Work Programme 2013-ENERGY-VIIPM
Oportunidades para el sector de la Energía.

"Oportunidades para las Empresas de la Comunidad Valenciana en Proyectos de I+D en el ámbito de la Energia"

Valencia, 21 de Junio de 2012

Mª Luisa Revilla
CDTI

ÍNDICE

1. Estructura del Programa de Trabajo. Aspectos generales Temática Energía-VIIPM
2. Resultados obtenidos por las entidades españolas en convocatorias de energía VII PM
3. Estructura del Programa de Trabajo y Oportunidades 2013
4. Recomendaciones prácticas-elaboración de propuestas.

ÍNDICE

1. **Estructura del Programa de Trabajo. Aspectos generales Temática Energía-VIIPM**
2. Resultados obtenidos por las entidades españolas en convocatorias de energía VII PM
3. Estructura del Programa de Trabajo y Oportunidades 2013
4. Recomendaciones prácticas-elaboración de propuestas.

VII Programa Marco 2007-2013 (50.521 M€)

COOPERACIÓN (32.413)

1. Salud (6.100)	2. Alimentación, agricultura y pesca, y biotecnología (1.935)	3. Tecnologías de la información y las comunicaciones (9.050)	4. Nanotecnologías, nanomateriales y producción (3.475)	5. Energía (2.350)	6. Medio ambiente (incluido el cambio climático) (1.890)	7. Transporte (incluida la aeronáutica) (4.160)	8. Ciencias socioeconómicas y humanidades (623)	9. Espacio (1.430)	10. Seguridad (1.400)

IDEAS (7.510) — Consejo Europeo de Investigación

PERSONAS (4.750) — Acciones Marie Curie

CAPACIDADES (4.097)

- Infraestructuras de investigación (1.715)
- Investigación en beneficio de las PYME (1.336)
- Regiones del conocimiento (126)
- Potencial de investigación (340)
- La cien cia en la sociedad (330)
- Desarrollo Coherente de las Políticas de Investigación (70)
- Actividades de cooperación internacional (180)

Acciones no nucleares del Centro Común de Investigación (1.751)

(Datos en millones de euros)

Temática Energía. Objetivo.

OBJETIVO

•Transformar el sistema actual basado en combustibles fósiles en otro más sostenible con menor dependencia de combustibles fósiles importados y basado en un mix energético en el que las energías renovables tengan un peso significativo.

• Incrementar la eficiencia energética, incluyendo un uso razonable de la energía y el almacenamiento.

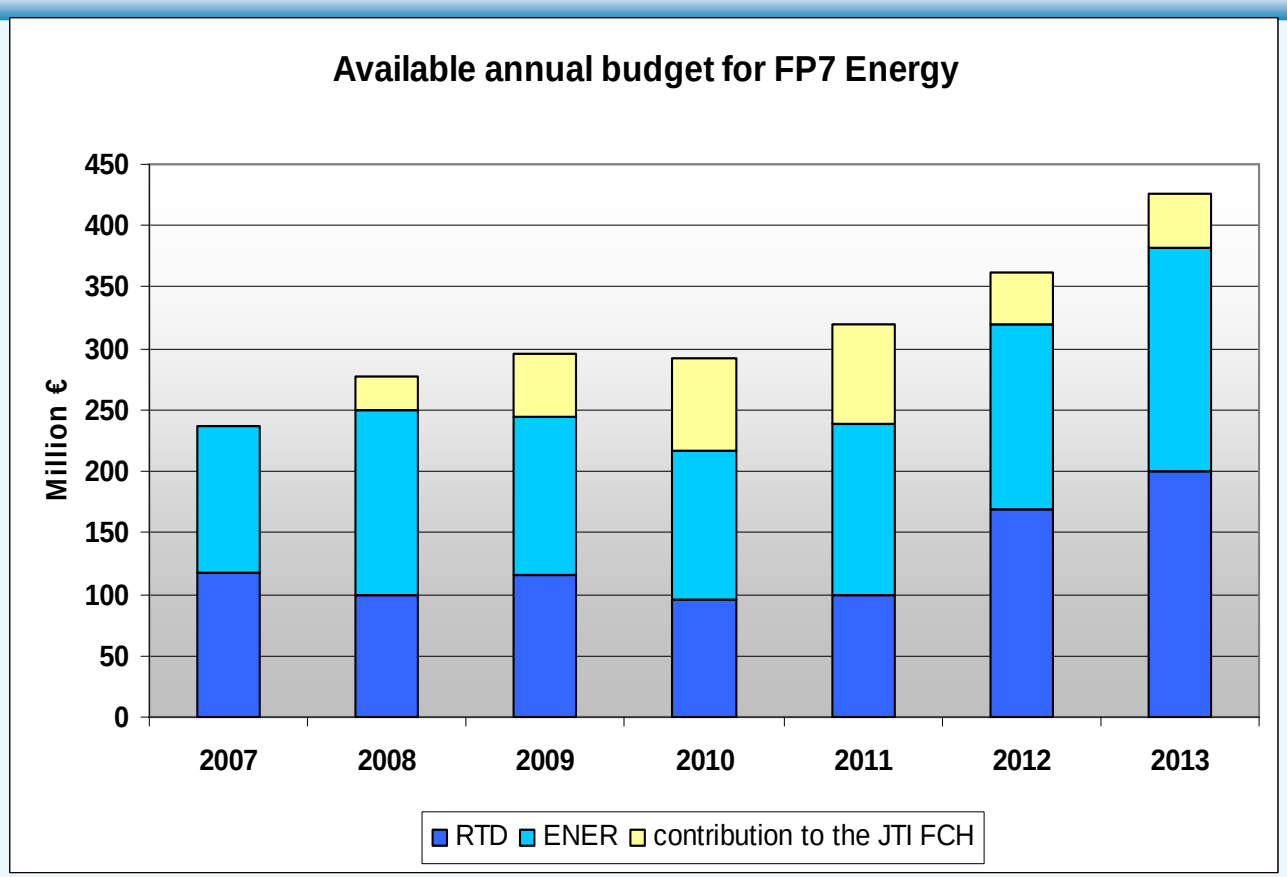
• Abordar retos de sostenibilidad, cambio climático y competitividad de la industria europea.

ALCANCE

• Desarrollo de tecnologías efectivas de coste asumible

•Abarcar todos los horizontes de tiempo y la cadena entera de investigación de una forma integrada

Temática Energía. Distribución presupuestaria anual



Presupuesto total: 2.350 M €

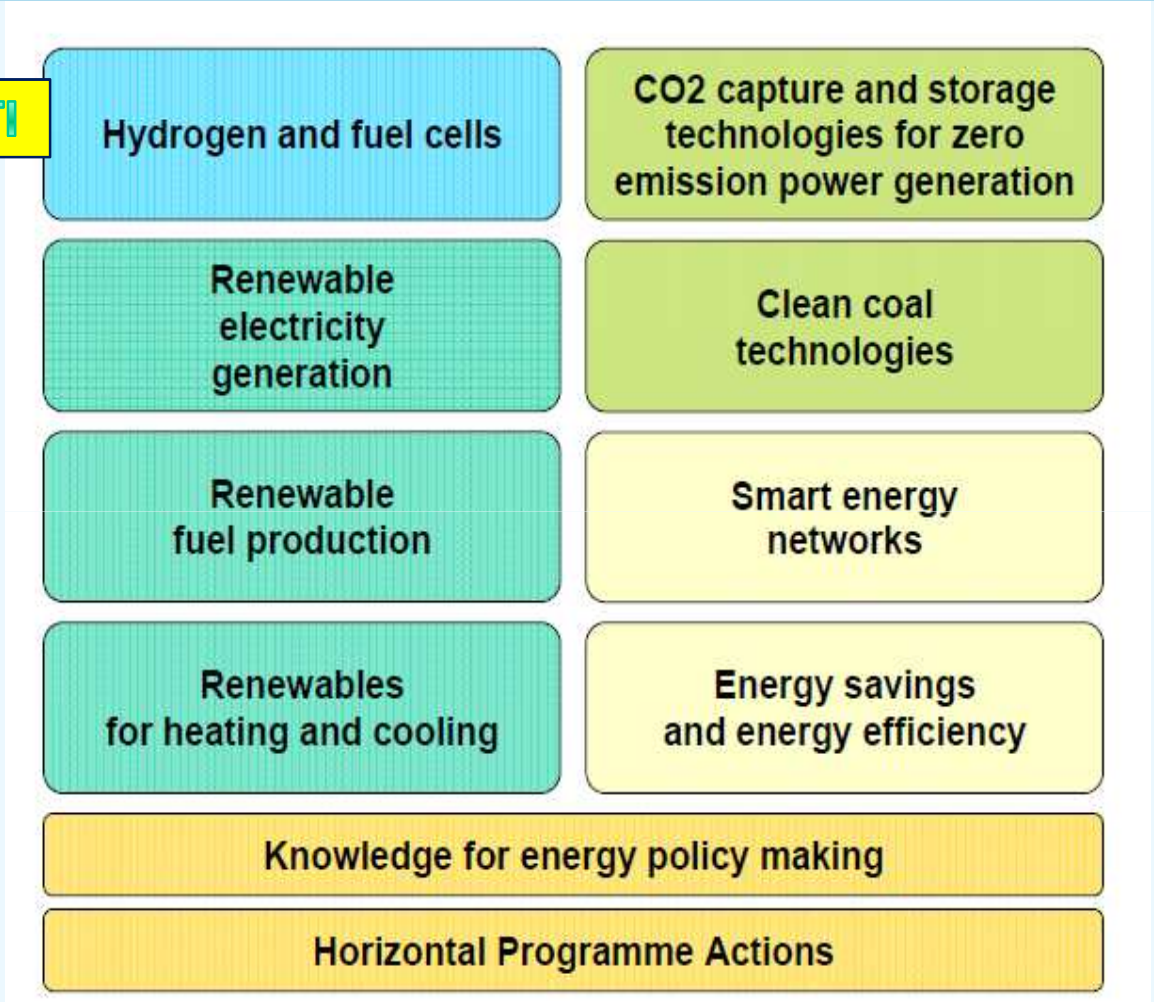
7% Programa de Cooperación

Actividades del programa de trabajo de energía

Actividades

Áreas

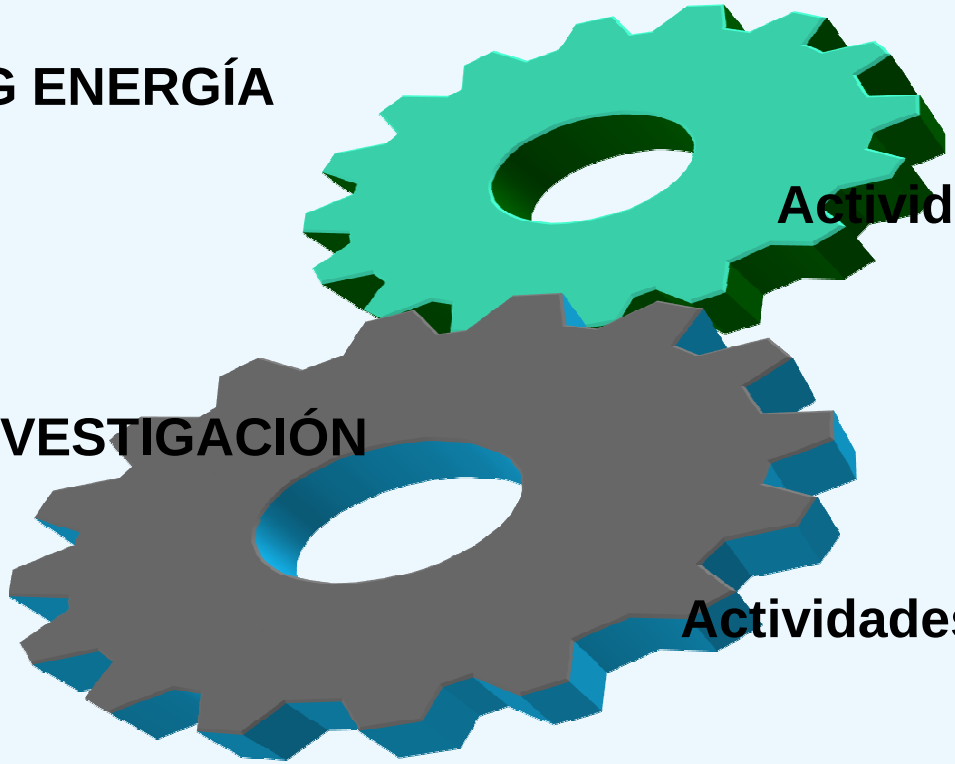
Topics



Tipología de convocatorias en Energía

DG ENERGÍA

Actividades a corto-medio plazo



DG INVESTIGACIÓN

Actividades a largo plazo

En la temática de Energía hay dos tipos de convocatorias. Se diferencian por la Dirección General de la CE que las promueve y por el carácter y el alcance de los proyectos.

