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**12 January 2017**

Dear sir / madam

### **Plan for a Smart, Flexible Energy System - A call for evidence**

The Federation of Small Businesses (FSB) is the largest organisation representing small and medium sized businesses in the UK. We exist to protect and promote the interests of the self-employed and all those who run their own business.

FSB's new report – *The Price of Power: Energising small business in the next UK Carbon Plan* – warns the UK risks failing to meet its climate obligations without the help of small businesses. The UK's energy infrastructure is facing unprecedented change as we seek to meet challenging carbon emissions targets and move towards a distributed energy system. This upgrade will potentially increase costs, but also opportunities, for small businesses, so it is critical that these are shared out equitably and fairly. Small businesses have a complex and varied relationship with the energy sector, operating as generators and investors, consumers, and suppliers of products and services.

#### **Key FSB Findings**

**86 per cent of FSB small businesses believe the UK is too reliant on imported energy.** Energy security is the biggest single concern for most small businesses. For many, this even outweighs concerns about costs and carbon emissions.

**61 per cent say energy is a significant cost.**

**12 per cent already generate their own electricity.** The vast majority of which is from solar panels.

**41 per cent believe renewable and low carbon energy will be cheaper than fossil fuel in future.** Just 23 per cent who believe it will never be as cheap. Small businesses are optimistic about renewable energy generation.

**27 per cent believe that a low carbon economy will create more opportunities than threats for their business.** Only 14 per cent believe the opposite.

**33 per cent believe that energy efficiency savings will offset the increasing cost of their energy.** Only 23 per cent don't think this will be the case.

## Consultation Questions

### **1. Have we identified and correctly assessed the main policy and regulatory barriers to the development of storage? Are there any additional barriers faced by industry?**

FSB's view is that developing storage capacity should be a priority for Government and industry. Without it, the UK cannot hope to roll out the low carbon generation capacity required to achieve our binding carbon reduction targets. However, FSB remains concerned about how much the current system for subsidising and incentivising low carbon technology is fair, transparent or strategic, particularly bearing in mind the relative importance of storage.

In early 2013, Government set out eight great technologies where Britain's research and development sector could lead the world.<sup>1</sup> One of these great technologies was energy storage, with Government believing this technology:

*"...has the potential for delivering massive benefits – in terms of savings on UK energy spend, environmental benefits, economic growth and in enabling UK business to exploit these technologies internationally.*

*"Efficient energy storage technologies could allow the UK to capitalise on its considerable excess energy production."*

Since the publication of the 2011 Carbon Plan, National Grid's Future Energy Scenarios report says Britain's progress on wind and solar-powered electricity has been quicker than some expected. On the one hand this is to be celebrated. However, FSB recognises that without the equivalent investment to upgrade and maintain the energy network, improve energy storage, reduce consumption and introduce smart technology, there will be no way to draw down this low carbon power when we need it.

Battery storage costs are expected to decrease significantly in the next few years.<sup>55</sup> However, there is clearly some way to go before battery storage is widely adopted by small businesses. Any incentives aimed at promoting small business microgeneration, storage and efficiency must be simple, straightforward and worth the effort.

A tiny fraction (1%) of FSB small businesses have invested in energy storage. Of those few that have, it is unclear what their motivation was, since they cover a range of businesses which, respectively, believe their energy costs are 'high', 'moderate' and 'low'. However, all of those that say they have invested in energy storage have also invested in renewable energy technology, suggesting that their investment in energy storage may, currently, be solely an associated by-product of their decision to invest in renewables.

Compared to generating technologies, energy storage is still costly, and a quickly changing market can discourage investors.<sup>2</sup> Large-scale storage units compete against fuel-burning

<sup>1</sup> The Rt. Hon David Willetts, Speech: The Eight Great Technologies (2013)

<sup>2</sup> Parliamentary Office of Science and Technology POSTNOTE Number 492: Energy Storage (2015)

power plants, interconnector supply and demand-side response.<sup>3</sup> Small-scale electricity storage competes against small diesel-fuelled electricity generating units and the use of flexible grid electricity.

At a market-wide scale, the Capacity Market will play an important role in driving investment in new and innovative capacity technologies. However, it must be acknowledged that the majority of Capacity Agreements awarded in 2014 were to large-scale gas (45%), coal/biomass (19%) and nuclear (16%). By contrast, the capacity market only leveraged 0.35 per cent of capacity from demand side response technologies and 5.48 per cent from storage.<sup>4</sup>

We welcome the changes made to the Capacity Market to enable the participation of demand side response and storage technologies, particularly those changes aimed at encouraging smaller providers. However, FSB believes the Government should go further in this regard. Although we recognise a developing role of aggregators, we believe this market will take some time to develop. So, although we welcome the reduction of a de-minimus threshold to 2MW, we would urge Government to reduce this threshold even further to allow participation a greater number of individual small business innovators.

