

Input to consultation on “EU 2020” strategy COM(2009) 642



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The SET Plan – a leitmotif for the new decade

The Lisbon Treaty served as a guiding principle in the last decade, keeping Europe focused on the task of developing a knowledge economy. The Strategic Energy Technology Plan, with the key technology challenges it has identified, is a worthy follow-up. Leadership in energy technology is at the nexus of climate protection and economic competitiveness. Securing this leadership is a challenge that demands concerted action at different political levels and across policy portfolios over a ten-year period.

In 2008 and 2009, energy technology roadmaps were drawn up and funding requirements evaluated. In 2010, the acceleration beyond a business-as-usual rate of progress must begin, and this requires the commitment of public financial resources. With the European Energy Programme for Recovery, the Commission demonstrated its ability to win the argument on re-aligning the Community budget to address the fresh challenges posed by the imploding world economy. The worst of the economic crisis might be behind us, but the rationale for additional Community spending on renewable energy technology remains for both a) demonstrating a multitude of new technologies on a large enough scale to ‘de-risk’ them and give private investors the confidence to deploy them widely, and for b) conducting collaborative R&D to maintain a stock of European intellectual property. Crucially, the Commission must take the opportunity of the Budget Review and the FP7 Review to conclude that more Community resources should be devoted to both these tasks in the short term (during the period of the current Financial Perspectives) and in the longer term (2014-2020). If Community resources of 3-4 billion EUR are not found for the period to 2014, the credibility of the SET Plan will be severely damaged. The March Energy Council should adopt conclusions aligned with the European Parliament’s Resolution of 17th September 2009 underlining “the need for more investment in renewable and low-carbon energy and energy efficiency”. These conclusions should also force the Member States to acknowledge their role in providing funding for energy technology.

The 2020 consultation document correctly notes the importance of a skilled, creative, entrepreneurial citizenry. We see the support of cooperation activities between European universities in high growth areas (e.g. renewable energy) as integral to this.

Worldwide agreement on climate change

The Copenhagen Accord is hugely disappointing. It has made the timetable for the introduction worldwide of specific policies to reduce greenhouse gas emissions less rather than more clear, and this uncertainty will impact negatively on the investment decisions of companies across the globe. The Commission must assist in securing an international deal before the end of the year that is sufficiently strong to invoke the EU's 30% GHG reduction target by 2020. A 20% reduction by this date would put us on too slow a trajectory to meet the cuts that are required by mid-century.

The consultation document rightly points to the need for fair international trade rules. 'Fair' should include the notion of border adjustment taxes to level the playing field for manufacturers selling to the European market that are subject to tough environmental laws, including on carbon dioxide emissions, and manufacturers that are not.

Super-grid

Two distinct sets of technologies are needed to enable the massive integration of renewable electricity. For large-scale renewable energy projects connected to the transmission system, grids that can move electricity over meteorologically significant distances with low losses are needed. For decentralised technologies¹ supplying electricity at the low voltage level, close to the consumer, a "smart grid" becomes necessary, containing technology that enables loads to be dispatched depending on the availability of electricity, perhaps in combination with local storage. A special case of storage is the batteries of electric or plug-in hybrid cars. The deployment of electric cars should be targeted at locations equipped with smart grids, so that they can charge when renewable energy is available. If charged using 'dumb' technology, electric vehicles might not be as green as they could and ought to be, and their full utility to the electricity system would likely not be realised.

Pervasive information and communication technologies embedded into our energy system can help consumers match their use of electricity (whether locally or distantly produced) to the times when renewable supply is plentiful. Such systems, running in the background with a minimum of manual intervention, can potentially avoid the need for more costly (and possibly unpopular) investments in transmission capacity.

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¹ The photovoltaic sector is targeting a 12% share of the European electricity market by 2020, implying much higher penetrations in some specific localities.