Características obligatorias de los proyectos

- Proyectos de Investigación, Desarrollo Tecnológico (I+DT) y Demostración, relacionados con una determinada tecnología, producto, proceso o servicio.
- Aportar valor añadido a nivel europeo.
- Participación de al menos 3 entidades independientes de 3 Estados Miembros de la UE o Estados Asociados.
- Presupuesto global puede variar entre 0,5 y varios Millones de €.
- Duración entre 1 y 5 años.

Ventajas de participar en un proyecto europeo.

- Incremento de la competitividad
- Colaboración con entidades de otros países y en redes internacionales
- Internacionalización de estrategias y mercados
- Compartir riesgos en las actividades de investigación y desarrollo tecnológico
- Acceso a la información privilegiada a nivel europeo y a nuevos conocimientos
- Renovación tecnológica
- Visibilidad y prestigio
- Apertura a nuevos mercados

Funding Scheme – WP 2013

Collaborative Project (CP)

- At least 3 independent legal entities, each of which is established in a MS or AC, and no two of which are established in the same MS or AC

Coordination Support Action-Coordination Action (CSA-CA)

- At least 3 independent legal entities, each of which is established in a MS or AC, and no two of which are established in the same MS or AC

Coordination Support Action-Supporting Action (CSA-SA)

- At least 1 independent legal entity

Collaborative Project for specific cooperation actions (SICA)

- At least 4 independent legal entities. Of these, 2 must be established in different MS or AC. The other two must be established in different international cooperation partner countries.

Combination of Collaborative Project and Coordination and Support Action (CP-CSA)

- At least 3 independent legal entities, each of which is established in a MS or AC, and no two of which are established in the same MS or AC

Collaborative Project with a predominant demonstration component

Aspectos generales VII Programa Marco 2007-2013. Financiación de las actividades

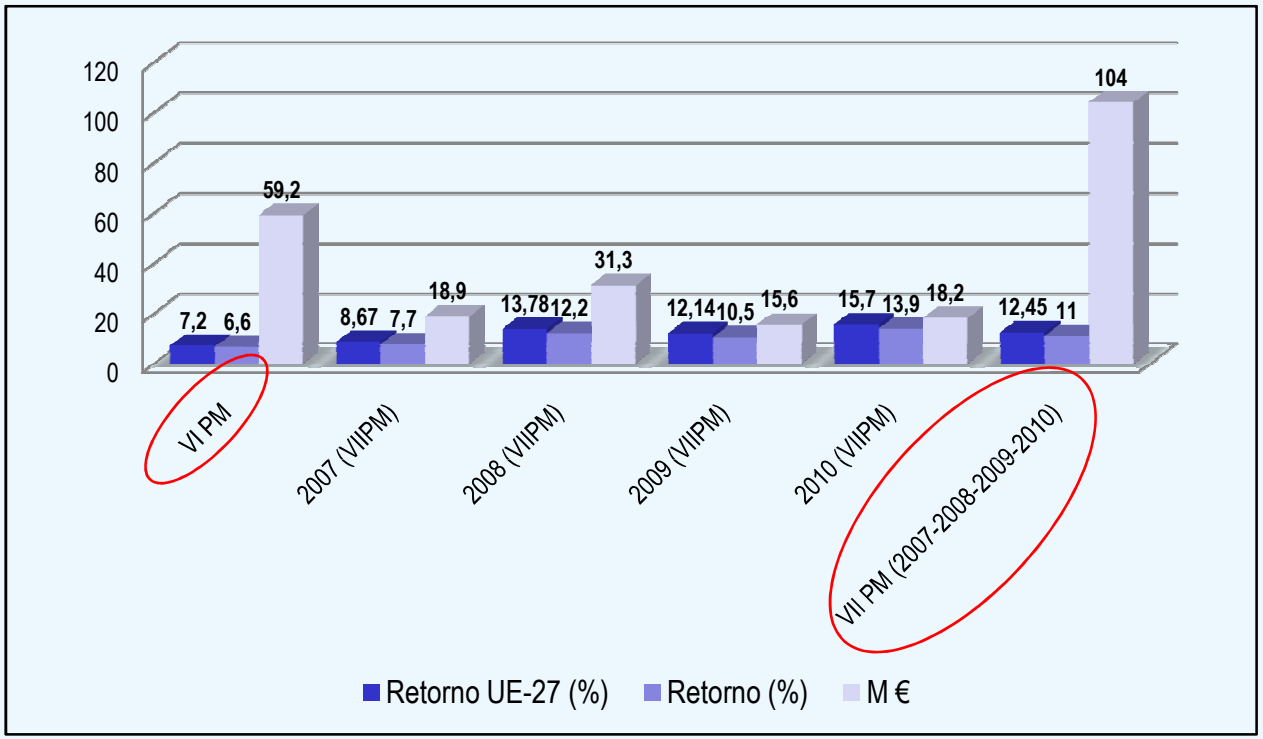
Porcentajes máximos de financiación en función del tipo de actividad:

- **Actividades de I+D: 50 % de los costes excepto**
  - **Organismos públicos: 75 %**
  - **Universidades: 75 %**
  - **Centros de investigación sin ánimo de lucro:75%**
  - **PYMES : 75 %**
- **Actividades de demostración: 50 %**
- **ERC (investigación básica), Acciones coordinación y apoyo, formación, gestión y movilidad: 100 %**

ÍNDICE

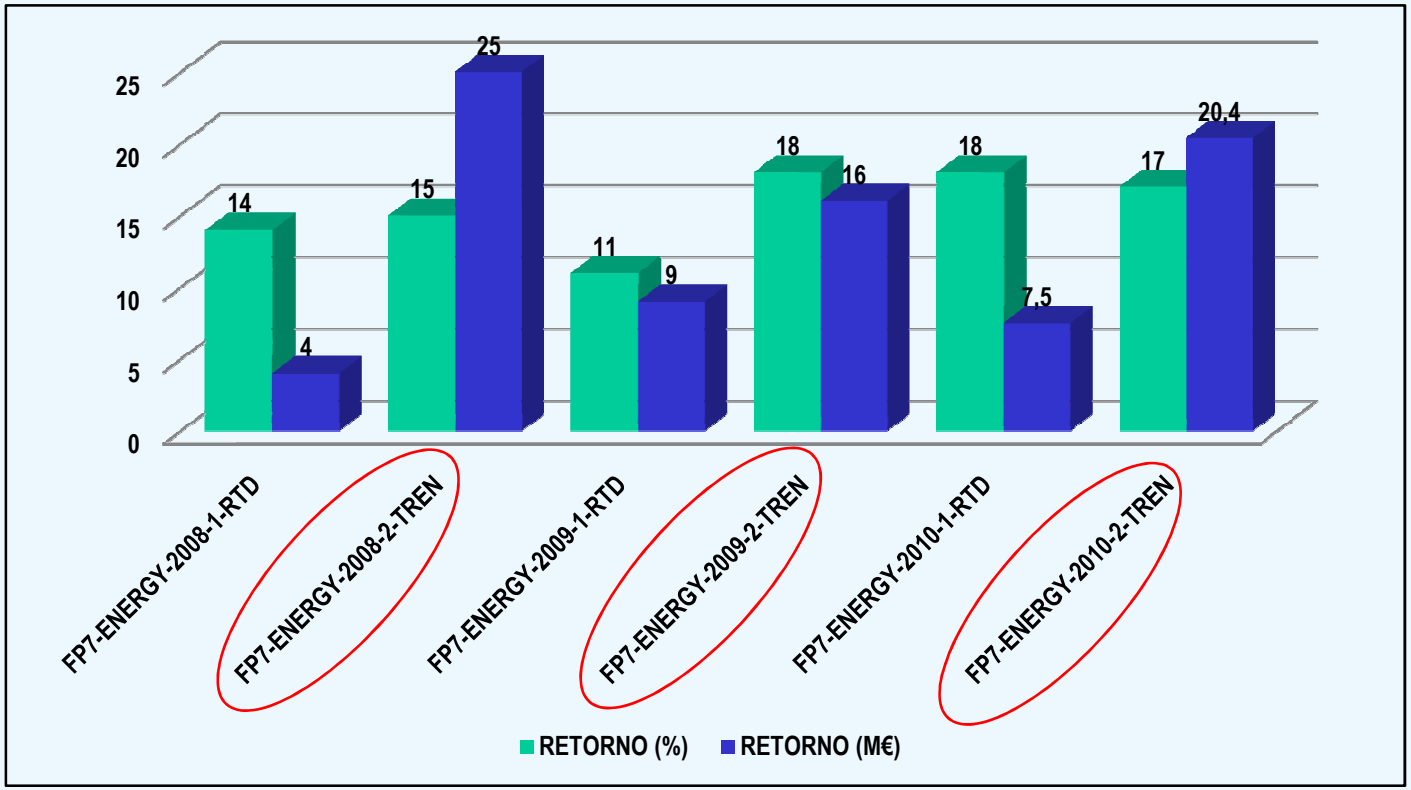
1. Estructura del Programa de Trabajo. Aspectos generales Temática Energía-VIIPM
2. **Resultados obtenidos por las entidades españolas en convocatorias de energía VII PM**
3. Estructura del Programa de Trabajo y Oportunidades 2013
4. Recomendaciones prácticas-elaboración de propuestas.