More broadly, storage also faces a number of regulatory barriers, relating to uncertainty around whether it is classed as a demand response technology or part of generation capacity. At the moment, it is classified as both and, therefore, subject to two different connection regimes and charging methodologies. We are pleased to see that Ofgem are working to address connection and usage charges related to storage, particularly with regard to double-charging (once for consuming electricity, then again when supplying it back to the grid).

## **2. Have we identified and correctly assessed the issues regarding network connections for storage? Have we identified the correct areas where more progress is required?**

The transition to a low carbon economy will place great pressure on the energy network, both through the large number of additional connections that will need to be enabled and, subsequently, through managing the potentially steep peaks and troughs of daily generation and usage. New technology and innovation will be required to take pressure off the energy transmission and distribution networks. FSB believes that microgeneration and community energy schemes will play a critical role in this.

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<sup>3</sup> Parliamentary Office of Science and Technology POSTNOTE Number 452 Electricity Demand-side Response (2014)

<sup>4</sup> National Grid, Final Auction Results: T-4 Capacity Market Auction (2014)

However, FSB believes that, in terms of planning a regulatory regime covering network connections for storage, the industry must learn lessons from existing issues related to network connections for distributed generation.

DNOs should work with Ofgem, Government, National Grid, other DNOs, distributed generators and stakeholders to develop a system in which fully-functional Distribution System Operators (DSOs) are responsible for balancing and controlling distributed networks. These should incentivise innovative storage, demand side and efficiency technologies to help balance supply and demand.

**5. Do you agree with our assessment of the regulatory approaches available to provide greater clarity for storage?**

FSB believes the existing regulatory approach to storage – treating it as generation for licensing purposes (option a.) – does not reflect the role that storage plays and, therefore, does not provide a solid foundation on which to build a regulatory regime that incentivises its development and proliferation.

Equally, defining storage as a completely separate activity (option d.) does not reflect the broader role of storage and could potentially create uncertainty for both incumbent storage operators who are licensed as generators and current storage developers.

Therefore, FSB believes storage should be defined as a subset of generation, taking account of the non-generation role of storage (options b. or c.). However, we would stress the importance of taking a risk-based approach to any new storage licensing regime so that smaller participants were not discouraged by onerous regulatory burden.

**6. Do you agree with any of the proposed definitions of storage? If applicable, how would you amend any of these definitions?**

FSB recognises the importance of clearly defining storage in a regulatory context. We are broadly content to support the definition of storage suggested by the Electricity Storage Network (ESN) as:

*"...the conversion of electrical energy into a form of energy which can be stored, the storing of that energy, and the subsequent reconversion of that energy back into electrical energy."*

However, we are open-minded about exactly how storage is defined going forward, particularly as the regulatory regime continues to develop and evolve.

- 7. What are the impacts of the perceived barriers for aggregators and other market participants?**
- 8. What are your views on these different approaches to dealing with the barriers set out above?**
- 9. What are your views on the pros and cons of the options outlined in Table 5? Please provide evidence for your answers.**

Aggregators are likely to play an important role, both in managing demand response across a wide domestic and non-domestic customer base, and also providing those customers with the necessary information, products and services to enable them to take advantage of this sub-market.

In a smart future, FSB believes it is vital that small businesses have access to a trusted aggregator service and all the benefits this potentially provides. However, Ofgem have acknowledged that they currently have limited regulatory tools to protect consumers who contract with independent aggregators and that consumers might therefore be at risk from behaviours or offers that are unfair, misleading, or unclear. Aggregators are, essentially, a form of TPI and, as this market grows, it will be important to learn lessons from the performance of TPIs in other markets, particularly acknowledging the problems caused by a lack of regulation in the energy retail market.

FSB members have reported very mixed experiences in the retail energy TPI market. FSB believes a transparent, regulated TPI industry is required, which builds trust by promoting the good and excluding the bad. Before the CMA investigation into the energy retail market, FSB supported Ofgem's project to develop of a draft code of practice for non-domestic TPIs, setting out customer engagement standards (professional and honest behaviour, transparency of information and effective monitoring).

Although Ofgem's initial work on TPIs did not explicitly cover aggregators, we believe there are clear parallels between the two industries. Lessons must be learned from the way that Ofgem and the wider energy industry have failed to reach a consensus on how to regulate TPIs.

