;
- € Operating Grants for NGO;
- € Contributions to financial instruments.

**The LIFE climate sub-programme:
Specific priority areas**

Commission

- **Climate Change Mitigation** contributes to the reduction of greenhouse gas emissions
- **Climate Change Adaptation** supports efforts leading to increased resilience to climate change
- **Climate Governance and Information**

Investing in climate action
Investing in LIFE

New: Possible contribution to FI (2)

Examples of existing FI

→ Risk Sharing Finance Facility (EUR 2 billion) - provides risk coverage for loans for Research, Development and Innovation (RDI) projects of the Seventh Framework Programme (FP7) and of Horizon 2020

→ SME Guarantee Facility (EUR 500 million) - ensures that loans are provided to SMEs at lower rates or are awarded to SMEs that would not otherwise be able to get a loan

→ European Energy Efficiency Fund (EUR 260 million, target size 600 million) - invests in smaller scale energy efficiency and renewable energy projects of local authorities, mainly the development of energy service companies (ESCOs)

→ Green for Growth Fund (EUR 166 million) – provides security for private investors' capital for development purposes in Southeast Europe region including Turkey

eeef
EUROPEAN ENERGY EFFICIENCY FUND

GREEN FOR GROWTH FUND
SOUTHEAST EUROPE

BLOQUE II. Horizonte 2020

COMPLEMENTARIADES



Future Cohesion Policy 2014-2020

1. **Thematic concentration** to maximise the impact of investments
2. **Conditionalities** and strengthened partnership to ensure effective implementation
3. **Common Strategic Framework:** coherent funds (ERDF, ESF, CF, EAFRD, EMFF); clarify Horizon 2020 etc. (see modified COM proposal for Comm Regulation of 11 Sept 2012: <http://eur-lex.europa.eu>)



The Synergies and Smart Specialisation Matrix

STRUCTURAL FUNDS THEMATIC OBJECTIVE NO 1 ON STRENGTHENING RESEARCH, TECHNOLOGICAL DEVELOPMENT AND INNOVATION

HORIZON 2020 TOP DOWN RESEARCH AND INNOVATION PRIORITIES
INFLUENCING NATIONAL AND REGIONAL PRIORITIES

THEMATIC CONCENTRATION FOR MOST ADVANCED AND TRANSITION REGIONS FOR ALLOCATING 80% OF THE ERDF MONEY FOR 4 OBJECTIVES: R&I, ICT, SME COMPETITIVENESS AND LOW CARBON ECONOMY

THEMATIC CONCENTRATION FOR LESS ADVANCED REGIONS FOR ALLOCATING 50% OF THE ERDF MONEY FOR 4 OBJECTIVES: R&I, ICT, SME COMPETITIVENESS AND LOW CARBON ECONOMY

EXCELLENCE

SMART SPECIALISATION EX-ANTE CONDITIONALITY
based on a SWOT analysis to concentrate resources on a limited set of research and innovation priorities in compliance with the NRP; measures to stimulate private RTD investment; a monitoring and review system; a framework outlining available budgetary resources for research and innovation; a multi-annual plan for budgeting and prioritisation of investments linked to EU research infrastructure priorities (European Strategy Forum on Research Infrastructures - ESFRI)

INDUSTRIAL LEADERSHIP

SOCIETAL CHALLENGES

In the future:
"European Structural and Investment Funds"

Less developed region
Transition regions (G)
More developed regions

Between €80-100 billion will be invested in innovation-drivers and take-up, notably research and innovation projects, SME competitiveness, digital growth and energy efficiency / renewable energies.

€ 70 billion for ESF investments in skills, life-long learning, social integration, employment services, social innovation ...

Via the Cohesion Fund around € 66 billion will go into trans-european transport connections and environmental projects

325.1

Regional Policy

(27/03/2014)



BLOQUE II. APROXIMACIÓN CONCEPTUAL

RIS 3

MAPA DE ÁMBITOS DE ESPECIALIZACIÓN DE LAS REGIONES ESPAÑOLAS

	SALUD, CAMBIO DEMOGRÁFICO Y BIENESTAR			SEGURIDAD Y CALIDAD ALIMENTARIA, ACTIVIDAD AGRARIA PRODUCTIVA Y SOSTENIBLE; SOSTENIBILIDAD RECURSOS NATURALES, INVESTIGACIÓN MARINA Y MARÍTIMA			ENERGÍA SEGURA, SOSOTENIBLE Y LIMPIA			TRANSPORTE INTELIGENTE, SOSTENIBLE E INTEGRADO			ACCIÓN SOBRE CAMBIO CLIMÁTICO Y EFICIENCIA EN LA UTILIZACIÓN DE RECURSOS Y MATERIAS PRIMAS			ECONOMÍA Y SOCIEDAD DIGITAL			LIDERAZGO EMPRESARIAL HD+I			KET															
	Comprender la salud, el bienestar y la enfermedad	Prevenir la enfermedad	Tratamiento y gestión de las enfermedades	Envejecimiento activo y autogestión de la salud	Agricultura y silvicultura sostenible	Alimentación	Recursos acuíferos	Bioindustrias.	Bioeconomía	Investigación transversal marítima y marina	Energías Renovables	Hidrógeno y pilas de combustible	Almacenamiento de CO2	Redes eléctricas	Almacenamiento energía	Eficiencia energética	Un transporte eficiente	Mejor movilidad	Lucha contra el cambio climático	Protección del medio ambiente	Abastecimiento sostenible materias primas	Economía verde.	Sistema de Observación e Información	Patrimonio Cultural	Infraestructuras,	Sistemas y tecnologías de computación avanzada	ingeniería de componentes y sistemas	TIC para los contenidos digitales y la creatividad	Interfaces avanzadas y robots	Microelectrónica, nanoelectrónica y fotónica	Turismo	Sectores Manufactureros Tradicionales	Sector Aeronáutica y del Espacio	Biotecnología	Nanotecnología	Materiales Avanzados	Tecnologías de Fabricación avanzada
ANDALUCÍA (*)																																					
ARAGÓN																																					
ASTURIAS																																					
CANARIAS																																					
CANTABRIA																																					
CASTILLA LA MANCHA																																					
CASTILLA Y LEÓN																																					
CATALUÑA																																					
EXTREMADURA																																					
GALICIA																																					
BALEARES																																					
MADRID																																					
MURCIA																																					
NAVARRA																																					
PAÍS VASCO																																					
LA RIOJA																																					
C. VALENCIANA																																					

(*) En el momento de elaboración de esta tabla no estaban disponibles las prioridades de especialización de la Comunidad Autónoma de Andalucía.

BLOQUE II. APROXIMACIÓN CONCEPTUAL

Iniciativas político-estratégicas

Iniciativa	Alcance	Protagonistas	Apertura	Gestión €
JPI Joint Programming	Inv. (algo Innov.)	Países gestores PN		Países
PPP Public Private Partnerships*	Tecnológico	Industrias.	Open	CE
JTI Joint Technology*	Tecnológico	Industrias.	Club	Autónoma
European Research Alliances	Investigación	Centros Inv.	Semi	Autónoma
EIP European Innovation Partnership	IDT+ Inn+ CPI Regulación ...	CE, países, RTD, PT industria, usuarios		«etiquetas» VIP

*En el H2020 se denominarán: PPP contractuales y las JTI como PPP Institucionales

BLOQUE II. APROXIMACIÓN CONCEPTUAL

- [European Innovation Partnership \(EIP\)](#)

- I.[EIP Water](#)

- II.[EIP Raw Materials](#)

- III.[EIP Agriculture](#)

- [Public Private Partnerships \(PPP\)](#)

- I.[PPP SPIRE](#)

- [Joint Programming Initiatives \(JPI\)](#)

- I.[Water Challenge](#)

- II.[Agriculture, Food Security and Climate Change](#)

- III.[Cultural Heritage](#)

- IV.[Healthy and Productive Seas and Oceans.](#)

- [ERA-NET](#)

- I.[ECO-INNOVERA](#)

- II.[ERAMIN](#)

- Otros:

- I.[Eco-innovation Action Plan \(EcoAP\)](#)

- II.[European Institute of Innovation & Technology \(EIT\)](#). [Climate-KIC](#)



BLOQUE II. APROXIMACIÓN CONCEPTUAL

European Innovation Partnerships (EIPs)



http://ec.europa.eu/eu2020/index_en.htm



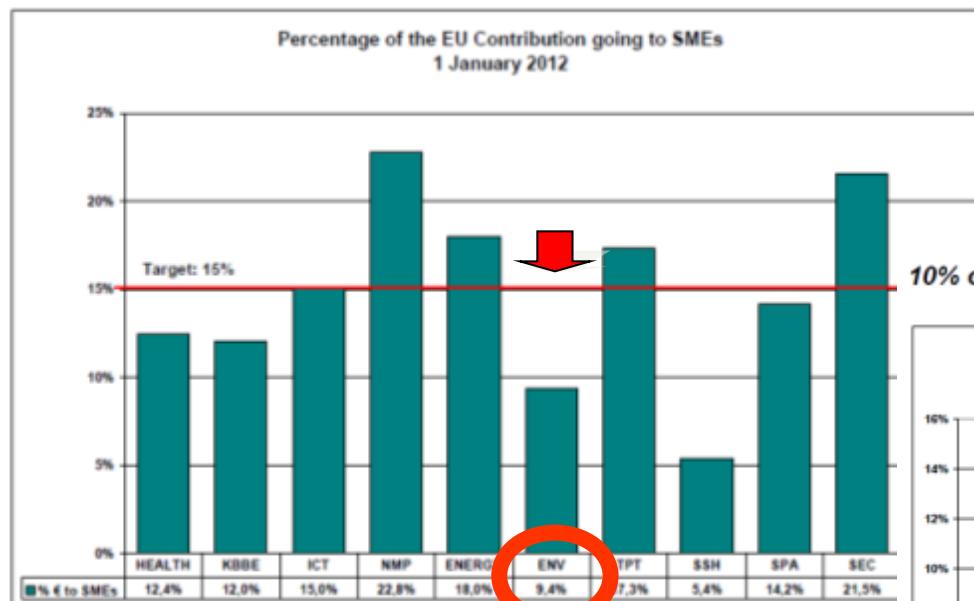
http://ec.europa.eu/research/innovation-union/index_en.cfm

http://ec.europa.eu/research/innovation-union/index_en.cfm?section=active-healthy-ageing&pg=home

