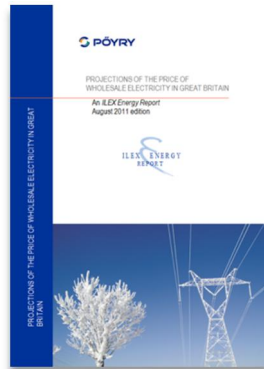


Future prospects for the market and the investment environment



The report

Pöyry Management Consulting (formerly ILEX Energy Consulting) has been publishing its flagship report on the wholesale electricity market in Great Britain since 1991.

This report provides a comprehensive review of the market rules, key players and historic trends. Wholesale prices are projected until 2035 under three scenarios, which span a range of wholesale electricity price outcomes. The report is one of the leading sources of projections in the market and is used extensively by project developers and financial institutions to assess potential new power projects and plant acquisitions.

The report has been fully revised and updated with our latest projections of commodity prices and demand. We account for Electricity Market Reform, as well as other recent

developments in national and EU policy. Our EurECa market model and detailed database of historic plant operation are combined to provide what we believe is an unparalleled analysis of the market.

Highlights

Electricity Market Reform

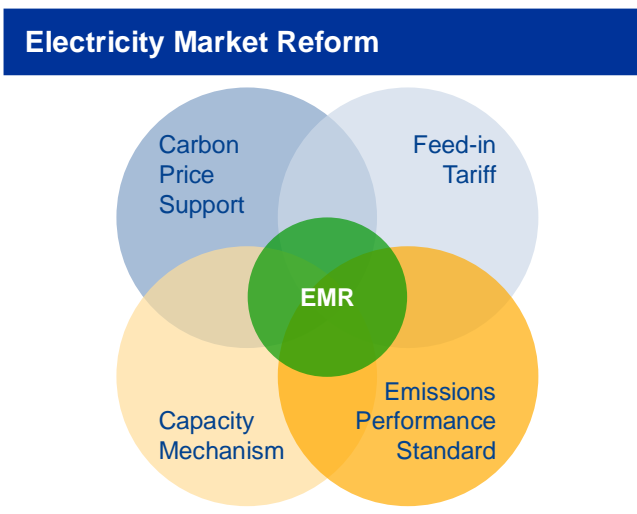
The Government's July 2011 White Paper sets out proposals for Electricity Market Reform (EMR) that are intended to deliver the transition to a decarbonised electricity sector and address security of supply concerns. The

EMR package presented in the White Paper introduces Contract for Difference Feed in Tariffs for low carbon generators; an Emissions Performance Standard; and discusses alternative options for a Capacity Mechanism. A Carbon Price Floor has been introduced in GB and we now model this as standard. We provide a detailed analysis of the four instruments and their impact on the GB market.

Prospects for new generation

Britain's generating fleet is ageing rapidly – by 2016, we project that 11GW of current firm capacity will have closed, rising to 38GW by 2030. Some of this gap will be filled by the expansion of renewable generation, but a large space for new thermal technology remains.

All of the current large thermal projects under construction are CCGTs. However low-carbon targets and shifts in government policy mean the trend of CCGT build will not necessarily continue. We review the policy environment and prospects for a variety of thermal technologies – including nuclear, CCGT, coal CCS and gas CCS.



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Commodity prices

Fuel and carbon prices are key drivers of future electricity prices. In light of their importance, we maintain detailed models of the markets for all of these commodities. The outlook for gas prices in particular has changed since winter 2010 with unusually cold weather across Europe last winter coinciding with tightening supply due to the Japanese earthquake. This has increased gas prices temporarily to oil-indexed contract levels. We assess the impact this has on wholesale electricity prices.

Large Combustion Plant Directive (LCPD) and Industrial Emissions Directive (IED)

A total of 11GW of coal and oil plant has opted-out of the LCPD and must close by 2015. We review the behaviour of these plants in detail and consider the potential for early closures.

The IED will come into effect from 2016 onwards and will further tighten emission limits. An investment in Selective Catalytic Reduction will probably be required to comply with the IED – we assess which plants are likely to invest and consider the potential form of the Transitional National Plan.

Growth of renewable generation

UK renewable energy policy is heavily influenced by EU policy, in particular the existence of

ambitious targets for the growth in renewable energy by 2020. The levels of wind generation in GB which are implied by the EU's targets would drastically change the market. We review the prospects for the growth of renewable electricity and the effects this may have on wholesale prices.

Modelling approach

EurECa is our linear optimisation model which analyses each half hour in 24 characteristic days across the year. It is used to project wholesale electricity under three scenarios:

- a **High** scenario where high demand is coupled with high fuel and carbon prices;
- a **Central** scenario based on central assumptions for fuel prices and demand growth; and
- a **Low** scenario where low demand and fuel prices combine to produce low electricity prices.

Each scenario contains an assessment of which projects will reach financial close. Longer term capacity additions are made by

testing commercial viability of alternative new entrant technologies.

We also model different trajectories for the recently introduced Carbon Price Floor.

EurECa can be used to model plant-specific load factors, capture prices and merit orders.

Additionally, we are now using our Zephyr model to assess the operation for plant which requires wind intermittency to be assessed with greater granularity (for example low load factor plant or storage technologies).

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ILEX Energy Reports

Pöyry Management Consulting produces ILEX Energy Reports for electricity, gas, carbon and green certificate markets across Europe.

Pöyry Management Consulting is Europe's leading energy consultancy, providing strategic, commercial, regulatory and policy advice.

Our team of over 200 European energy specialists, located across 14 offices and 12 countries, offers unparalleled expertise in the energy sector.

