

**Commission Services' comments to the recommendations  
of the 5-Year Assessment Panel for the**

**ENERGY, ENVIRONMENT AND  
SUSTAINABLE DEVELOPMENT PROGRAMME**

***NON-NUCLEAR ENERGY***

These comments have been prepared by officials of DG RTD and represent their personal views on the conclusions of the 5-year assessment. These views have not been adopted or in any way approved by the Commission and should not be relied upon as a statement of the views of the Commission or DG RTD.

The Programme Directors (hereinafter referred to as the Directors) welcome the work carried out by the Independent Panel of External Experts and their "1999 five-year Assessment Report" on the Specific Programme on Research, Technological Development and Demonstration (RTD&D) activities in the field of Non-Nuclear Energy. The Directors consider that the panel produced a balanced and comprehensive report, combining praise and criticism, covering all main activities of the programme, and that the recommendations made will certainly orient future initiatives in this domain of activity.

The panel identified several sectors where, in their opinion, the programme had been particularly effective, including wind, solar thermal, photovoltaic, clean coal, co-generation and some aspects of energy efficiency in buildings and public transport. The quality of the information material produced and the work of the OPETs (Organisations for the Promotion of Energy Technologies) were mentioned. The work of Scientific Officers was praised, in particular their efforts to co-ordinate the programme. Generally, the quality of the actions and the productivity of staff was considered to be high. The reduction of programme objectives, from some 280 in the earlier programme to 40 in the current programme, is welcomed and the successful integration of the demonstration and R&D parts of the programme is recognised (notably acknowledging some new difficulties). Finally, the panel identifies a wide range of potential weaknesses in the conception and implementation of the programme and provides recommendations for future activities on which the Directors wish to make the observations that follow:

**1. Maintaining the effort**

The panel recommends that the programme should be continued and that funding levels should be established in such a way that the programme can have an identifiable impact.

The Directors view this as a recognition of the growing importance of energy related RTD for complying with public interest targets which have a European and global dimension such as climate change and sustainable development, growing importance that is substantiated by the identified successes of the past and by the imperative need to reinforce programme achievements in the near future.

Furthermore, the new approach for programme implementation, proposed at the current revision of the ENERGIE Work Programme (covering the programme activities for 2001-2002), will stimulate the emergence of larger projects (notably by means of successful

clustering), with wider impact at European scale on industry, market and society, greater visibility and more focused conclusions, and will increase efficiency in management.

## **2. Create strategic focus**

The report regrets several times the absence of an overall programme strategy, and more specifically an information strategy, including for the promotion of results and replication of projects. Likewise, it was felt that individual projects should have clear strategic value and objectives. The panel recommends the Commission to develop a clear strategic roadmap or vision for European energy, to reduce the number of priority areas and to allocate a substantial part of the budget to the identified priorities.

In the context of the present revision of the ENERGIE Work Programme (covering the activities for 2001-2002), the Directors have already taken a series of measures that fully accommodate the recommendations made. In fact, the implementation of the programme activities will be focused on a new approach based upon three main elements:

- Concentration of a substantial fraction of the programme budget (approximately 60%) around a core set of Target Actions which are designed to facilitate the emergence of solutions with a measurable impact, high profile and direct relevance to EU policy objectives; Target Actions integrate multidisciplinary and multisectoral activities involving, wherever possible, private-public sector partnerships and end-users from the business, industrial and policy-making sectors;
- Identification of a limited number of priorities of strategic importance to the EU, which are to be considered by proposals related to any of the topics of the Work Programme, to which the remaining 40% of the programme budget are allocated;
- A clear differentiation between proposals addressing problems that can be solved and technologies that can be used within the short-time frame (less than five years), and proposals which address problems and technologies within the medium-to-long-time frames (more than five years).

## **3. Ensure a problem solving, market-oriented focus**

The Panel recommends the Commission to encourage more truly interdisciplinary projects, addressing all elements of the value-chain including technical and non-technical issues and, whenever appropriate, call for solutions outside of the traditional energy field.

The innovative approach for programme implementation described in the previous point, together with the priority given to projects that will “exploit the potential of new ICTs in energy research, including e-science issues” are, according to the Directors, clear signs that the above recommendations are in the process of being followed.

It is clear that this recommendation will be further taken into account in the preparation of the Sixth Framework Programme.

## **4. Ensure programme relevance**

The Panel recommends the Work Programme to keep pace with emerging issues in the energy sector by close monitoring of their developments, encourages research outside the traditional energy technology areas and research that addresses impediments to change in the physical energy infrastructures.

The Directors are convinced that the new approach for programme implementation, which allocates a substantial fraction of the budget (approx. 60%) to a limited number of Target Actions, does not preclude the possibility of “letting the winners pick” in areas of activity which become unexpectedly important, with the allocation of approximately 40% of the remaining 2001-2002 budget to these initiatives.

## **5. Ensure meaningful impacts**

The Panel considers that a target approach to projects is necessary, which combines technology development with dissemination activities. Moreover, the Panel is of the opinion that impact monitoring and assessment at all levels and an information strategy are key issues to be addressed.

