Case Study: Environmental Technology Action Plan

The Environmental Technologies Action Plan (ETAP) was endorsed by EU heads of state and government at the European Spring Council in March 2004. Positive reactions to ETAP were received from a wide variety of stakeholders including business organisations, financial actors, the research community, non-governmental organisations.

ETAP is aiming at giving eco-efficient innovations a fair and competitive market perspective and to provide for the internalisation of external costs through an effective mix of instruments. These include performance-based green public procurement, fiscal incentives, reform of subsidies that have considerable negative effects on the environment and are inconsistent with sustainable development, and risk-sharing facilities, especially for SMEs.

ETAP and EU Competitiveness

More evidence is emerging on the contribution of environmental protection to the competitiveness of EU business and enterprises as a whole. When considering eco-industries alone, the world market for environmental goods and services was estimated at over €500 billion in 2003 – comparable to the aerospace and pharmaceutical industries – and continues to grow at around 5% per year.

At the global level, the sharp increase and fluctuation in oil prices in recent months has re-launched the debate on the need to reduce EU dependence on oil and boost support to policies aiming at energy efficiency, renewable energies and low carbon energies. Energy efficiency can reduce the energy demand in a cost-effective manner. It should be noted that investments in such technologies, by reducing the dependency on oil, also protect the economy against GDP losses because of the oil-GDP effect: recent calculations[32] suggest that an increase of 10% in the share of renewable sources in electricity production can avoid oil-induced GDP losses in the range of $29–$53 billion in the US and the EU ($49–$90 billion for OECD). These avoided losses offset *one-fifth* of the investment needs in renewable energy projected by the European Renewables Energy Council and *half* the OECD investment projected by a G-8 Task Force.

The European Commission Communication on the share of renewable energy in the EU assesses the state of development of renewable energy and proposes concrete actions at national and Community level to ensure the achievement of EU renewable energy targets for 2010. Investments in both energy efficiency and renewable energy will thus increase the security of supply of energy for Europe.

Technological developments in the energy sector, especially regarding energy efficiency and renewable energies, are also, but not only, steered by the EU Climate Change policy. The launch of the Emission Trading System in January 2005, should be instrumental in this respect. Technological developments are also crucial for the preparation of the next steps of the fight against climate change, after the deadlines fixed in Kyoto. The Commission's Communication relating to the costs and benefits of medium and long term strategies on climate change ("post-2012") will give elements to guide the EU on the way forward.

The Implementation of ETAP so far

The implementation of the Action Plan is well underway. Progress has been made in giving more priority to environmental technologies in the EU Framework-Programme for Research and Development. An important action of the Environmental Technologies Action Plan (ETAP) was to increase and support research on Environmental Technologies, with the identification of "dedicated actions".

[32] Shimon Awerbuch, Exploiting the oil-GDP effect to support renewables deployment.

Research Priority 3 has opened several research topics in its Work Programmes using two key instruments, namely: Integrated Projects (IP) which are big projects of the order of 10 billion Euros designed to attain a critical mass of activities (research, demonstration, training, innovation, management) and resources (staff, skills, competences, finances, infrastructure, equipment etc.); Coordination actions (CA), intended essentially to promote and support the networking and coordination of research and innovation activities.

Some examples include:

- 2004: Integrated Projects (IP) for SMEs on "Eco-industries", Coordinated Action (CA) on "Sustainable Consumption", Integrated Project on "Low CO2 steel production".
- 2005: Running call for proposals on "Industrial Biotechnology - Environmental technology for Sustainable Production".

They all demonstrate the importance attached to the knowledge-based approach through research in achieving the goals of sustainable development via a wide spectrum of subjects and stakeholders, including a focus on SME participation.

Several among the European Technology Platforms (ETP) launched are also very relevant to the balance that has to be kept between industrial development and environmental impact, including through adequate research efforts. A "Technology Platform" is a concept to bring together all interested stakeholders at European level with a view to developing a long-term vision and strategy as well as concrete measures around specific technologies. Examples of ETP related to industrial technologies include: Future of Manufacturing, Pulp & Paper, Clean Steel, Sustainable Chemistry, Construction, etc. Moreover, networks of testing centres are being established and should prepare the ground for a possible EU-wide environmental technology verification system. The Action Plan on Nanotechnologies and Nanosciences also contributes to the promotion of environmental technologies.

The proposed Regulations for the future period of the Cohesion policy[33] should facilitate regional investments in sustainable techniques and solutions; and the preparation of a future framework-programme for Competitiveness and Innovation should extend the range of EU instruments supporting environmental technologies. In order to improve market conditions for the uptake of environmental technologies, an EIB facility supporting private investments related to the EU Emission Trading Scheme has been established, and preparatory work paves the way for further action regarding risk funding schemes. The finalisation of key orientation documents on Green Public Procurement, on standardisation, and on environmentally-harmful subsidies should catalyse action at both EU and Member States levels in these areas. In particular, co-operation between the European Commission and Member States is taking place on the basis of the Handbook on Green Public Procurement, in order to facilitate the preparation of national Action Plans, measure progress and possibly set common targets. Preparatory work is also pursued on the design and implementation of performance targets for key products, services and processes.
Progress has also been made with respect to the global dimension, with the preparation of a "Patient Capital Initiative"[34] supporting investments in renewable energy and energy efficiency, and discussions at international level on export credits and trade agreements. The implementation of the water and energy ACP-EU facilities, in the framework of the development policy, also creates significant opportunities for environmental technologies. The development of information tools and the mobilisation of relevant stakeholders should pave the way for further initiatives regarding awareness-raising and targeted training.

[33] Cohesion policy refers to measures that aim at reducing disparities between European regions and to promote greater economic, social and territorial cohesion.
[34] The Patient Capital Initiative is designed to provide equity and quasi-equity funding to renewable energy businesses and projects in developing markets.