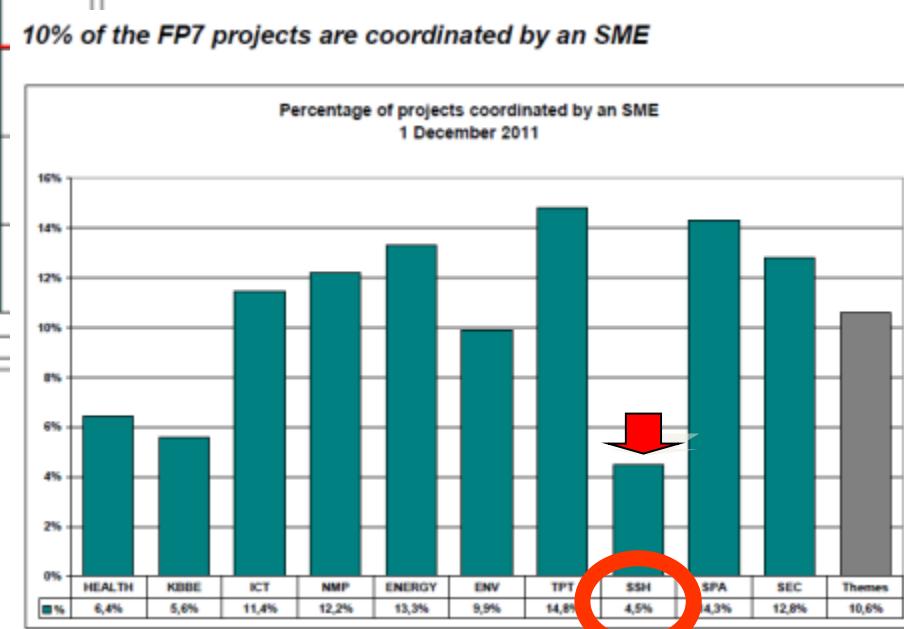
BLOQUE II. APROXIMACIÓN CONCEPTUAL

European Innovation Partnerships (EIPs)

*EU Contribution going to SMEs, per Theme, versus the 15% target
Grant agreements signed during the years 2007 to 2011*



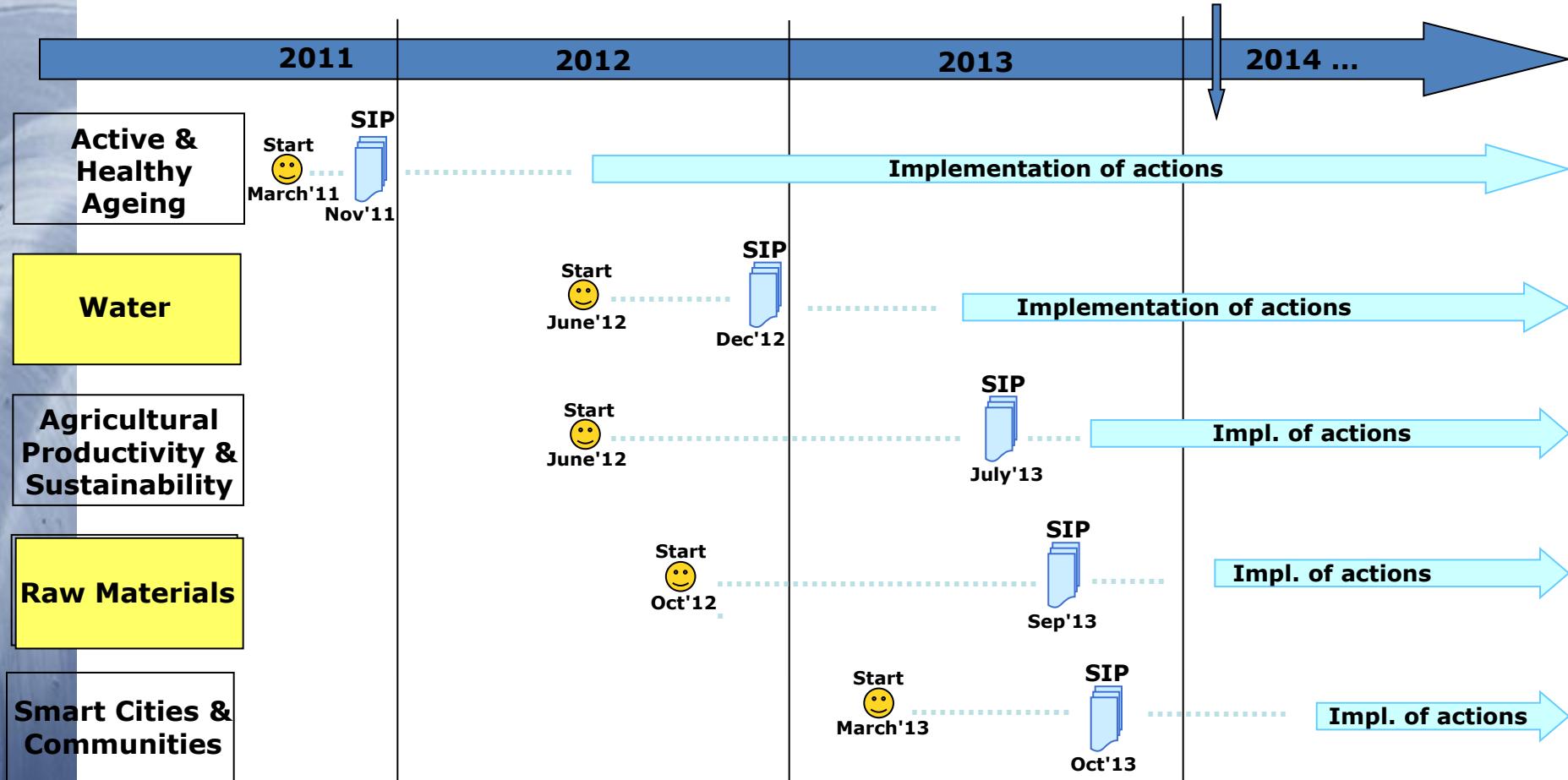
Graph 1: The share of the EU Contribution going to SMEs, for each Theme within the Cooperation Programme (2007-2011)



Graph 11: SME Coordinators per Theme in percentage of the projects

BLOQUE II. APROXIMACIÓN CONCEPTUAL

European Innovation Partnerships (EIPs)



Start: Endorsement by Council (following Commission proposal)

SIP: Strategic Implementation Plan (issued by Steering Group)

Implementation of actions: Execution of priority actions (following 'Invitations for Commitments', forming 'Action/Operational Groups', setting up 'Marketplaces', Conferences ...)

BLOQUE II. APROXIMACIÓN CONCEPTUAL

European Innovation Partnerships (EIPs)

...Las EIPs no tienen financiación teórica, pero sí influencia práctica real o potencial en estos fondos:

- **Horizonte 2020-Enfoque estratégico del contenido de las Áreas Foco (*Focus Areas*) y los propios *topics*: Criterio de Evaluación de Impacto**
 - Fondos Estructurales
 - Banco Europeo de Inversiones
 - Otros: LIFE+
 - Proyectos de Interés Comunitario

BLOQUE II. APROXIMACIÓN CONCEPTUAL

European Innovation Partnerships (EIPs)

...Las EIPs tienen convocatorias específicas, bien para la elaboración de su Plan Estratégico de Implementación (*Strategic Implementation Plan*), bien para el desarrollo de las actividades de ese SIP:

- **Call for Experts**
- **Call for Commitments** (...for Action Groups)

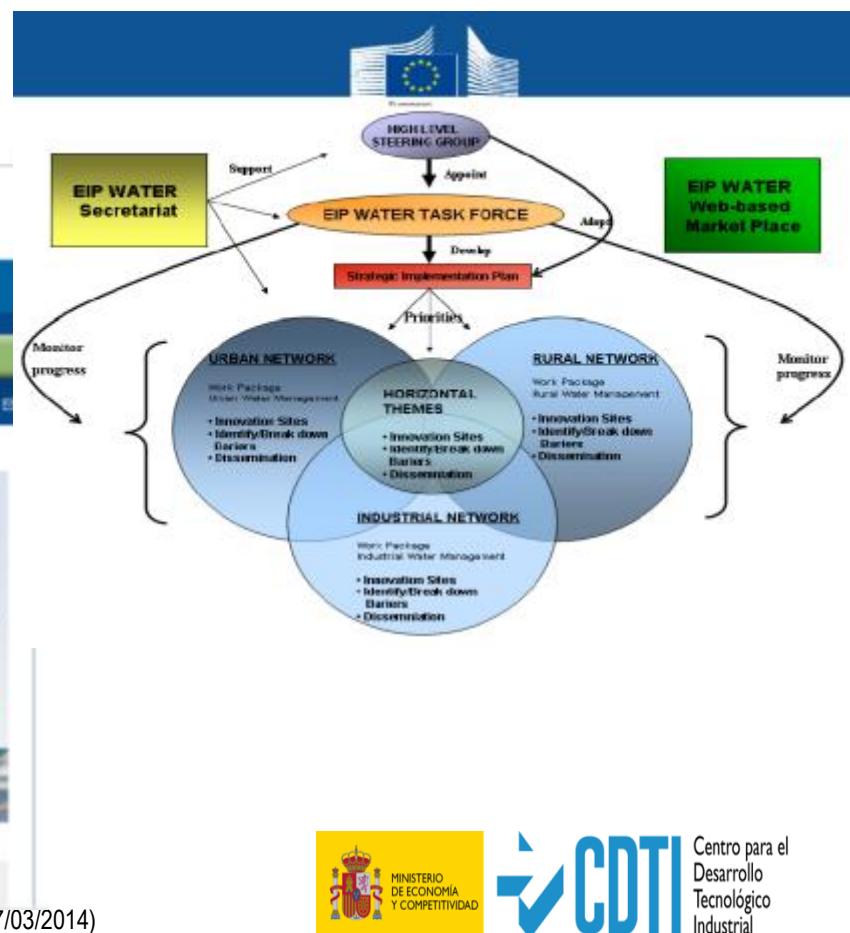
BLOQUE II. APROXIMACIÓN CONCEPTUAL

EIP on Water

- Lidera DG Environment
- Apoya DG RTD (Directorate ENV)

