

Electricity Market Reform: Government proposals

Reference card



The government has proposed four mechanisms to help bring forward investment in new, low carbon electricity generation while keeping the lights on and controlling costs for consumers:

Carbon Price Support (CPS)

CPS is intended to provide more certainty over the price of carbon in the power sector by establishing a floor price for carbon relative to the EU Emissions Trading Scheme, thus making it potentially more expensive to generate electricity using fossil fuels and encouraging investment in low carbon technologies. The arrangements were confirmed in the 2011 Budget and will come into effect in 2013.

How it works...

- A carbon price floor (target price) of ~£16/tCO₂ has been set for 2013, increasing to £30/tCO₂ in 2020 and £70/tCO₂ in 2030.
- The current Climate Change Levy (CCL) and fuel duty exemptions for fuels used to generate electricity in the UK will be removed. The application of these taxes to fossil fuels used in power generation will make up the difference between the target and expected market price for carbon.
- The difference between the target and expected carbon price is calculated two years in advance and CCL rates set accordingly. The tax rates applied to different fuels will reflect their carbon content.
- Reduced rates will apply to CHP and Carbon Capture and Storage (CCS) plant.

Emissions Performance Standard (EPS)

An EPS would limit the amount of CO₂ that fossil-fuelled power stations can emit. It is intended that initially this would apply only to new coal-fired plant.

How it works...

- An annual limit is set on the amount of CO₂ that can be emitted at individual power stations, equivalent to an emissions level for each unit of electricity generated.
- The EPS would apply to new power stations only and would be grandfathered so that the level of EPS that applied when the plant was consented would continue to apply throughout the life of the plant.
- Two options are proposed for the level of the EPS: 600 gCO₂/kWh, consistent with the current requirement to demonstrate CCS on new coal-fired power stations; or 450 gCO₂/kWh, which would require greater use of CCS on new coal-fired plant.

Feed-in tariff (FIT) with Contract for Difference (CfD)

The FIT is intended to support new low carbon investments (renewables, nuclear and CCS) by providing certainty about the revenue they receive for their output. The government's preferred option is a FIT with CfD but, if this cannot be made to work, a premium FIT (a fixed payment on top of the wholesale price) will be considered instead. The FIT would replace the Renewables Obligation for all new renewable projects from 2017.

How it works...

- A long-term contract is signed with a central body for a set £/MWh price.
- The generator sells his output into the market.
- An additional payment is made to the generator to 'top-up' his revenue to the agreed price. This payment is variable and is the difference between the *average* wholesale electricity price and the contract price.
- The CfD can be a two-way mechanism – generators pay money back if electricity prices are higher than the agreed tariff.
- Generators will have an incentive to sell their output above the average market price as they will keep any upside.

Capacity mechanism

A capacity mechanism would reward the provision of electricity generation capacity as opposed to only the energy generated. This is intended to promote security of supply by encouraging the construction of flexible generation and demand reduction measures. There are many potential ways of designing a capacity mechanism – the government proposals favour a targeted mechanism.

How it works...

- An obligation is placed on a central body to maintain a set capacity margin.
- The body determines the level of spare capacity that the market is likely to deliver.
- Tenders are run to secure any additional capacity required to make up the shortfall between the level of capacity provided by the market and the centrally determined capacity margin.
- Demand side response ("negawatts") will be eligible as well as generation.

The government will announce its next steps in a White Paper expected in summer 2011.

Read more about Electricity Market Reform at www.aepuk.com