

## ESTA RESPONSE TO:



### **Electricity Market Reform – Consultation Document Department for Energy and Climate Change**

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[REDACTED]

W: [www.esta.org.uk](http://www.esta.org.uk)

#### **ESTA Energy Services and Technology Association**

ESTA is the UK Industry Body representing suppliers of products, systems and services for Energy Management. The 120 members cover Energy Consultants, meter, AMR and controls manufacturers through to full Energy Services/Contract Energy Management.

ESTA is engaged with UK Government policies on Energy and Climate Change, The Green Deal, Energy Performance of Building Directive, Part L Building Regulations, Display Energy Certificates, Carbon Reduction Commitment, Energy Services Directive and the roll-out of smart and advanced meters. It also provides UK input to developing international energy management standards and Chairs several BSI committees.

ESTA members are key to the realisation of a low carbon, secure and affordable energy future. Our members provide equipment, systems and services for energy management to reduce energy demand at source and including renewables.

Our response is a majority consensus of the members involved. Where ESTA members respond directly to DECC, they may offer differing opinions on some issues which we respect as expressing their own definitive view.

**Key points:-**

- Call for demand side response measures to be given greater investment opportunities to support supply side reforms.
  - Call for a detailed impact assessment into reputational not economic drivers for ongoing investment in demand side energy management as grid increasingly decarbonises under market reform proposals.
  - Concern over localised demand and capacity constraints.
  - Need for investment into electricity storage R&D.
  - Support for CfD FIT mechanism as most flexible and least impact on increased prices.
  - Clarity on capacity payments and current generating technology.
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## Electricity Market Reform

Overhauling the electricity market to ensure secure, low carbon supplies are increased and then maintained over the next 40+ years sets the basis for massive investment. Not only must the future market cope with diverse supplies, it must also promote and achieve significant carbon reduction in generation and improved energy efficiency on the demand-side.

The challenge in real terms is all about priorities and the best ways to incentivise participants up and down the supply chain to encourage market investment and policy success.

We would argue that an unequal bias is currently being placed on supply side initiatives as opposed to demand side initiatives in order to provide benefits when considering security, low carbon and affordability.

Equivalent investment in the demand side as compared with supply side would create the added value needed to ensure security of supply. Micro and macro-level response measures coupled with energy efficiency are equivalent to reinforcing grid infrastructure, lowering carbon emissions and reducing additional plant and maintenance costs.

In addition, it could be viewed that these measures are more resilient than individual back-up power plant, which if offline when required because of maintenance or incident creates further strain on the system.

This is not to say that supply side investment is not required but shows that in terms of electricity market reform the need for a fully functioning demand side electricity market would make similar in-roads to meet government targets and so should be seen as an additional strand to supply side initiatives.

Currently, under the outlined reform scenarios it is difficult to envisage a medium to long term energy strategy for the majority of large business energy consumers across the UK, as generation becomes increasingly decarbonised and policies in excess of EU mandates create uncertainty about remaining competitive across Europe.

Therefore it is vital that demand side participants and consumers are fully engaged at every level in the policy process in order to achieve maximum benefits and returns.

It is these consumers that will bear the brunt of forthcoming infrastructure and generating upgrades through increased prices; and although a future energy scenario sees prices fall in the run up to 2030, demand side energy efficient solutions and response mechanisms need to be invested in now and must be given a higher profile across the whole supply chain, as an integral and major part of any future energy scenario.

With figures showing demand set to double as we progress towards 2050, demand side efficiencies as a minimum can and must help reduce the burden on capacity to create a longer lasting legacy for future generations.

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## **Security of Supply**

Whilst we agree with the Government's assessment of the future risks to the UK's security of electricity supplies, and whilst it is understood that the Electricity Market Reform Consultation is considering the Generation/Supply side, further analysis needs to be undertaken regarding possible future trends in demand, response measures and localised capacity constraints.