Evolución de los resultados de retorno económico en energía



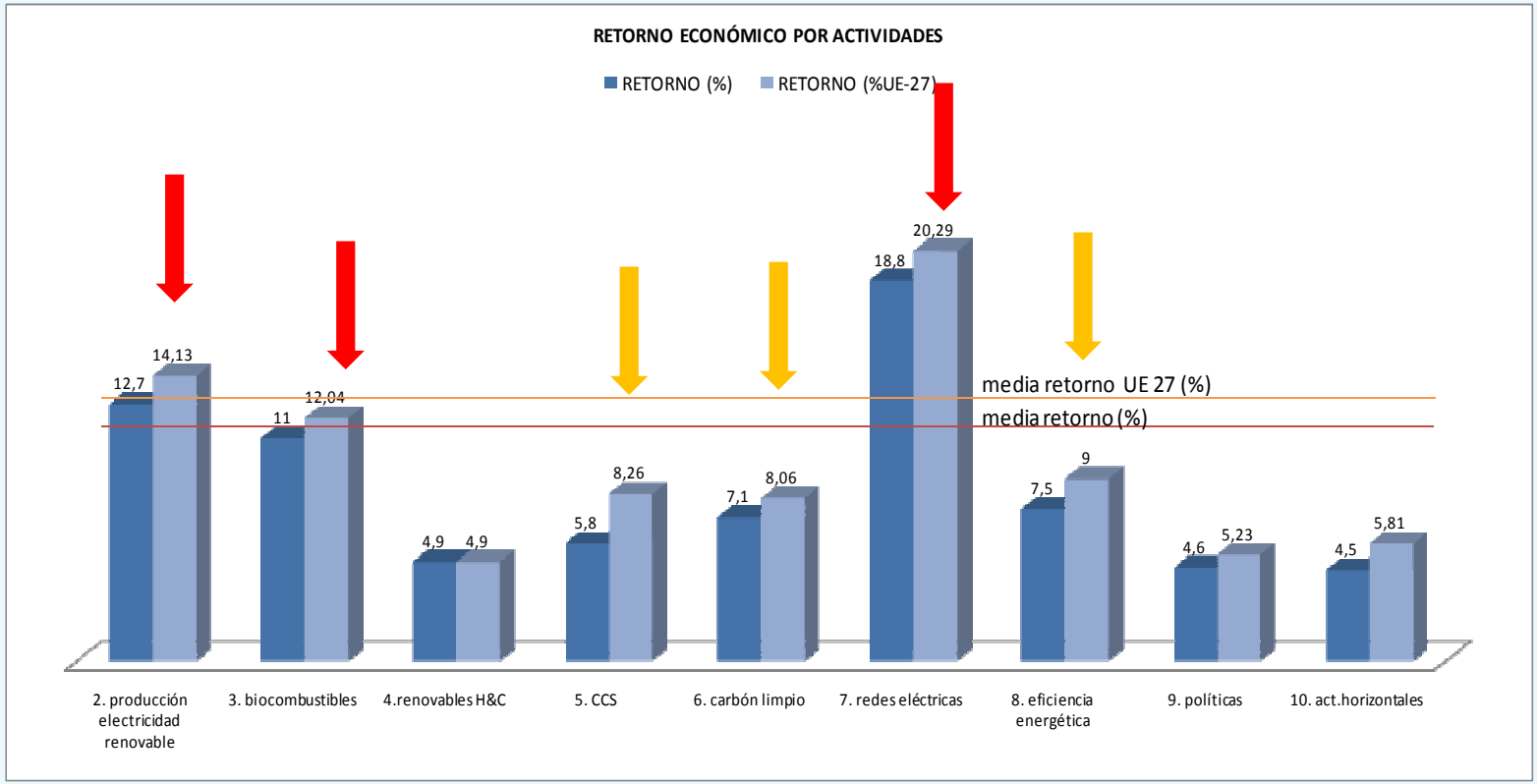
Retorno económico en VI PM=7,2% (59,2 M €). Retorno económico en VII PM (2007-2010)=12,4% (104 M €).
España ocupa la 2ª posición en el ránking por países, únicamente por detrás de Alemania.

Resultados convocatorias generales energía 2008-2009-2010



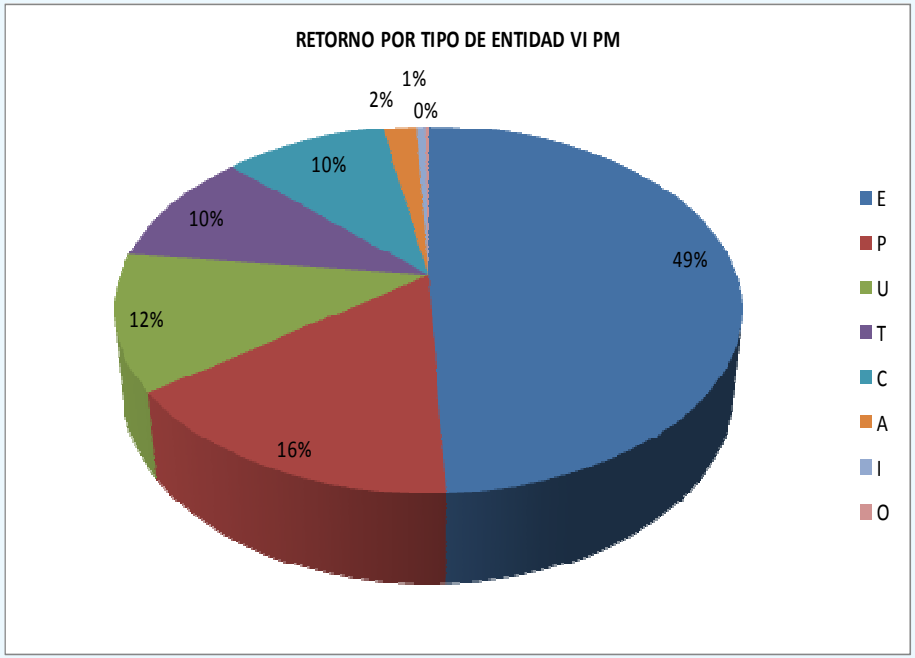
El retorno en las convocatorias generales de energía en los años 2008, 2009 y 2010 se ha situado entre el 11-18 %.

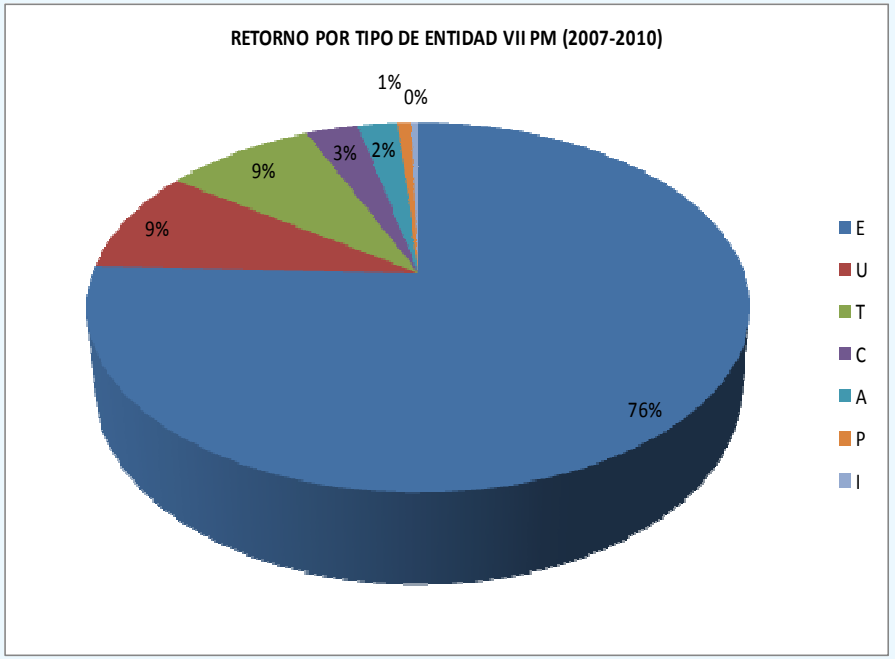
Resultados de las entidades españolas por actividades (2007-2010)



Las actividades con los mejores resultados de retorno son: 7.redes eléctricas inteligentes (20, 3% UE-27), 2. producción de electricidad de origen renovable (14,1% UE-27) y 3. biocombustibles(12% UE-27).

Resultados por tipo de entidad. Comparativa entre VI y VII PM (2007-2010)

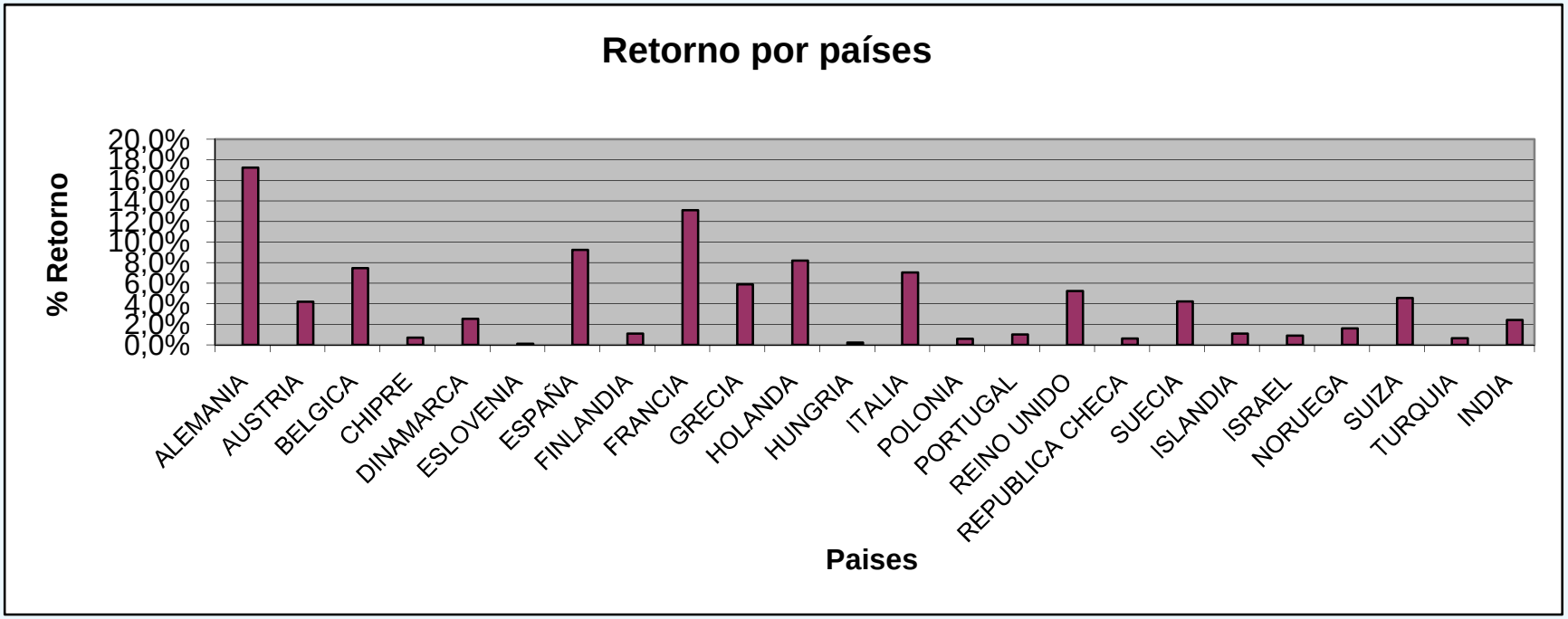




Las empresas tienen cada vez un mayor peso relativo, han pasado del 49% al 75,6% (aproximadamente, el 49,2% corresponde a PYMES). Las Universidades, los Centros de Innovación y Tecnología y los Centros Públicos de Investigación mantienen una participación que ronda el 10%.

