

European Commission proposes a plan to accelerate energy technologies for a low-carbon future

Energy technologies will be crucial to successfully fighting against climate change and securing world and European energy supply. Achieving Europe's 2020 and 2050 targets on greenhouse gas emissions, renewable energy and energy efficiency will require action on energy efficiency, standards, support mechanisms and putting a price on carbon emissions. It will also require the deployment of more efficient and new technologies. So a significant research effort is necessary. Europe's potential to develop a new generation of decarbonised energy technologies, such as off-shore wind, solar technology, or 2nd generation biomass, is enormous. However EU energy research is often under-funded, dispersed and badly coordinated. If the opportunity facing the EU is to be seized, actions to develop new energy technologies, lower their costs and bring them to the market must be better organised and carried out more efficiently. This is why the European Commission is proposing the Strategic Energy Technology Plan, a comprehensive plan to establish a new energy research agenda for Europe. The Commission believes that Europe should lower the costs of clean energy and put EU industry at the forefront of the rapidly growing low carbon technology sector. This Plan is to be accompanied by better use of and increases in resources, both financial and human, to accelerate the development and deployment of low-carbon technologies of the future.

"The Energy Policy for Europe calls for a new industrial revolution. Like all industrial revolutions, this one is going to be technology driven and it is high time to transform our political vision into concrete actions. Decisions taken over the next 10-15 years will have profound consequences for energy security, for climate change and for growth and jobs in Europe. If we fall behind in the intensifying global race to win low carbon technology markets, we risk meeting our targets with imported technologies," said European Commissioner for Energy Andris Piebalgs.

Janez Potočnik, Commissioner for Science and Research said: *"We have the chance to be world leaders in low carbon technologies, but if Europe doesn't act together more effectively, we will squander that opportunity and the economic benefits of the transition to a low carbon economy will go elsewhere. The ideas that the Commission is putting forward today will allow Europe to develop a world class portfolio of affordable, clean, efficient and low emission energy technologies."*

Europe faces real challenges linked with energy supply and climate change. With current trends and technologies, the EU and the world will not achieve its climate change objectives at a cost that is economically sustainable. Research and innovation in energy technology are therefore vital in meeting the EU's ambition to reduce greenhouse gas emissions by 60-80% by 2050. But unless there is a major change in the EU's approach such technologies, there is a serious risk that these objectives will not be met, or the technology to do so will come from outside the EU. The energy innovation process, from initial conception to market penetration, suffers from structural weaknesses. There is neither a natural market appetite nor a readily discernible short-term business benefit for such technologies. In addition, public energy research budgets in the EU Member States have generally declined substantially since the 1980s. It is clear that many of the technological challenges faced by the EU energy policy cannot be overcome by the instruments or models of cooperation that are in current use. A new mind-set is required.

The European Commission is therefore proposing a new approach, which focuses on more joint planning, making better use of the potential of the European Research and Innovation area and fully exploiting the possibilities opened up by the Internal Market. In particular, the Plan includes the commitment to set up a series of new priority European Industrial Initiatives focusing on the development of technologies for which working at Community level will add most value. The Plan proposes the strengthening the industrial research and innovation, by aligning European, national and industrial activities; it also proposes the creation of a European Energy Research Alliance to ensure much greater cooperation among energy research organisations as well as improved planning and foresight at European level for energy infrastructure and systems. The Commission clearly signals the need for increased funding in this field, and will present its ideas on financing low carbon technologies during 2008. It will set up an information system to ensure a clear picture of energy technologies across Europe and establish a process with Member States so that energy technology research can be planned together. A European Energy Technology Summit will be called in 2009 to review progress.

Details of all of the above are available in [MEMO/07/493](#) and the SET-plan document, which is available at:

http://ec.europa.eu/energy/res/setplan/communication_2007_en.htm;

[MEMO/07/494](#) provides answers to some frequently asked questions.