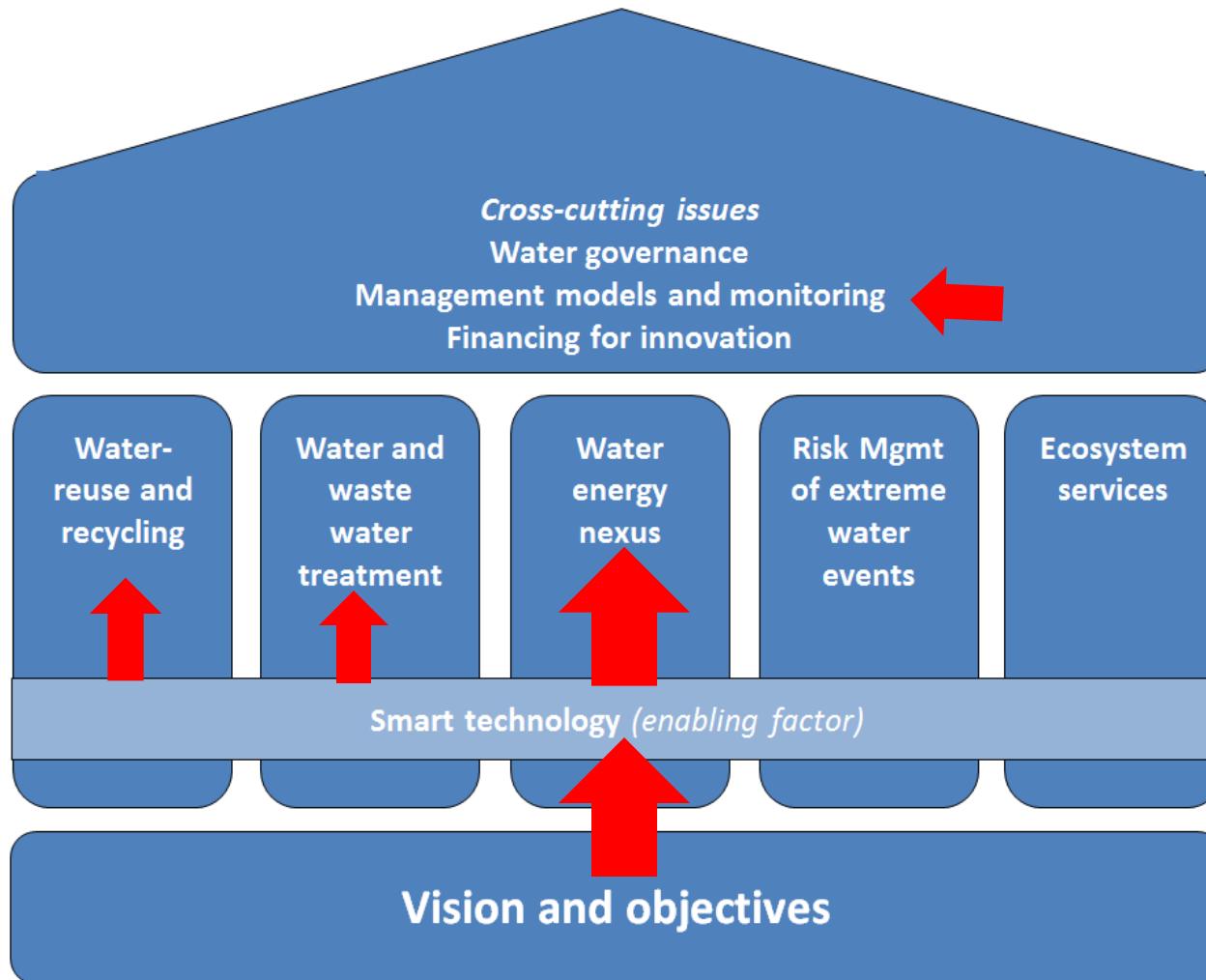
A to Z | About this site | Contact | FAQ | Sitemap | What's new? | Search | Legal notice | English (en)

The screenshot shows the European Commission Environment website. The top navigation bar includes links for A to Z, About this site, Contact, FAQ, Sitemap, What's new?, Search, and Legal notice. Below this, there's a logo for the European Commission Environment. The main content area is titled "ENVIRONMENT" and "European Commission > Environment > Water > EIP". The "EIP Water" section features a banner with "Boosting opportunities - Innovating water" and four tabs: Action Groups, What we do, Priorities, and Get involved!. Under "Action Groups", it says "1st Action Group call finalized" with three bullet points: Welcome to the nine selected Action Groups!, Over 100 partner organizations from more than 20 countries involved, and First results to be presented at the EIP Water Conference on 21 November 2013. There's also a "Read more" link and a small image of laboratory glassware. To the right, there's a "Get involved!" section with text about the evaluation of applications and a red flag icon. At the bottom, there's a "Sign up for our" button and the date "(27/03/2014)". The footer includes the WISE logo ("Your gateway to Europe") and a statement about European Innovation Partnerships.



BLOQUE II. APROXIMACIÓN CONCEPTUAL

EIP on Water



BLOQUE II. APROXIMACIÓN CONCEPTUAL

EIP on Water

- *Market place on-line*

The screenshot shows the homepage of the EIP Water Online Market Place. At the top, there is a header with the EU flag, the text "EIP Water Online Market Place Matchmaking for water innovation", a "Feedback" button, and links for "EU water policy", "Contact", "Register", and "Login". Below the header is a search bar with "Subscribe our news" and "Browse the archive" buttons, and social media icons for YouTube, Twitter, and RSS.

The main content area features a banner with the text: "The European Innovation Partnership on Water - EIP Water in short - aims to boost opportunities for innovation in the water sector. It facilitates the development of innovative solutions and...". Below this is a "Read more" link.

A central feature is a map of Europe and the Mediterranean region, showing various locations marked with orange circles containing numbers indicating the count of Action Groups, Events, or New in Showcase. A legend on the right side of the map defines these symbols and includes entries for Kazakhstan, Uzbekistan, Kyrgyzstan, Turkmenistan, Tajikistan, and Georgia.

To the right of the map, a "FEATURED" section highlights the "2nd call for EIP Water Action Groups open!". It states: "Call for expressions of commitment for EIP Water Action Groups has opened on November 4th and will close on 31 January 2014." A "read more" button is present.

Below this is a "MY MARKET PLACE" section with the text: "Your exclusive area for information exchange, matchmaking and teaming-up (How to register)". It includes a "Sign In / Register" button and a "Today's Market Place Index".

BLOQUE II. APROXIMACIÓN CONCEPTUAL

EIP on Water

Action Group	País líder	Líder	Num. Socios	Num Socios ES
Smart Pricing and Drought Insurance Schemes in Mediterranean Countries	ES	IMDEA Agua	10	9
Renewable Energy Desalination (RE-Desalination)	ES	CIEMAT	14	3
W4EF: Framework for evaluation and reporting of the energy impacts on water	FR	EDF	37	0
Anaerobic membrane Bioreactor for Recovery of Energy and Resources	ES	Univ. Valencia	11	3
CITY BLUEPRINTS: Improving Implementation Capacities of Cities and Regions	NL	KWR	22	2
WaterCoRe: Regional governance of water scarcity and drought issues	NL	Noord-Brabant	18	2
Industrial Water Re-use and Recycling	NL	TNO	44	4
ESE - Ecosystem Services for Europe	ES	CIRCE	13	3
FINNOWATER	EU	ERRIN	19	7
Total	9	-	188	
Total España	4	-	33	
Porcentaje de España sobre total	44	-	18	
Ranking	Primero	-	¿Primero?	

BLOQUE II. APROXIMACIÓN CONCEPTUAL

EIP on Raw Materials

- Lidera DG Enterprise
- Apoya DG RTD (Directorate ENV)

Sitemap | About this site | Legal notice | Contact | Search | English (en)

European Commission > Enterprise and Industry > All topics > Raw materials > Innovation partnership

Enterprise and Industry

Raw materials European Innovation Partnership (EIP)

The supply of raw materials, the lifeblood of today's high-tech industry, is increasingly under pressure. With a view to increasing the availability of raw materials for Europe, the European Commission has proposed a European Innovation Partnership on raw materials.

Innovation can be a powerful vehicle in meeting Europe's challenges in the field of raw materials. For example, new technologies can help to extract deeper, in more remote areas and under harsh conditions.

Action is also needed to develop substitutes for critical raw materials and to improve recycling of, among others, the 17 kg electric and electronic equipment waste that each EU citizen produces annually today.

The current situation calls for targeted innovation and research efforts, breakthrough technologies and multidisciplinary approaches, as well as demand-side interventions (e.g. standards, public procurement, regulatory measures).

The Innovation Partnership brings together, among others, EU countries, companies, researchers and NGOs to promote innovation solutions to Europe's raw materials challenges.

Raw Materials
A
R
Recycle
E
Xtract

EUROPEAN COMMISSION

Brussels, 29.2.2012
COM(2012) 82 final

COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS

MAKING RAW MATERIALS AVAILABLE FOR EUROPE'S FUTURE WELL-BEING
PROPOSAL FOR A EUROPEAN INNOVATION PARTNERSHIP ON RAW MATERIALS

{SWD(2012) 27 final}

BLOQUE II. APROXIMACIÓN CONCEPTUAL

EIP on Raw Materials

Metrics for Monitoring the Performance of the EIP on Raw Materials:

1. Import Dependency
2. Resource Efficiency
3. Competitiveness

Ponderación anual mundial

Table 1: Metrics for EU Import Dependency of Raw Materials (%)

Raw Material	Import Dependency
Natural Rubber	100%
High-Tech Metals	96%
Iron Ore	85%
Critical Raw Materials*	77%

Raw Material	Import Dependency
Bulk Metals	57%
Industrial Minerals	46%
Wood	15%
Paper	9%

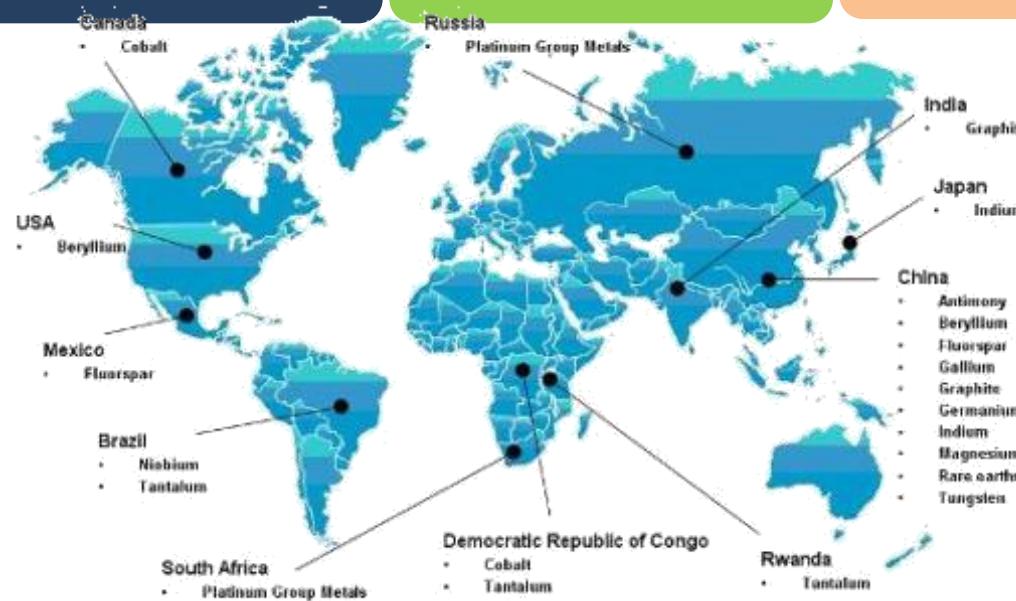
* As defined by the EU. These 14 raw materials include a combination of high-tech metals, bulk metals, as well as industrial minerals
Source: European Commission (2010), Critical Raw Materials for the EU & some additional references