Resultados FP7-Energy-2011-1

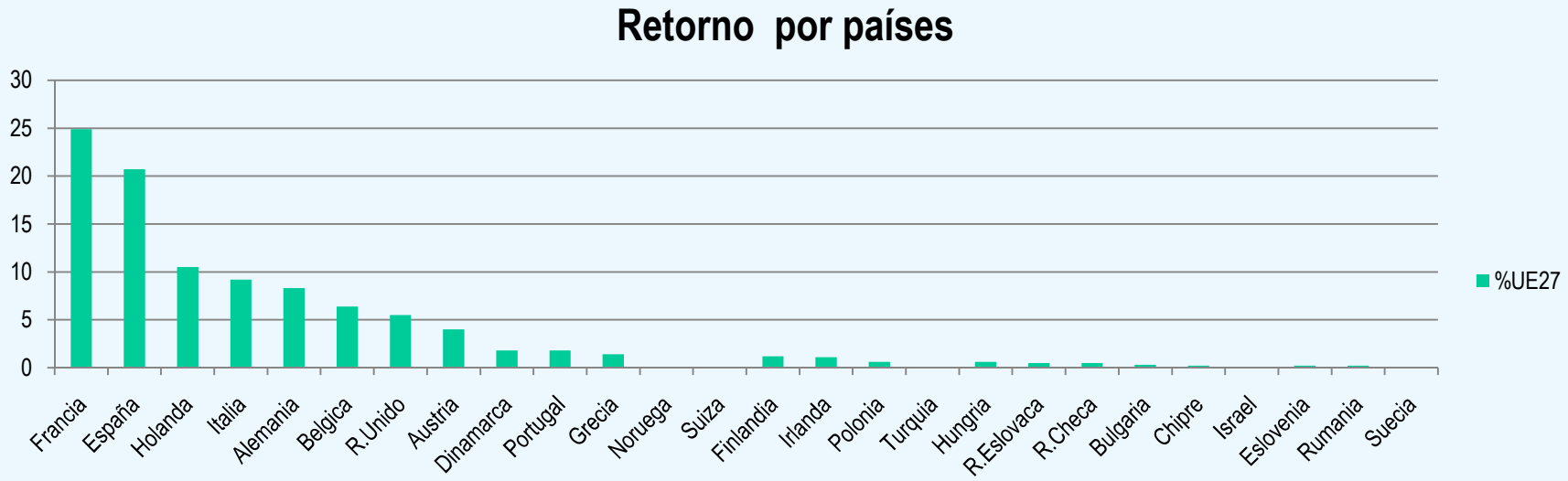
Date of publication: 20th July 2010
Two stage. Indicative Budget: 74 M.€ . 11 topics abiertos.



Retorno Económico: **9,3% (6,76M.€).** Tercera posición en el Ranking, por detrás de Alemania (17,2%) y Francia (13,1).

Resultados FP7-Energy-2011-2

Date of publication: 20th July 2010
Deadline: 07 April 2011
Indicative Budget: 137 M.€ - 12 topics abiertos.

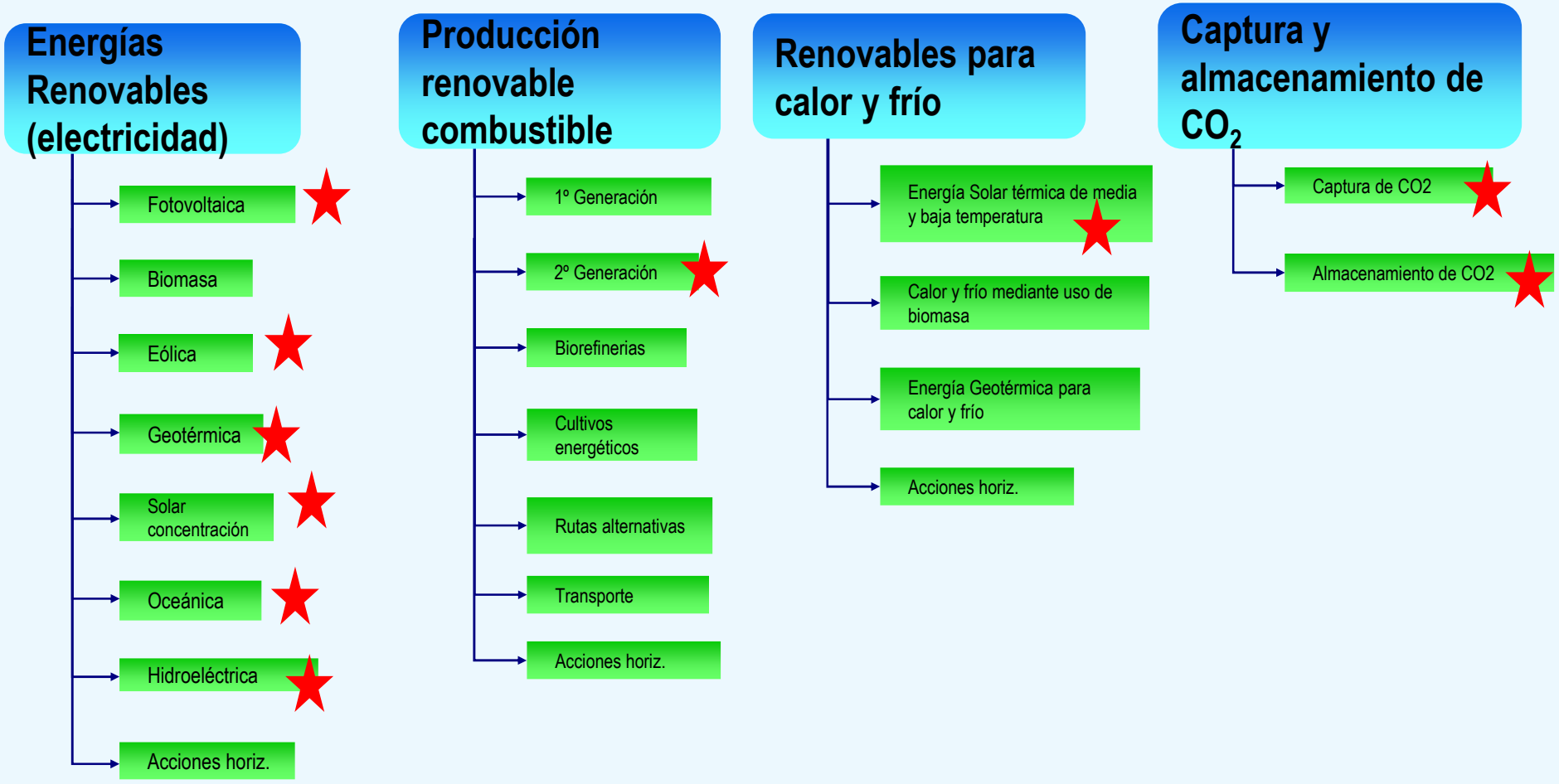


Retorno Económico: **20,7% (29,5M.€).** Segunda posición en el Ranking, por detrás de Francia (24,9% - 35,6 M.€).

ÍNDICE

1. Estructura del Programa de Trabajo. Aspectos generales Temática Energía-VIIPM
2. Resultados obtenidos por las entidades españolas en convocatorias de energía VII PM
3. **Estructura del Programa de Trabajo y Oportunidades 2013**
4. Recomendaciones prácticas-elaboración de propuestas.

Actividades del programa de trabajo



Actividades del programa de trabajo

Convocatorias FP7-ENERGY-2013

BORRADOR

Call/ activity	DG RTD (*) EUR million	DG ENER EUR million	Date of Publication	Date of Closure
FP7-ENERGY-2013-1	105,5		10 July 2012	28th November 2012
FP7-ENERGY-2013-2		83	10 July 2012	24 th January 2013
FP7-SMARTCITIES-2013	24	90	10 July 2012	4 th December 2012
FP7-ENERGY-2013-IRP	37,5		10 July 2012	8th January 2013
FP7-ERANET-2013-RTD	22	5	10 July 2012	
FP7-OCEAN-2013	4		10 July 2012	4th December 2012
Estimated total budget allocation	**193,0**	**178,0**		

La información facilitada en ésta y siguientes slides, es provisional y orientativa, basada en el **borrador** del programa de trabajo 2013. La información definitiva y oficial será publicada en el Portal del Participante en el enlace: http://ec.europa.eu/research/participants/portal/page/home

Convocatorias FP7-ENERGY-2013.
APPROACH FOR 2013

Cumplir objetivos 2020 → Necesidad de llevar a mercado nuevas tecnologias de alta eficiencia y asegurar el lierazgo europeo en tecnologías de bajo carbón.

Apoyo a **4 CHALLENGES**:

- **SMART CITIES** – Integración de soluciones tecnológicas en Energía, TIC y Transporte para incrementar la eficiencia energética en áreas urbanas.
  - Area 8.8 DEMO Project
  - Topics 7.1.1 , 7.3.1 y 7.3.2 – Redes de distribución y vehículo eléctrico

- **RENEWABLE ENERGY SOURCES** – Incrementar la competitividad de las tecnologías de energias renovables para generar electricidad (actividad 2 y 10), biocombustibles (actividad 3) y aplicaciones en el sector de H&C (actividad 4) . Reducir costes, mejorar eficiencias.

- **SMART GRIDS and ENERGY STORAGES** – Redes electrícas inteligentes y flexibles, con sistemas de almacenamiento apropiados. Topic 2.7.1., actividad 7 y 10

- **CCS technologies** – reducir el impacto medioambiental de los combustibles fósiles, incrementar la eficiencia de las tecnologías de captura y la viabilidad del almacenamiento geológico del CO2. Actividad 5 y 6

Convocatorias FP7-ENERGY-2013. SMART CITIES AND COMMUNITIES

Challenge	Activities / Areas /Topics in this Work Programme
Smart Cities and Communities **4 topics.**	ENERGY.2013.7.1.1: Development and validation of methods and tools for network integration of distributed renewable resources ENERGY.2013.7.3.1: Planning rules for linking electric vehicles (EV) to distributed energy resources ENERGY.2013.7.3.2: Enhanced interoperability and conformance testing methods and tools for interaction between grid infrastructure and electric vehicles EeB.ENERGY.2013.8.8.1: Demonstration of optimised energy systems for high performance-energy districts

Convocatorias FP7-ENERGY-2013. RENEWABLE ENERGIES

Challenge	Activities / Areas /Topics in this Work Programme
RENEWABLE ENERGIES **20 topics.**	Topic ENERGY.2013.2.1.1: High efficiency c-Si photovoltaics modules Topic ENERGY.2013.2.1.2: Support to key activities of the European Photovoltaics Technology Platform (TP P... Topic ENERGY.2013.2.3.1: Advanced aerodynamic modelling, design and testing for large rotor blades Topic ENERGY.2013.2.3.2: Small to medium wind turbines Topic ENERGY.2013.2.4.1: Exploration and assessment of geothermal reservoirs Topic ENERGY.2013.2.9.2: Methods for the estimation of the Direct Normal Irradiation (DNI) Topic ENERGY.2013.2.6.1: Design tools, enabling technologies and underpinning research to facilitate ocean energy converter arrays Topic ENERGY.2013.2.9.1: Research cooperation and knowledge creation in the area of renewable energy with Mediterranean partner countries Topic ENERGY.2013.3.2.1: Pre-commercial industrial scale demonstration plant on paraffinic biofuels for use in aviation **Demo** Topic ENERGY.2013.3.7.1: Developing regional and pan-European schemes for the sustainable delivery of non-food biomass feedstock in a pan-European integrated market Topic ENERGY.2013.3.7.2: Support to key activities of the European Biofuels Technology Platform (EBTP) Topic ENERGY.2013.4.1.1: Innovative solar thermal façade systems Topic ENERGY.2013.10.1.1: ERA-NET Plus – Bioenergy: Demonstrations of the European Industrial Bioenergy Initiative Topic ENERGY.2013.10.1.2: ERA-NET Plus – European wind resources assessment Topic ENERGY.2013.10.1.3: Supporting the coordination of national research activities of Member States and Associated States in the field of OCEAN energy (ERA-NET) Topic ENERGY.2013.10.1.5: Integrated Research Programme in the field of photovoltaics Topic ENERGY.2013.10.1.6: Integrated Research Programme in the field of wind energy Topic ENERGY.2013.10.1.7: Integrated Research Programme in the field of bioenergy Topic ENERGY.2013.10.1.8: Integrated Research Programme in the field of Concentrated solar Power (CSP)
	OCEAN 2013.4 Innovative transport and deployment systems for the offshore wind energy sector

