## Call title: Energy Call Part 1

- **Call identifier:** FP7-ENERGY-2012-1
- **Date of publication:** 20 July 2011
- Deadline:
  - For CSA topics (one stage submission): 25 October 2011 at 17.00.00, (Brussels local time)<sup>1</sup>
  - For Collaborative Project (CP) topics (two stage submission):
    - First stage: 25 October 2011 at 17.00.00, (Brussels local time)<sup>2</sup>
    - Second stage: 3 April 2012 at 17.00.00, (Brussels local time)<sup>3</sup>
- Indicative budget <sup>4</sup>: EUR 141 million from the 2012 budget<sup>5</sup>

#### **INDICATIVE BUDGET**

|  | Indicative budget           |
|--|-----------------------------|
| ENERGY.2.1: PHOTOVOLTAICS                                  | EUR 19 million              |
| ENERGY.2.5: CONCENTRATED SOLAR POWER                       | EOK 19 minon                |
| ENEGY.2.3: WIND  | EUR 16 million              |
|  |                             |
| ENERGY.2.9: CROSS-CUTTING ISSUES                           |                             |
| ENERGY.2012.3.2.1: BIOFUELS FROM MICROALGAE OR             |                             |
| MACROALGAE   |                             |
| ENERGY.4.1: LOW/MEDIUM TEMPERATURE SOLAR                   | EUR 17 million              |
| THERMAL ENERGY   |                             |
| ENERGY.8.1: EFFICIENT ENERGY USE IN THE                    |                             |
| MANUFACTURING INDUSTRY AND BUILDING SECTOR                 |                             |
| ENERGY.2012.3.2.2: DEVELOPMENT AND TESTING OF              |                             |
| ADVANCED SUSTAINABLE BIO-BASED FUELS FOR AIR               | EUR 10 million <sup>6</sup> |
| TRANSPORT  |                             |
| ENERGY.5: CO <sub>2</sub> CAPTURE AND STORAGE TECHNOLOGIES | EUR 21.5 million            |

<sup>&</sup>lt;sup>1</sup> The Director-General responsible may delay this deadline by up to two months.

<sup>&</sup>lt;sup>2</sup> The Director-General responsible may delay this deadline by up to two months.

<sup>&</sup>lt;sup>3</sup> The Director-General responsible may delay this deadline by up to two months.

<sup>&</sup>lt;sup>4</sup> Reserve lists per sub-area of the indicative budget table will be constituted if there are a sufficient number of good quality proposals. It will be used if extra budget becomes available.

<sup>&</sup>lt;sup>5</sup> Under the condition that the draft budget for 2012 is adopted without modification by the budgetary authority.

<sup>6</sup> The FP7 Theme 5 ('Energy') will contribute EUR 5 million and the FP7 Theme 7 ('Transport (including Aeronautics)') will contribute EUR 5 million.

| FOR ZERO EMISSION POWER GENERATION  |                  |
|---|------------------|
| ENERGY.2012.5&6.2-1 SUPPORT TO THE COORDINATION OF<br>STAKEHOLDERS' ACTIVITIES IN THE FIELD OF ZERO<br>EMISSION ENERGY PRODUCTION<br>ENERGY.2012.7.3.1: NETWORKING OF NATIONAL R&D AND<br>DEMONSTRATION PROJECTS ON SMART METERING<br>INFRASTRUCTURE AND DATA PROCESSING<br>ENERGY.2012.7.3.3: SUPPORT TO THE COORDINATION OF<br>STAKEHOLDERS ACTIVITIES IN THE FIELD OF SMART<br>GRIDS | EUR 3 million    |
| ENERGY.7: SMART ENERGY NETWORKS   | EUR 30.5 million |
| ENERGY.10.2: FUTURE EMERGING TECHNOLOGIES   | EUR 24 million   |

All budgetary figures given in this work programme are indicative. The final budgets may vary following the evaluation of proposals.

The final budget awarded to actions implemented through calls for proposals may vary:

- The total budget of the call may vary by up to 10% of the total value of the indicated budget for each call; and
- Any repartition of the call budget may also vary by up to 10% of the total value of the indicated budget for the whole call