BLOQUE II. APROXIMACIÓN CONCEPTUAL

EIP on Raw Materials

Potencial EIP Materias Primas

Exploración y Extracción



Reciclado

Sustitución

10 plantas piloto

3 materiales críticos sustituidos

Knowledge Innovation Community en 2014

Objetivos 2020

BLOQUE II. APROXIMACIÓN CONCEPTUAL

EIP on Raw Materials

Líneas Tecnológicas – aplicaciones destacadas

Semiconductores y condensadores

→ Galio,
Tántalo y
Paladio



Leds blancos

→ Paladio



Células fotovoltaicas en lámina delgada

→ Indio, Selenio, Galio



Soldar sin Pb

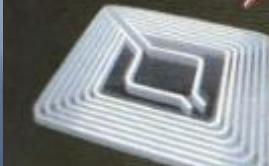


→ Zinc, Plata



Etiquetas RFID

→ Plata



Pantallas táctiles y flexibles

→ Indio, Zinc

Motores eléctricos

→ Neodimio, Cobre



Materiales inoxidables

→ Titanio,
Paladio



BLOQUE II. APROXIMACIÓN CONCEPTUAL

EIP on Raw Materials

Raw material	Emerging technologies
Antimonio	Óxido Antimonio-Zinc (~ In-Sn-O), microcondensadores
Cobalto	Baterías de ión-Litio, combustibles sintéticos
Galio	Semi-conductores, células fotovoltaicas de lámina delgada, LEDs blancos
Germanio	Fibra óptica, tecnologías ópticas
Indio	Pantallas, células fotovoltaicas de lámina delgada
Platino (PGM)	Células de combustible, catalizadores
Paladio (PGM)	Catalizadores, desaladoras
Niobio	Microcondensadores, aleaciones férricas
Neodimio(REE)	Imanes permanentes, tecnologías laser
Tántalo	Microcondensadores, tecnologías médicas



BLOQUE II. APROXIMACIÓN CONCEPTUAL

EIP on Agricultural Productivity and Sustainability

- Lidera DG AGRI
- Apoya DG RTD

The screenshot shows a web browser window with the URL http://ec.europa.eu/agriculture/eip/index_en.htm. The page title is "AGRICULTURE AND RURAL DEVELOPMENT". On the left, there's a sidebar with links like Home, The CAP, Policy areas, Market sectors, External relations, CAP funding, Analysis, Media, Services, Tool Box, Archive, and About us. Below this is a "Have your say" section with Contact us, Consultations, and Surveys. The main content area features the "European Innovation Partnership" logo and the title "European Innovation Partnership 'Agricultural Productivity and Sustainability'". It includes a text box about the partnership's goals and a "News" section with two items: a call for experts for focus groups on HNV farming and a new call for experts on genetic resources. To the right, there's a sidebar titled "IN THIS CHAPTER" with links to Introduction, Events, Newsletters, Network and Service Point, High Level Steering Board, Focus groups, and Documents. Another sidebar titled "RELATED INFO" lists EIP network call for tender, Standing Committee on Agricultural Research, EIP on Water, and Innovation Union.

EIP AGRO – Areas of Innovative Actions:

- Increased agricultural productivity, output, and resource efficiency
- Innovation in support of the bio-based economy
- Biodiversity, Ecosystem services, and soil functionality
- Innovative products and services for the integrated supply chain
- Food quality, food safety and healthy lifestyles

BLOQUE II. APROXIMACIÓN CONCEPTUAL

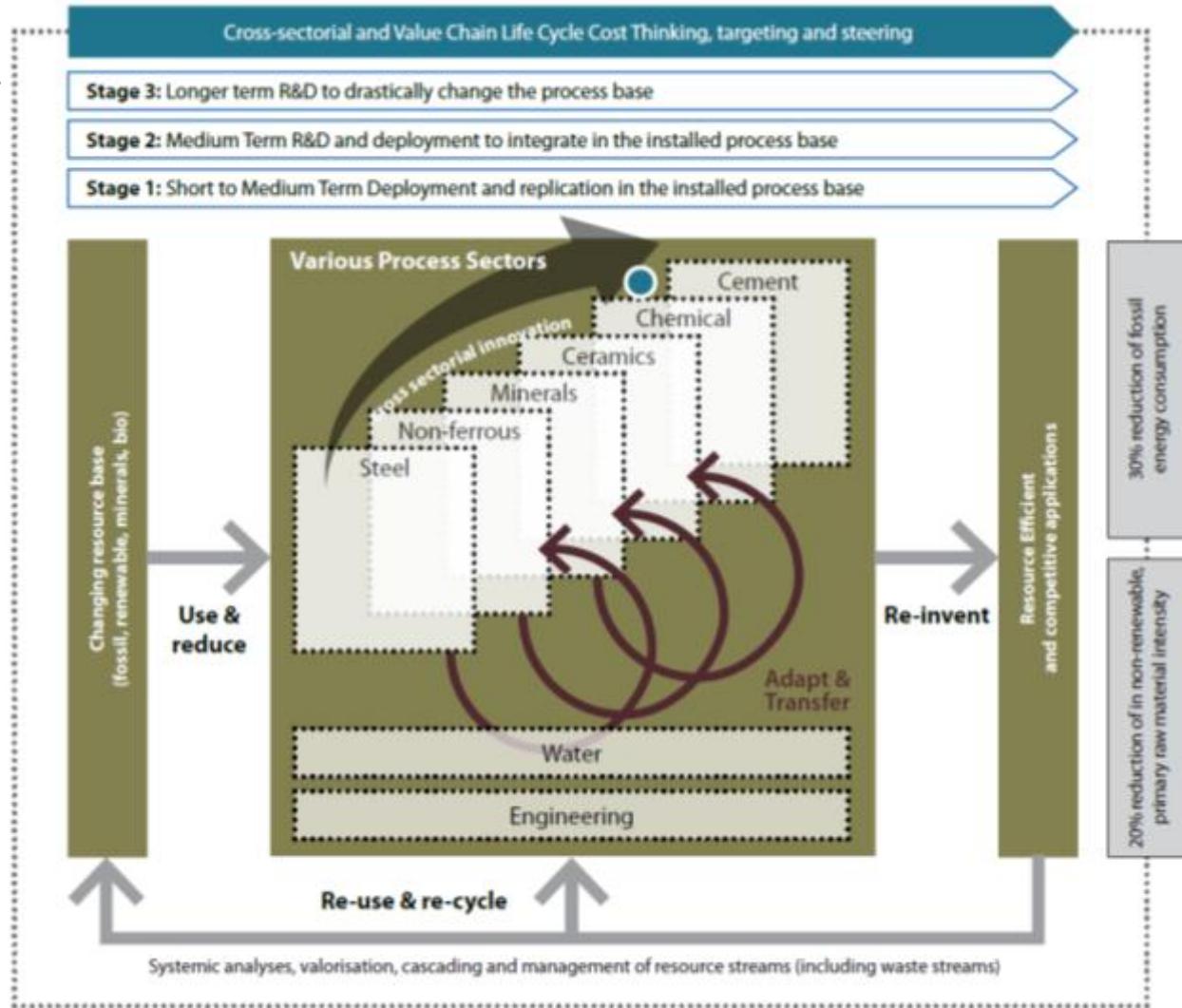
EIP on Agricultural Productivity and Sustainability

- April '13: EIP Service Point established
- May '13: 1st Call for Expression of Interest for EIP Focus Groups
 - 1. Organic farming, 2. Protein crops, 3. Animal husbandry – started Sep '13
- Sep '13: 2nd Call for EoI for EIP Focus Groups
 - 4. Genetic resources, 5. Organic matter content of soils, 6. Integrated pest management in brassica production – started Dec '13
- Nov '13: Seminar on Programming EIPs within Rural Dev Policy
- Monitoring and evaluation framework completed
- Jan '14: EIP Workshop on integrating research and innovation activities
- Feb '14: Staff Working Document on the SIP

