

## GREENPEACE BRIEFING – ELECTRICITY MARKET REFORM

### What is Electricity Market Reform (EMR)?

The EMR is the process that reviews the policies around the electricity market and the trading arrangements for electricity. At the moment, there are a variety of policies for low-carbon power and technology support including the Renewable Obligation (RO), and the Feed-in Tarriff (FiT).

This attempt at reform is happening because since the introduction of new trading rules in early 2000s, very little new generating capacity has been constructed and much of that still functioning is nearing the end of its life. The current model for trading arrangements encourages asset-sweating and delivers little innovation or investment. Given that the UK needs to construct a lot of new kit whilst tackling climate change, maintaining energy and system security and keeping bills affordable, a new set of policies and arrangements is required.

### Why does it matter?

First because we rely on electricity for most of our daily lives and it would be no fun if the lights went out. However, the risk of this is actually happening very low, and what matters more is making sure we meet our other energy objectives at the same time. The Climate Change Committee has suggested that the power sector should be the first to ‘decarbonise’, with the transport and heat sectors to follow. The Secretary of State, Chris Huhne has also said that “The power sector needs to lead the way when it comes to cutting carbon out of our economy. For us to meet our ambitious climate change goals, it must be close to zero carbon by 2030.”

The EMR will determine which companies get what in financial terms for power generation, and investors will therefore look long and hard at the arrangements before committing their money to new generation or investment in energy efficiency.

### What is being proposed in the EMR?

There are four new policies being proposed.

1. Emissions Performance Standard – this sets a limit for the amount of carbon dioxide per unit of electricity produced by any given power station. Before the election both the Conservatives and Lib Dems promised this would be set at the level of a modern gas plant, which would rule out a new coal fired power station unless it had reduced its emissions to this level using (so far untested) carbon capture technology. Reports suggest that this ambition has been significantly lowered, so that a coal fired power station with a small amount of CCS technology will now be allowed. This risks the so-called ‘high carbon lock-in’ that the Commons Energy and Climate Change Committee warned about recently.

*Greenpeace view - missed opportunity and questions coalition's low carbon commitment*

2. Low carbon price support – this will be a contract from an agency like OFGEM for payment for low carbon power. Essentially it will guarantee a minimum price (the ‘strike price’) for power from any low carbon source. This could include nuclear power as well as renewables such as offshore wind.

The floor price is there to guarantee a certain level of return, but the generator could get more if they are able to play the market well and make power available at times when power prices are high.

*Greenpeace view – this is a subsidy for nuclear power by another name. Renewable technology deserves such as subsidy – it's an emerging field and requires Government help to get off the ground. Nuclear has had decades to prove its economic viability and has failed.*

3. Carbon price support. This will extend the “Climate Change Levy” to include the big power generators. Formerly they were exempt from this tax. The levy is expected to start low, and is very unlikely to have a material impact on investment decisions for some time.

*Greenpeace view - low impact and unless hypothecated could give Green taxes a bad name.*

4. Capacity payments – a way of the government controlling how many power stations are available in the UK, or helping our energy system to become more efficient. These power stations could be used as ‘back up’ capacity, or for normal base load use. These payments might allow the Government to encourage companies to build plants, keep them open based on the needs of the power system as a whole, or provide manufacturers with incentives to develop more efficient appliances.

*Greenpeace view – could help develop long term system security but depends on the detail and could end up providing unnecessary subsidies*

### **How will the low carbon price support help break up the energy monopoly?**

Currently most of the electricity generated is sold by the generators to their ‘sister’ retail arms, who sell it on to their customers. The power is not traded on an open market but traded directly (bilateral trading) between two different parts of the same company.

Because these companies take power from the power station to the consumer they are called ‘vertically integrated’ and are known as the ‘Big 6’ –Eon, RWE, EDF, Centrica, Scottish and Southern and Scottish Power. Trading on the ‘wholesale market’ (i.e. where non-Big 6 power generators sell to other retailers or users) is pretty low and the price of the power produced is quite volatile. The low carbon price support can thus help provide certainty to smaller energy companies looking to break into this huge market, but without buyers it may still seem risky.

### **Why does this matter?**

Need for healthy competition and creating alternative, better products for consumers.

New need for substantial investment over the next few years means that new sources will be required outside the Big 6 utilities, and this will not happen with the current market trading arrangements.

Breaking up the monopoly of the big 6 minimises the risks to billpayers of low-cost selling between big generators and retailer arms, with the price support being provided by OFGEM from consumers.

These safeguards are especially crucial to avoid windfall profits for nuclear power companies.

### **What does EMR need to achieve?**

The EMR needs to deliver lots of investment into a new, low carbon electricity system – much more than is the current norm. KPMG estimate that over the next 10 years UK will need to find £200 billion of extra investment in the Grid and in generation. Conventional sources like utilities can only deliver about £75 billion even if they are able to extend to new modes of financing. So more will need to come from ‘new entrants’ to the UK power market, in place of the current dominance of the ‘Big 6’ (see below).

For investors to want to put money into the UK low carbon electricity system (compared to anywhere else in the world), the balance of risk vs returns must look good. Policies in the EMR should attempt to reduce both policy risks (such as the government changing its incentive schemes without warning) and market/price risks (relating to the cost of power on the market). The EMR should also look to address the returns via a low-carbon/renewable support system.

New investment does not just mean generating electricity. Saving it is just as important. There are substantial opportunities if new policies can reduce the amount of power we use, because the cheapest form of power is the stuff you don't need at all. The Government needs to ensure that companies that provide savings from efficiency can benefit from the market in the same way as companies who generate power.

In addition to incentivising and encouraging investment in new renewable generation, the EMR needs to discourage polluting high-carbon fossil power plants, and ensure that the government does not end up giving substantial covert subsidy or a windfall to nuclear.

### **What else needs to happen to bring secure, low carbon, sustainable, affordable power to UK?**

The EMR is only a market system and a market is not a substitute for policy or political leadership. Measuring the success of the EMR reforms would be easier – and would provide more certainty to investors - if the government committed to some key policy goals:

- Decarbonisation of power sector by 2030 as advised by Climate Change Committee.
- Targets for energy demand reduction, and sustainable renewables to 2030 – we currently only have a target for 2020.

Success is also more likely in the long term if the Government proves its commitment in other areas of energy policy by creating:

- A well funded, independent Green Investment Bank able to raise capital and distribute low interest loans to clean energy projects.
- A pathway towards a fully co-ordinated offshore transmission network and platform for EU grid integration priority access to grid for renewables.
- Continued innovation support required for development of wave, tidal etc.

A new transmission network is particularly important for beyond 2020 where there will be substantial amounts of variable renewable generation on the power system. A major international study has demonstrated that the cheapest way of dealing with large levels of intermittency is to have large interconnection between states across EU rather than each member state having its own reserve/back-up plant.

### **Key questions for EMR**

- Will it stop high-carbon lock-in? If so how, if fossil fuel is cheap?
- How much renewable capacity is expected and with what certainty?
- Which new entrants will bring new investment to power market?
- Is there a clear new initiative for investment in efficiency measures?
- Is there an implicit subsidy to nuclear?