Convocatorias FP7-ENERGY-2013. SMART GRIDS AND ENERGY STORAGE

Challenge	Activities / Areas /Topics in this Work Programme
Smart Grids / Energy Storage **8 topics**	Topic ENERGY.2013.2.7.1: Optimisation of Water Turbines Topic ENERGY.2013.7.2.1: Advanced concepts for reliability assessment of the pan-European transmission network Topic ENERGY.2013.7.2.2: Advanced tools and mechanisms for capacity calculation and congestion management Topic ENERGY.2013.7.2.3: Large-scale demonstration of innovative transmission system integration and operation solutions for (inter)connecting renewable electricity production. **DEMO** Topic ENERGY.2013.7.2.4: Ensuring stakeholder support for future grid infrastructures Topic ENERGY.2013.7.3.3: Understanding interfaces in rechargeable batteries and super-capacitors through in situ methods Topic ENERGY.2013.10.1.8: Integrated Research Programme on smart grids Topic ENERGY.2013.10.1.9: Integrated Research Programme on electrochemical storage

Convocatorias FP7-ENERGY-2013. CCS/CCT - Horizontal Issues

Challenge	Activities / Areas /Topics in this Work Programme
CARBON CAPTURE AND STORAGE (CCS)/ CLEAN COAL TECHNOLOGIES (CCT) ***4 topics***	Topic ENERGY.2013.5.1.1: Scale-up of advanced high-efficiency capture processes Topic ENERGY.2013.5.1.2: New generation high-efficiency capture processes Topic ENERGY.2013.5.2.1: Mitigation and remediation of leakage from geological storage Topic ENERGY.2013.6.1.1: Combined Underground Coal Gasification and CO2 Capture and Storage

Challenge	Activities / Areas /Topics in this Work Programme
Horizontal ISSUES ***2 topics***	Topic ENERGY.2013.9.2.1: European scientific multidisciplinary "think-tank" to support energy policy and to assess the potential impacts of its measures Topic ENERGY.2013.10.1.4: Mobilising the research, innovation and educational capacities of Europe's universities

Convocatorias FP7-ENERGY-2013-1

BORRADOR

Reto	Actividad	TOPIC	ESTIMATED BUDGET
Renewable Energies	2.1. Photovoltaics	2.1.1. High efficiency c-Si photovoltaics modules (Modulos de SI-Cristalino de alta eficiencia)	EUR 51 million
	2.3. Wind	2.3.1.Advanced aerodynamic modelling, design and testing for large rotor blade (Diseño, prueba y modelado de la aerodinámica avanzada para palas de grandes rotores.)	
		2.3.2. Small to medium size wind turbines. (SME). (Turbinas eólicas de pequeño y mediano tamaño)	
	2.4. Geothermal Energy	2.4.1.Exploration and assessment of geothermal reservoirs. (Metodos de exploración y evaluación de la reservas geológicas.)	
	2.6. Ocean Energy	2.6.1.Design tools, enabling technologies and underpinning research to facilitate ocean energy converter arrays. (Herramientas de diseño, tecnologías facilitadoras e investigación de base que faciliten el depliegue de conjuntos de dispositivos de energía oceánica)	
	2.9. Cross Cutting Issues	2.9.1.Research cooperation and knowledge creation in the area of renewable energy with Mediterranean partner countries (SICA).(Cooperación con paises del Mediterraneo en materia de investigación y generación de conocimiento en el campo de energías renovables)	
		2.9.2. Methods for the estimation of the Direct Normal Irradiation (DNI). (Métodos para la mejora de la Estimación de la Radiación Solar Directa Normal)	
	4.1. Low/Medium Tª Solar Thermal Energy	4.1.1.Research and development of innovative solar thermal facades (SME) (Investigación y desarrollo de fachadas solares termicas innovadoras)	

Convocatorias FP7-ENERGY-2013-1

BORRADOR

RETO	Actividad	TOPIC	ESTIMATED BUDGET
Renewable Energies	3.7.Cross Cutting Issues	3.7.1. Support to the sustainable delivery of non-food biomass feedstock at local, regional and pan-european level (Apoyo a los sistemas de suministro de material biomásico (de origen no alimentario), a nivel local, regional y pan-europeo)	EUR 4 million
Smart grids/ energy storage	2.7. Hydro	2.7.1. Optimisation of water turbines for integration of renewables into the grid. (Optimización de turbinas hidráulicas para apoyar la integración de energías renovables en la red)	EUR 24 million
	7.2. Pan-European Energy Networks	7.2.1. Advanced concepts for reliability assessment of the pan-European transmission network (Conceptos avanzados para la estimación de la fiabilidad de la red Pan-Europea de transmisión)	
		7.2.2. Advanced tools and mechanism for capacity calculation and congestion management. (Herramientas avanzadas y mecanismos para el calculo de capacidad de la red y la gestión de la congestión.)	
		7.2.4. Ensuring stakeholder support for future grid infrastructures. Asegurar el apoyo de los agentes relevantes para las futuras infraestructuras de red	
	7.3. Cross Cutting Issues and Technologies	7.3.3. Understanding interfaces in rechargeable batteries and super-capacitors through in situ methods. Entender las interfases en baterias recargables y supercondensadores a través de métodos in-situ	

Convocatorias FP7-ENERGY-2013-1

BORRADOR

CHALLENGE	AREA	TOPIC	ESTIMATED BUDGET
Carbon Capture and Storage	5.1. CO2 Capture	5.1.1. Scale-up of advanced high-efficiency capture processes (SME) .(Escalado de procesos de captura de CO2 avanzados y de alta eficiencia)	EUR 28.5
		5.1.2. New generation high-efficiency capture processes. (Nuevos procesos de captura de alta eficiencia)	
	5.2. CO2 Storage	5.2.1. Mitigation and remediation of leakage from geological storage (SME). (Mitigación y remediación por filtración de contaminantes en almacenamientos geológicos.)	
	6.1. Conversion Technologies for Zero Emission Power Generation	6.1.1. Combined Underground Coal Gasification and CO2 Capture and Storage. (Captura y almacenamiento de CO2 en procesos de gasificación de carbón subterraneo.)	

Area 2.1. PHOTOVOLTAICS Topic ENERGY.2013.2.1.1: High efficiency c-Si photovoltaics modules .

Scope: Crystalline Si photovoltaics (c-Si PV) is the dominating photovoltaics technology today. Nevertheless, in order to achieve investment costs below 0.7€/W, an intensive and constant R&D support is required. Novel cell architectures and new processes should be developed and transferred as fast as possible into industrial applications. Proposals therefore shall address the following:

High performance device concepts: innovative wafer-based silicon devices exploiting new cell architectures and new approaches, such as heterojunctions, rear contact cells, metal wrap through, or other.

Processing and manufacturing: high-throughput and novel processes for layer deposition, metallization, etc., including the use of lasers, ion implantation and other advanced options; the entire manufacturing process up to module level and therefore also cell handling, interconnection, encapsulation, etc.

Reducing the environmental impact and cost of fabrication, taking into account lifetime and safety issues, and at the same time improving the efficiency of the technology, is a key objective. …In particular, a cost analysis for a commercial production plant with annual production of 500 MW for the proposed technology must be included.

Funding Scheme: Collaborative project. Up to 1 project may be funded.

Area 2.3. WIND Topic ENERGY.2013.2.3.1. Advanced aerodynamic modelling, design and testing for large rotor blades

Scope: The main goal is to develop advanced rotor design models, using integral design tools in order to enable new and optimised designs for the next generation of large-scale wind turbines (up to 20MW). This includes research in aerodynamics, structural response and aerolasticity for full as well as segmented blade concepts. The research may therefore involve the following areas of work:

•Definition on large-scale rotor blades and aero-tools for turbines to be developed and tested. For upscaling to be successful, a stepwise approach might be needed. Therefore, the project should focus on turbines in the 8 to 12 MW range but may as well pave the way for larger turbines up to 20 W;

•Development of advanced aerodynamic modelling for selected elements, including flow devices for distributed aerodynamic control;

•Design and demonstration of new large-scale rotor blades and aero-tools.

Funding Scheme: Collaborative project. **Additional Information:** Both industry and R&D community players should be involved in project consortium Up to 1 project may be funded.

Area 2.3.: WIND Topic ENERGY.2013.2.3.2- Small to medium size wind turbines

Scope: The exploitation of wind energy in urban and periurban areas so far has been limited by the moderate wind regime, turbulence, visual impact, vibration and noise, which are all obstacles to the integration of wind turbines in zero energy buildings, high performance energy districts and decentralised power generation systems. This topic therefore is calling for new and innovative solutions to address these issues and improve the exploitation potential of wind energy in urban and periurban areas. The research may involve but is not limited to the following areas of work:

- Innovative design, materials and aesthetic solutions;
- New control systems and methods for optimization of operation and maintenance;
- Innovative solutions for transport, assembly and installation thereby minimizing impact in the construction phase.

The new wind turbine system designs shall be validated at pilot scale within the project duration.

Funding Scheme: Collaborative project.
Participating of **SMEs** is particularly encouraged . Up to one project may be funded.

Area 2.4. GEOTHERMAL Topic ENERGY.2013.2.4.1: Exploration and assessment of geothermal reservoirs.

Scope: The aim of this research is to develop reliable exploration methods for geothermal reservoirs. It will embrace geophysical, geological and geochemical knowledge through an interdisciplinary approach. The project will investigate all accessible information from resource location, structural geology and estimation of the in-situ stresses, to geophysical and geochemical data. The potential of supercritical fluids should also be explored. Methods to acquire and validate the information should be applied at promising sites.
The development of a common and EU-wide accepted standardized protocol for characterization of geothermal potential will help to set up a clear and transparent European database.
The final result should be scientifically sound methods to assess the technical potential and physical properties of geothermal reservoirs prior to drilling and utilisation, including appropriate software development and a clear definition of process indicators.

Funding Scheme: Collaborative project. Up to 1 project may be funded.

Area 2.6.: OCEAN Topic ENERGY.2013.2.6.1: Design tools, enabling technologies and underpining rearch to facilitate ocean energy converter arrays

Scope: The objective of the research is therefore to develop optimal designs, enabling technologies and underpinning research to facilitates the development of ocean energy converter arrays. Research and development are needed at all levels, from moorings and foundations, operation and maintenance, power take off and electrical systems development, through to array and control system modelling and environmental impacts. The solutions developed should be applicable to as many devices and under as many different site conditions as possible. Solutions should be validated / trialled using existing installations, single devices or test centres.

Expected impact: The optimisation of the design, development and operation of ocean energy arrays will contribute to the efficient and sustainable use of the ocean energy resource and hence to a better cost competitiveness, which will pave the way to a large-scale deployment of ocean energy systems. This deployment would bring a strong balancing effect to offshore wind electricity production due to its easier predictability and a dephasing effect, leading to a valuable complementary impact on power quality and value.

Additional information: Links with the wind offshore activities should be brought in to take advantage of the accumulated knowledge with establishment of offshore wind farms. Up to one project may be funded.

Area 2.7.: HYDRO Topic ENERGY.2013.2.7.1. Optimisation of water turbines for integration of renewables into the grid .

Scope: The activities under this topic will focus on research and development to optimise water turbines for storage (as well as conventional) applications in energy systems incorporating a large share of intermittent renewable energy, encompassing both fresh and sea water environments. One particular problem in accommodating renewables in these systems is to cope with frequent and large load changes, fatigue loads and significant water level variations. The proposals shall involve modelling, hydraulic and mechanical design, new material use and fabrication techniques, model validation and prototype testing.