We acknowledge the announcement by the Association for Decentralised Energy that they intend to develop a code of conduct and compliance scheme for non-domestic aggregated demand side response (DSR). However, we would point out that several competing, voluntary schemes have been in existence in the energy retail TPI market for a number of years. FSB considered some of these to be worthy of further promotion, but all of them were hamstrung by not being enforced across the whole market.

FSB would strongly urge Government to consider a mandatory code of practice for aggregators, while fully acknowledging the difficulties this has faced in the retail TPI market.

## 11. What types of enablers do you think could make accessing flexibility, and seeing a benefit from offering it, easier in future?

**Smart meters** will be a critical enabler for accessing and providing energy flexibility services. According to Smart Energy GB, by the end of 2020, around 53 million smart meters will be fitted in more than 30 million premises (households and businesses) across Wales, Scotland and England. However, simply installing this new technology won't automatically provide any benefits. Cost savings will come with the behaviour change that this technology empowers and the energy savings that come with this. The ability to use energy flexibly – for instance, avoiding peak times – will play a key role in this.

Without a clear strategy for ongoing customer engagement and empowerment, the costs and benefits of this new technology will not be equitably distributed. Therefore, the rollout of smart meters must be supported by ambitious and holistic industry plans for ongoing energy saving and management support and advice to small businesses.

Beyond the initial benefits of ending estimated bills and empowering energy use decisions for consumers, smart meters provide the foundation for a much smarter market, particularly with regard to energy grid management.

**Demand response**, driven by monetary rewards and penalties for using energy at certain times, will benefit from the proliferation of real time data. In this regard, it is important to acknowledge that the average energy profile for businesses – in other words, the variation in energy use during the day – may be very different to that of domestic household customers. This could represent opportunities and threats in terms of the way this sub-market is devised. The ability of small businesses to take advantage of demand side response will depend on the development of a number of sectors and technologies, including storage, microgeneration, smart meters, smart products and equipment, aggregators and price signals. The Government should set out a more detailed strategy for small business demand response.

**Time-of-use tariffs** will undoubtedly take on increasing importance as grid infrastructure becomes more stressed. Some businesses are already accustomed to time of use charges, but many smaller firms will not be. Going forward, their ability to take advantage of these charges will be dependent on the equipment they rely on, the development of new technology and smart appliances, and the degree to which they can introduce flexibility into their day-to-day activities. It is clear that some businesses will be more able to take advantage of time of use charges than others, depending on the nature of their operation. Many businesses operate on different cycles to the average domestic customer. So, a one-size-fits-all approach to time of use charges will not work. In order to drive behaviour change, the market will need to provide not only a price disincentive against using energy at certain times, but also a clear pathway for achieving this. For instance, it may be prudent to consider a recommendation for all users above a certain energy threshold to implement storage and management systems that allow them to run 'off line' at certain times of the day.

**15. To what extent do you believe Government and Ofgem should play a role in promoting smart tariffs or enabling new business models in this area? Please provide a rationale for your answer, and, if you feel Government and Ofgem should play a role, examples of the sort of interventions which might be helpful.**

Following the completion of a recent Competitions and Markets Authority (CMA) investigation, FSB broadly welcomed remedies for improving the retail energy market, particularly the development of published, comparable prices for microbusinesses. However, the investigation did not extend to looking at how the retail market can empower customers to use less energy, use energy at cheaper times, or choose how and where their energy is generated.

Energy reduction and management is the best way that small businesses can save money on their bills, yet the post-CMA market is still not well placed to drive and support this behaviour change.

FSB wants to see a new energy market that acknowledges a diverse customer base and enables smaller businesses to make holistic decisions. Business customers must be empowered to understand and choose what services they pay for, where they can find the best deal, where they can save energy, where and how their energy is generated, and what support they can get around demand management.

Thirty-three per cent of FSB small businesses believe that energy efficiency savings will offset the increasing cost of their energy, as opposed to just 23 per cent who don't think this will be the case. So, small businesses need support and information to help make these savings wherever possible.

FSB has engaged with Government and suppliers around how best to promote improved energy management among small businesses. The national roll-out of smart meters across the UK, and the associated move to a smarter and more dynamic market, provides the greatest opportunity for customers to take control of their energy and reduce their consumption. If usage cannot be monitored, it cannot be managed.

However, small businesses are a diverse audience. It is clear that energy suppliers need to improve their understanding and segmentation of their small business customer base so that their energy needs can be targeted in a more focused, bespoke way. This will help to tailor customer offers related to energy costs, contracts, efficiency support, innovation, products and services.

