feature

JUMPING TOGETHER

Fiona Hall explores the energy challenge for the EU in the years ahead

On 22nd May, the UK goes to the polls to elect its Members of the European Parliament for the next five years. This time for once, the campaign looks set to be about Europe, and more precisely, about the pros and cons of the UK being a member of the EU.

One area that has received little attention so far is the effect of EU membership on UK energy policy and on the challenge of tackling climate change.

The point has often been made that tackling environmental threats requires European (and indeed global) co-operation, because pollution knows no respect for national boundaries. What is mentioned less often is that the challenge of tackling climate change and other environmental problems also represents an enormous business opportunity. Europe is probably still in the intellectual lead in this field, although investments in green technology in China and the US already outstrip those in the EU. For those British firms who lead on 'clean tech', being part of the world's single biggest market, the European Union, is absolutely essential for the sale of innovative products and technologies.

Jumping Together

Moreover, for all that industry likes to complain about regulation, what companies actually tell MEPs is that they are happy to rise to the challenge as long as everyone jumps together and there is a reasonable period of adjustment. This "jumping together" is only possible because of the harmonisation of rules under the single market.

A good example of this can be seen in EU energy efficiency standards for electrical appliances. It has been estimated that the first 13 measures under EU Eco-Design legislation will result in electricity savings of 12% by

2020, unparalleled by any national energy efficiency measure in the UK.

Similarly, the CO2 limits for cars and vans show what is possible when an entire industry is travelling in the same direction. The average fleet emissions for cars must come down to 95g of CO2/km by 2021 – and consultation will soon be underway on a target for 2025. While the adoption of the 2013 legislation on CO2 and cars was immensely frustrating for MEPs because of the last-minute interference by Cameron and Merkel, nevertheless the progress made over a relatively short time has been substantial: consider that the UK still rewards with zero road tax any car with emissions under 100g CO2/km.

Long term target stability

EU targets tend to be set over a longer time frame than the policies of individual Member State governments, providing a welcome degree of stability for industry. EU 2020 renewable energy targets have offered a bulwark to the renewable industry as the Conservatives in government have slid from hugging huskies to deriding 'green crap'.

The UK did not have any mandatory commitments on renewables in place before the EU-level target was agreed, and indeed had one of the lowest shares of renewables in the EU when the EU Renewable Energy Directive (RED) was introduced in 2008, despite Britain's vast wind energy resource. As a result of EU legislation, in just four

years the share of electricity produced from renewables doubled to reach 10.8% in 2012, driven by the binding target under the RED which lays down that 15% of UK energy should come from renewable sources by 2020.

Had there been no target, the necessary support measures for the development of new technologies would have long ago felt a cold reactionary wind. Instead, the renewable energy sector now employs three times as many people as the UK coal industry, according to RenewablesUK, and could create up to 70,000 additional jobs over the next decade.

Integration - interconnection

But an efficient development of renewable energy requires neighbouring EU Member States to be better integrated and more use to be made of the comparative advantages of one country over another, rather than each country developing its own infrastructure and resources nationally. The UK remains too much an island in energy terms. Better interconnection to the wider European electricity market would bring the immediate advantage of any market: the ability to buy and sell. More interconnection would also increases access to non-variable renewable sources such as Norwegian hydropower or Icelandic geothermal energy, offering the possibility of using other renewable sources instead of fossil fuels to balance variable wind energy output. This is no green pipe-dream: work is expected to start very soon on the first interconnector from Norway to Northumberland, subject to the expected planning permission.

A 2011 report from WWF-UK suggested that with 27 – 35 GW of interconnection the UK could supply 87 per cent of its electricity from renewables in 2030. Such is the importance of electricity interconnection that I have been pushing for a binding commitment on interconnection levels as part of the EU 2030 framework on climate and energy policies.

Integrating renewables

On a recent visit to the National Grid Control Centre near Wokingham, I heard how engineers used to be aghast at the prospect of integrating 1GW of variable wind power into the UK grid. Now they handle ten times that without turning a hair. But developing an interconnected Europe and moving to a high percentage of renewable electricity sources does require investment. Fortunately, this is reflected in the EU budget for 2014-2020 and in particular in the research and innovation budget, Horizon 2020, which earmarks 85% of its energy research funds, or over £5 billion, for sustainable energy technologies to do with renewables, energy efficiency and smart grids.

