



# Third Call for proposals



**Philippe SCHILD**

**Thierry LANGLOIS d'ESTAINOT**

**Jeroen SCHUPPERS**

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# Other Renewables

- × **Wind**
- × **Ocean**
- × **Concentrated Solar Thermal**
- × **Geothermal**





# EU FUNDING SYSTEM

- **Research: 50% for private organisation and 100% of additional cost for universities**
- **Demonstration: 35% for private organisation and 100% of additional cost for universities**
- **Coordination Action and Specific Support Action: up to 100% but with limited overheads (20%)**





# FP6 INSTRUMENTS

- × **IP**
- × **NoE**
- × **STREP**
- × **CA**





# INSTRUMENTS

## NEW

- **Integrated Projects (IP)** aiming to integrate the critical mass of activities for achieving a specific objective; around €10 M of EU funding for about 15 research teams for 4-5 years
- **Networks of Excellence (NoE)** around a joint programme of activity and aiming to create a durable integration among research teams; around €7 M of EU funding for about 10 partners





# INSTRUMENTS

## “TRADITIONAL”

- **Specific Targeted Research Projects (STRP)** focused on a specific RTD objective; around €1-2 M of EU funding for 6 research teams for 2-3 years
- **Co-ordination Actions (CA)** oriented towards a better networking of research teams; less than €1 M for about 15-20 partners for 2-3 years
- **Specific Support Actions (SSA)** for accompanying the programme (dissemination, transfer of results); less than €1 M for a limited time and number of teams





# Wind

- × **IP ML: Innovative materials, modelling and designs for future wind energy converters**
- × **STREP ML: Design and development of large (> 5MW) turbines**
- × **STREP SM: Innovative wind farms, components and design tools**
- × **CA: Output forecasting for multi-MW offshore wind- and wave energy installations**



A background image of a wind turbine with the name 'SØRSTARK' visible on the nacelle. The image is partially obscured by a white curved shape that frames the text.

# Wind IP

## × **IP: Innovative materials, modelling and designs for future wind energy converters**

The objective is to develop significantly improved wind turbine components from blade tip to foundations using new materials, improved modelling techniques and innovative designs aiming at lightweight, reliable and efficient turbines with reduced environmental impact. Issues to be addressed include new materials, adaptation and improvement of models, development of lightweight, high-strength and durable turbine components, optimisation of blades and generators, systems interfacing, research on machine loads and the response of the structure, and integration of advanced control and monitoring issues. Furthermore, the objectives should include pre-normative research on wind turbine components and performances (in particular blades and power curves) and developing harmonised measurement and testing methods, with a view to prepare for standardisation and certification.

**Instrument :** this topic is only open for IP proposals. To address the goals of the topic, it is expected that one IP could be funded. Efforts should be made to include innovative SMEs.



A background image of a wind turbine with the name 'HØRSTARK' visible on its nacelle. The turbine is white and set against a blue sky. The image is partially obscured by a white curved shape that frames the text.

# Wind STREPs

- × **STREP ML: Design and development of large (> 5MW) turbines**

The objective is to develop very large turbines (> 5MW), in particular for use in offshore wind farms, for which designs can no longer be an upscaling of existing smaller models. Issues to be addressed include the development of advanced drive trains and controls, optimisation of turbine size and installation costs.

Instrument : this topic is only open for STREP proposals. To address the goals of the topic, it is expected that one STREP could be funded.

- × **STREP SM: Innovative wind farms, components and design tools**

Innovative wind farms, components and design tools for reliable electricity generation at reduced costs using either onshore or offshore installations, with particular emphasis on issues related to low wind speeds, extreme load cases, complex terrains, advanced micro-siting techniques, and micro-climates;





# Wind CA

## × CA: Output forecasting for multi-MW offshore wind- and wave energy installations

The objective is to co-ordinate existing model-development activities, including proper interfacing towards integration of the various models to assess and predict power output for offshore wind- and wave-energy installations. This coordination should lead to better coherence of models, improved confidence in output data to reduce the technical and economic risks prior to installation, and to improve the control systems for power take-off and grid supply planning. Issues to be addressed include resource assessment, optimisation of the topology of wind- and wave-energy installations, short to long term wind and wave power prediction using meteorological data, and economic simulations to minimise investment risks.

