

FP7 Cooperation Work Programme: Theme 5 – Energy

Call Fiche

Call title: Energy Call Part 1

Call identifier: FP7-ENERGY-2007-1-RTD

Date of publication: 22 December 2006

Deadline: 3 May 2007 at 17.00, Brussels local time

Indicative budget^{1 2}: 109.3 M€ from the 2007 budget

Topics called:

Activity/ Area	Topics called	Funding Schemes
ACTIVITY ENERGY.1: HYDROGEN AND FUEL CELLS		
AREA ENERGY.1.1: FUEL CELLS	Topic ENERGY.2007.1.1.1: Basic research for materials and processes for Polymer Electrolyte Membrane Fuel Cells (PEMFC)	Collaborative Project (small or medium scale focused project)
	Topic ENERGY.2007.1.1.2: Basic research on materials and processes for High Temperature Fuel Cells (SOFC & MCFC)	Collaborative Project (small or medium scale focused project)
	Topic ENERGY.2007.1.1.3: Innovative concepts for fuel cells (<i>Future and Emerging Technologies topic</i>)	Collaborative Project (small or medium scale focused project)
AREA ENERGY.1.2: HYDROGEN SUPPLY	Topic ENERGY.2007.1.2.1: New materials and processes for advanced electrolyzers	Collaborative Project (small or medium scale focused project)
	Topic ENERGY.2007.1.2.2: New materials and processes for advanced multi-fuel processors	Collaborative Project (small or medium scale focused project)
	Topic ENERGY.2007.1.2.3: Advanced Materials for High Temperature thermo-chemical processes	Collaborative Project (small or medium scale focused project)
	Topic ENERGY.2007.1.2.4: Novel nanostructured materials for hydrogen storage	Collaborative Project (small or medium

¹ Under the condition that the preliminary draft budget for 2007 is adopted without modifications by the budget authority. An amount from the 2008 budget is expected to be added to this call for which a new financing decision to cover the budget for that year will be requested at the appropriate time (see call page on CORDIS for further details).

² Any increase/variation inferior to 10% of this amount will not be considered substantial and will not require a modification of this Work Programme. A reserve list will be constituted if there is a sufficient number of good quality proposals. It will be used if extra budget becomes available.

		scale focused project)
AREA ENERGY.1.3: CROSS-CUTTING ISSUES AND HORIZONTAL ACTIVITIES	Topic ENERGY.2007.1.3.1: Pre-normative research to support EU and international regulatory activities	Collaborative Project (small or medium scale focused project)
ACTIVITY ENERGY.2: RENEWABLE ELECTRICITY GENERATION		
AREA ENERGY.2.1: PHOTOVOLTAICS	Topic ENERGY.2007.2.1.1: Intermediate band (IB) materials and cells for PV	Collaborative Project (small or medium scale focused project)
	Topic ENERGY.2007.2.1.2: Dye-sensitised PV solar cells	Collaborative Project (small or medium scale focused project)
	Topic ENERGY.2007.2.1.3: Concentrating photovoltaics: cells, optics, modules	Collaborative Project (large-scale integrating project)
	Topic ENERGY.2007.2.1.4: Research for binary thin-film photovoltaics	Collaborative Project (small or medium scale focused project)
	Topic ENERGY.2007.2.1.5: Environmental aspects of photovoltaics	Coordination and Support Action (support type)
	Topic ENERGY.2007.2.1.6: Alternative approaches for crystalline silicon PV	Collaborative Project (small or medium scale focused project)
AREA ENERGY.2.2: BIOMASS	Topic ENERGY.2007.2.2.1: Advanced gas cleaning technologies for biomass	Collaborative Project (small or medium scale focused project)
	Topic ENERGY.2007.2.2.2: Innovative technologies for efficient electricity production in biomass-fired IGCC	Collaborative Project (small or medium scale focused project)
	Topic ENERGY.2007.2.2.3: New and improved slagging and corrosion control technologies for large-scale biomass co-firing processes	Collaborative Project (small or medium scale focused project)
AREA ENERGY.2.3: WIND	Topic ENERGY.2007.2.3.1: Development of components and systems for turbines and wind farms	Collaborative Project (large-scale integrating project)
	Topic ENERGY.2007.2.3.2: External conditions, resource assessment and forecasting for wind energy	Collaborative Project (small or medium scale focused project)
	Topic ENERGY.2007.2.3.3: Testing, standards and certification for wind energy systems	Collaborative Project (small or medium