Part of the shift that is needed is to move away from a few big energy supply companies to much

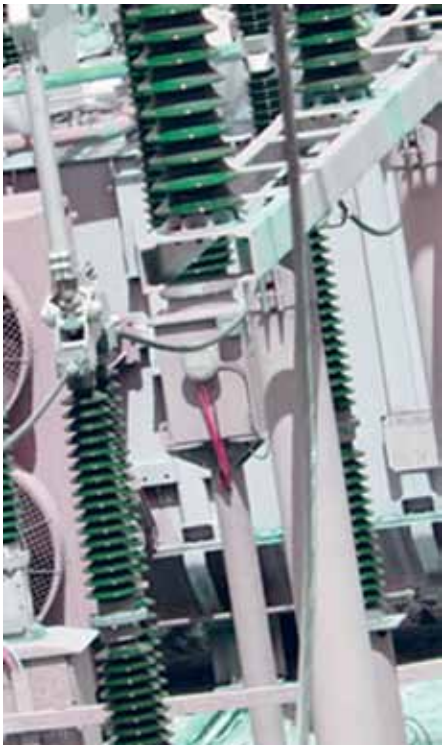
more decentralised and localised production.

Almost unnoticed, around £20 billion from the EU regional development funds for 2014-2020 has been quietly earmarked for supporting the green transition, mainly through financing local projects on energy efficiency and renewables.

The path ahead

Though some sound foundations have already been put in place, a great many challenges lie ahead for the next European Parliament.

The first is to get right the future 2030 framework on energy and climate change policies. The European Parliament has already published a report on the issue



and it is hoped Member States will reach a tentative agreement later this year –ahead of the Ban Ki-moon summit and 2014 CoP negotiations this autumn. The outline agreement will be followed by implementing legislation that will replace the current 2020 targets on greenhouse gas (GHG) emissions, renewables and energy efficiency.

The current discussion

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is dominated by the debate – including among Liberal Democrats! - on how many targets, if any, to set for 2030. There are compelling reasons to drive forward as hard as possible on energy efficiency and renewables. Indeed, under the shadow of the crisis in Ukraine it is very likely that EU Member States will continue with national

policies on energy efficiency and renewables - even in the absence of EU-level targets - for economic and energy security reasons.

Improvements in energy efficiency and increased deployment of renewables both result in GHG savings. But without coordination at an EU level it will be difficult to calculate by this autumn how much in the way of GHG savings such national policies will result in. The likely outcome of this failure is that the EU adopts far too low a GHG reduction target ahead of the global CoP negotiations.

A recent study by ISI Fraunhofer highlights that achieving a 40% cost-effective energy savings in the EU by 2030 would on its own result in at least 50% GHG reduction.

Moreover, a failure to account for the emissions reductions deriving from an upsurge in renewables and energy efficiency will make it impossible to set a correct cap for the main EU mechanism for driving down industrial emissions, the EU Emissions Trading System (ETS), and will lead to the price of carbon remaining very depressed.

I am therefore arguing strongly that a future 2030 framework should be based on mutually reinforcing and properly calculated objectives on energy efficiency, renewables and GHG emissions.

High-voltage network

Another important task for the next Parliament, beyond setting a simple interconnection target between neighbours, will be to facilitate the development of a pan-European high-voltage network.

The UK will especially benefit from one of the key parts of this Supergrid, the North Sea Offshore Grid linking wind farms around the North Sea. This offers the most efficient way of utilising the vast North Sea wind resource. National Grid estimates that such a network would cost 25% less than connecting each offshore wind farm individually to the shore, as happens currently. So, much work awaits Lib Dem MEPs after 22nd May to ensure that European decision-making delivers the efficient and cost-effective transition to a sustainable economy which is so essential for growth, jobs and tackling climate change.

But first we need to get those MEPs elected. Go go go!

Fiona Hall MEP