Executive Summary

In Europe a number of different approaches are being followed to stimulate innovative energy research on a national and regional level. Innovative energy research is taken to mean research into energy technologies in the very first stages of development (new inventions). The INNER project will establish cooperation between European national research programmes that stimulate innovative energy research. This cooperation will contribute to the coherence and coordination of the European Research Area, through benchmarking of approaches and a set of joint transnational programme activities. The activities are designed to allow a durable collaboration, beyond the duration of the INNER project.

Project Objectives

The objective of the INNER project is to establish cooperation between European research programmes, or parts within such programmes, that aim to identify and stimulate innovative energy technologies and unexpected breakthroughs in conventional energy technology fields. This also means attempting to bridge the gap between advances in basic science and energy technology research. The INNER project contributes towards strengthening European efforts to define a policy and suitable approaches to find new ways (energy technologies) to meet the challenges of today's energy economy. Thus, the ERA-Net will help towards ensuring a secure energy supply, which is environmentally sound, while at the same time decreasing dependency on imports.

Specific project objectives are to achieve the following results through cooperation and coordination of the national and regional energy research programmes:

- Insight into approaches and methodology, based on both national and regional programmes and other relevant EU, IEA and international initiatives
- Benchmarking of approaches, SWOT analysis
- Development of a joint approach that combines the best elements
- A pilot test of a new joint approach in a certain field
- Development and implementation of joint research programme activities
- Transfer of knowledge and experience to other countries. Special attention will be paid to transferring important findings to project partners and non-participating EU countries that are in the process of developing a policy or instruments in the field of innovative energy technologies or are interested in doing so
- Development of a framework for long term co-operation.

The INNER project will mark the beginning but not the end.

Contractors/Project Partners

Co-ordinator: Forschungszentrum Jülich GmbH
Project Management Organisation Jülich (PtJ)
Germany

French Agency for Environment and Energy Management (ADEME)

Centre National de la Recherche Scientifique (CNRS), France

SenterNovem, The Netherlands

Nordic Energy Research

The Research Council of Norway

Ministry of Science and Higher Education (MSHE)
Poland

National Institute of Engineering, Technology and Innovation (INETI), Portugal

Slovak Energy Agency (SEA)

Ministry of Education and Science (MEC)
Spain

Swedish Energy Agency (STEM)

Natural Environment Research Council (NERC)
UK

Centralne Laboratorium Naftowe, EC BREC
Poland

Work Performed and Results

The first task which had to be carried out in the framework of the INNER project was to collect data and analyse all the research programmes which aim to support innovative energy research in the partner countries. The result was a report which gave the basic material needed for all of the subsequent tasks. Since energy is a highly political issue, these programmes change according to governments. As a result an update of this report will be produced for the end of 2007. A summary of the partner programmes was completed during the period and has been put on the project website.

A short overview of similar programmes which are being carried out in other countries, not participating in INNER, was also produced. It covered the programmes in the USA, China, Japan and Canada. In particular, lessons could definitely be learned from the USA approaches to encouraging innovative energy research.

As a result of the political aspects of energy research programmes, the SWOT analysis seeking to identify the strengths, weaknesses, opportunities and threats of national programmes concentrated far more on the opportunities which the INNER-project could offer through joint activities and collaboration. This study found that there is no "best" approach but the strengths and weaknesses of various programmes and instruments were clarified. A brainstorming session on potential ways of collaboration laid the basis for the working groups which will develop ideas for joint activities.

A questionnaire on joint activities was completed. It pin-pointed the tasks which each partner could contribute to, either during the project or at a later stage, and where support from the Ministries and funding organisations could be expected.

The partners were presented with a wide range of common tasks which were classified under the three headings “Foresight”, “Human Resources” and “Financial Instruments”. These will now be elaborated in more detail in individual working groups to produce some interesting joint actions, which will be undertaken later in the project.

ADEME

Angers, le 28/07/06

INNER ERA-NET
Innovative Energy Research

WP4 – Questionnaire on wishes for cooperation and joint activities

“How to work together ?”

The aim of this questionnaire is to identify the interest for cooperation and possible joint activities from participants in ERANET INNER since cooperation and joint activities can take place in many ways. This questionnaire is based on the WP4 presentation in Oslo and is not only focused on INNER relevant subjects. Three or four couples "joint activities/thematic" should be selected in the next workshop in Warsaw and corresponding working groups should be assigned in next January/February.

In the table below, please indicate your preferred ways for cooperating and the level of interest for your organisation using the following mark :
0 = no interest
1 = possible interest
2 = high interest
3 = top priority

Please, fill out the both columns : "During INNER period" (short term : within next three years) and "After the end of INNER" (longer time scale). The last column "After the end of INNER" aims at clarifying the interest of your organisation for the corresponding topic in a second stage, i.e. if INNER network becomes a permanent structure.

Note that an interest ranking shall correspond to the realistic financial possibilities of your organization to actively participate in the consequent scooping process. You are also welcome to give any comment on all subjects, to state your interpretations and to propose additional topics/issues.

In the second paragraph "2) Cooperation related to programming" , you are invited to give your opinion about how you consider the future of INNER ERANET and what is for you the term of "platform" which could be studied in an ad hoc working group. If you show interest in activities needing permanent structures (Foresight groups, "Club" of national programme managers, etc.), please try to suggest existing structures (EnR, TAFTIE, IEA, ...) which could be considered in order to avoid duplication of work and costs.

WP4_Questionnaire_PU_1.xls

Intro

INNER : Questionnaire on Joint Activities

Possible research topics were discussed in a brain-storming session and produced a very wide range of subjects which were considered by the partners to be highly innovative. These ranged from new processes which could be introduced into “conventional” energy systems such as power station technology and solar cooling, through biological PV, a well-known “innovation”, up to the very new research topic of wireless electricity.

It will now be necessary to decide which innovative topics can be best connected with which joint activity in order to reduce the scope and number of experts and researchers concerned.

The INNER project has already been the vehicle for bringing together the Scandinavian partners, the Academy of Finland and the Danish Ministry of Science to discuss the possibility of organising an early joint call. NER, RCN and STEM will arrange all aspects of this call and will report to INNER on the experiences they make. The call will stimulate collaborative projects where researchers from two or more participating countries are encouraged to send in proposals for innovative energy research. Final details of this new initiative will be published in March 2007.

The pictures below were taken at the most recent project committee meeting in Brussels where the results of the SWOT analysis were presented and topics for innovative research were proposed. The topics were divided into the categories “close to market introduction”, “incremental research”, “patents applied for”, or, perhaps the most difficult to identify, completely new ideas and inventions.

Intentions and future impact

The selected joint activities and research topics will now be discussed in Working Groups and developed into action plans which, assuming the consent of Ministries and funding organisations, will be undertaken within the INNER project period. The impact of such activities will finally depend on the activities selected but will most likely not only lead to closer contact, and hence more collaboration between programme owners, but also closer contacts between the researchers themselves and possibly more mobility of scientists.

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