		scale focused project)
AREA ENERGY.2.4: GEOTHERMAL	Topic ENERGY.2007.2.4.1: Understanding and Mitigation of Induced Seismicity Associated with Geothermal Field Development	Collaborative Project (small or medium scale focused project)
AREA ENERGY.2.5: CONCENTRATED SOLAR POWER	Topic ENERGY.2007.2.5.1: Key components for CSP	Collaborative Project (small or medium scale focused project)
	Topic ENERGY.2007.2.5.2: Using CSP for water desalination (<i>Specific International Cooperation Action</i>)	Coordination and Support Action (support type)
AREA ENERGY.2.6: OCEAN	Topic ENERGY.2007.2.6.1: New components and concepts for ocean energy converters	Collaborative Project (small or medium scale focused project)
	Topic ENERGY.2007.2.6.2: A strategy for ocean energy	Coordination and Support Action (coordination type)
	Topic ENERGY.2007.2.6.3: Pre-normative research for ocean energy	Collaborative Project (small or medium scale focused project)
AREA ENERGY.2.7: HYDRO	Topic ENERGY.2007.2.7.1: New or improved hydro components and concepts	Collaborative Project (small or medium scale focused project)
	Topic ENERGY.2007.2.7.2: A strategy for hydropower	Coordination and Support Action (coordination type)
AREA ENERGY.2.8: CROSS-CUTTING ISSUES	Topic ENERGY.2007.2.8.1: Solar irradiation resource assessment and forecasting	Coordination and Support Action (support type)
ACTIVITY ENERGY.3: RENEWABLE FUEL PRODUCTION		
AREA ENERGY.3.2: SECOND GENERATION FUEL FROM BIOMASS	Topic ENERGY.2007.3.2.1: Pre-treatment of lignocellulosic biomass for ethanol production	Collaborative Project (small or medium scale focused project)
	Topic ENERGY.2007.3.2.2: New and advanced technologies for hydrolysis and/or fermentation of lignocellulosic biomass	Collaborative Project (small or medium scale focused project)
	Topic ENERGY.2007.3.2.3: High purity syngas cleaning technologies for biofuels	Collaborative Project (small or medium scale focused project)
	Topic ENERGY.2007.3.2.4: Biological conversion of syngas into liquid biofuels	Collaborative Project (small or medium

		scale focused project)
	Topic ENERGY.2007.3.2.7: Identifying research needs and technological opportunities for biofuels production in Latin America (<i>Specific International Cooperation Action</i>)	Coordination and Support Action (support type)
AREA ENERGY.3.3: BIOREFINERY	Topic ENERGY.2007.3.3.1: Forest-based biorefinery	Collaborative Project (large-scale integrating project)
	Topic ENERGY.2007.3.3.2: New uses for glycerine in biorefineries	Collaborative Project (small or medium scale focused project)
	Topic ENERGY.2007.3.3.3: Developing biorefinery concepts	Coordination and Support Action (support type)
AREA ENERGY.3.5: ALTERNATIVE ROUTES TO RENEWABLE FUEL PRODUCTION	Topic ENERGY.2007.3.5.1: Fuel production using solar radiation (<i>Future and Emerging Technologies topic</i>)	Collaborative Project (small or medium scale focused project)
AREA ENERGY.3.7: CROSS-CUTTING ISSUES	Topic ENERGY.2007.3.7.1: Harmonisation of biomass resource assessment	Coordination and Support Action (coordination type)
	Topic ENERGY.2007.3.7.2: Marine biomass	Coordination and Support Action (support type)
ACTIVITY ENERGY.5: CO₂ CAPTURE AND STORAGE TECHNOLOGIES FOR ZERO EMISSION POWER GENERATION		
AREA ENERGY.5.1: CO₂ CAPTURE	Topic ENERGY.2007.5.1.1: Advanced pre-combustion capture techniques	Collaborative Project (large-scale integrating project)
	Topic ENERGY.2007.5.1.2: Fluid bed based capture techniques	Collaborative Project (small or medium scale focused project)
	Topic ENERGY.2007.5.1.3: Advanced separation techniques	Collaborative Project (small or medium scale focused project)
	Topic ENERGY.2007.5.1.4: Separation techniques in gaseous fuel power generation	Collaborative Project (small or medium scale focused project)
AREA ENERGY.5.2: CO₂ STORAGE	Topic ENERGY.2007.5.2.1: Development of a suitable methodology for the qualification of deep saline aquifers for CO ₂ storage	Collaborative Project (large-scale integrating project)
CROSS-CUTTING ACTIONS BETWEEN ACTIVITIES ENERGY.5 AND ENERGY.6		