Instrument : this topic is only open for CA proposals. To address the goals of the topic, it is expected that one CA could be funded.





## Ocean

- × **IP ML: New concepts for ocean energy converters**
- × **STREP ML: Reliable, low-cost ocean energy converters**
- × **STREP SM: Ocean / marine energy technologies**





# Ocean IP

## × IP: New concepts for ocean energy converters

The objective is to create the knowledge and critical mass to develop new and innovative technologies and prototypes for wave and tidal stream energy converters. Issues to be addressed should include amongst others new materials and coatings, manufacturing systems, power take-off systems, output prediction, grid connections, mooring or foundations, harmonised testing methods and comparative assessment of the converters' potential in terms of cost and environmental and socioeconomic impact. An important point would be to provide research services and testing facilities to developers and SMEs.

Instrument : this topic is only open for IP proposals. To address the goals of the topic, it is expected that one IP could be funded. Efforts should be made to include innovative SMEs.





# Ocean STREPs

## × **STREP ML: Reliable, low-cost ocean energy converters**

The objective is the development and real sea testing of prototypes of proven concepts with significant potential for reaching the cost targets for power production. Issues to be addressed include performance monitoring, maintenance and control, and reliability assessment.

Instrument : this topic is only open for STREP proposals. To address the goals of the topic, it is expected that more than one STREP could be funded.

## × **STREP SM: Ocean / marine energy technologies**

Ocean / marine energy technologies, including wave, ocean current and tidal stream technologies, which are ready for demonstration at full scale with a view to commercial exploitation .





# Concentrated Solar Thermal

- × **STREP ML: Development of solar thermal reactors for hydrogen production**
- × **STREP ML: Solar hybrid power plants**





# Concentrated Solar Thermal STREP

## × **STREP: Development of solar thermal reactors for hydrogen production**

The objective is to address the development of new and innovative solar thermal reactors (including hybrid systems) to produce hydrogen at significantly reduced costs compared to existing technologies. Proposals should focus on either thermo-chemical reactions, reforming, cracking or gasification pathways. Issues to be addressed include cost, performance, life cycle, environmental and socio-economic impact assessments.

**Instrument :** this topic is only open for STREP proposals. To address the goals of the topic, it is expected that one STREP could be funded.





# Concentrated Solar Thermal STREP

## × **STREP: Solar hybrid power plants**

The objective is to develop and test a prototype hybrid power plant that combines concentrating solar thermal (CST) systems with other fuels, with a view to providing reliable, affordable and environmentally sustainable heat and power. Issues to be addressed include the development of components that allow dual operation, as well as the optimisation or the development of innovative CST components.

Instrument : this topic is only open for STREP proposals. To address the goals of the topic, it is expected that one STREP could be funded. Opportunities to include research organisations from Third Countries should be explored.





# Geothermal

- × **STREP ML: Improved exploration methods for deep geothermal resources**
- × **STREP ML: High-temperature downhole tools and instruments**
- × **STREP SM: Geothermal energy using innovative integrated systems**
- × **CA: Co-ordination and structuring of research, technology transfer and information dissemination in the field of EGS and other unconventional geothermal resources**





# Geothermal STREPs ML

## x **STREP ML: Improved exploration methods for deep geothermal resources**

The objective is to develop innovative, cost-effective and accurate exploration methods for deep geothermal resources in order to reduce the risk prior to drilling. The research should cover the development of integrated geophysical techniques for the detection of fractured and/or fluid bearing prospective geothermal zones, and include advanced processing, interpretation and modelling approaches.

Instrument : this topic is only open for STREP proposals. To address the goals of the topic, it is expected that one STREP could be funded.

## x **STREP ML: High-temperature downhole tools and instruments**

The objective is the development and testing of innovative, reliable tools and instruments for the characterisation and exploitation of high-temperature unconventional geothermal energy resources.

Instrument : this topic is only open for STREP proposals. To address the goals of the topic, it is expected that one STREP could be funded.