**25. Can you provide evidence to show how existing Government policies can help or hinder the transition to a smart energy future?**

FSB recognises the importance of binding international, European and domestic targets for carbon reduction and renewables in providing a strong market steer for investors, including those looking to contribute to a smart energy infrastructure.

In the shorter term, FSB wants to see a strong strategic UK policy direction that provides confidence and security to investors in new energy technologies, including generation, storage, demand management and efficiency. We have called on Government to produce a new Carbon Plan as a matter of urgency. The UK needs a broad, measured and transparent strategy for promoting investment in the right places through a combination of different incentives including, but not limited to, subsidies and tax reliefs.

Without this, we have already witnessed the impact on investment when the Government continuously changes the rules related to renewables support at short notice.

We recognise that the issue of subsidies for certain technologies has become highly politicised. We believe that the recent decision to withdraw subsidies for wind and solar generation has – rightly or wrongly – had a detrimental impact on investor confidence, at least in the short term. However, the long-term impact is unclear, especially given the shift in emphasis to other forms of support.

Subsidies must be viewed in the context of a number of other mechanisms that promote the development and roll-out of certain energy technologies by providing investor confidence (e.g. tax penalties and reliefs, legal obligations, access to finance, capacity market, binding carbon reduction targets, skills development, education and information, etc.). We recognise that the relative contributions of each of these mechanisms may change over time, reflecting the ebb and flow of variables such as energy prices and technology development. The Government must keep these mechanisms under review as they all have the potential to both stimulate and subdue the market in different ways.

FSB recognises the Levy Control Framework as an important tool for controlling consumer costs, but we continue to have concerns about its management, transparency and accountability. The Framework imposes an important ‘cap’ on subsidy expenditure. However, without a holistic Government strategy setting out what the UK wants to achieve in terms of low carbon infrastructure investment, and by when, the level at which this cap is set cannot be seen as anything other than arbitrary. This can make it more difficult to explain the relative benefits of subsidy reductions to the general public.

It is not yet clear what impact subsidy reductions will have on the overall development of new technologies critical to delivering a smart energy infrastructure. Most of these cuts have so far been related to generation technologies.

In early 2016, in response to higher than expected renewables deployment, changes were made to the FITs scheme to control/reduce tax payer expenditure. Changes to deployment caps, accreditation, tariffs and tariff degeneration all combined to make FITs a relatively less attractive package for small-scale investors. This posed potential problems for small business generators who had already made their investment calculations on the assumption of unchanged FITs arrangements. The changes were particularly challenging for microgeneration and community schemes, many of which face relatively slow development timescales. Such schemes are often driven by individuals who may have already committed

significant time, effort and money before they were in a position to make a formal FITs application.

Many FSB members have benefitted from energy subsidies. However, despite contributing to their cost, many others receive none of the benefits for a variety of different reasons. In this regard, we acknowledge that incentives are not universally fair and don't necessarily benefit those that need them most. For example, small-scale and community generation schemes, by their nature, take a comparatively long time to complete. These schemes often compete with larger commercial projects which, funded by liquid market capital, are able to progress more quickly. Therefore, incentives may promote schemes that offer the quickest return, rather than those in areas where alternative energy is needed most. So, in terms of fairness, incentives must promote investment in the right places, and across the right audiences. They must be simple, straightforward and worth the effort.

Although changes have been controversial and undoubtedly reduce the attractiveness of FITs, this subsidy remains an important support mechanism for many businesses hoping to contribute to low carbon investment. The Government should formally review the effectiveness of subsidies and other incentives related to low carbon generation, energy efficiency and demand management, for both small and large scale technologies.

Those wishing to use subsidies to help fund small-scale installations (up to 50kW capacity for electricity generation, up to 45kW capacity for heat generating technologies) must use an installer covered by the Microgeneration Certification Scheme (MCS). This is an industry-led and nationally recognised quality assurance scheme, supported by Government. FSB believes the MCS can provide a valuable service for small businesses, most of which will have a low base-line of expertise in terms of microgeneration investment. However, some FSB members have reported problems with some MCS accredited companies, with regard to the quality of advice and service they have received.

Government should assess the success of the MCS at identifying and promoting those that provide high quality products and services, and how well it safeguards against poor practices. A robust MCS scheme should provide quality assurance for would-be investors, and make it more difficult for rogue traders to undercut and undermine the service provided by quality installers. However, as the energy market changes, the scheme must be frequently assessed to ensure it maintains the right balance between the risks and costs associated with regulatory burden.

