

Electricity market reform

Response of the Environmental Services Association

ESA is the sectoral trade association for the UK's managers of waste and secondary resources, a sector with an annual turnover of around £9 billion. ESA's Members seek to align economic and environmental sustainability through delivering compliance with relevant EU waste and environmental law.

Key points

- Energy from waste can help deliver the UK's energy objectives
- The economics of energy from waste are very sensitive to market arrangements
- Several of the Government's reform proposals will improve the economics of energy from waste
- Fixed FITs would offer the greatest revenue certainty and support, particularly for smaller generators

Energy from waste can help deliver the UK's energy objectives

The Government should be looking to energy from waste (efw) as a key component of electricity supplies going forward. Some ESA Members and other stakeholders, including a number of leading institutions and business organisations, have estimated that efw could provide up to 6% of the UK's total electricity supply. Efw has a number of advantages over other technologies, in that:

- It is significantly renewable and contributes towards renewable energy, carbon reduction and landfill diversion targets
- It is located closer to electricity demand (by virtue of being closer to waste generation) and so has lower transmission losses than some other proposed renewable solutions
- It provides a stable and reliable base-load
- Its fuel comes from domestic sources, alleviating the need to import stocks from potentially unstable overseas markets

Energy from waste is an important solution to meeting public sector waste management requirements under the Landfill Directive, which determines that municipalities must divert biodegradable material from landfill. Public sector value for money is however harmed by the challenge of raising private finance at reasonable rates for new efw projects.

The economics of energy from waste are very sensitive to market arrangements

Lenders are unwilling to lend to efw projects which do not have a local authority anchor contract to provide a reasonable guarantee of fuel inputs for the life of the debt. However, even when this is in place the off-take (energy and recycle price) risks contribute towards raised costs of finance.

Local authorities have a strong preference for stable and predictable costs associated with the management of their wastes and are consequently generally unwilling to accept a degree of risk associated with energy price movements.

The conservative nature of the price assumptions required by banks means that the authority will pay a relatively high risk premium to cover the possibility of future falls in electricity prices over the full operational life of the facility. This risk premium would be reduced and public sector value for money improved by greater energy price certainty, which would of course be provided by the Government's proposals for a carbon floor price combined with FITs.

The waste PFI programme has helped to support some municipal waste projects. Going forward,

In this environment it is imperative that efw is provided with full and robust support as a renewable source of electricity under Decc's proposed electricity market reforms.

Without support to help improve the risk profile of efw projects, this valuable source of energy, which meets Decc's energy policy objectives, will be unable to make its full potential contribution towards the UK's renewable, carbon reduction, and landfill diversion targets. The support of FITs for efw projects could help to improve revenue certainty and improve the risk profile.

Objectives

Energy from waste meets Decc's three key objectives for energy policy. It is a cost-effective source of stable base-load power, which contributes towards security of supply by virtue of the fact that it uses a domestic fuel source. At the same time, efw contributes towards decarbonisation by utilising a sustainable source of biomass (as recognised under EU policy) and contributing towards renewable targets and, in the wider economy, diverts biodegradable material from landfill thereby reducing methane emissions from landfill and leading to significant carbon savings.

Current market arrangements

ESA agrees with Decc's analysis that there are significant risks to current arrangements providing sufficient investment in new secure renewable electricity supplies. ESA supports HM Treasury's proposals for carbon floor price support and also the introduction of FITs. ESA believes that these proposals could help to provide greater power price certainty which would help reduce some of the risks involved in investing in new efw projects and thereby help stimulate new capacity.

ESA also hopes that the Government's Green Investment Bank proposals will explore potential financial products which might help address other (feedstock and technology) risks associated with new efw projects.

Decarbonisation options for reform

ESA supports the Government's proposals for providing increased certainty of the carbon price. This should, in turn, help to improve revenue certainty and the associated risk profile for efw facilities.

FITs

ESA agrees that Decc's proposals for electricity feed-in tariffs could increase revenue certainty and improve the weighted cost of capital for new projects. For municipal efw projects this would have the impact of also improving value for money for the public sector.

ESA believes that Fixed FITs would provide the greatest certainty for investors and so would provide the strongest stimulus for investment in new low-carbon generating capacity. ESA's Members have some concerns that Decc's preferred option of FITs with CfD would disadvantage smaller generators. This is due to the fact that smaller generators often sell their electricity under power purchase agreements at levels below the average wholesale price. At times of higher prices, this would result in such projects receiving lower total returns, which could in turn disincentivise investment in such generation.

ESA believes that the proposed FIT should be paid on output rather than availability, which would be more cost effective for the public.

As noted above, efw projects possess a wide range of risks which must be considered. To help the delivery of new capacity, it is essential that efw projects receive support from FITs to help improve revenue certainty.

Mixed waste fuels

Projects using mixed waste fuels have suffered under the RO from an inability to demonstrate with sufficient accuracy the bio-content of their fuel inputs. This has previously been recognised by Decc and any further measures which could help mixed waste projects to gain the full support for which they are entitled would be welcomed.

Security of supply and market operation reforms

Energy from waste provides a stable and predictable base-load of renewable electricity generation. This is in contrast to more intermittent forms of renewables and should therefore be rewarded through the proposed capacity payments designed to manage the security of supply.

ESA supports Decc's proposals for a capacity mechanism which is centrally managed. ESA's preferred option is for a capacity payment which would provide the greatest certainty for investors.

Implementation issues

ESA believes that FIT support levels should, at a minimum, be aligned with those of the RO. Disruption would be minimised if the process for determining FIT levels was, in the first instance, aligned with the RO banding process.

ESA also notes that grandfathering support levels to existing projects and protecting investments already made is of course vital to sustaining confidence in the market and minimising perceived political risk. ESA supports Decc's proposals to give developers the choice over which scheme to fall under pre-2017. This would provide additional certainty for projects which may be subject to high degrees of planning uncertainty.

ESA supports Decc's proposals for an accelerated banding review and the proposed overlap between the two schemes.