#### **TOPICS CALLED:**

| Activity/ Area                                      | Topics called   | Funding Schemes       |
|---|---|-----------------------|
| ACTIVITY ENERGY.2: RENEWABLE ELECTRICITY GENERATION |   |                       |
| AREA ENERGY.2.1:<br>PHOTOVOLTAICS                   | Energy 2012.2.1.1: Reliable, cost-<br>effective, highly performing PV systems<br>(Up to 2 projects may be funded)             | Collaborative Project |
| AREA ENERGY.2.3:<br>WIND                            | ENERGY.2012.2.3.1: Innovative wind<br>conversion systems (10-20MW) for<br>offshore applications                               | Collaborative Project |
| AREA ENERGY.2.5:<br>CONCENTRATED<br>SOLAR POWER     | ENERGY.2012.2.5.1: Research,<br>development and testing of solar dish<br>systems<br>( <i>Up to 2 projects may be funded</i> ) | Collaborative Project |
|   | ENERGY.2012.2.5.2: Hybridisation of<br>CSP with other energy sources<br>(Up to 1 project may be funded)                       | Collaborative Project |
| AREA.2.9: CROSS-<br>CUTTING ISSUES                  | ENERGY.2012.2.9.1: Power generation<br>in the low temperature range<br>( <i>Up to 2 projects may be funded</i> )              | Collaborative Project |

#### **ACTIVITY ENERGY.3: RENEWABLE FUEL PRODUCTION**

| AREA ENERGY.3.2:<br>SECOND<br>GENERATION FUEL<br>FROM BIOMASS | ENERGY.2012.3.2.1:Biofuelsfrommicroalgae or macroalgae(Up to 2 projects may be funded)   | Collaborative Project |
|---|--|-----------------------|
|   | ENERGY.2012.3.2.2: Development and<br>testing of advanced sustainable bio-based<br>fuels for air transport<br>( <i>Up to 1 project may be funded</i> ) | Collaborative Project |

## **ACTIVITY ENERGY.4: RENEWABLES FOR HEATING AND COOLING**

| AREA ENERGY.4.1:        | ENERGY.2012.4.1.1: Research and     | Collaborative Project |
|-------------------------|-------------------------------------|-----------------------|
| LOW/MEDIUM              | development for medium temperature  |                       |
| TEMPERATURE             | range solar collectors (100°-250°C) |                       |
| SOLAR THERMAL<br>ENERGY | (Up to 2 projects may be funded)    |                       |

# ACTIVITY ENERGY.5: $CO_2$ CAPTURE AND STORAGE TECHNOLOGIES FOR ZERO EMISSION POWER GENERATION

| AREA ENERGY.5.2:<br>CO <sub>2</sub> STORAGE | ENERGY.2012.5.2.1: Sizeable pilot tests<br>for CO <sub>2</sub> geological storage<br>( <i>Up to 2 projects may be funded</i> ) | Collaborative Project<br>(Requested EU<br>contribution per project<br>shall not exceed EUR 9<br>Million) |
|---|--|--|
|   | ENERGY.2012.5.2.2: Impact of the quality of $CO_2$ on transport and storage behaviour  | Collaborative Project  |

# ACTIVITY ENERGY.5&6: CROSS-CUTTING ACTIONS BETWEEN ACTIVITIES ENERGY.5 AND ENERGY.6

| ENERGY.5&6.2:            | ENERGY.2012.5&6.2.1: Support to the             | Coordination and    |
|--------------------------|---|---------------------|
| CROSS CUTTING            | coordination of stakeholders' activities in     | support action      |
| AND REGULATORY<br>ISSUES | the field of Zero Emission Energy<br>Production | (supporting action) |
|                          | (Up to 1 project may be funded)                 |                     |

## **ACTIVITY ENERGY.7: SMART ENERGY NETWORKS**

| ENERGY.7.1:<br>DEVELOPMENT OF<br>INTER-ACTIVE<br>DISTRIBUTION<br>ENERGY<br>NETWORKS | ENERGY.2012.7.1.1: Integration of<br>variable distributed resources in<br>distribution networks<br>ENERGY.2012.7.1.2: Enhancing<br>electricity networks through use of<br>distributed intelligence | Collaborative Project Collaborative Project                              |
|---|--|--|
|   | ENERGY.2012.7.1.3: Empowering smart<br>customers to participate in active demand<br>and energy system efficiency   | Collaborative Project  |
| AREA ENERGY.7.2:<br>PAN-EUROPEAN<br>ENERGY<br>NETWORKS                              | ENERGY.2012.7.2.1: Planning for<br>European Electricity Highways to ensure<br>the reliable delivery of renewable<br>electricity and market integration   | Collaborative Project<br>(Participation of at least<br>3 European TSO's) |
| AREA ENERGY 7.3:<br>CROSS CUTTING<br>ISSUES AND<br>TECHNOLOGIES                     | ENERGY.2012.7.3.1: Networking of national R&D and demonstration projects on smart metering infrastructure and data processing  | Coordinationandsupportaction(coordinating action)                        |
|   | ENERGY.2012.7.3.2: Facilitating the deployment of safe stationary batteries  | Collaborative Project  |
|   | ENERGY.2012.7.3.3: Support to the coordination of stakeholders activities in the field of Smart Grids  | Coordinationandsupportaction(supporting action)                          |
|   | (Up to 1 project may be funded)  |  |