BLOQUE II. APROXIMACIÓN CONCEPTUAL

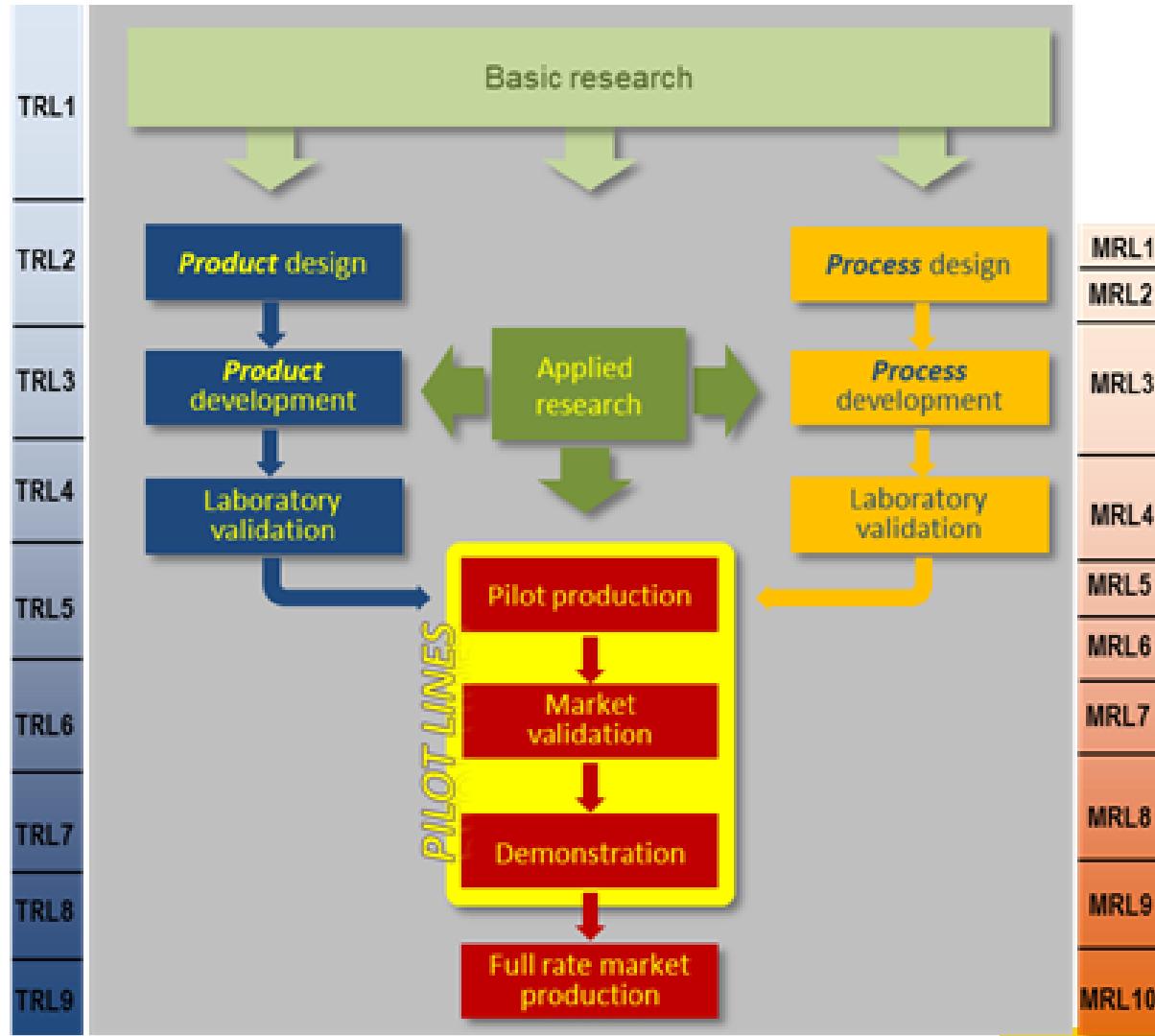
Public Private Partnership SPIRE

- <http://www.spire2030.eu>
- 900 M EUR en total
- Impacto: Key Performance Indicators (KPIs)



BLOQUE II. APROXIMACIÓN CONCEPTUAL

Key Enabling Technologies (KETs)



BLOQUE II. APROXIMACIÓN CONCEPTUAL

COPERNICUS

<http://www.copernicus.eu/>

The screenshot shows the Copernicus website homepage. On the left, there's a vertical navigation bar with buttons for Overview, Services, Infrastructure, Applications, Projects, Library, Events, News, Newsletters, Publications, and Links. Below this is a decorative graphic of overlapping circles in blue, yellow, and green. The main content area features a grid of images showing satellite imagery of fields, clouds, and landscapes. To the right of the images is a section titled "WHAT'S NEW" with several news items:

- 28 Nov 2013 : Coastal Enviro The squeeze continues
- 28 Nov 2013 : SWARM End of beginning
- 28 Nov 2013 : European Space The European
- 25 Nov 2013 : SWARM SWARM constellation deployed booms

Below the news is a "FOCUS EVENT" box for the "European Space Expo" from November 28 to December 9, 2013, in Lisbon, Portugal. The top right of the page has three blue boxes with images and text: "Management of urban areas", "Sustainable development and nature protection", and "Regional and local planning".

BLOQUE II. APROXIMACIÓN CONCEPTUAL

Joint Programming Initiatives

<http://www.jpc2013.com/programme/>



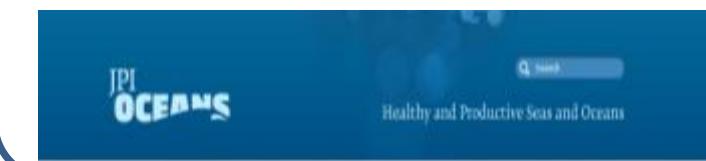
<http://www.waterjpi.eu/>



<http://www.jpi-climate.eu/>



<http://www.jpi-oceans.eu/>



<http://www.jpi-culturalheritage.eu/>



BLOQUE II. APROXIMACIÓN CONCEPTUAL

Joint Technology Initiative on BioBased Industries

- Overall Budget: 3.800 M€ 1.000 M€ EC (850 RS2 + 150 LEIT);
2.800 M€ BioIndustries
- BIC members (69 Industries + 102 RTOs , Associations & ETPs)
- Drafting WP 2014 (final version).
 - Matchmaking event: 5 February 2014 (BIC Members)
 - Pre-publication: May 2014
 - Stakeholder event: May 2014
 - Date of Publication: July 2014
 - Deadline: October 2014
 - Budget: 50 M€ (approx)
 - Actions: R&D (mainly), demo/flagship (limited), CSAs
- Several ideas for WP 2015 – draft WP version in August
 - Date of Publication: Dec 2014?



BLOQUE II. APROXIMACIÓN CONCEPTUAL

ERA-Nets



Type of action used for ERA-NET: Programme Cofund

(Rules for participation, Article 2 – Definitions)

(16) 'programme co-fund action' means an action funded through a grant the main purpose of which is supplementing individual calls or programmes funded by entities, other than Union funding bodies, managing research and innovation programmes.

A programme co-fund action may also include complementary activities of networking and coordination between programmes in different countries;



Programme co-fund: Typology of actions

'programme co-fund action' means an action funded through a grant the main purpose of which is supplementing individual calls or programmes funded by entities, other than Union bodies, managing research and innovation programmes

ERA-NET Cofund
PCP/PPI Cofund

Marie-Skłodowska-Curie Cofund
European Joint Programmes
(2014/15: EURATOM/EFDA)

A. Implementation of a single joint call (MS contribution in cash)

- Call for proposals organised by national/regional funding agencies
- Activities: call preparation, implementation and follow-up
- **Eligible costs:** financial support paid to third parties

B. Implementation of a single joint call (MS contribution in cash) and additional activities

- Call and activities as in A.
- **Additional joint activities** including additional joint calls without Union top-up funding.
- **Eligible costs:** financial support paid to third parties and coordination costs for additional activities (unit costs per beneficiary per year).

C. Implementation of a single joint call (MS contribution in kind) In exceptional cases

- Call for proposals organised by governmental research organisations
- Beneficiaries carry out the projects resulting from the call themselves
- **Eligible costs:** costs of trans-national projects on the basis of Horizon 2020 rules
- In-kind contributions: non-reimbursed expenditure

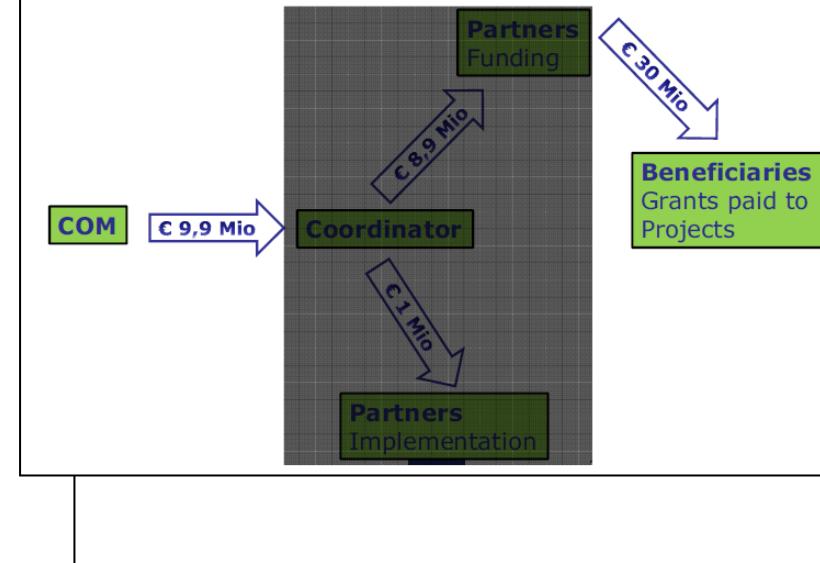
BLOQUE II. APROXIMACIÓN CONCEPTUAL

ERA-Nets

Financing of the co-funded call



Example: cash-flow



ERA-NET Cofund MGA – forms of costs

ERA-NET
"cash"

A. direct costs related to trans-national projects

A.1 Direct costs of providing financial support to third parties implementing trans-national projects

A.2 Direct costs for the implementation of trans-national projects by the beneficiaries

A.2.1 Direct personnel costs for the implementation of trans-national projects by the beneficiaries

A.2.2 Direct costs of subcontracting for the implementation of trans-national projects by the beneficiaries

A.2.3 Other direct costs for the implementation of trans-national projects by the beneficiaries

ERA-NET
"in-kind"

B. direct coordination costs for additional activities (unit cost)

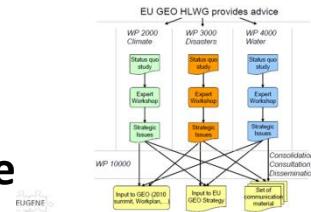
C. indirect costs (25% flat rate) (excluding support to third parties, subcontracting etc.)

