

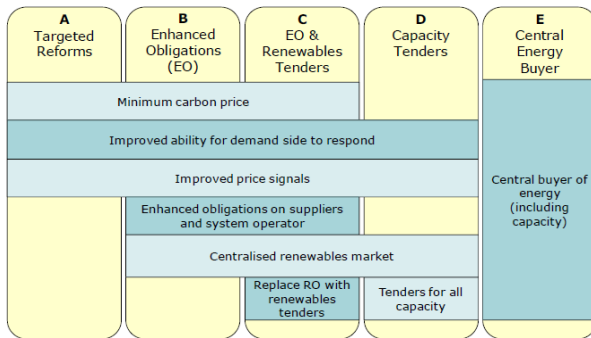
April 2010: Whoever wins the election, we appear set to see a return of greater Government control of the electricity sector.

Despite the uncertainty over who will win the General Election on May 6, one thing which does seem likely is that the new government will exert a much greater level of regulation and control over the electricity industry than seen over the past decade.

Since the major market change to NETA in 2001 (and relatively smooth extension to BETTA in 2005), the regulation of the generation sector in particular has been broadly "hands off". However, concerns have been raised that the market cannot be relied upon to make the large-scale investments necessary to achieve the various decarbonisation and renewable policy objectives for 2020 and 2050 whilst maintaining adequate security of supply and affordability.

The debate was really kick-started in February when Ofgem published the conclusions from its [Project Discovery](#) investigation into whether the existing market arrangements would be adequate for delivering secure and sustainable electricity and gas supplies over the next 10-15 years.

Ofgem concluded both that significant price rises of around 14-25% and some form of change to the market structure were likely to be necessary to provide the appropriate price signals and relative income certainty that investors will need in order to build the plant needed over the next decade. They proposed some possible measures ranging from a minimum carbon price to introducing a central purchaser as shown in the following figure.



Range of Possible Policy Measures Identified in Ofgem's Project Discovery

It was this latter concept, combined with Ofgem's pronouncements, which particularly caught the headlines, with many suggesting it was clear evidence of a failure of the free market in energy which had been the cornerstone of policy since electricity privatisation in 1990.

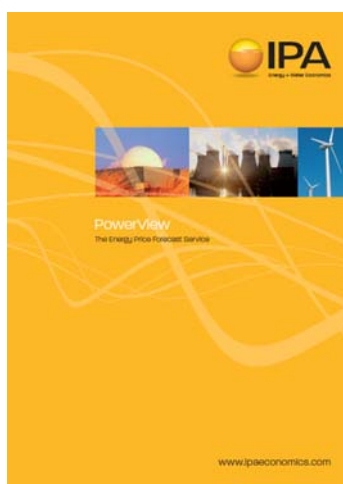
Subsequently the political parties published their own proposals in their election manifestos. Although there are obviously differences between them, there is a clear consensus on the need for greater and more rapid decarbonisation of the sector.

In its [Energy Market Assessment](#) published alongside the Budget in March, the Government ruled out the option of a carbon price floor as unlikely to drive investment, or a single buyer option as incompatible with market-based principles. Instead the Labour Party intends to implement one or more intermediate measures such as providing direct support for low-carbon generation, introducing regulation to limit high-carbon generation, or establishing a separate carbon market.

The [Conservative Party](#) advocates introducing a minimum carbon price through reform of the Climate Change Levy into a carbon tax on generators, and converting to feed-in tariffs for renewables. They would also introduce a capacity guarantee to be managed by Ofgem through measures such as a supplier obligation or capacity auction.

The [Liberal Democrats](#) differ from the other two Parties in their opposition to new nuclear as a low carbon solution, which they see as soaking up subsidies and hindering the development of "Britain's vast renewables resources." Instead they favour energy efficiency measures and the creation of a smart decentralised Grid.

Whichever party forms the next government, the electricity sector should be prepared for an element of reform, perhaps even to the extent of a fundamental change to the market structure. Investors should thus be assessing the impact different measures will have on their plans and develop a strategy to engage in the upcoming post-election debates about the future of the GB electricity industry. With 20 years' experience in the market, IPA is well positioned to support these efforts, and we will be evaluating potential policy changes in future editions our quarterly *PowerView* market assessment.



PowerView is an assessment of the potential development of the Great Britain wholesale electricity market published quarterly by IPA Energy + Water Economics, including **long-term forecasts of electricity, gas, CO₂, and Renewable Obligation Certificate (ROC) prices.**

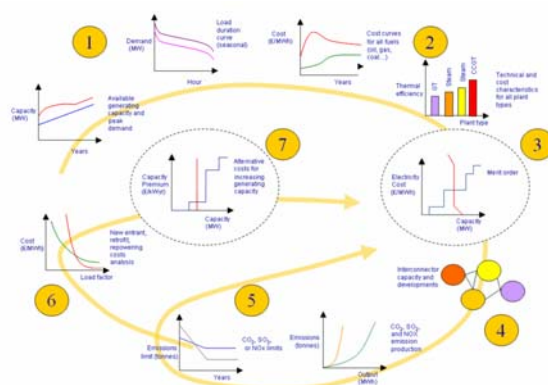
The report investigates the **key drivers** which will impact on the electricity market over the next 25 years:

- movements of other energy **commodity markets** (including oil, gas, and coal);
- **regulatory developments** at both the UK and EU level, including the EU Emissions Trading Scheme (ETS) for CO₂, the Large Combustion Plants Directive (LCPD), the climate change package, renewables targets and changes to the Renewable Obligation (RO) support mechanism;
- **security of supply** concerns as generation capacity is closed and demand for electricity grows; and
- the rate of development and cost of **new technology**, such as carbon capture and storage (CCS), third-generation nuclear, and large-scale offshore renewables, and the resultant deployment by market participants.

Our proprietary market model **ECLIPSE** (*Emissions Constraints and Policy Interactions in Power System Economics*) is able to capture the complex interactions between these various economic and non-economic drivers through a linear optimisation methodology to help quantify their impact on the industry.

A significant advantage of the approach used by ECLIPSE is that electricity and ROC prices, and capacity build and closure, are all assessed simultaneously; with the effect each has on the other thus forming an explicit component of the results.

We explore a credible range of outcomes for all of these drivers in the form of **three scenarios** under which power and ROC prices are forecast against **self-consistent assumptions** for fuel and CO₂ prices, with economically rational plant closure and build decisions. We seek to reflect the range of conditions that have been experienced over the past eighteen months, and provide a view of the most probable long-term balance between the extremes:



- **High Case:** With high energy prices (based on an underlying real oil price in excess of \$100/bbl) and strong environmental concern characterised by a high CO₂ price as seen in early- to mid-2008, the trend is towards a low-carbon world. Nuclear and renewables would be very profitable given the high power prices and would be expected to dominate the new build, while gas would be preferred to coal for the balancing generation.
- **Low Case:** This could be taken to represent a depressed economic environment as currently experienced, characterised by low energy prices (oil at \$45/bbl) and a lesser regard for environmental concerns. Coal would be advantaged by the low CO₂ price, while low power prices would deter nuclear and renewables build, and hence the system would continue to be dominated by fossil fuels.
- **Base Case:** Our baseline case is between these two extremes, as over the long-term it would be expected that while immediate priorities will shift, the overall development will be a balance between the objectives of **security of supply, environmental protection, and affordability.**

For more information about how *PowerView* can be of use to your business, including how we could develop bespoke forecasts to meet your specific requirements, or to purchase the **full April 2010 report**, please contact us at:

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