## ACTIVITY ENERGY.8: ENERGY EFFICIENCY AND SAVINGS

| AREA ENERGY.8.1:                            | ENERGY.2012.8.1.1: Next generation | Collaborative Project |
|---|------------------------------------|-----------------------|
| EFFICIENT ENERGY                            | heat pump technologies             |                       |
| USE IN THE<br>MANUFACTURING<br>INDUSTRY AND | (Up to 2 projects may be funded)   |                       |
| BUILDING SECTOR                             |                                    |                       |

## **ACTIVITY ENERGY.10: HORIZONTAL PROGRAMME ACTIONS**

| AREA ENERGY.10.2:               | ENERGY.2012.10.2.1: Future Emerging | Collaborative Project   |
|---------------------------------|-------------------------------------|---|
| FUTURE EMERGING<br>TECHNOLOGIES | Technologies                        | (Requested EU<br>contribution per project<br>shall not exceed EUR 3<br>Million) |

## **ELIGIBILITY CRITERIA**

The general eligibility criteria for this call are set out in Annex 2 to the work programme, and in the Guide for Applicants. Please note that the completeness criterion also includes that part B of the proposal shall be readable, accessible and printable.

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 below<sup>7</sup>:

| Funding scheme   | Minimum conditions   |
|--|--|
| Collaborative Project                                    | At least 3 independent legal entities, each of which is established<br>in a MS or AC, and no two of which are established in the same<br>MS or AC. |
| Coordination and Support<br>Action (coordinating action) | At least 3 independent legal entities, each of which is established<br>in a MS or AC, and no two of which are established in the same<br>MS or AC. |
| Coordination and Support<br>Action (supporting action)   | At least 1 independent legal entity.   |

Only information provided in part A of the proposal will be used to determine whether the proposal is eligible with respect to budget thresholds and/or minimum number of eligible participants.

 $<sup>^{7}</sup>$  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.

#### Additional eligibility criteria:

- **Topic ENERGY.2012.5.2.1:** Sizeable pilot tests for CO2 geological storage: Requested EU contribution per project shall not exceed EUR 9 Million.
- **Topic ENERGY.2012.7.2.1:** Planning for European Electricity Highways to ensure the reliable delivery of renewable electricity and pan-European market integration: Participation of at least 3 European TSO's.
- **Topic ENERGY.2012.10.2.1:** Future Emerging Technologies: Requested EU contribution per project shall not exceed EUR 3 million.

#### **EVALUATION PROCEDURE:**

- The evaluation criteria and scoring scheme are set out in annex 2 of the work programme.
- Proposal page limits: Applicants must ensure that proposals conform to the page limits and layout given in the Guide for Applicants, and in the proposal part B template available through the EPSS.

The Commission will instruct the experts to disregard any pages exceeding these limits.

The minimum font size allowed is 11 points. The page size is A4, and all margins (top, bottom, left, right) should be at least 15 mm (not including any footers or headers).

## ALL TOPICS FOR COLLABORATIVE PROJECTS

The evaluation for these topics shall follow a two-stage procedure.

#### **Evaluation criteria and thresholds for stage 1 proposals:**

The first stage proposal should focus on the S&T content and on clear identification of the intended results. Information on the consortium composition and the estimated financial resources involved should also be provided.

Stage 1 proposals are evaluated on the basis of their S/T quality

|             | Minimum threshold |
|-------------|-------------------|
| S/T quality | 3/5               |

A list of proposals for 250% of the available budget will be invited to proceed to stage 2 at the condition that they reach the minimum threshold as above. If there is a tie between the proposals with the lowest mark to enter the list of proposals to proceed to stage 2, all those proposals with the same mark will be added to the list. Only the information on budget provided in Part A of the proposal will be used to define the threshold.

They will be evaluated remotely with the consensus session being held in Brussels. Stage 1 proposals shall be submitted at the closure date mentioned above.

Coordinators of retained proposals in stage 1 ('go' proposals) will receive an invitation to submit their full proposal instead of an Evaluation Summary Report. The complete proposal will then be evaluated against the entire set of evaluation criteria. The closure date of the

second submission will be specified in the invitation to submit the complete proposal. The indicative closure date is 03.04.2012

#### **Evaluation criteria and thresholds for stage 2 proposals:**

Stage 2 proposals are evaluated on the basis of the following three criteria: **1.** S/T quality; **2. Implementation**; **3. Impact.** For each criterion marks from 0 to 5 will be given, with the possibility of half-point scores. Successful proposals must pass the minimum thresholds as follows:

|                            | Minimum threshold |
|----------------------------|-------------------|
| S/T quality                | 3/5               |
| Implementation             | 3/5               |
| Impact                     | 3/5               |
| Overall threshold required | 10/15             |

Proposals will not be evaluated anonymously.