# Geothermal STREP SM

- × **STREP SM: Geothermal energy using innovative integrated systems**

**Geothermal energy using innovative integrated systems with optimised efficiency and reduced costs for electricity generation, and / or combined heat, cooling and power (CHCP), using environmentally sustainable technologies.**





# Geothermal CA

- × **CA: Co-ordination and structuring of research, technology transfer and information dissemination in the field of EGS and other unconventional geothermal resources**

**The objective is to co-ordinate ongoing research and to promote the development and uptake of innovative methods and technologies to expand the exploitation of unconventional geothermal resources, in particular enhanced geothermal systems. Proposals should address the assessment of ongoing research, the identification of best practices, gaps in knowledge and barriers to implementation, and propose strategies for implementation as well as directions for future research.**

**Instrument : this topic is only open for CA proposals. To address the goals of the topic, it is expected that one CA could be funded. Opportunities for including research organisations from the new Member States and Candidate Countries should be fully explored.**

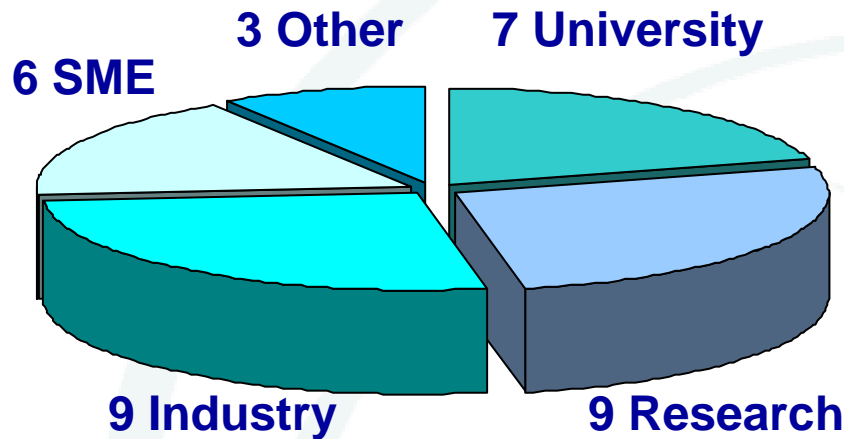




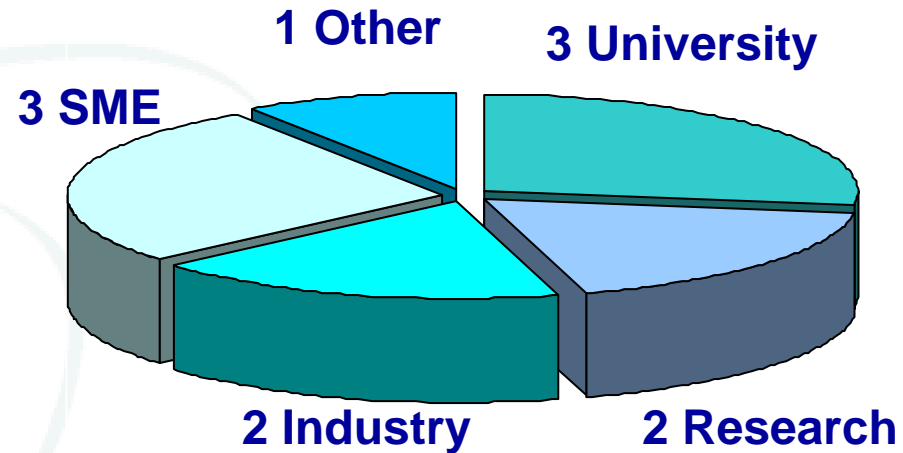
# Please note the statistics

(All numbers are averages following 1st Call)

## IP



## STREP



Requested contribution (submitted)  
 Recommended (ranked list)  
 Number of partners

IP	STREP
13 M€	2.5 M€
9 M€	2 M€
34	11





# Please remember

- × **Topics and areas are given in the Call text**
- × **There are no thresholds for the size of the project, but statistics from the 1st Call provide a guideline**
- × **Previous submission of an EoI will have no bearing on the proposal evaluation.**
- × **There may be competition between proposals across and within topics and areas.**





# Please consider

- × **Policy context, research and energy policies**
- × **Integration of partners from Associated Candidate Countries**
- × **SME participation (15% of the FP6 budget)**
- × **International co-operation**





# Media Briefing Almeria

- × **Ocean – solar – geothermal projects presented**
- × **42 journalists attended**
- × **108 press articles**
- × **Largest media impact of DG RTD**

