

DCMNR

**Green Paper:
Towards a Sustainable Energy Future for Ireland**

**Submission from the
RDS Committee of Science and Technology**

We warmly welcome the publication of this Green Paper, and are grateful for the opportunity to comment. In particular we welcome the recognition accorded energy efficiency and demand management.

Realising our energy savings potential in a sustainable manner is by far the most effective way:

- to improve security of energy supply
- to reduce carbon emissions
- to foster competitiveness and
- to stimulate the development of a large leading-edge market for energy-efficient technologies and products.

In our comments we focus on energy in the built environment. Over half of all energy in Ireland is used in building and construction, and in the operation of buildings. The building sector offers the single greatest opportunity to achieve significant improvement in energy utilisation through a combination of improved building design, innovative energy delivery technologies and improved system and design integration.

On 19 October 2006 the EC adopted its Action Plan for Energy Efficiency¹ setting out 75 ways to increase energy efficiency in the Union. The Plan aims to exploit the economic potential of energy at a European scale so that 20% of the EU's total energy consumption (390 million tonnes equivalent of oil, or 780 million tonnes of CO₂ emissions annually) will be saved by 2020. According to the Commission, the largest potential is in the building sector, with between 27% and 30% energy efficiency potential. This Action Plan provides an important agenda which is very relevant to Ireland.

In order to improve energy use in buildings, the Commission will propose substantially expanding the scope of the Energy Performance of Buildings Directive (2002/91/EC) in 2009 to include the large stock of smaller buildings, by lowering significantly the current threshold from 1000 m² for minimum performance requirements for major renovations to include the majority of existing buildings. It will propose an expanded role for the public sector to demonstrate new technologies and methods. It will also propose EU

minimum performance requirements for new and renovated buildings and some components and, by the end of 2008, will develop a strategy for very low energy or zero energy buildings so as to achieve more widespread deployment of these by 2015. The EC will set a good example by leading the way, as far as its own buildings are concerned: in applying the Community eco-management and audit scheme (EMAS), the Commission will ensure that all Commission-owned buildings are certified by the end of 2009. It will consider proposing binding requirements to install passive heating and cooling technologies.

In the implementation of the Construction Products Directive (89/106/EEC), the EC will introduce energy efficiency aspects in construction product standards whenever relevant. In the new Member States the Commission will encourage the use of Structural and Cohesion funds to facilitate leveraging of private financing at national and local levels for energy efficiency particularly in the multi-family and social housing sectors. In 2007 the Commission will bring together in a permanent network the mayors of 20 to 30 of Europe's largest and most progressive cities with the aim of exchanging and applying best practices thereby improving energy efficiency significantly in the urban environment.

In addition to key proposals that take into account recent Community legislative measures, the Commission put forward ten priority actions covering all sectors to be implemented as soon as possible. It also invites Member States, regional and local authorities and stakeholders to take complementary measures. An annex contains a list of all the measures suggested as well as a timetable. The two separate working documents include specifications concerning these measures (savings potentials and impacts), as well as an impact assessment report. The Action Plan, which must be implemented over the next six years and reviewed mid-term (2009), includes targeted sectoral and horizontal measures for setting dynamic energy performance requirements for a wide range of products, buildings and services. To achieve this, the Commission will push Member States to fully implement the Community legislative and regulatory framework (eco-design, labelling, energy end-use efficiency and energy services, energy performance of buildings and the Energy Star regulation) to ensure rapid development of the internal energy market for energy efficient and energy saving goods and services. It will suggest strengthening this arsenal if necessary. One illustration quoted is that the adoption of high efficiency Light Emitting Diode (LED) technology, already available on the market, could by 2015 save 30% of today's electricity consumption for general lighting and 50% by 2025.

The Commission will develop minimum energy performance standards for 14 groups of priority products (including heaters, water heaters, lighting, electric motors, air conditioning, etc.) to have them approved by the end of 2008. It plans to develop a working plan in 2007 for the realisation by 2010 of an internal market for other energy using products and to revise the directive on labelling to reinforce its effectiveness. In order to improve end-use energy efficiency, the Commission hopes to develop, on the basis of Directive 2006/32/EC, a memorandum of understanding in cooperation with the Council of European Energy Regulators (CEER) setting forth guidelines and a code of conduct on improving energy end-use efficiency in all sectors.

Conclusion

The summary policy target in the Green Paper is to develop an Action Plan on energy efficiency to deliver 20% improvement in energy efficiency by 2020; we believe that this is seriously lacking in ambition. The EU Action Plan proposes a similar target, although according to the Commission, the largest potential is in the building sector, with between 27% and 30% energy efficiency potential. Construction is much more significant in Ireland than elsewhere in the EU, and the scope for cost-effective improvement in energy efficiency is considerably greater in new-build than in retrofitting. Thus we recommend a target of 30% improvement by 2020.

¹COMMUNICATION FROM THE COMMISSION

COM(2006)545 final

Brussels, 19.10.2006

http://ec.europa.eu/energy/action_plan_energy_efficiency/doc/com_2006_0545_en.pdf