End the governmentsubsidised bet on black

With the European energy sector looking to stimulate an internal electricity market, a 'fifth freedom' needs to prevail – and quickly – if a foundation for the future of renewable energy is to prevail. By Christian Kjaer

he financial crisis was brought on by too many investing too much of their wealth in risky assets such as mortgage-backed securities (MBS) and collateralised debt obligations (CDO). Financial institutions, investment banks and other investors even issued large amounts of debt and invested these in MBOs and CDOs. The taxpayers were left with the bill.

In the energy sector, we have been doing much the same for decades. We have invested too much of our (energy consumers' and citizens') wealth in risky technologies with low capital cost and high and unpredictable fuel and operating cost. Energy policy decisions have been backed up by economic models from the International Energy Agency (IEA), the European Commission and national governments, which assume that fuel price risk, carbon price risk, supply risk and political risk does not exist in the energy markets.

Meanwhile, governments allow energy investors to pass on their environmental risks and cost to citizens. The Deepwater Horizon disaster stands out as the exception because US President Obama insisted the company created a €15.6 billion spill response fund after the accident happened.

In most businesses, including in the wind energy business, the response to risk is to buy insurance and pay a premium if it makes economic sense to you as an investor. In contrast, when it comes to the conventional energy sector, governments' response is that taxpayers and consumers carry large parts of the risks and costs of the economic activity. Naturally, that would make sense to any investor in any sector, but it is not in the taxpayers' best interest and it distorts competition between technologies in the energy markets. Obviously, technologies such as wind energy with zero fuel and carbon costs and minimal environmental impacts are disadvantaged by these distortions.

The EU needs a fifth freedom

So here we are, stuck with a European supply structure exposed to all kinds of risks that our energy models still deny the existence of; risks that governments allow investors to pass on to energy consumers, taxpayers and societies at large and which, for a large part, are mitigated by governments rather than through the insurance markets. These indirect subsidies come on top of the €435 billion in global annual

subsidies that the International Energy Agency (IEA) says governments hand out to the fossil fuel industries and the – as yet unquantified – global nuclear energy subsidies.

This government-subsidised bet on black at the energy sector roulette must end. In addition, we need to start exposing energy plant investors rather than consumers to these risks. Otherwise, innovation will be too slow to support the necessary rapid shift towards smarter, cleaner and less risky energy options.

We must also speed up the process of creating real competition and well functioning power markets in Europe (and elsewhere). Europe's current electricity supply structure still bears the characteristics of the time in which it was developed. It is national in nature, the technologies applied are ageing and the markets supporting it are underdeveloped. Given the international nature of the energy challenges that the EU is facing, it is astounding that 24 years after the Single European Act was signed – establishing the free movement of goods, services, capital and labour between Europe's nations – we still do not have an internal market for electricity. We need urgently to establish a fifth freedom within Europe: the free movement of energy across borders.

Improved and fair competition in the power markets would expose investors to the risk of technology choice. Together with the environmental risks, the two biggest risk factors in power plant investments should be the uncertainties related to the future cost of emitting carbon (most critical for coal power investments) and to future fuel prices (most critical for gas power investments). However, again investors are not fully exposed to these risks because they are free to pass on the fuel and carbon price risk of their technology choice to the consumers, as a result of ineffective competition. Moving from free allocation to auctioning of allowances under the EU Emissions Trading Scheme (ETS) from 2013 will somewhat rectify this distortion when it comes to carbon risk.

Put the money to work in Europe

Meanwhile, Europe's existing power plants are ageing and 50 percent of all the power generating capacity operating in the EU today needs to be replaced over the coming 10 to 15 years. The time is ripe for a complete overhaul of our electricity supply structure. Europe imported 54 percent of



"The power systems must be made much more flexible and be supported by modern infrastructure technology, research and development"



its energy in 2006 and these imports represented an estimated $\mathfrak{e}350$ billion, or around $\mathfrak{e}700$ for every EU citizen. We need to end this significant transfer of wealth and start putting a larger part of our citizens' money to work in the European economies by nurturing the energy technologies where Europe has a real competitive advantage.

Europe must use the opportunity created by the large turnover in capacity to construct a new, modern power system capable of meeting the energy and climate challenges of the 21st century, while nurturing Europe's competitive advantages in tomorrow's leading technologies, including wind energy, other renewables and infrastructure. The power systems must be made much more flexible and be supported by modern infrastructure technology, research and development and well-functioning markets for electricity and transmission – including markets for balancing power, intra-day markets and greater demand response – to ensure that investors, rather than consumers, are exposed to carbon and fuel price risk.

I have no doubt that wind energy will be the most cost-competitive power technology in the world 10 years from now. But we, as a sector, will only be able to prove that if the overall power markets are functioning and competition is fair and effective. Without adequate infrastructure there will be no effective competition. Without effective competition, consumers rather than investors will continue to be exposed to carbon and fuel price risk. But if we get it right, I am convinced that wind energy will dominate global

power sector investments in the 21st century and that consumers will be less exposed to unpredictable fuel and carbon costs, fuel supply disruptions and environmental and health costs.

Europe has no significant resources and the ones we have are depleting and extremely dirty. In this carbonand fuel-constrained world, Europe has a considerable competitive disadvantage when it comes to conventional energy resources. According to the European Commission, the EU is home to only 0.8 percent of the world's proven oil reserves; 2 percent of the world's proven gas reserves, 3.5 percent of the world's coal reserves, and 1.9 percent of the world's uranium reserves. And out of the resources that the EU does possess, 80 percent is coal and over two thirds of that coal is lignite.

The world is currently paying the bill for governments' acceptance of excessive risk-taking in the financial sector. In 2008, oil reached €117 and our economies tumbled. It is not clear how much high fuel prices contributed to the economic crisis. But what is clear is that the same economic laws apply to both the financial sector and the energy sector. Governments allowed financial market players to invest too heavily in cheap, risky assets with unpredictable returns and European citizens were forced to pick up the bill. The energy sector is heading in the same direction. Unless energy policy-makers address the problem, Europe, together with the rest of the world, will face an energy sector crisis of the same magnitude. ■



Christian Kiaer was appointed Chief Executive Officer of The European Wind Energy Association in March 2006. He had previously held the post of Policy Director for EWEA. He drafts EWEA's direction, vision and long-term strategy in collaboration with the President and the Executive Committee. He represents the association in external forums, and engages actively with the international institutions, the key stakeholders and NGOs, the members of EWEA and the media.