BLOQUE II. APROXIMACIÓN CONCEPTUAL

ERA-Nets

EUGENE European Initiatives for the
European Union
Climate Water Disasters

Scope, Methodology



- **SC5-15-2015: Strengthening the European Research Area in the domain of Earth Observation. 15-25 M EUR**

- **WATER-3-2014/2015: Stepping up EU research and innovation cooperation in the water area.** 2015 ...sustainable water use in agriculture, to increase water use efficiency and reduce soil and water pollution... **15 M EUR**

- **SC5-2-2015: ERA for Climate Services. 25 M EUR**

Geo-sciences. **15-25 M EUR**

- **Cultural Heritage. 15-25 M EUR**

<http://www.waterjpi.eu>



<http://www.jpi-climate.eu>



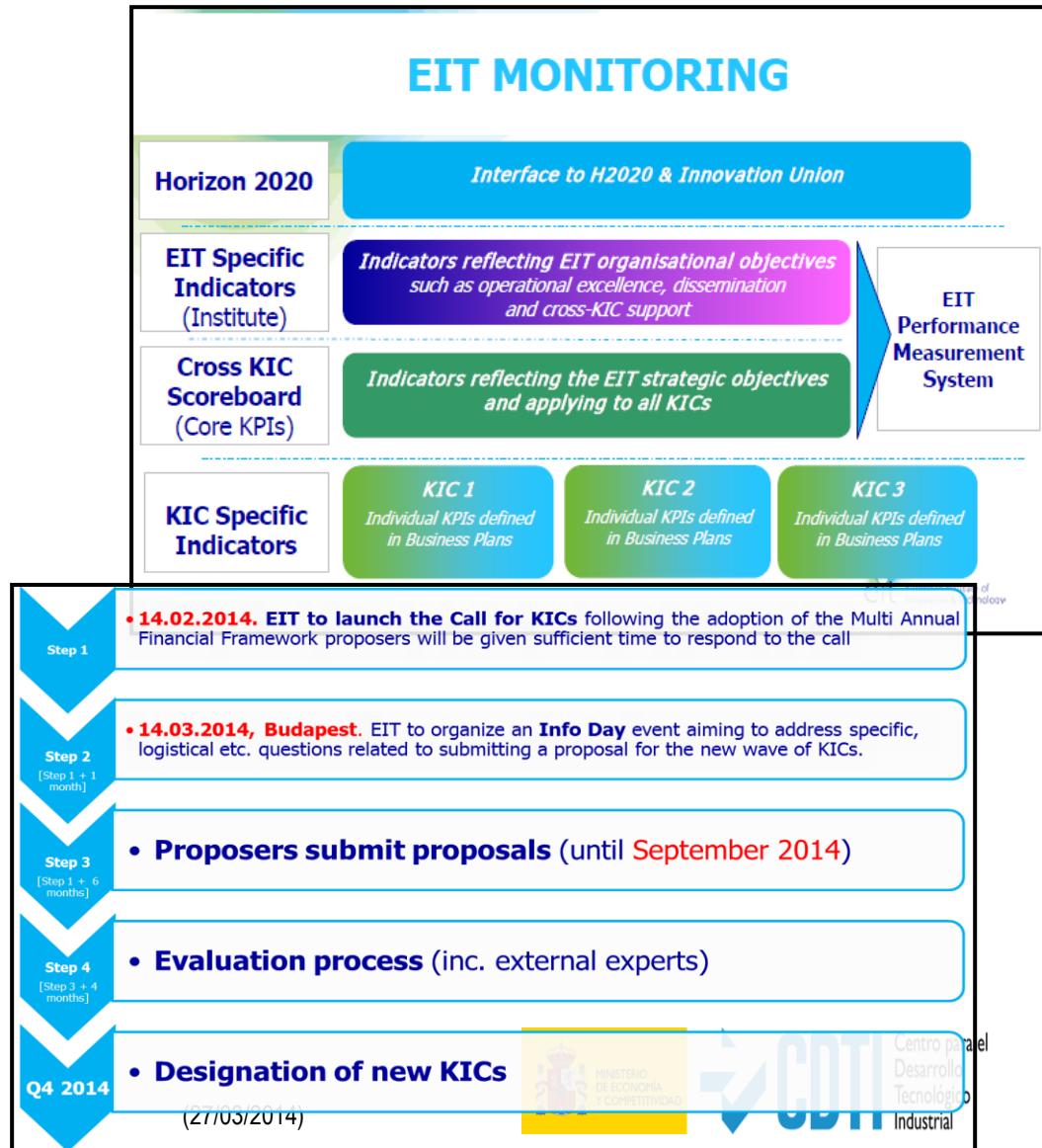
<http://www.jpi-culturalheritage.eu>



BLOQUE II. APROXIMACIÓN CONCEPTUAL

EIT (*European Innovation and Technology Institute*)

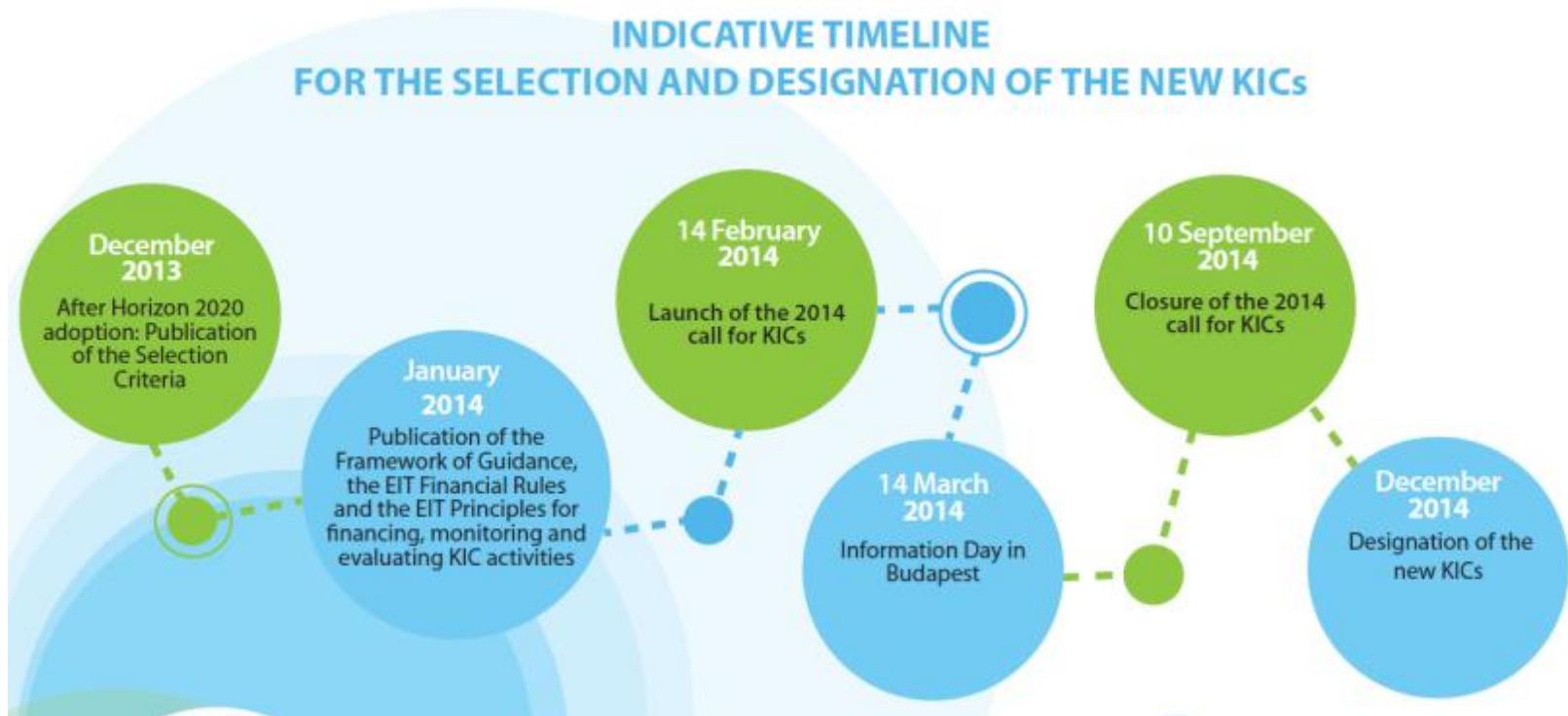
- KICs existentes:
 - Climate KIC
 - INNO ENERGY KIC
 - ICT Labs
- **Futuras 2014...**
 - Health
 - **Raw Materials**
- **2016...**
 - Added Value Manufacturing
 - **Food4Future**
- **2018...**
 - Urban Mobility



BLOQUE II. APROXIMACIÓN CONCEPTUAL

EIT (*European Innovation and Technology Institute*)

- eit.europa.eu/kics/2014-call-for-kics/



BLOQUE II. APROXIMACIÓN CONCEPTUAL

EIT (*European Innovation and Technology Institute*)

1. STRATEGY 30 points	2. OPERATIONS 35 points	3. IMPACT 35 points
TOTAL 100 points		
1.1 STRATEGIC APPROACH <p>Relevance and applicability of the KIC model to tackle the societal challenge via a multidisciplinary approach by integrating the Knowledge Triangle and fostering entrepreneurship.</p> <p>10 points max</p>	2.1 KIC GOVERNANCE <p>Quality and relevance of the KIC governance model for implementing the KIC's strategy including the choice and suitability of the KIC Legal Entity and involvement of partners' top management in the KIC's governance.</p> <p>10 points max</p>	3.1 IMPACT AND COMPETITIVENESS <p>Short, mid and long-term potential pan-European impact on human capital, job creation, economic growth and its relevance in the context of the KIC's strategy and the EIT's Strategic Innovation Agenda.</p> <p>15 points max</p>
1.2 ADDED-VALUE, INNOVATIVENESS AND SYNERGIES <p>Novelty of the strategic market-oriented approach and competitive position; readiness to establish concrete synergies and complementarities with EU and other relevant global initiatives.</p> <p>10 points max</p>	2.2. LEADERSHIP AND OPERATIONS <p>Quality of the leadership team profiles and their executive power over all of the KIC's strategy and business plan implementation. Effectiveness of the operational structure including connectivity among co-location centres; quality and demonstration of how activities (education, research, and innovation) are integrated in the entrepreneurship-driven Knowledge Triangle.</p> <p>10 points max</p>	3.2 OUTPUTS (KPIs) AND KIC SCOREBOARD <p>Relevance of the expected outputs, Key Performance Indicators (KPIs) included in a KIC Scoreboard consistent with the KIC's activities, and contribution to the EIT Scoreboard.</p> <p>10 points max</p>
1.3 KIC PARTNERSHIP <p>The combined strength of the partners forming a diverse, balanced, collaborative and world-class partnership.</p> <p>10 points max</p>	2.3 KIC BUSINESS MODEL AND FINANCIAL PLAN <p>Feasibility of the KIC's business model and financial plan for achieving market targets and strategic milestones; financial plan for achieving return on investments and financial sustainability in the long-term with a progressive phasing out of the EIT's funding; cash-flow including EIT's funding and partners' investments and other non-EIT resources; a plan for the management and exploitation of intellectual property supporting the KIC's business model.</p> <p>15 points max</p>	3.3 COMMUNICATION, OUTREACH AND DISSEMINATION <p>Quality and relevance of the KIC communication strategy including the contribution to building the EIT identity; quality and relevance of the outreach and dissemination plans, including sharing good practices, within, between and beyond the KIC, across EU Member States, regions and institutions.</p> <p>10 points max</p>

BLOQUE II. Horizonte 2020-Reto 5

ENFOQUE ESTRATÉGICO DE LOS TOPICS: Art. 185

The screenshot shows the BONUS website. The top navigation bar includes a logo with a stylized figure, the word "BONUS", and the tagline "SCIENCE FOR A BETTER FUTURE OF THE BALTIC SEA REGION". It also features social media links (Facebook), a search bar, and navigation links for "Contact us", "E-bulletin", and "BONUS logo". The main content area has a green header "BONUS 2010-2016" and a sub-header "The joint Baltic Sea research and development programme". Below this, there's a paragraph about the programme's launch and its status as a model case for European regional seas. To the right is a photograph of the Baltic Sea with numerous small islands. At the bottom, there's a quote about regional research governance frameworks and a link to a MARCOM+ 2011 report. On the left side of the main content, there's a sidebar with links to various BONUS components and external resources.