(Activity ENERGY.5&6)		
AREA ENERGY.5&6.1: POWER GENERATION TECHNOLOGIES FOR INTEGRATED ZERO EMISSION SOLUTIONS	Topic ENERGY.2007.5&6.1.1: Feasibility study and development of an integrated solution for a large scale zero emission fossil fuel power plant	Collaborative Project (large-scale integrating project)
AREA ENERGY.5&6.2: CROSS CUTTING AND REGULATORY ISSUES	Topic ENERGY.2007.5&6.2.1: Support to regulatory activities for CO2 capture and storage	Coordination and Support Action (support type)
	Topic ENERGY.2007.5&6.2.3: Socio-economic assessment of pathways for the deployment of CCS in Europe	Coordination and Support Action (support type)
	Topic ENERGY.2007.5&6.2.6: Support to international collaboration in zero emission power generation (<i>Specific International Cooperation Action</i>)	Coordination and Support Action (support type)
ACTIVITY ENERGY.7: SMART ENERGY NETWORKS		
AREA ENERGY.7.1: DEVELOPMENT OF INTER-ACTIVE DISTRIBUTION ENERGY NETWORKS	Topic ENERGY.2007.7.1.1: Develop and validate innovative control strategies and network architectures for active networks with large-scale penetration of renewables sources and distributed generation	Collaborative Project (large-scale integrating project)
	Topic ENERGY.2007.7.1.2: Develop new tools to simulate smart distribution networks	Collaborative Project (small or medium scale focused project)
AREA ENERGY.7.2: PAN-EUROPEAN ENERGY NETWORKS	Topic ENERGY.2007.7.2.1: Simulation and state estimation of smart electricity transmission networks	Collaborative Project (large-scale integrating project)
AREA ENERGY.7.3: CROSS CUTTING ISSUES AND TECHNOLOGIES	Topic ENERGY.2007.7.3.1: Electricity network assets management	Coordination and support action (coordination type)
	Topic ENERGY.2007.7.3.2: The value of innovative storage solutions for smart networks	Collaborative Project (small or medium scale focused project)

ACTIVITY ENERGY.9: KNOWLEDGE FOR ENERGY POLICY MAKING		
AREA ENERGY.9.1: KNOWLEDGE TOOLS FOR ENERGY-RELATED POLICY MAKING	Topic ENERGY.2007.9.1.1: Energy security of supply	Collaborative Project (small or medium scale focused project)
	Topic ENERGY.2007.9.1.2: Energy behavioural changes	Collaborative Project (small or medium scale focused project)
	Topic ENERGY.2007.9.1.3: Energy technological foresight and scenario development	Collaborative Project (small or medium scale focused project)
	Topic ENERGY.2007.9.1.4: Energy technology transfer (<i>Specific International Cooperation Action</i>)	Collaborative Project (small or medium scale focused project)
AREA ENERGY.9.2: SCIENTIFIC SUPPORT TO POLICY	Topic ENERGY.2007.9.2.1: Energy foresight network	Coordination and Support Action (coordination type)
ACTIVITY ENERGY.10: HORIZONTAL PROGRAMME ACTIONS		
	Topic ENERGY.2007.10.0.2: Trans-national co-operation among NCPs	Coordination and Support Action (coordination type)
	Topic ENERGY.2007.10.0.4: Development of a methodology for monitoring the expected impacts of FP7 Energy projects	Coordination and Support Action (support type)

Evaluation procedure:

- The evaluation shall follow a single stage procedure.
- Proposals may be evaluated remotely.
- The evaluation criteria (including weights and thresholds) and subcriteria, together with the eligibility, selection and award criteria, for the different funding schemes are set out in Annex 2 to this work programme
- Proposals will not be evaluated anonymously.
- For Collaborative Projects (large-scale integrating projects), coordinators of proposals that pass the evaluation thresholds may be invited to a hearing.
- At the Panel stage, proposals with equal overall scores will be prioritised according to their scores for the Quality criterion. If they are still tied, they will be prioritised according to their scores for the Impact criterion, and then by their scores for the Implementation criterion. If any proposals are still tied, then overall Work Programme coverage will be used to decide the priority order.

Indicative evaluation and contractual timetable:

Evaluations are expected to be carried out the period May to July 2007. It is expected that the contract negotiations for the short-listed proposals will open by September 2007.

Consortium agreements:

Participants in Collaborative Projects are required to conclude a consortium agreement; participants in Coordination and Support Actions are encouraged, but not required, to conclude a consortium agreement.

Particular requirements for participation, evaluation and implementation:

- The minimum number of participating legal entities required, for all funding schemes, is set out in the Rules for Participation. They are summarised in the table below³:

Funding scheme	Minimum conditions
Collaborative project	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 for specific international 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.
Coordination and support action (coordination type))	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 and support action (support type)	At least 1 independent legal entity.

- Collaborative Projects (small or medium scale focused projects) shall have a maximum requested EC contribution of 4M€ This is an eligibility criterion – proposals above this limit will not be evaluated.
- Collaborative Projects (large-scale integrating projects) shall have a requested EC contribution greater than 4M€ This is an eligibility criterion – proposals below this limit will not be evaluated.

Forms of grant:

The forms of grant and maximum reimbursement rates which will be offered are specified in Annex 3 to the Cooperation work programme.

³ MS = Member States of the EU; AC = Associated country. Where the minimum conditions for an indirect action are satisfied by a number of legal entities, which together form one legal entity, the latter may be the sole participant, provided that it is established in a Member State or Associated country