**26. What changes to CM application/verification processes could reduce barriers to flexibility in the near term, and what longer term evolutions within/alongside the CM might be needed to enable newer forms of flexibility (such as storage and DSR) to contribute in light of future smart system developments?**

The capacity market is aimed at large and medium-sized generators so doesn't cover small businesses. However, we recognise that an increasingly smarter market could increase

opportunities for aggregators (representing numerous smaller clients) to take advantage of the capacity market. Although we welcome the reduction of a de-minimus threshold to 2MW, we would urge Government to reduce this threshold even further to allow participation a greater number of individual small business innovators.

In the first capacity market auction in 2014, £1bn was paid out to leverage 49GW of peak demand energy capacity. According to Government, this auction cost UK bill payers, on average, £11 each, a cost that is expected to drop in the future.<sup>5</sup> In December 2015, the second auction leveraged a further 46GW.<sup>6</sup> FSB has questioned the extent to which the capacity market drives investment in the new and innovative technologies of the future. The majority of the Capacity Agreements awarded in 2014 were to large-scale gas (45%), coal/biomass (19%) and nuclear (16%). By contrast, the capacity market only leveraged 0.35 per cent of capacity from demand side response technologies and 5.48 per cent from storage.<sup>7</sup>

However, we welcome recent changes to Government policy that specifically promote demand side and storage technologies in the capacity market. The success of these policy changes will only be measurable as future capacity auctions are completed.

**27. Do you have any evidence to support measures that would best incentivise renewable generation, but fully account for the costs and benefits of distributed generation on a smart system?**

FSB would like to see small businesses given an increased opportunity to supply energy to the distribution network, but also the opportunity to supply directly to customers locally. As it stands, a small energy generator may only make £0.04kWh exporting locally-generated energy to the grid. However, by selling directly to a local smart grid (e.g. adjacent village/housing estate) at market rates, they could make £0.11kWh.<sup>8</sup> This would transform the viability of local energy generation without the need for public subsidy or green levy on energy bills, encouraging small businesses to invest in peak capacity beyond their own consumption.

There are a number of hurdles that need to be addressed in order to realise this microgeneration revolution:

- Amending regulations restricting the direct sale of power from any power station below 50MW would need to be amended.

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<sup>5</sup> Gov.uk website, Press Release: The first ever capacity market results have been released today, accessible at [www.gov.uk/government/news/the-first-ever-capacitymarket-auction-official-results-have-been-released-today](http://www.gov.uk/government/news/the-first-ever-capacitymarket-auction-official-results-have-been-released-today)

<sup>6</sup> National Grid, Provisional Auction Results: T-4 Capacity Auction Results for 2019/20 (2015)

<sup>7</sup> National Grid, Final Auction Results: T-4 Capacity Market Auction (2014)

<sup>8</sup> Make It Cheaper website, Business Energy Prices and Rates, accessible at [www.makeitcheaper.com/business-energy/prices-per-kwh-unit.aspx](http://www.makeitcheaper.com/business-energy/prices-per-kwh-unit.aspx)

- Establishing a light touch regulatory regime for sub-50MW retailers who would supply to local grids.
- Creating a separate category of light touch licence for community or business energy retailers selling to a defined local area with a limited number of customers.
- Developing a smart grid, with real time data available for distributed microgeneration schemes.
- Transitioning of Distribution Network Operators (DSOs) to Distribution System Operators (DSOs), responsible for managing and controlling supply and demand across their local distributed networks.

Anecdotal evidence from FSB members also suggests a lack of clarity around how DNOs manage their reserve capacity, particularly as they seek to address uncertainty about future availability related to changes in local demography. This approach can potentially distort the calculation about the level of demand in a specific area, which is particularly important in a situation where a business applies to increase its generating capacity. DNOs should work with smaller generators to provide innovative solutions to network capacity constraints and the burden of required reinforcement or upgrade costs. They should provide greater transparency around costs of non-contestable works and these costs should be broken down and explained to customers in more detail. They should highlight any areas that are contestable and open to competition, signposting small business customers to alternative providers. And they should provide real time information about available capacity, as well as committed generation. This should take account of planned re-enforcement works.

FSB urges DNOs to provide dedicated account managers to help small business microgenerators and community schemes through the process of connection. We want to see DNOs working with small generators to provide innovative solutions to network capacity constraints and the burden of required reinforcement or upgrade costs. They should facilitate microgeneration partnerships and consortia, signpost to areas of available capacity, and provide flexible contract arrangements to promote investor confidence.

Costs of non-contestable works require greater transparency and should be broken down and explained to customers in more detail. DNOs should highlight any areas that are contestable and open to competition, signposting customers to alternative providers. Information about available capacity, as well as committed generation, should be available in real time and should take account of planned re-enforcement works.