The aims are to significantly increase turbines efficiency, operating range, life time and unit response, while also extending the use of hydro storage in seawater environments.

Funding Scheme: Collaborative Project Up to one project may be funded.

Area 2.9 : Cross-Cutting Issues Topic ENERGY.2013.2.9.1 – Research cooperation and knowledge creation in the area of renewable energy with Mediterranean partner countries.

Scope: … this topic aims to support cooperation on research and innovation in the area of renewable energy between European research centres and research organisations in the MPC. Such cooperation would *a priori* involve a first period of joint research and development work in one or more European organisations, a second period of joint testing and validation in one or more research organisations in MPC and a third period of establishing a roadmap for further cooperation on RTD&D, technology transfer, technology deployment and research infrastructure development in the targeted areas. A balanced participation of both junior and senior researchers, the different relevant institutions and other key stakeholders from both regions will be a prerequisite for the grant. Ideally each individual project will cover at least 3 out of the following 6 renewable energy areas: photovoltaics, concentrated solar power, solar-thermal, wind, bioenergy, grid integration.

Expected impact: The resulting projects are expected to substantially and sustainably increase the research and development capacity in the participating regions, to help establish sustainable cooperation networks amongst partner countries, to foster MPC participation in EU programmes, and to pave the way for long-lasting cooperation in renewable technologies and R&D more generally between the MPC and between them and Europe and thus also contributing to achieving the aims of the European external energy policy[1].

Funding Scheme: Collaborative Project for Specific cooperation actions (SICA) dedicated to Mediterranean partner countries.
Up to 2 projects may be funded for a total period of implementation per project by 4 years.

Area 2.9 : Cross-Cutting Issues Topic ENERGY.2013.2.9.2: Methods for the estimation of the Direct Normal Irradiation (DNI)

Scope: Concentrating solar technologies need reliable estimates of the Direct Normal Irradiation (DNI). For example, Concentrated Solar Power (CSP) plants need forecasts for short term (45 - 240 minutes) and very short term (1 - 45 minutes) time horizons. The objective of the topic is to support the development and validation of a method for the estimation of the DNI. The method developed will have to provide estimates at a spatial and temporal scale which is relevant to the needs of CSP in the first place and possibly also for Concentrated Photovoltaics (CPV) and other applications. Besides cloudiness, the method will have to take into account the other factors which can affect the DNI (e.g. aerosols).

Expected impact: Current methods provide estimates with errors of ± 15%. The method developed should provide more reliable forecasts of the DNI, thus reducing the uncertainties affecting (i) the prefeasibility studies of new CSP plants and possible new CPV installations, and (ii) the electricity production of CSP plants in operation.

Funding Scheme: Collaborative Project.

Additional eligibility criteria: The maximum requested EU contribution per project shall not exceed EUR 3 million. Up to one project may be funded.

FP7-ENERGY-2013-1 3. Renewable Fuel Production

.

Area 3.7. Cross-Cutting Issues Topic ENERGY.2013.3.7.1: Support to the sustainable delivery of non-food biomass feedstock at local, regional and pan-European level.

Scope : The objectives of this project are to develop Strategies, Roadmaps and Tools (SRT) in support of decision-making at local, regional and Pan-European level. This will involve economic, social, environmental and logistics research building on most relevant data and projects.
The development of these SRT will have to confront and make use of a large number of available information including:

- Geographical and environmental (e.g. soil, water, climate, protected areas);
- Agronomical (e.g. best available and identified plant/tree varieties, agricultural and forestry practices including effect of biomass extraction on carbon cycle);
- Industrial (e.g. best available pre-treatment and conversion processes, considering also relevant pilot and demo projects);
- Logistical (e.g. hubs and transportation routes);
- Economic and regulatory (e.g. CAP, RES Directive, strategies for rural and regional development, national support schemes, workforce).

Due consideration will be given to the development of small-scale plants suitable for decentralized operation with associated benefits to rural communities besides the centralized large-scale units involving long distance biomass transport.

The South East European and East Neighbourhood countries shall be considered as part of this Pan-European approach. Appropriate links will be made with relevant programmes and actions, notably in the context of the EU Agricultural, Environmental, Regional, Enlargement and Neighbourhood policies. (Bosnia and Herzegovina, Albania, Croatia, Former Yugoslav Republic of Macedonia, Kosovo, Montenegro, Serbia, Turkey, Moldova and Ukraine)

Funding scheme: Collaborative Project . Up to one project may be funded.

FP7-ENERGY-2013-1 4. Renewables for Heating&Cooling

.

Area 4.1. Low/Medium Temperature Solar Thermal Energy. Topic ENERGY.2013.4.1.1: Research and development of innovative solar thermal facades

Scope: The topic aims to support applied research, development and validation of new solar thermal facade systems.
The project will develop new and innovative concepts of solar thermal facades which significantly improve the thermal performance of the building envelope (e.g. by means of advanced materials) and which provide a high solar fraction of the heating and cooling requirements (e.g. by means of innovative solar collectors and chillers). The proposed solutions shall offer a considerable contribution to the development of smart energy systems at the city or district level. The design and aesthetics of the proposed solutions shall also be properly evaluated…..

Funding Scheme: Collaborative project

Additional information: R&D community players, industry, construction companies and architects shall be involved in the project consortium to ensure swift market implementation of the developed innovative systems. Participation of SMEs is particularly encouraged.

FP7-ENERGY-2013-1 5. CO2 Capture and Storage Technologies for Zero Emission Power Generation

Area 5.1. CO2 CAPTURE: Topic ENERGY.2013.5.1.1: Scale-up of advanced high-efficiency capture processes

Scope: The objective is the scaling-up of advanced capture technologies that have shown considerable potential for reduction of the energy penalty and a significant overall improvement of cost-efficiency of the whole capture process. Projects can address innovative capture technologies (such as for example solid sorbents, cryogenics and membranes). They should define operating conditions and provide proof of the reliability and cost-effectiveness of these concepts through pilot testing, and aim for an ambitious scale-up as compared to the state-of-the-art. The proposal should state a clearly defined target for the reduction of the energy penalty and the relative incremental operating costs of the capture process, and should assess the environmental impact of the technology at plant scale.

Additional information: Participation of SMEs is particularly encouraged. To realise prototypes or pilots at a meaningful scale, a substantial part of the funding is expected to come from third parties

Additional eligibility criteria: The requested EU contribution per project shall not exceed EUR 8 million.

Area 5.1. CO2 CAPTURE: Topic ENERGY.2013.5.1.2: New generation high-efficiency capture

Scope: The objective is to support the development of high-potential novel technologies or processes for post- and/or pre-combustion CO2 capture. Research should follow new paths leading to highly innovative technologies and materials for CO2 capture applications with the potential for the real breakthroughs… Projects shall provide "proof of concept" through prototype testing. Any research that constitutes a technology demonstration at large scale or a combination of CCS technologies proven at pre-demonstration pilot scale will not be considered for funding.

Additional information With a view to promoting international cooperation with Australia, initiatives for collaboration between project(s) under this topic and selected Australian project(s) will be encouraged on the basis of mutual benefit and reciprocity. The participation of innovative SMEs is particularly encouraged

FP7-ENERGY-2013-1 5. CO2 Capture and Storage Technologies for Zero Emission Power Generation

Area 5.2. CO2 STORAGE: Topic ENERGY.2013.5.2.1: Mitigation and remediation of leakage from geological storage.

Scope: Geological storage of CO2 must ensure the safety, reliability and controllability of the storage process, as well as address concerns about leakage of CO2 - with human health and/or environmental impacts. Safe, long-term geological storage - both onshore and offshore - therefore brings the need for sophisticated methods for the detection, characterisation, mitigation and remediation of leakage from CO2 storage sites and complexes, as well as for sound approaches to safety assessment.

Mitigation and remediation options should be investigated for a number of different leakage scenarios, addressing for example impaired caprock (dissolution, faults/fractures), well integrity, spillpoint outflow, secondary CO2 accumulations in shallow aquifers or soils, and eventually surface release. Research should include a thorough analysis of the mechanisms controlling the migration of CO2 and brine out of the storage target. Results from the project - mitigation and remediation methodologies, safety assessment models shall be published – e.g. as guidelines – so that they could eventually feed into the regulatory process for storage permitting, in particular into the corrective measures plan for storage site operators pursuant to the Directive on geological storage…

Expected impact: Projects should provide a technical knowledge base for the definition of protocols and safety regulations.

Funding scheme: Colaborative project

FP7-ENERGY-2013-1 6. Clean Coal Technologies

Area 6.1 Conversión Technologies for Zero Emission Power. Topic ENERGY.2013.6.1.1: Combined Underground coal Gasification and CO2 Capture and Storage.

Scope: Underground Coal Gasification (UCG) holds potential for reduced CO2 emissions per unit of gasified coal, for reduced impact from mining operations, and for using the site for CO2 Capture and Storage (CCS). However, the technology is still in a very early stage of development, and is also controversial because of environmental concerns. The process would be best used at limited depth for easier control, but if the process is not well-managed, UCG could potentially lead to groundwater contamination and/or soil subsidence. The understanding of UCG combined with CCS is limited, and many engineering and environmental challenges still remain. Projects should have a predominant research component, addressing both the environmental and engineering aspects. Emphasis should be on the integrated design, engineering and operation of UCG with reactor zone carbon sequestration, and on the coupled simulation of geomechanical and hydrological effects, including groundwater contamination and surface subsidence. Projects must clearly describe how they will build on and progress the state of the art as presented by previous and ongoing research, and shall aim to establish collaborative links with leading research projects in the field, both in and outside Europe.

Additional Information: An additional aim of this topic is to gain an international perspective. Active participation of non-European partners, in particular South-Africa, Australia, U.S., India and China could add to the scientific and technological excellence of the project and lead increased impact of the research to be undertaken. Up to one project may be funded.

Funding scheme: Colaborative project

FP7-ENERGY-2013-1 7. SMART ENERGY NETWORKS

Area 7.2 Pan-European Energy Networks Topic ENERGY.2013.7.2.1: Advanced concepts for reliability assesment of the pan-European transmsision network.

Scope: Today's network reliability is guaranteed by the (n-1) criterion, which assures continuity of the electricity supply in case of loss of a single principal component, without instability or cascading issues. With the massive introduction of renewable energy sources (RES), a continuous but stochastic variation between full production and zero production or load is possible for numerous specific components of the network. As a consequence, the network reliability assessment and subsequent contingency measures need to be fundamentally changed to face the challenges of a complex and multi variable system, where the (n-1) criterion is no longer sufficient.
The aim of this topic is to identify, develop, assess and recommend innovative strategies, methods and tools to evolve current security criteria into more flexible criteria for the future pan-European electricity transmission system while maintaining present-day reliability levels. The new flexible security criteria should consider the substantial anticipated changes in the energy mix for future generation scenarios and recommend ways to allow this transition without jeopardizing current reliability levels. Pilot testing of the proposed concepts in a part of the European electricity network should be included.
The consortium should include a relevant number of TSO's.
Funding scheme: Colaborative project

Area 7.2 Pan-European Energy Networks Topic ENERGY.2013.7.2.2: Advanced tools and mechanisms for capacity calculation and congestion management.