BONUS 2010-2016

Partners and funding development
Strategic research agenda
BONUS calls
Facilities and data sharing
BONUS metadata collection
Stakeholder communications
National BONUS contact points

About BONUS
BONUS projects
For policymakers
For researchers
Events
News room
Publications
Policy and other links
For members of the public

Front page > BONUS 2010-2016

BONUS 2010-2016

The joint Baltic Sea research and development programme

In June 2010, the European Parliament supported the European Council's decision that launched a new research and development programme to protect the Baltic Sea, BONUS, worth of EUR 100 million for the years 2010-2016.

In particular, the exceptionally high support by the Members of the Parliament – 97 % of votes for BONUS – reflects well the status of BONUS as the first model case for the development of science-based management of the European regional seas. BONUS thus serves the whole Europe, not only the Baltic Sea.



Copyright Riku Lumiaro

"Regional research governance frameworks at regional seas level do not exist yet, except for BONUS."

Review of regional research governance frameworks for the purpose of future articulation of maritime governance at the EU level, MARCOM+ 2011

BONUS brings together the research communities of marine, maritime, economical and societal research to address the major challenges faced by the Baltic Sea region. A full understanding of the Baltic Sea system is needed. This requires sound knowledge that is scientifically first-rate and relevant for society.

BLOQUE II. APROXIMACIÓN CONCEPTUAL

European Research Alliance

The screenshot shows the homepage of the European Climate Research Alliance (ECRA). The header features a large banner image of a bridge over water at sunset. Navigation links include Home, About us, Collaborative Programmes (highlighted in blue), Members, Intranet, Sitemap, Contact, and Disclaimer. A search bar is also present.

ECRA
European Climate Research Alliance

Navigator

- About us
- Collaborative Programmes
- Press corner
- Useful links

Login

User Name

Password

Remember Me

Log in

[Forgot your password?](#)

[Forgot your username?](#)

Home

Mission - Towards a European Climate Research Alliance

The European Climate Research Alliance (ECRA) aims to strengthen, expand and optimise EU climate research capabilities through the sharing of world-class national facilities in Europe and the collaborative realisation of pan-EU programmes. National and European Climate change research programmes have to be streamlined and coordinated, in order to ensure optimum use of human resources, modelling capacities, field activities, and infrastructures, maximising therefore the impact of scientific results and reinforcing the European Research Area for climate change science.

Key objectives of ECRA

The high-level objectives of the Alliance are to:

- Accelerate the development of climate change research by conceiving and implementing Collaborative Programmes of research, combining capacities of research institutions and maximising complementarities and synergies, including collaboration with international partners.
- Work towards a long term, durable integration of excellent but dispersed research capacities across Europe, optimising the use of resources, building additional research capacity and developing a comprehensive range of pan-European research infrastructures.
- Strengthen Europe's capacity to initiate and execute large fundamental and comprehensive research and development programmes in climate science.
- Develop training, education and outreach activities, encouraging researcher mobility and providing a training environment for PhD students and other scientists in strategic climate

News & Events

30.05.2013
International Conference on
Regional Climate
CORDEX 2013
4-7 November, Brussels,
Belgium

ECRA Side Event
6 November, 18:00-20:00

19.03.2013
2nd Workshop
High Impact Events and
Climate Change
3 - 4 June 2013, Bergen,
Norway

14.01.2013
Summer School
Climate Change and the
Mountain Environment
18-28 June 2013, Valle d'Aosta,
Italy

BLOQUE III. INCENTIVOS Y RESULTADOS

- **Empresas Nuevas:** aquellas que no hayan obtenido subvención en los cuatro años anteriores a esta nueva propuesta en el Programa de Cooperación del Séptimo Programa Marco de I+D o en Horizonte 2020; o nuevos líderes, empresas que habiendo participado sólo como socios en el VII Programa Marco de I+D o en Horizonte 2020, obtengan retorno como coordinadoras de proyectos.
- Ámbito Instrumental: **Liderazgo Industrial y Retos Sociales**
- **Fecha límite** de presentación de ofertas: **3 de enero de 2014** (12:00 hs)



BLOQUE III. INCENTIVOS Y RESULTADOS

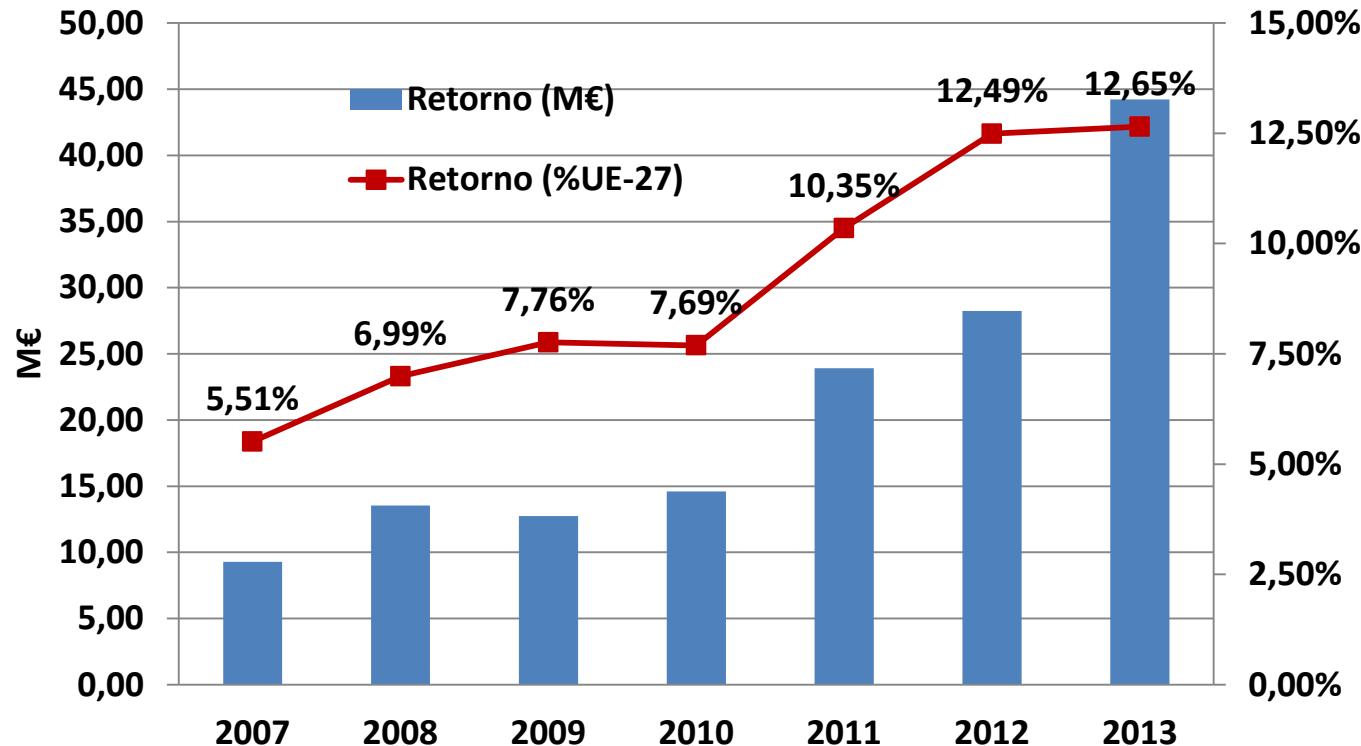


Resultados participación española en Medio Ambiente (resultados provisionales acumulados 2007-2013)

Participación en propuestas (% del total)	Presentadas España, nº Coordinadas España, nº Financiación solicitada ES, M€	1.409 (72,8%) 285 (14,7%) 796,2 (11,3%)
Financiación actividades (% del total)	Financiadas España Coordinadas España	270 (55,9%) 50 (10,4%)
Resultados entidades	Entidades españolas con actividades financiadas Empresas (%PYME*)	273 129 (75,97%)
Tasa de éxito % proyectos financiados/ propuestas presentadas	España Total	19,2% 24,9% ▾
Retorno	M€ % UE-27(% total)	146,0 9,59% (8,2%)
Posición España por retorno		4ª