Some DNOs have already started to implement some of these ways of working and provide good templates for others. We also note that Ofgem has tasked all DNOs with developing their own enforceable Code of Practice (COP). These should be published clearly on DNO websites and should be as consistent as possible across the industry.

More broadly, there remains a lack of clarity around the division of responsibilities between DNOs, National Grid and Ofgem. This makes it difficult to identify where delays are occurring in the planning, funding and implementation of microgeneration schemes. FSB would like to see improved clarity and delineation around these roles and responsibilities. Ofgem should

examine the current role of DNOs and the potential future role of DSO in facilitating microgeneration schemes. This must include an assessment of how costs of required upgrades to the network are passed on to microgenerators. It should review the transparency and fairness of contestable and non-contestable charges, particularly with regard to variations across the country. It should also urgently review issues related to behind-the-meter generation and storage relating to data collection and fair charging, as well as management of supply and demand. It should publish a new model for charging that provides fairness for customers of all sizes during the transition to a more distributed energy system. The responsibilities of DNOs, National Grid and Ofgem with regard to planning, funding and implementation of microgeneration schemes should be clarified and where delays are occurring in these processes, these should be identified.

FSB believes DNOs should work closely with Ofgem, Government, National Grid, other DNOs, distributed generators and stakeholders to develop a system in which fully-functional DSO are responsible for balancing and controlling distributed networks. These should incentivise innovative storage, demand side and efficiency technologies to help balance supply and demand.

**40. Please provide views on what interventions might be necessary to ensure consumer protection in the following areas:**

**Social impacts**

The problem for Government and energy suppliers attempting to persuade small businesses to invest in efficiency and demand management is that they represent an extremely diverse group with very varied pressures and motivations. Yet, time and time again, the tactics for engaging with the small business community across a range of energy issues – efficiency, switching, smart meters etc. – rarely involve any meaningful segmentation or sub-division of this audience into more homogeneous groups.

FSB has argued that energy suppliers must improve their understanding and segmentation of their diverse small business customer base so that their energy needs can be targeted in a more focused, bespoke way. This will help to tailor their customer offers related to energy costs, contracts, efficiency support, innovation, products and services. For instance:

- Are they home-based or do they operate from bespoke business premises?
- Are they the landlord or the tenant?
- Are they sole traders, microbusinesses, or larger employers?
- Are they vulnerable, start-ups or well-established?
- Are they intensive energy users?
- Are they asset rich or cash rich?
- Is their business expanding or contracting?
- Do they have access to available capital?

The decision-making processes are entirely different for, say, a processing plant, a hair salon, an accountancy firm and a mechanic. So, a one-size-fits-all approach to promoting efficiency and demand response simply will not work.

The small business market must be segmented. However, gaining information about small businesses is extremely challenging. They are, by their nature, an extremely difficult audience with which to engage.

FSB has been keen to explore the factors that prevent or promote the implementation of energy saving measures by small businesses. FSB research from 2015 discovered that the vast majority of FSB small businesses (90%) said they wanted to be energy efficient and acknowledged the direct benefits of energy efficiency (86%). Figure nine shows that the majority of FSB small businesses thought energy efficiency was important for saving money (78%), protecting the environment (70%) and increasing profits (67%).

There is no silver bullet for engaging small businesses on energy efficiency and management. There is a clear need for market segmentation. A business that is not concerned about its energy bills may not be motivated by the potential for cost savings, but may be motivated by other factors – such as environmental responsibility, profit margins and attractiveness to customers. Likewise, although access to finance may not be the most widely reported barrier for most small businesses, it could still be a deal-breaker for those that it does impact. It is also worth bearing in mind that access to finance may not be widely regarded as a major barrier to energy efficiency, simply because most businesses have never reached the point where they would be seeking it. This is because other hurdles, like tenancy issues, would be failed at an earlier stage.

### **Informed consumers / preventing abuses**

Although FSB welcomes the CMA's decision to introduce published, comparable tariffs for small businesses in the non-domestic energy retail market, this does not eradicate the need for the services provided by external brokers or TPIs. TPIs can play an important role in helping businesses secure the best possible energy deals. But, as the energy landscape changes, the value for money that small businesses associate with their own personal energy deals will increasingly depend on the wider opportunities that come with them. The role of a TPI will become even more important as energy bills increasingly include costs associated with additional products and services, such as energy efficiency advice, renewable-sourced energy and smart technology.