Specifically, in regard to electric transport and a more varied tariff structure for domestic properties following the roll-out of smart meters. Overnight car charging could create similar 'bandwidth' issues in housing estates that are currently recognised in the telecoms market as uptake increases over the next decade or so. Similarly, in local businesses with staff car parks and local multi-storeys where charging points will begin to increase in number. Increased demand will require increased monitoring and targeting mechanisms in order to balance capacity at local levels where such varied and unpredictable load patterns could occur.

R&D into electricity storage is lagging behind new and improved generation technologies and the Government should be encouraged to make similar commitments to this as it is making with CCS, perhaps through the allocation of a portion of the capacity payments.

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## **Carbon Price Support**

We agree with the need for Carbon Price Support, however, the cost of carbon needs to be sufficient to encourage investment in alternative generation which will undoubtedly see a difficult transition period. The past scenario where generators fired up the coal plants and paid the penalties because it made more economic sense to do so should not be able to be repeated.

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## **Feed-in-Tariffs**

Whilst we agree with the Government's preferred choice of Contract for Difference (CfD) Feed-in-Tariff, we are concerned with the implementation issues. We would refer the Government at this stage to the work being undertaken on CRC EES which has seen a simplification of the original system following initial legislation and how that has been received by the market. With the CfD incorporating the most flexibility for a FIT mechanism we would not want to see a watered-down CfD which moves more towards a Premium FIT creating increased costs to be borne by an already stretched market.

We are concerned too with the generalisation of the term FIT to apply to large renewable installations and also for the term to refer to small projects on the demand side. We would recommend that the mechanisms for demand and supply side initiatives are separated and that the threshold is moved for medium sized sites to avoid the CfD

process, while a crossover band is established to allow those at the threshold level to choose which scheme to opt in to.

On the demand side FITs should be an option AFTER achieving energy efficiency which can be implemented by requiring a certain level of efficiency [a rating of grade D for example].

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### **Emissions Performance Standard**

We do not currently hold a view on the best option for an emissions performance standard for coal fired plant due to CCS being a fledgling technology. Creating standards without the necessary practical application of reducing emissions to the required level will undoubtedly result in much more consultation and research as time progresses and so it is premature to give a considered view at this stage.

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### **Capacity Payments**

We agree with the need for a capacity mechanism in addition to the already proposed improvements. Demand Side Response will increasingly be required to operate at a local as well as national level and these payments should provide encouragement for on-site back up generation to be updated to a level comparable with emerging policies to support increasing renewable capacity. It is deemed to be unlikely that volatility will be reduced in the wholesale market as demand will not become more stable or predictable going forward. However, Ofgem's assessment of the wholesale market should provide a clearer insight.

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### **Electricity Market Reform – Conclusions**

The Electricity Market Reform should not overly burden the consumer in terms of added cost for electricity. The Manufacturing industry is already in decline due to recent energy price hikes creating the inability to be competitive in a global market. In the North West a strong chemical industry base has seen significant closures resulting in a handful left remaining.

It is imperative therefore that long-term investment deals are done against a backdrop of secured returns over the life of that installation. How the Green Investment Bank dovetails into the reform package is key to providing the right drivers for new low carbon capacity.

The Electricity Market Reform should not be put forward in isolation and it is hoped that the forthcoming White Paper will tie together existing policy strands.

We argue that demand side energy management has a significant role to play in any future landscape and we would like to see an impact assessment undertaken on the effects of the market reform proposals, specifically on the investment required by business to continually reduce consumption to 2050 as the grid decarbonises. With an effective reduction in average grid CO<sub>2</sub>/KWH, will boards understand the importance of energy management when the impact on the environment is reduced? To date reputational and environmental pressures exceed economic necessity to continually find efficiencies in a substantial number of large businesses where energy as part of operating cost is typically 1-5%.

We would welcome the opportunity to discuss further the ability of demand side participants to reduce the burden on increased generation capacity, infrastructure and carbon reduction and to look at the options to improve demand side response through a functioning technology-led demand side market.

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