

## **New Europe Article- Energy Special- words 962**

For a long time there have been three general aims for energy policy at the European level. Competitiveness, security and sustainability. Over time, the order of priority has changed as the desirability of achieving an open single market has given way to the perceived threat of climate change until the imperative of keeping the lights on has asserted itself.

There is, of course, an inherent contradiction between these policy objectives if pursued in isolation and without consideration of the others. There is another contradiction which needs to be recognised and accommodated, namely the fact that energy policy remains a national responsibility whereas the objective of a single European policy remains an objective, not least because of the range of national situations and the potential for disagreement over what a single European policy should actually look like. Energy requirements differ markedly from north to south and east to west.

For me, the maintenance of security of supply remains fundamental. Without energy, our society would disintegrate. I also believe that responsibility should remain where it is, at the Member State level, because of those differences between the energy supply situation from one country to another and because the risk to security is greater if only one body is making the decisions rather than 27 separate sets of decision makers. Just suppose if the decisions were determined by public opinion in Germany or Italy and imposed on everyone else?

Put another way, I believe security of supply is best maintained by diversity. Diversity of energy mix, diversity of technology, diversity of fuels, diversity of sources of supply, diversity of suppliers, diversity of planning models.

Does this mean I think we should forget about climate change or competitiveness? Certainly not. Competitiveness is crucial to maintain that diversity and, indeed, to achieve CO<sub>2</sub> emission reduction in the most efficient way. I do think we should draw back from what I call the religion of renewables which prescribes the solution before the problem is defined. I also think that if we really want to re-engineer our economy

and society into a low carbon version, we should be realistic about targets and timing, especially in relation to the rest of the world, our competitors. And we should be open about the costs of this transformation with the people who must foot the bill, the consumers.

What does this mean in practical terms? Modern industrial societies like the EU Member States are becoming increasingly dependent on electricity so let me start there. Drawing on figures for electricity production by fuel sourced from the EEA (European Environment Agency) 2008, the shares were oil 3%; coal and lignite 26.3%; natural and derived gas 23.6%; nuclear 27.3%; renewables 18% and other fuels 1.8%. Although these figures are 3 years old, they still give a good picture of the situation and a clue of the challenge we face.

There have been some significant changes since 2008. The most significant, in my view, has been the emergence of shale or unconventional gas as a major source of fuel. The other has been the very mixed reaction to the powerful earth-quake and tsunami experienced in Japan in early 2011. I remain astonished at the irrational response in Germany in particular. Fortunately, many other Member States have taken a more balanced position on the issue of nuclear energy and to long-term energy supply.

Looking at the above figures it seems clear to me that we should be looking to reduce the share of coal, at least unless, or until, we can demonstrate CCS (Carbon Capture and Storage) on an industrial scale. We should continue to encourage a shift to renewables, but not at any price. We should intensify our efforts to replace ageing nuclear capacity and to increase it to a level where it provides virtually all base load. I offer my target numbers of 40, 30, 20, 10 by 2050; i.e. 40% nuclear, 30% renewables, 20% gas and 10% coal. These are ambitious, demanding, but achievable within 40 years. We are obliged to think long-term for such a major undertaking as achieving that low carbon economy.

Of course electricity supply is only part of the equation. The really difficult bit of maintaining security of supply, while meeting climate change policy objectives, is how we tackle oil consumption in the transport sector. In 2009, oil supplied 41.9% of final energy consumption in the EU 27. Remember that in road passenger terms, vehicle transport supplies over 90% and the percentage for freight is in the high 80% range. Trains provide just under 10% of passenger traffic and just over 10% of freight, so that is a measure of the challenge. I do not see it as achievable to make the change as it can be for electricity, yet change we must if the scientists are correct about climate change. A range of solutions offer themselves such as electric cars, hybrids, hydrogen fuel cells, biofuels.

Finally, let me touch on the other side of the equation, namely, energy efficiency and how to persuade people to change the way we use energy. In this regard, I share the estimate of the European Commission that savings of 20% final energy consumption are possible through energy efficiency. However, I differ from their approach of confusing savings with efficiency. Energy savings as called for in the draft energy Efficiency Directive just means consuming less. Efficiency means either producing a unit of gdp (gross domestic production) with less energy, or using the same amount of energy to produce higher gdp. Probably we will achieve efficiency gains through a mix of technology, such as smart meters and smart grids, regulation to enforce higher standards of insulation and buildings efficiency, and the price mechanism as energy costs rise inexorably people will be more efficient and use less.

We shall see.