Currently, the TPI industry covers a huge variety of different individuals and organisations providing many different services – ranging from the unscrupulous to the excellent. FSB members continue to have very mixed experiences in this market, so it is critical to have a transparent, regulated TPI industry. FSB supports the introduction of a regulated TPI industry, one which builds trust by promoting the good and excluding the bad. Before the CMA investigation into the energy market, FSB supported in the development of a draft code of practice for non-domestic TPIs, setting out customer engagement standards (professional and honest behaviour, transparency of information and effective monitoring). Ultimately,

the regulation of the TPI industry was not directly addressed by the CMA. However, they did formally acknowledge the problem:

*"TPIs have the potential to help customers engage with energy markets and reach good outcomes. However, this may be undermined if customers do not trust TPIs. FSB evidence suggests that there have been long-standing concerns about the conduct of a minority of TPIs; that some TPIs may not offer customers the best tariffs for the customer; and that customers lack information about how they pay for TPIs' services. These issues may not apply to all TPIs, but they may affect customer perception of all TPIs. This may deter the use of TPIs and form a barrier to higher levels of engagement."<sup>9</sup>*

Despite failing to address the TPI regulation issue directly, the CMA did acknowledge the work that Ofgem had begun in 2013 to explore a workable regulatory framework, essentially pushing this problem back to the regulator to deal with:<sup>10</sup>

*"Due to concerns about poor customer experience of using TPIs and the potential negative impact on future engagement that this may have, has developed a draft code of practice for non-domestic TPIs. The purpose is to build consumer trust and confidence when using TPIs. The draft code of practice sets out standards for TPIs when dealing with customers, such as: including clearer information, fair marketing tactics and effective monitoring and complaints redress."*

Ofgem should now urgently work to finalise proposals for a regulated TPI market, in consultation with industry representatives, energy suppliers and consumer groups.

Alongside a regulated TPI sector, FSB also wants to see increased scrutiny around the system for giving consent for trusted TPIs to operate on behalf of their clients, specifically Letters of Authority (LOAs). Good TPIs have a valuable role to play in the energy market, yet there is evidence that LOAs received by some suppliers are not being dealt with adequately, leading to unnecessary delays for potential switchers. This is a key barrier to engagement. If businesses cannot get access to information about their contract and consumption, it leaves them in a poor position to exploit their own data and make informed choices around their energy use.

Recent research carried out by Make It Cheaper looked into the reasons why so many SMEs are disengaged from the energy buying process and tested the hypothesis that more would switch if there was a service to which they could delegate their authority and which adheres to their preferences. Make It Cheaper conducted research in November 2016 among small business owners, including FSB members. Qualitative and quantitative data gathered from an online survey of 300 businesses and two focus groups, found the following:<sup>11</sup>

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<sup>9</sup> CMA, Energy Market Investigation Final Report, Appendix 16.1: Microbusinesses (2016)

<sup>10</sup> Ofgem website, Third Party Intermediaries (TPI) Programme working group, accessible at [www.ofgem.gov.uk/gas/retail-market/forums-seminars-and-working-groups/third-party-intermediaries-tpi-programme-working-group](http://www.ofgem.gov.uk/gas/retail-market/forums-seminars-and-working-groups/third-party-intermediaries-tpi-programme-working-group)

<sup>11</sup> Make It Cheaper, Switching On Small Businesses (2016)

- SMEs are less likely to tackle business energy costs than many other overheads, such as insurance, telecoms, rent and even their own household utilities.
- Among regular switchers, having someone they trust to take care of it for them is the number one driver for engagement in the market.
- An overwhelming majority (92%) expect their supplier to provide switching information to a third party operating on their behalf via a Letter of Authority (LOA).

Finally, participants were provided with various suggestions to promote market engagement and asked to score each between 0 (highly unfavourable) and 10 (highly favourable). By far the most popular choice – scoring an average of 8.2 (or 82%) – was a ‘Do it for you’ service which simply delegated authority to a trusted third party to take care of renewals.

#### **45. With regard to the need for immediate action:**

##### **a) Do you agree with the proposed roles of DSOs and the need for increased coordination between DSOs, the SO and TOs in delivering efficient network planning and local/system-wide use of resources?**

DNOs are responsible for ensuring customers are provided with adequate infrastructure to meet their energy needs. The cost of managing and maintaining this infrastructure is passed on to consumers via their energy bills. According to Ofgem, network costs are the second biggest costs associated with energy bills (after wholesale costs), accounting for between 20 and 25 per cent of the overall bill.<sup>12</sup>

DNOs assess whether there is a need to reinforce the National Electricity Transmission System (NETS) as a result of any new microgeneration scheme being connected – the Statement of Works (SOW).<sup>13</sup> Though each individual microgeneration scheme may have a negligible impact on the transmission system on its own, the combined impact of these schemes needs to be managed. This may lead DNOs to impose conditions and constraints on microgeneration schemes. As the UK increasingly moves from transmission-level to distribution-level generation, it will be even more important for DNOs to understand how and where energy is being consumed and generated across the networks they manage.

