

# EU Energy calls 2013

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Research and Innovation



## Strategic context

- Support to political initiatives (EU Energy and Climate Policy, EU Research and Innovation Policy)
- Support to implementation of the **Strategic Energy Technology Plan** (SET-Plan)
- Bridge to Horizon 2020 / completion of FP7 portfolio





## **Priorities of Energy WPs 2013**

### FP7 Energy Theme

- Smart cities
- Renewable energies
- Smart grids and energy storage
- Carbon Capture and Storage

#### **Euratom WP 2013**

• Nuclear Fission, Safety and Radiation Protection





### **Basics**

- FP7 (2007-2013) implemented through **annual** work programmes and calls for proposals
- Work programmes structured along 'Activities' → 'Areas' → 'Topics'
- Total FP7 Energy call budget 2013: ca. 340 M€, Fission call:
   55 M€
- Energy relevant topics are also included in **other work programmes** / calls (e.g. Transport, ICT, NMP, KBBE, Environment, Security etc.)





## **Overview of energy calls 2013**

• Publication date for all 2013 calls: 10 July 2012

call identifier	call deadline
FP7-ENERGY-2013-1	28 November 2012
FP7-ENERGY-2013-2	24 January 2013
FP7-SMARTCITIES-2013	4 December 2012
FP7-ENERGY-2013-IRP	8 January 2013
FP7-ERANET-2013	28 February 2013
FP7-OCEAN-2013	7 February 2013

• N.B: Also other FP7 calls 2013 can be relevant







#### Smart Cities and Communities

- 7.1.1: Development and validation of methods and tools for network integration of distributed renewable resources
- 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
- 8.8.1: Demonstration of optimised energy systems for high performance-energy districts





## Renewable energy technologies Solar energy

- 2.1.1: High efficiency c-Si photovoltaics modules
- 2.1.2: Support to key activities of the European Photovoltaics Technology Platform (TP PV)
- 4.1.1: Innovative solar thermal façade systems
- 2.9.2: Methods for the estimation of the Direct Normal Irradiation (DNI)
- 10.1.5: Integrated research programme in the field of photovoltaics
- 10.1.10: Integrated Research Programme in the field of Concentrated Solar Power (CSP)





### Renewable energy technologies



#### Wind energy

- 2.3.1: Advanced aerodynamic modelling, design and testing for large rotor blades
- 2.3.2: Small to medium size wind turbines
- 10.1.6: Integrated research programme in the field of wind energy
- 10.1.2: ERA-NET Plus European wind resources assessment
- OCEAN 2013.4 Innovative transport and deployment systems for the offshore wind energy sector





## Renewable energy technologies Bioenergy



- 3.2.1: Pre-commercial industrial scale demonstration plant on paraffinic biofuels for use in aviation
- 3.7.1: Developing regional and pan-European schemes for the sustainable delivery of non-food biomass feedstock in a pan-European integrated market
- 3.7.2: Support to key activities of the European Biofuels Technology Platform (EBTP)
- 10.1.1: ERA-NET Plus Bioenergy: Demonstrations of the European Industrial Bioenergy Initiative
- 10.1.7: Integrated research programme in the field of bioenergy







### Renewable energy technologies

- 2.4.1: Exploration and assessment of geothermal reservoirs
- 2.6.1: Design tools, enabling technologies and underpinning research to facilitate ocean energy converter arrays
- 2.9.1: Research cooperation and knowledge creation in the area of renewable energy with Mediterranean partner countries
- 10.1.3: Supporting the coordination of national research activities of Member States and Associated States in the field of OCEAN energy (ERA-NET)







### CCS / Clean Coal

- 5.1.1: Scale-up of advanced high-efficiency capture processes
- 5.1.2: New generation high-efficiency capture processes
- 5.2.1: Mitigation and remediation of leakage from geological storage
- 6.1.1: Combined Underground Coal Gasification and CO2 Capture and Storage







### Smart grids and energy storage

- 2.7.1: Optimisation of Water Turbines
- 7.2.1: Advanced concepts for reliability assessment of the pan-European transmission network
- 7.2.2: Advanced tools and mechanisms for capacity calculation and congestion management
- 7.2.3: Large-scale demonstration of innovative transmission system integration and operation solutions for (inter)connecting renewable electricity production







### Smart grids and energy storage

- 7.2.4: Ensuring stakeholder support for future grid infrastructures
- 7.3.3: Understanding interfaces in rechargeable batteries and super-capacitors through in situ methods
- 10.1.8: Integrated research programme on smart grids
- 10.1.9: Integrated research programme on electrochemical storage







#### Horizontal actions

- 9.2.1: European scientific multidisciplinary "think-tank" to support energy policy and to assess the potential impacts of its measures
- 10.1.4: Mobilising the research, innovation and educational capacities of Europe's universities





## Integration of research programmes

- **Bridge to Horizon 2020** emphasis on partnerships, joint activities, real critical mass
- Support to **existing** Integrated Research Programmes covering a significant proportion of European research in a given area
- Support aimed at delivering **concrete results** in four years, whilst being part of a longer-term plan
- Types of activities: Integrating activities, Exchange of researchers, Development of joint research facilities with EU dimension, Joint research activities, Transfer of knowledge, International cooperation
- Funding scheme: CP-CSA
- Open to all Research Performers = research centres, universities, industry, ...
- EU contribution: up to 10 M€ per programme (for clearly defined priorities in the IRP), funded at normal FP7 rates





## **Additional information**

#### **Call documents:**

• <a href="http://ec.europa.eu/research/participants/portal/page/fp7">http://ec.europa.eu/research/participants/portal/page/fp7</a> calls

#### **Orientation Paper:**

• <a href="https://ec.europa.eu/research/participants/portal/ShowDoc/Extensions+Repository/General">https://ec.europa.eu/research/participants/portal/ShowDoc/Extensions+Repository/General</a>
+Documentation/Orientation+papers+2013/Cooperation/fp7-energy-orientation-paper en.pdf

#### **National Contact Points:**

http://cordis.europa.eu/fp7/ncp\_en.html

#### **Commission staff:**

• <a href="http://ec.europa.eu/staffdir/plsql/gsys">http://ec.europa.eu/staffdir/plsql/gsys</a> page.display index?pLang=EN (DG RTD/K, DG ENER/C)

#### **Brussels Information Day on 2013 Energy calls (live-stream):**

http://ec.europa.eu/research/conferences/2012/energy\_infoday/infoday\_energy\_en.htm





## Thank you for your attention! Good luck!

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