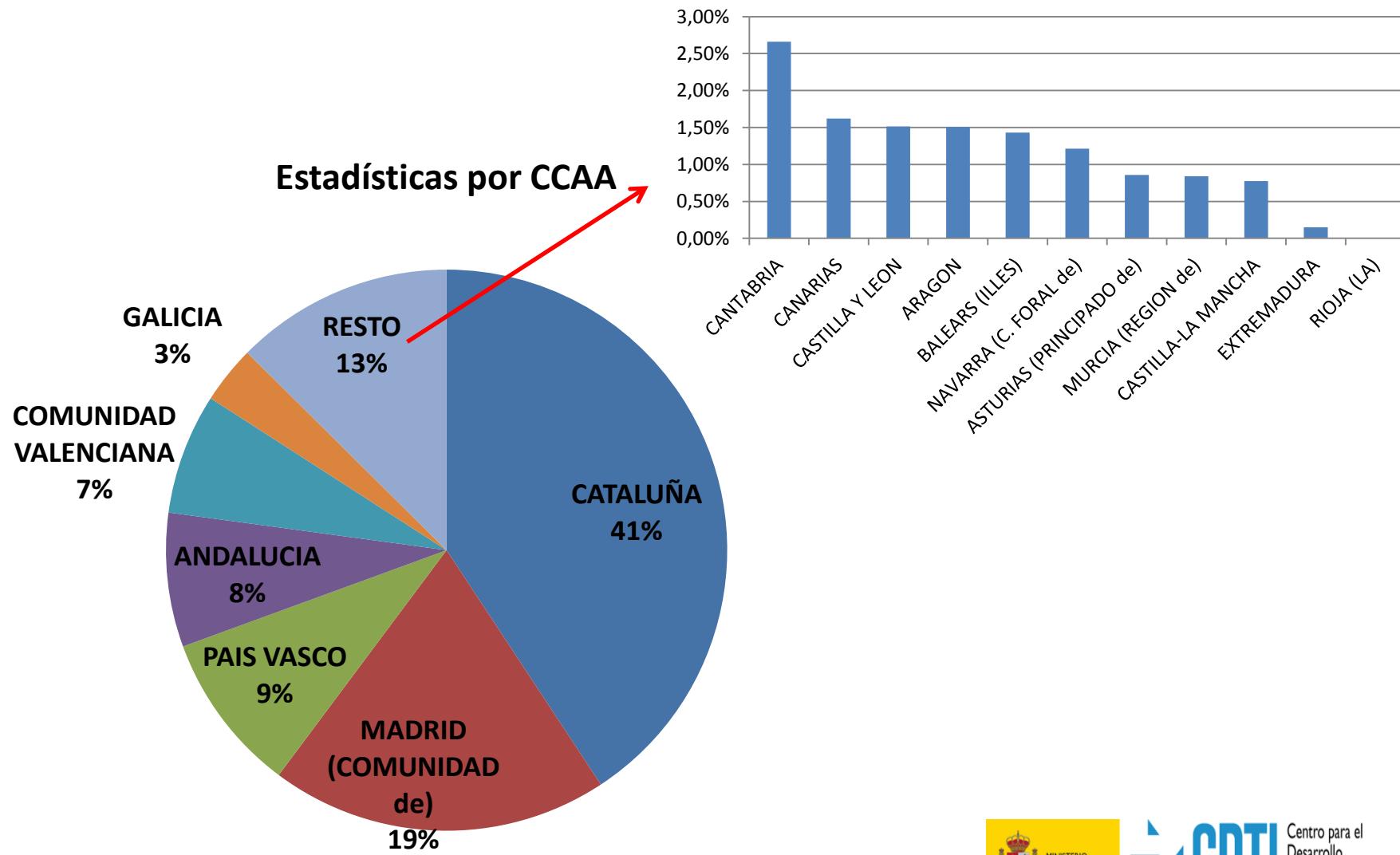
*PYME: empresas con menos de 250 empleados
¤ Fuente: Comisión Europea "Fifth FP7 Monitoring Report"

BLOQUE III. INCENTIVOS Y RESULTADOS

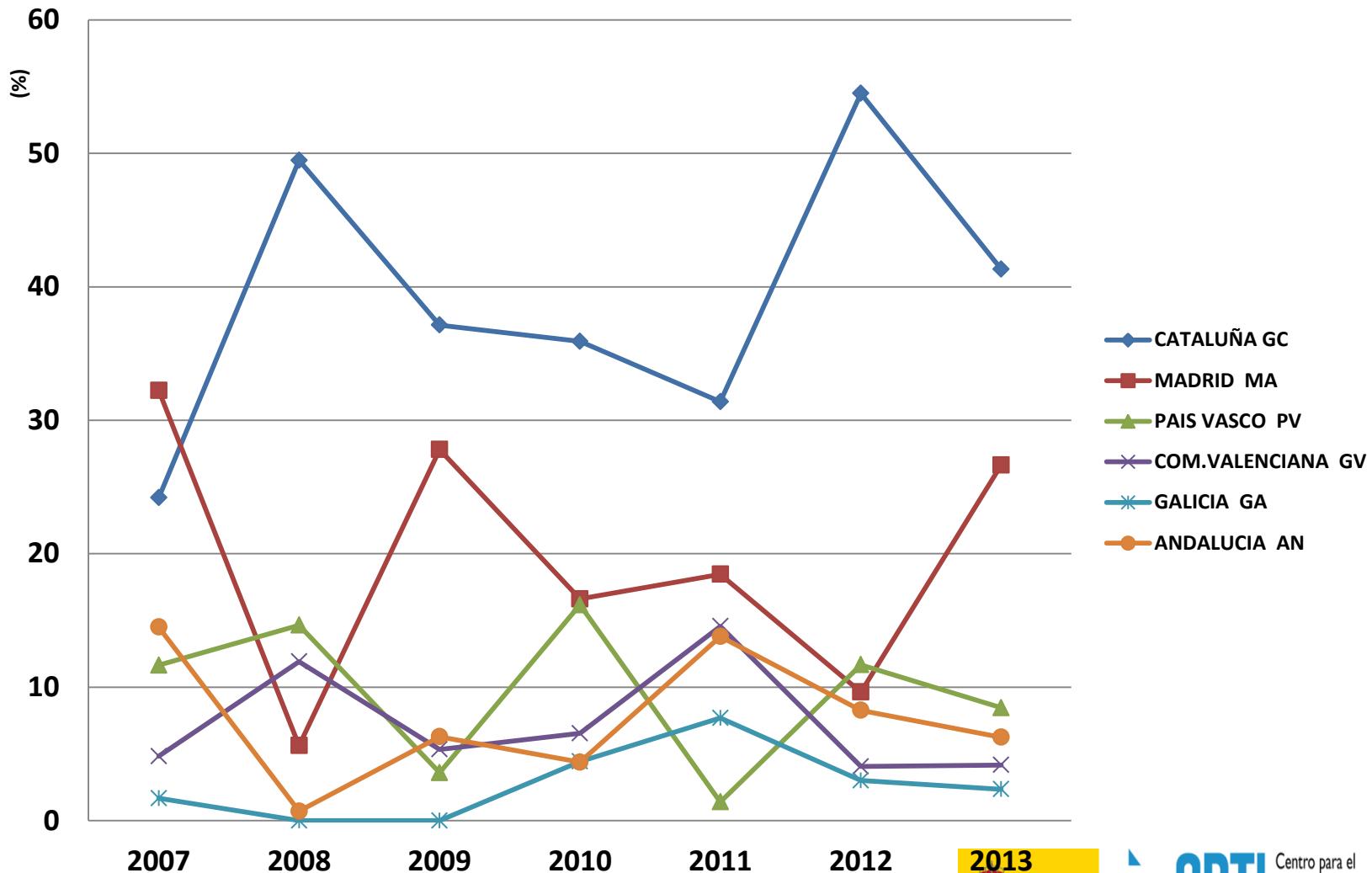


- Posición de España en retorno: evolución 7º (2007) → 4º (2012)

BLOQUE III. INCENTIVOS Y RESULTADOS



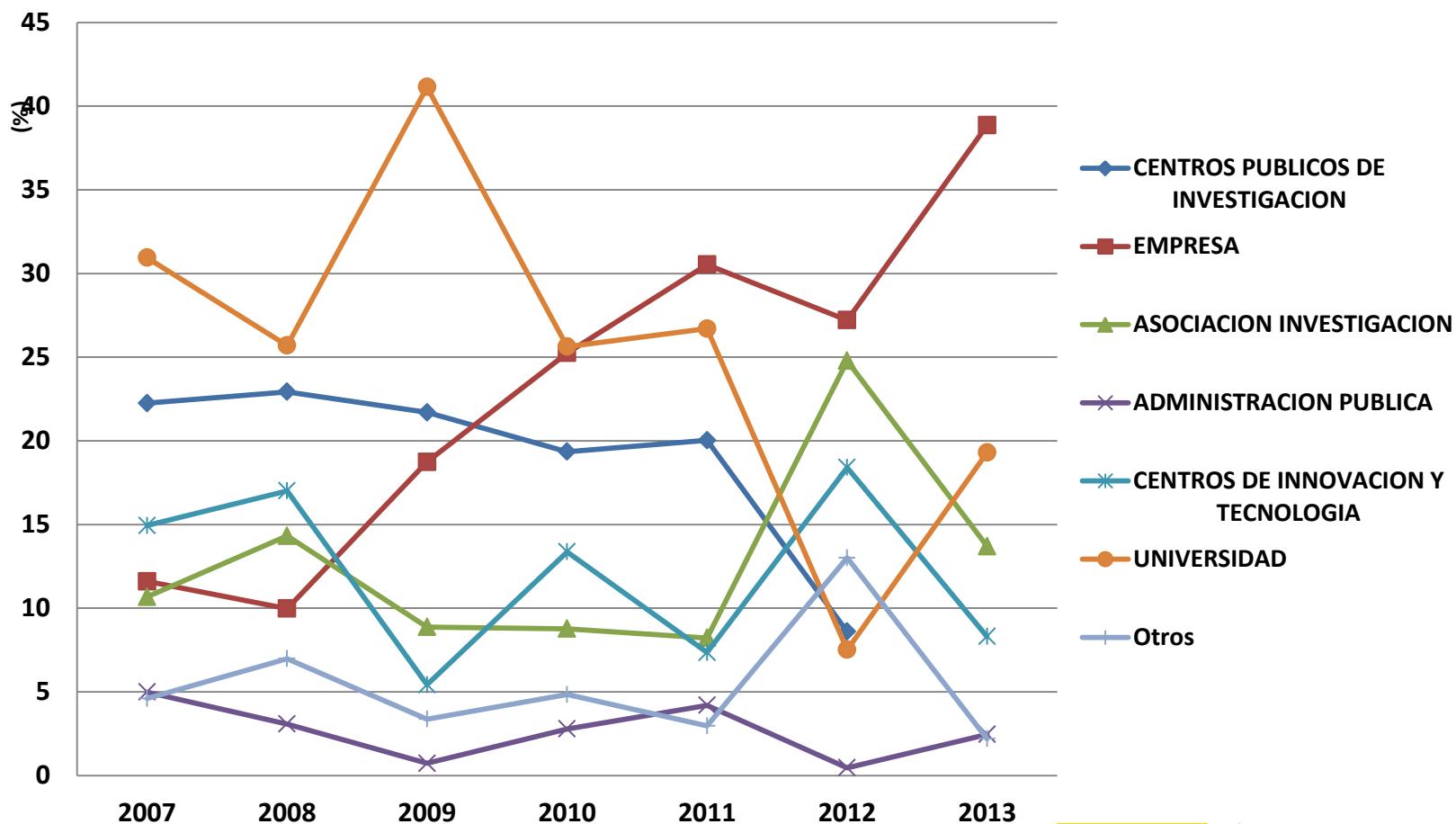
BLOQUE III. INCENTIVOS Y RESULTADOS



BLOQUE III. INCENTIVOS Y RESULTADOS



Estadísticas por Tipo Entidad



GRACIAS POR LA ATENCIÓN

Carolina Rodríguez

Representante Española de Clima, Medio Ambiente, Eficiencia de Recursos y Materias Primas- Horizonte 2020

Dirección de Programas Internacionales

carolina.rodriguez@cdti.es

Cid,4 – 28001 Madrid

Tel. +34 91 581 55 00/55 62