National Grid must boost opportunities for distribution level interconnection to enable greater potential for sharing and managing demand and supply between DNOs and, in future, DSOs. A major stumbling block in this regard is behind-the-meter generation and storage. This type of technology provides only black box information to energy suppliers and DNOs taken from meter readings. In reality, a whole sub-system of generation, usage and storage is happening behind the meter at particular sites. Currently, the charging scheme for electricity is based on a number of parameters, including how much a customer

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<sup>12</sup> Ofgem website, Understand your gas and electricity bills, accessible at [www.ofgem.gov.uk/consumers/household-gas-and-electricity-guide/understand-your-gas-and-electricity-bills](http://www.ofgem.gov.uk/consumers/household-gas-and-electricity-guide/understand-your-gas-and-electricity-bills)

<sup>13</sup> National Grid, Small Embedded Generation (2011)

consumes, how much they generate and how much they store. In addition, these costs vary depending on the time of day that these activities take place. None of this information is provided in a meter reading for behind-the-meter technologies. This potentially has a major impact on those who rely on the more traditional model of paying for energy and infrastructure through their metered usage.

The decision to holistically manage on-site energy in this way and operate more off-grid is to be applauded. However, from a cost-benefit point of view, this tends to be an option reserved for larger and more energy-intensive industries, at least under current market arrangements. As more industries move to this kind of approach, there is a risk that charges related to the maintenance and improvement of energy infrastructure will be disproportionately passed on to smaller users who do not have the same opportunity to avoid these costs. We acknowledge that Ofgem are reviewing this issue at the moment and it is imperative that they come up with a new model for charging that provides fairness for customers of all sizes during the transition to a more distributed energy system.<sup>14</sup>

**c) Are there any legal or regulatory barriers (e.g. including appropriate incentives), to the immediate actions we identify as necessary? If so, please state and prioritise them.**

FSB recognises the recent findings of the Energy and Climate Change Select Committee – Low Carbon Network Infrastructure (June 2016) – which found a number of potential barriers to distributed energy generation, including:<sup>15</sup>

**Rapid scale-up:** The rapid increase in the number of local connection requests from new types of power generation has strained the ability of DNOs to connect distributed generation. Applications can take many weeks. Outcomes can be uncertain and slow decisions around agreed capacity can delay design work.

**Lack of capacity:** Existing rules disadvantage customers who trigger a major reinforcement scheme. Currently, if a connection request would overload the local substation, then that business would have to fund the entire upgrade cost of that substation. 'Anticipatory investment' – work to meet expected future capacity – can potentially reduce such problems before they arise. Anticipatory investment can speed up distributed generation connections but, if miscalculated, could also create stranded assets at bill-payer expense. Up-to-date modelling will minimise this risk.

**Lack of standardisation:** Standardisation of processes and expectations can be difficult as different DNOs operate in different types of locations, with different types of network.

**Planning consent:** Planning consents can be difficult for some of the physical infrastructure associated with distributed generation. In addition, planning consent for connections lies

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<sup>14</sup> Ofgem, Open Letter: Charging Arrangements for Embedded Generation (2016)

<sup>15</sup> House of Commons Energy and Climate Change Committee, Low Carbon Infrastructure (2016)

with local and national authorities, whereas grid-connection processes are in the hands of the network companies. This lack of integration can potentially delay connections.

**Queue blockers:** DNOs are required to offer connections on a first-come-first-served basis, regardless of the relative merits, or potential for success, of the schemes applying. There are currently no up-front application fees related to connection requests and, therefore, little to lose by applying. Some believe that the balance has shifted too far towards encouraging speculative applications (with lower chances of success), thereby delaying more serious applications. Others are wary that introducing fees may deter bone fide applications.

**Connection and Network costs:** Microgenerators wishing to connect to the network must pay Distribution Use of System (DUoS) charges. Network costs and connection costs vary across the UK and there is a lack of transparency around the level at which they are set.

I hope this helps to adequately clarify FSB's position. If you would like any further information or input from FSB, please contact our energy and environment policy advisor, Andrew Poole, at [andrew.poole@fsb.org.uk](mailto:andrew.poole@fsb.org.uk).

Yours faithfully,



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