



# BULLETIN

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## The UK as a Pioneer in Energy Market Reform

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*A U-turn in the United Kingdom's energy policy represents a departure from a market-based to an interventionist approach. The energy system will be designed to deliver on the government's policy objectives, which the free market has been unable to do, such as security of supply, decarbonisation of the economy, and affordable energy prices. As a European pioneer in this area, the UK is also a guinea pig for new projects and an incubator for new remedies, paving the way for other EU countries, including Poland, to address similar problems.*

Back in the late 1980s, the UK was one of the pioneers of energy market liberalisation. Now, the country is again the first to start down a new path. The market-based energy policies in the UK resulted in cost reductions, the end of long-term contracts, and de-monopolisation. Consumers were empowered to change suppliers and gained access to cheaper fuels and electricity. At that time, the UK served as a model for the EU. Yet, with increasing uncertainty about future developments in global energy markets, together with the depletion of North Sea resources, the UK has encountered unforeseen problems. To this was added a new concern: climate change. The pure market model proved unable to deal with the new challenges, hence policymakers decided to reform it. The change in priorities from competition and low prices to secure energy sources and a sustainable low-carbon future—came with the Climate Change Act (2008), and complex and targeted policy instruments followed (Electricity Market Reform, Green Deal, etc.).

**Security of Supply.** Until the end of the 1990s, the UK's energy supply was constantly ensured thanks to abundant coal in the nation and the North Sea's gas and oil reserves. But in 2012, gas production dropped by 60% from a record level in 2000 (from 108 bcm to 41 bcm), while oil production decreased by 67% (from 137 Mt in 1999 to 45 Mt). Since 2005, the country has been a net importer of hydrocarbons. The recent depletion of the North Sea deposits has increased the UK's dependence on imports, a relatively new concern for the country. Hence, the priority of the UK's government (as seen in its 2012 Energy Security Strategy) is to minimise the risk of any unplanned interruptions, whether for technical, economic or geopolitical reasons. Also, with the UK's energy mix still relying mainly on natural gas (around 44%) and coal (29%), there is a need for the diversification of the country's energy sources. Increasing the amount of energy obtained from renewables and nuclear—both produced domestically—without turning away from unconventional resources would therefore reduce the UK's dependence on international oil and gas markets in the longer term. As for shale gas, the UK plans to generously incentivise domestic industry with tax breaks and secure U.S. LNG deliveries.

Further concerns about security of supply may come from coal and nuclear plant closures and obsolete infrastructure. A fifth of installed capacity is due to be taken offline by 2020, hence the risk of blackouts is high. Important investments in generation capacity and transmission and distribution networks, estimated to be £110 billion, seem crucial. The UK government has acknowledged that without a support mechanism, the markets will not deliver security and decarbonisation, thus it has decided to reform the power sector. In fact, the Electricity Market Reform announced on June 27, and lying at the heart of the current debate, contains two core elements, Contracts for Difference and the Capacity Market, aiming at the promotion of low-carbon electricity generation. The first works by stabilising revenues for generators, while the latter gives investors financial incentives to provide reliable capacity.

**Climate Change Agenda.** Undoubtedly, climate change has become a clear priority in UK energy policy. The most ambitious legally binding challenge that the UK has imposed voluntarily on itself through the Climate Change Act of 2008 consists of the reduction of greenhouse gas emissions from 1990 levels by at least 34% by 2020 (compared to

the EU's 20%), and at least 80% by 2050. The act introduced a system of carbon budgets that set legally binding limits on the amount of emissions that may be produced in successive five-year periods, beginning in 2008. A reduction in energy usage, and especially of fossil fuel consumption, which have the greatest impact on CO<sub>2</sub> emissions, is reflected in a diverse array of measures in such sectors as transport, construction and heating. For example, the Green Deal, described as the government's flagship programme, aims to reduce greenhouse gas emissions by letting customers pay for energy efficiency improvements over time through their regular energy bills. Additionally, a carbon floor price was introduced, as the EU Emission Trading System does not facilitate the UK's aims.

Although the UK's policy is becoming green it does not mean a focus on renewable energy sources. For the moment, they account for 8% of the UK's energy mix, but according to the EU Directive in 2020, that share should reach 15% (the same as in Poland). However, the UK opposes European plans to set a 30% share of renewable sources in Europe's energy mix by 2030, as it claims it is "inflexible." UK decision-makers prefer to leave the door open for other decarbonisation options, such as new gas and nuclear power capacity or carbon-capture-and-storage systems.

**Prices that Consumers Can Afford.** In the pursuit of secure and clean energy, the UK's government has not lost view of the most vulnerable part of the energy system, consumers. Indeed, ensuring that every home is adequately and affordably heated is one of the key policy goals of the reform. This aim is not unfounded since a problem with fuel poverty, defined by the Low Income, High Cost Indicator (replacing the previous 10% measure, that is, when a household needs to spend more than 10% of its income to maintain adequate heating), touches around 2.39 million, or 11% of households in the UK (in 2011). The first in Europe to identify the fuel poverty problem, the UK is also the most advanced, along with France, in finding solutions. It has already helped reduce the number of affected households, from 26% in 1996. With or without reform of the energy market, household electricity prices are likely to increase over time. The implementation of the government measures, however, is intended to slow down the rise in prices, make society aware of its responsibility in electricity consumption, and protect the most vulnerable households. Social measures, seen so far in the UK as market distortions, have thus been recognised as the main challenge to its energy policy.

**Conclusions.** To tackle new problems and the energy market's failures, the UK government has come up with a strategic vision and a set of complex and specific policy instruments. In many respects, it represents a departure from the market-based approach that underpinned the previous UK policy, and is an acknowledgement that the market on its own will not deliver continuity of supply, decarbonisation and public services. The problem, unsurprisingly, consists of how to balance limits imposed by environmental concerns with attempts to ensure economic growth and competitiveness. British industry representatives underline the cost of such a green policy rather than the benefits linked to it. Nevertheless, the UK has chosen to put an emphasis on economic decarbonisation.

In the EU context, on one hand the UK, with its binding commitment to decarbonise, is an advocate of strong EU climate policy. This may translate into support for higher CO<sub>2</sub> reduction aims for 2030 and in keeping the EU Emissions Trading System. On the other hand, it seems that the UK is a trailblazer of a new proclivity—to act on its own rather than at the European level. The effects of the UK's reform are such that the government will intervene in the energy markets and offer support for national projects. This could be regarded as a distortion of trade and the single energy market and a violation of EU competition law. Concurrently, the proposed reform will be closely observed by the European Commission. An initial evaluation may come this year when the European Commission issues guidelines on renewable- and capacity-support schemes.

Counterintuitively and in spite of the UK's commitment to decarbonise its economy, there may be more in common than in contradiction between Poland and the UK, as the challenges they face—the transition to a low-emission economy, adequate investment, affordable prices—are similar. Being so far behind the UK, Poland can take advantage not only of the knowledge of the solutions implemented in the UK but also of the necessary policy corrections implemented in recent years, especially the Electricity Market Reform. If carefully planned and implemented by the UK government, it may set a benchmark for the Polish capacity market under discussion. It is also possible that Poland could form a coalition with the UK to advocate common goals such as the deployment of all domestic resources, including unconventional sources, or offer support for a different low-emission generation mix.