Scope: The aim is to develop new capacity calculation methods for medium- to long- time horizons (week, month, year, multi-year ahead) and congestion management approaches in accordance with a new comprehensive reliability methodology being developed for the pan-European transmission network. The work should also develop the relevant tools supporting capacity allocation and congestion management….. The consortium should include a relevant number of TSO's…
Funding scheme: Colaborative project

Area 7.2 Pan-European Energy Networks Topic ENERGY.2013.7.2.4: Ensuring stakeholder support for future grid infrastructures

Scope: The Project should take a society-oriented path, analysing major stakeholder concerns to the deployment of new or upgraded grid infrastructure and developing approaches to proactively engage stakeholders in the permitting process. The approach should as far as possible build on transparency, dialog with stakeholders, benefit sharing and other relevant measures. It should be informed by analysis of public concerns in a representative set of Member States. The approach should be supported by the implementation of practical measures to build stakeholder support and be reinforced by replication strategies based on best practice.
The work should take stock and build on relevant experiences of public acceptance of large energy infrastructures, such as wind turbines. It should build on experiences and link with other projects on this topic in Europe..

Funding scheme: Colaborative project . Up to one project may be funded.

Area 7.3 Cross Cutting Issues Topic ENERGY.2013.7.3.3: Understanding interfaces in rechargable batteries and super-capacitors through in situ methods.

Scope: The understanding and control of interfaces in rechargeable batteries and super-capacitors is essential to ensure good electronic and ionic transport across them. The term "interface" does not only refer to solid electrode/liquid electrolyte interface but also to buried interfaces (e.g. between additives and active material, the solid electrolyte interphase, and between lithiated and delithiated phases (in lithium ion batteries), etc. The physical and chemical processes occurring at these interfaces determine performance in terms of kinetics (charge-discharge rates) as well as safety and understanding their reactivity is a key tool in understanding capacity fade and failure modes. Being able to monitor changes in real time and to follow uncontrolled reactions leading to high impedance, safety issues and reduced energy and power output is of particular importance to control interfacial processes.

Funding scheme: Colaborative project

Convocatorias FP7-ENERGY-2013-2

BORRADOR

CHALLENGE	AREA	TOPIC	ESTIMATED BUDGET
Renewable Energies	3. RENEWABLE FUEL PRODUCTION	3.2.1. Pre-commercial industrial scale demonstration plant on paraffinic biofuels for use in aviation. DEMO	EUR 36 million
Smart Grids	7.SMART ENERGY NETWORKS	7.2.3. Large-scale demonstration of innovative transmission system integration and operation solutions for (inter)connecting renewable electricity production. DEMO	EUR 45 million
Horizontal Issues	9. KNOWLEDGE FOR ENERGY POLICY MAKING	9.2.1. European scientific multidisciplinary “think-tank” tosupport energy policy and to assess the potential impacts of its measures. SA	EUR 2 million

Topic ENERGY.2013.3.2.1: Pre-commercial industrial scale demonstration plant on paraffinic biofuels for use in aviation

Scope: The aim is to support the construction of pre-commercial plant(s) on paraffinic biofuels based on sustainable biomass feedstock (such as those defined in article 21.2 of the Renewable Energy Directive as well as algae). The call aims at industrially led projects with large-scale installed production capacity (ideally in the range of several thousand tons per year). The biofuel production plants should be designed to maximise the production of biofuels aimed for use in the aviation sector. The proposals should address the complete value chain including the supply chain of the sustainable biomass resource and the use of the biofuel in the aviation market. A detailed Life Cycle Analysis and GHG calculations must be included in the proposal and will be evaluated under the "Scientific and Technological Quality" criterion.
The leading role of relevant industrial partners is essential to achieve the full impact of the projects submitted. Applicants must demonstrate that by the time of the submission of their application (deadline of the call) they have been operating relative demonstration scale plants at a significant production capacity or have such plants under construction with planned commissioning the latest by 31/12/2013 (justification shall be provided in the proposal and will be evaluated under the 'Implementation' criterion). The number of operating hours by the time of the submission of the application (deadline of the call) may be an asset for the applicant. Biofuels from waste, residues, non-food cellulosic material and ligno cellulosic material

Funding scheme: Colaborative project with a predominant demonstration component

Additional information Proposals based on hydrogenated vegetable edible oils are not covered by this topic and thus shall be considered out of scope. The topic aims to facilitate the implementation of the SET Plan European Industrial Bioenergy Initiative (EIBI). The European Commission reserves its right to ask the project during the negotiation, to establish strong links, where appropriate, with relevant R&D projects at EU, national level.
It is envisaged that up to three projects could be funded.

Topic ENERGY.2013.7.2.3: Large-scale demonstration of innovative transmission system integration and operation solutions for (inter)connecting renewable electricity production.

Scope This topic will primarily address the important technological challenges stemming from the large-scale penetration of renewable electricity production in the European transmission network, in particular the integration and transport of foreseen substantial renewable electricity production (including cross-national generation projects) far from consumption centres (e.g. off-shore wind), possibly in combination with the inter-connection of EU member states' transmission networks to enable increased balancing and trade of electricity.

The projects will propose innovative technological solutions to be implemented on one or several demonstration sites. They should cover at least one, and preferably more, of the following areas:

- Optimised technologies for connecting offshore wind farms to offshore transmission lines (both HVDC / HVAC), which could also interconnect two countries. Solutions to ensure system stability should be addressed, including wind farm and grid control methods and protection schemes and possibly alternative solutions for power collection systems in offshore wind farms.
- New cost-efficient DC technologies (e.g. HVDC VSC, DC breakers, DC/DC converters), including processes for ensuring HVDC grid control and protection;
- Reliable and cost-efficient multi-connector technology for multi-terminal grid solutions, in particular for offshore applications;
- Innovative technologies for new and more powerful interconnection of electricity networks, possibly demonstrating (i) innovative concepts for HV lines (AC and/or DC) and advanced cable technologies; and/or (ii) integration of large-scale storage in (inter-connected) high voltage network with high renewables share, possibly using the balancing opportunities offered by smart system operation.

In view of the replication of the demonstrated solutions and their future commercial exploitation, the technical work in the demonstration projects should be accompanied by activities that propose practical ways to deal with the possible environmental, economic, regulatory, institutional and social constraints and barriers that projects deploying the innovative technologies could face.

Funding scheme: Colaborative project with a predominant demonstration component.

Additional information: It is envisaged that up to three projects could be funded.

FP7-ENERGY-2013-2 9.KNOWLEDGE FOR ENERGY POLICY MAKING

Topic ENERGY.2013.9.2.1: European scientific multidisciplinary “Think-tank” to support energy policy and to assess the potential impacts of its measures.

Scope: The EU energy policy brings many new intellectual challenges, in particular, the need to develop a multidisciplinary approach to issues that are increasingly interconnected. Entirely new approaches and a paradigm shift on the energy system will be needed (increased used of RES, system integration approaches etc.). Environmental, economic, technical, trade and legal issues need to be addressed urgently. Similarly new multidisciplinary approaches will be needed regarding energy efficiency, the Internal Energy Market, and oil and gas security stock, but to name a few, are needed.
The 'think tank' will contribute to and enhance the European Union's ability to properly develop these issues in terms of policy research. It should bring together Europe's foremost energy, economic, legal, trade and engineering academics and experts from industry, to support the rapid development of Community policy by providing input to the assessment of potential impacts of policy alternatives and options.
The 'think tank' will work on the basis of an annual work plan that anticipates and corresponds with the policy agenda; it could be supported by a network of energy policy research organisations that will analyse the issues in hand, prepare for and stimulate the debate of the 'think tank' and thus enable for and facilitate its ideas and perspectives. It would select a few topics for which it will deliver a 'think tank' report, analysing policy alternatives, against a predefine set of criteria, that in every case will include at least sustainability, security of supply and competitiveness. The 'think tank' may expand its consultation basis via internet to a broader community. The ‘think tank’ will closely liaise with the Commission’s Strategic Energy Technologies Information System (SETIS) as it may be necessary…

Funding scheme: Coordination and support action (supporting).
Additional information: the maximum requested EU contribution shall not exceed EUR 2 000 000. . The proposed project duration is 36 months. Due to the nature of the activities to be carried out, up to one project may be funded under this topic.

CALL "THE OCEAN OF TOMORROW 2013"

OCEAN 2013.4: Innovative transport and deployment systems for the offshore wind energy sector.

Scope: Research activities under this topic shall address the following aspects:

- Development of innovative and cost-effective deployment strategies for large-scale turbines, including building and testing onshore;
- Elaboration of optimal logistical processes and on-land transport links for large offshore structures;
- Design of novel vessel types and equipment for installation, maintenance and decommissioning and validation at reduced scale;
- Development of safety procedures for installation, operation and maintenance activities, regarding both offshore wind structures and the vessels;
- Improved operations and maintenance including the enhanced role of remote condition monitoring and systems with reduced human intervention;
- Development of new business models at European level for large offshore systems based on integrated life-cycle approaches;
- Development of methods and tools to assess the field performance of offshore wind farms servicing vessels and for optimised service activities in terms of lead time and energy usage.

Proposals are expected to include validation activities at reduced but industrially relevant scale using testing models and where possible tests at real scale using existing infrastructure and equipment, adapting those to validate models and management tools. Tests should also address extreme conditions. The proposal should cover both ground based and floating wind parks. Knowledge exchange with oil/gas and maritime sectors is expected. These aspects will be considered during the evaluation under the criterion *Scientific and/or technological excellence. ..* The multi-sectoral composition of the partnership and the participation of industrial partners and relevant end-users, in particular SMEs, are essential for the implementation of the project.

Funding Scheme: Collaborative Project .Up to one project may be funded. Estimated Budget: EUR 4 Million.

Convocatorias FP7-SMARTCITIES-2013

BORRADOR

CHALLENGE	AREA	TOPIC	ESTIMATED BUDGET
Smart Grids	7.1.Development of Inter-Active Distribution Energy Networks	7.1.1. Development and validation of methods and tools for network integration of distributed renewables resources	EUR 24 million
	7.3. Cross Cutting Issues and Technologies	7.3.1.Planning rules for linking electric vehicles (EV) to distributed energy resources	
		7.3.2. Enhanced interoperability and conformance testing methods and tools for interaction between grid infrastructure and electric vehicles	
SMART CITIES AND COMMUNITIES	8.8. Smart Cities and Communities	8.8.1. Demonstration of optimised energy systems for high performance-energy districts	EUR 90 million

Convocatorias FP7-ENERGY-2013-IRP

CHALLENGE	AREA	TOPIC	ESTIMATED BUDGET
Integrated of Research Programmes	10. HORIZONTAL PROGRAMME ACTIONS	10.1.5. Integrated Research Programme in the field of photovoltaics	EUR 35 million
		10.1.6. Integrated Research Programme in the field of wind energy	
		10.1.7. Integrated Research Programme in the field of bioenergy	
		10.1.8. Integrated Research Programme on smart grids	
		10.1.9. Integrated Research Programme on electrochemical storage	
		10.1.10. Integrated Research Programme in the field of Concentrated Solar Power (CSP)	
Support to platforms	2.1. Photovoltaics	2.1.2. Support to key activities of the European Photovoltaics Technology Platform (TP PV)	EUR 2.5 million
	3.7. Cross Cutting Issues	3.7.2. Support to key activities of the European Biofuels Technology Platform (EBTP)	
	10.1 Integration of ERA	10.1.4. Mobilising the research, innovation and educational capacities of Europe´s universities.	