The Directors fully share the views of the Panel on these matters and, in what concerns monitoring/assessment, intend to launch a comprehensive studies, covering the research and the demonstration components of the programme. First preliminary results of these are expected in late 2000. As regards the need for an information strategy, the Directors favour a bottom-up approach based on a wide-spread network of specialised organisations (covering not only the EU but also associated and third countries), that have the responsibility of selecting the topics considered of merit and interest to be disseminated. In other words, instead of defining, at programme level, the topics to be disseminated, the ENERGIE programme provides the necessary means to, and ensures a balanced technical and geographical coverage of, the market actors who are best placed to strategically and timely disseminate emerging results and technologies supported within the programme. Finally, the suggested recourse to “Target Projects” is being fully taken into account in the current ENERGIE Work Programme revision (see point 2 above).

## **6. Create synergy between European and national policies and programmes**

The Panel recommends attention to ensure continued complementarity between European and national programmes, and notably the fact that they should be co-ordinated in an efficient and well-organised way.

The Directors welcome this recommendation which is very much in line with the recent proposal of Commissioner Busquin to create the “European Research Area”, on the basis of which a truly European research Policy should emerge that goes beyond the current static structure of “15+1”, and that makes use of the best available practices and instruments designed to forge the links between enterprises, universities and research centres across Europe.

The “European Research Area” embraces networking of national and joint-research programmes, on a voluntary basis around freely chosen objectives, and it includes a series of key-elements which are crucial for research and innovation in Europe:

- the research infrastructure and the mapping of excellence in Europe including networking activities;
- the human resources, increase of scientists mobility across national borders and between universities and industry;
- the research and innovation environment, patents, fiscal issues, “spin-offs” and “start-ups” in collaboration with the European Investment Bank;
- the overall co-ordination of policies including the benchmarking of national policies to disseminate best practices, the common European strategic programmes combining financing from national research programmes and large industrial projects implemented in Public/Private Partnership, as well as issues related to science and society, such as European approach to ethical questions and for improving the dialogue between researchers, industry, policy-makers and citizens on a European scale.

In line with the declared political objectives the Commission, the “European Research Area” will reinforce the information gathering process on energy policies across Europe, will enable better co-ordination of EU and National energy-related programmes and will facilitate the exchange of successful experiences.

At programme level, and as already referred in point 2 above, in the context of the current revision of the ENERGIE Work Programme priority will be given to proposals that address one or more of the following policy related priorities of strategic importance: management of GHG emissions and climate change; exploitation of the potential of new ICTs in energy RTD including e-science issues; enhanced socio-economic research related to energy technologies and their impact; improved co-ordination and networking with national initiatives and increased international co-operation; enhanced pre-normative research at EU level.

## **7. Create the conditions for success**

The Panel judges that the new structures, rather than improving efficiency, risk doing the reverse, unless ways are found to reduce the complexity of procedures, strengthen co-ordination, improve flexibility within the programme, improve information exchange with Member States and avoid duplication. The Panel recommends the reduction of the current co-ordination administrative structures between the energy and the environment components of the EESD programme, to examine the present and future resources needs and to develop user-friendly information systems.

The Directors recognise that the management structure that was in place during the first year of the ENERGIE programme implementation (1999) had led to time consuming, and often non-effective co-ordination tasks. However, since April 2000 a clarification of management share and responsibility between the General Directors of DG TREN and DG RTD has been reached with the signature of an Agreement. As a result of this, the two Directorates General have agreed on some operational issues including:

- The identification of priorities within each DG and, in particular, the distinction between short-term and medium-to-long-term objectives and targets. Thus, DG TREN will concentrate its management on projects addressing problems which would be solved and technologies that could be used within a short-time horizon, while DG RTD will concentrate its management on projects addressing medium and long development of

energy technologies and solutions. These priorities are being taken into account in the revision of the Work Programme and in the planning of new calls;

- Each DG will assume full responsibility for the different managerial tasks such as proposal evaluation and selection, presentation to the programme Committee, internal consultations and management of the projects and their follow-up;
- Budget wise, each DG will be responsible for 50% of the available credits;
- Finally, developments associated with the “European Research Area” will be taken into account by both DGs.

As far as procedural aspects and co-ordination with the Environment component of the programme are concerned, decisions have to be taken at higher levels in the Commission managing structures. The Directors are committed to channel this recommendation and other related issues to the appropriate decision-makers.

Action is also being taken to improve information exchange with Member States and avoid duplication, as described in the point 6.

## **8. Enable learning and development**

The Panel calls for urgent development plans for all staff in such a way that lessons learnt are retained.

The Directors are fully aware of this problem and, despite the shortage in human resources, are trying to distribute sectoral responsibilities in such a way that officers will be involved in more than one technology area of activity. This will encourage knowledge sharing among the staff, will improve staff mobility and, in the medium-long term, assures that lessons learnt are shared and retained in the house. Priority has been also given to staff training, in technical and non-technical issues, with the establishment of comprehensive “DG Training Development Plans for 2000-2001”.