#### The procedure for prioritising proposals with equal scores:

Ranked lists of proposals will be established for each section of the indicative budget table above. At the Panel stage, in contrast to Annex 2, proposals with equal overall scores will be prioritised according to their scores for the S/T quality criterion. If they are still tied, they will be prioritised according to their scores for the Impact criterion. If any proposals are still tied, then overall Work Programme coverage will be used to decide the priority order. Reserve lists per sub-area of the indicative budget table will be constituted if there are a sufficient number of good quality proposals. It will be used if extra budget becomes available.

## The maximum number of projects that may be funded under a specific topic is restricted in the following topics:

- **Topic Energy 2012.2.1.1:** Reliable, cost-effective, highly performing PV systems: Up to 2 projects may be funded
- **Topic ENERGY.2012.2.5.1:** Research, development and testing of solar dish systems: Up to 2 projects may be funded
- **Topic ENERGY.2012.2.5.2:** Hybridisation of CSP with other energy sources: Up to 1 project may be funded
- **Topic ENERGY.2012.2.9.1:** Power generation in the low temperature range: Up to 2 projects may be funded
- **Topic ENERGY.2012.3.2.1:** Biofuels from microalgae or macroalgae: Up to 2 projects may be funded.

- **Topic ENERGY.2012.3.2.2:** Development and testing of advanced sustainable bio-based fuels for air transport: Up to 1 project may be funded.
- **Topic ENERGY.2012.4.1.1:** Research and development for medium temperature range solar collectors (100°-250°C): up to 2 projects may be funded.
- **Topic ENERGY.2012.5.2.1:** Sizeable pilot tests for CO2 geological storage: Up to 2 projects may be funded.
- **Topic ENERGY.2012.8.1.1:** Next generation heat pump technologies: Up to 2 projects may be funded.

#### INDICATIVE EVALUATION TIMETABLE:

- Evaluation stage 1 proposals: November / December 2011
- Evaluation stage 2 proposals: April/May 2012.
- Evaluation results: estimated to be available within two months after the closure date. A reserve list of projects might be established.

## ALL TOPICS FOR COORDINATION AND SUPPORT ACTIONS (CSA)

The evaluation shall follow a single step procedure.

Proposals may be evaluated remotely.

Proposals will not be evaluated anonymously.

• The evaluation criteria and scoring scheme are set out in annex 2 of the work programme.

Proposals are evaluated on the basis of the following three criteria: **1.** S/T quality; **2. Implementation; 3. Impact.** For each criterion marks from 0 to 5 will be given, with the possibility of 0.5 point scores. Successful proposals must pass the minimum thresholds as follows:

|                            | Minimum threshold |
|----------------------------|-------------------|
| S/T quality                | 3/5               |
| Implementation             | 3/5               |
| Impact                     | 3/5               |
| Overall threshold required | 10/15             |

#### The procedure for prioritising proposals with equal scores:

At the Panel stage, proposals with equal overall scores will be prioritised according to their scores for the S/T quality criterion. If they are still tied, they will be prioritised according to their scores for the Impact 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 in November / December 2011. It is expected that the contract negotiations for the short-listed proposals will open by March 2012.

## The maximum number of projects that may be funded under a specific topic is restricted in the following topics:

- **Topic ENERGY.2012.5&6.2.1**: Support to the coordination of stakeholders' activities in the field of Zero Emission Energy Production: Up to one project may be funded.
- **Topic ENERGY.2012.7.3-3**: Support to the coordination of stakeholders activities in the field of Smart Grids: Up to one project may be funded

## POINTS RELEVANT TO CSA AND COLLABORATIVE PROJECTS

#### **CONSORTIA 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.

#### FORMS OF GRANTS AND MAXIMUM REIMBURSEMENT RATES:

Further information on the offered grants and reimbursement rates are specified in Annex 3 to the Cooperation work programme.

#### FLAT RATES TO COVER SUBSISTENCE COSTS:

In accordance with Annex 3 of this work programme, this call provides for the possibility to use flat rates to cover subsistence costs incurred by beneficiaries during travel carried out within grants for indirect actions. For further information, see the relevant Guides for Applicants for this call. The applicable flat rates are available at the following website: <u>http://cordis.europa.eu/fp7/find-doc\_en.html</u> under 'Guidance documents/Flat rates for daily allowances'.

#### **DISSEMINATION:**

Grant agreements of projects financed under this call for proposals will include the special clause 39 on the "Open Access Pilot in FP7". Under this clause, beneficiaries are required to make their best efforts to ensure free access to peer-reviewed articles resulting from projects via an institutional or subject-based repository, and to make their best efforts to ensure open access to these articles within six months<sup>8</sup>.

<sup>&</sup>lt;sup>8</sup> Further information: <u>http://cordis.europa.eu/fp7/find-doc\_en.html</u>, <u>http://ec.europa.eu/research/science-society/scientific\_information/</u>.</u>