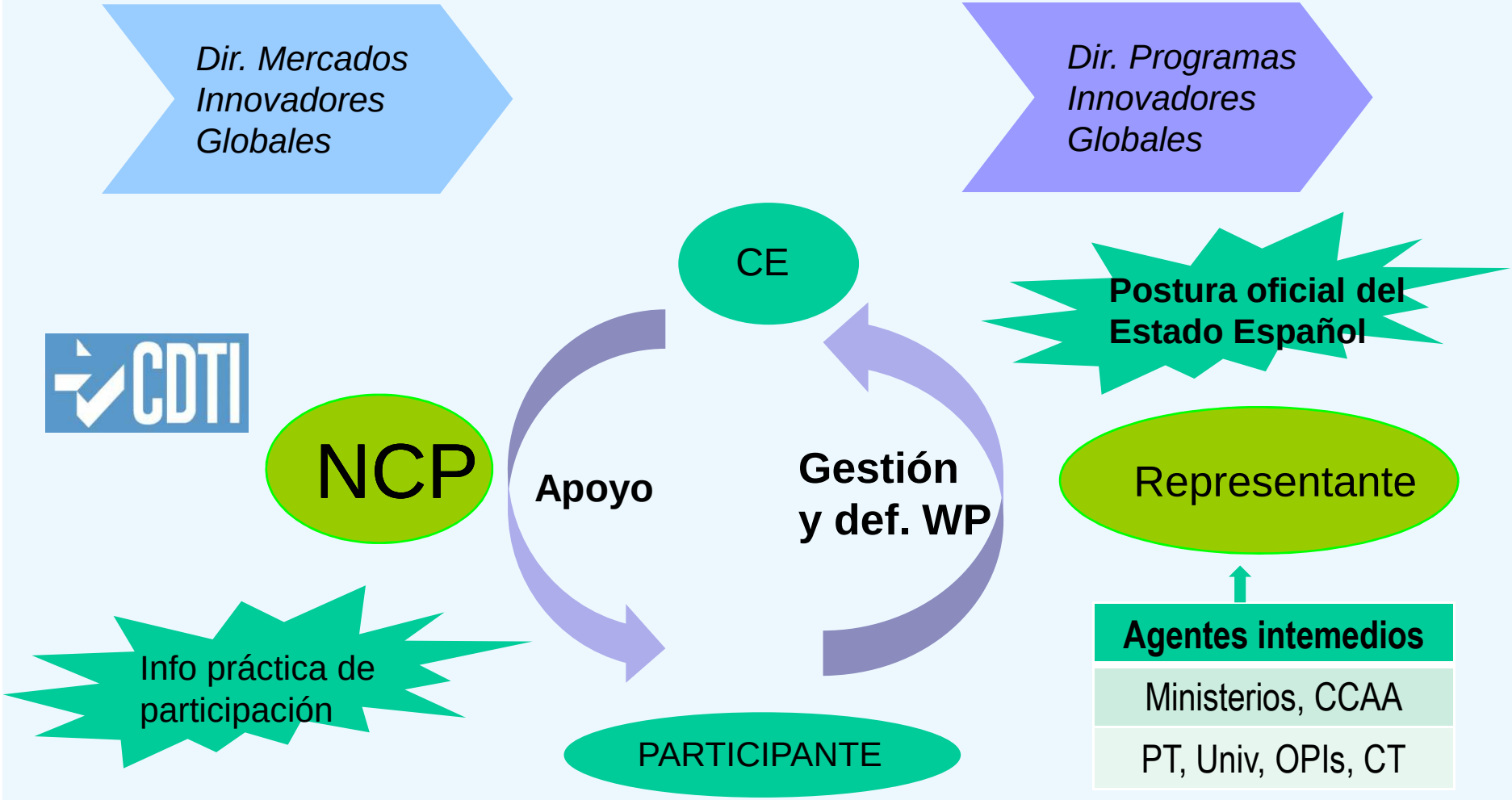
Convocatorias FP7-ERANET-2013-RTD

	TOPIC	ESTIMATED BUDGET
ERANET	ENERGY.2013.10.1.1.: ERA-NET Plus-BIOENERGY: Demonstration of the European Industrial Bioenergy Initiative	EUR 27 million
	ENERGY.2013.10.1.2: ERA-NET Plus-European WIND resources assessment	
	ENERGY.2013.10.1.3.: Supporting the coordination of national research activities of Member States and Associated States in the field of OCEAN energy (ERA-NET)	

ÍNDICE

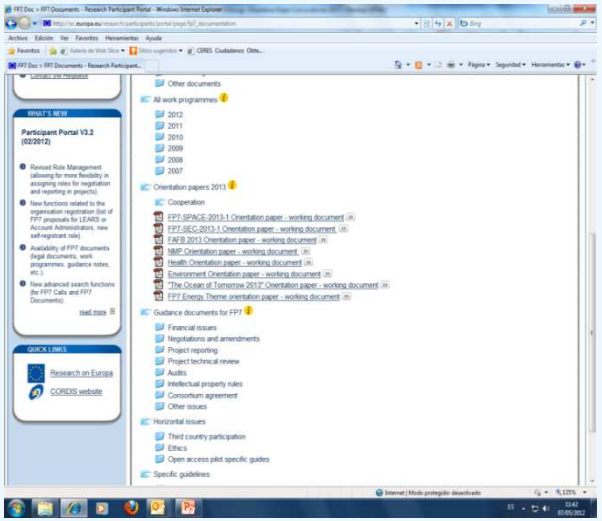
1. Entorno Político SET-PLAN
2. Estructura del Programa de Trabajo. Aspectos generales Temática Energía-VIIPM
3. Resultados obtenidos por las entidades españolas en convocatorias de energía VII PM
4. Estructura del Programa de Trabajo y Oportunidades 2013
5. **Recomendaciones prácticas-elaboración de propuestas.**

Apoyo del CDTI. Organización



Convocatorias 2013

- Las próximas convocatorias están en preparación (ultimas oportunidad en FP7)
- Se espera que las convocatorias de propuestas 2013, se publique el 10 de julio de 2012
- “Orientation Paper” disponibles en el portal del participante



Herramientas

- Portal del participante:
  http://ec.europa.eu/research/participants/portal/page/fp7_documentation
- SEP Servicio electrónico presentación propuestas (EPSS deja de existir)

Portal del participante

Home | FP7 Calls | FP7 Doc | My Organisations

Participant Portal services: without login

- **FP7 Calls** ⇨ Funding opportunities
- **FP7 Doc** ⇨ FP7 Documents
- **My Organisations** ⇨ Organisation Registration
- **?** ⇨ Support: FAQ, Contact, etc.

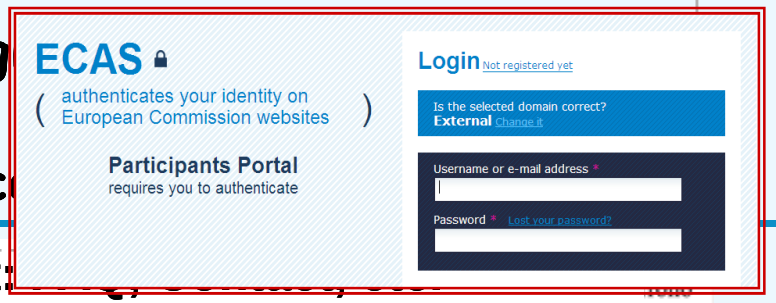
Participant Portal services: after login

Portal del participante

- **FP7 Calls** ⇨ Funding opportunities
- **FP7 Doc** ⇨ FP7 Documents

Personalised services

- **My Organisations** ⇨ Organisation-related data
- **My Proposals** ⇨ Proposals for funding
- **My Projects** ⇨ Projects-related services
- **My Roles** ⇨ Manag
- **Notifications** ⇨ Servic
- **?** ⇨ Support



Documentos esenciales

Programa de Trabajo	Temario detallado para una o varias convocatorias de cada área concreta.
Texto de la Convocatoria	Líneas de investigación del programa de trabajo abiertas, plazos de presentación, financiación disponible, referencias
Guía del solicitante	Reglas de participación, formularios oficiales, fuentes de información, consejos prácticos.
Manual de evaluación	Procesos y criterios de selección de propuestas. Generales y específicos de la convocatoria. Con los mínimos y la ponderación ***(Incluido en la Guía del Solicitante***
Notas para evaluadores	Basado en el “Manual de evaluación” y específico de cada convocatoria ***(Incluido en la Guía del Solicitante)***
Guía Financiera	Aspectos financieros: marco legal y ejemplos

Criterios de Evaluación

	Umbral	Umbral Global
 Excelencia C/T 0 a 5	3/5	10/15
 Implementación y Gestión 0 a 5	3/5	
 Impacto 0 a 5	3/5	

TODAS LAS CONVOCATORIAS SON EN **UNA SOLA ETAPA**

Detalle de los sub-criterios de evaluación

Excelencia C/T	1. Objetivos que encajen en el “scope” del topic 2. Descripción del estado del arte y avance propuesto 3. Metodología y plan de trabajo bien definido.
Implementación y Gestión	1. Estructura y procedimientos de gestión 2. Calidad / experiencia de los socios 3. Balance equilibrado del consorcio. 4. Recursos: justificación y localización entre actividades
Impacto	1. Contribución a los impactos esperados en el Plan de Trabajo 2. Medidas de diseminación y explotación 3. Gestión de la Propiedad Intelectual

Contribución a la innovación

- Énfasis en la innovación con el objetivo de generar conocimiento para proporcionar servicios, productos y procesos nuevos y más innovadores (que la investigación llegue al mercado) . Esto incluye actividades de prototipado, testeo, transferencia de tecnología, explotación de resultados existentes**:** Topic: 8.8.1 , 3.2.1, 7.2.3 y 5.1.1
- Liderazgo industrial en todos los proyectos DEMO.
- Innovación desde el lado de la demanda---estandarización: Topic: 7.2.3 , 7.3.2
- Compromiso de USERS en topics con un impacto directo en la vida diaria de los ciudadanos europeos – Smart Cities and Smart Grids

La dimensión de la innovación será evaluado en el criterio”Impact'.

PYMEs

- Topics relevantes para las PYMEs:
  - Topic dirigidos a PYMEs
  - Topics con enfoque de abajo-arriba (bottom-up approaches)
  - Topics con énfasis en las actividades de aplicación y demostración

ENERGY.2013.5.1.1: Scale-up of advanced high-efficiency capture processes;
ENERGY.2013.5.1-2: New generation high-efficiency capture processes;
ENERGY.2013.2.3.2: Small to medium wind turbines;
ENERGY.2013.4.1.1: Research and development of innovative solar thermal facades.

Cooperación internacional

- Topic específico de cooperación con países del área mediterranea. SICA. Topic ENERGY.2013.2.9.1
- Topics para promover la cooperación internacional con países seleccionados:
  - Topic ENERGY.2013.5.1-2: New generation high-efficiency capture processes; (with Australia);
  - Topic ENERGY.2013.7.3.3: Understanding interfaces in rechargeable batteries and super-capacitors through in situ methods (with industrialized and/or emerging countries).
- Cooperación con Third countries:

  Topic ENERGY.2013.3.7.1: Developing regional and pan-European schemes for the sustainable delivery of non-food biomass feedstock in a pan-European integrated market;

  Topic ENERGY.2013.6.1.1: Combined Underground Coal Gasification and CO2 Capture and Storage;

Recomendaciones específicas – Preparación de propuestas

- Dominar los documentos en los que se basa la política energética europea actual
- Especial importancia de SET PLAN. Plan de Implementación de la EII relacionada con el proyecto
- Relacionar los objetivos del proyecto con la consecución de los objetivos globales.
- Cuantificar el impacto del proyecto. Tener en cuenta los KPIs recogidos en los Planes de implementación

SET – PLAN: http://ec.europa.eu/energy/technology/set_plan/set_plan_en.htm

Planes de Implementación: http://setis.ec.europa.eu/activities/implementation-plans

KPIs: http://setis.ec.europa.eu/activities/eii-key-performance-indicators

Gracias por su atención

luisa.revilla@cdti.es
NCP ENERGY-VIIPM
C/ Cid,4 – 28001 Madrid
Tel. +34 91 581 55 66

Consultas generales I+D+i y el VII PM:
www.cdti.es/pidi - Tel. 902 34 74 34