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CREDS & UKERC response to: BEIS - Energy efficiency scheme for small and medium sized businesses: A call for evidence

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UKERC / CREDS Consultation 030 | May 2019

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General comments on the Call for Evidence

We welcome the idea of offering more policy support to SMEs to enable them to take up more energy efficiency opportunities, to the benefit of their enterprises, the economy as a whole and the environment. Researchers have previously argued that there is not enough policy focus on SMEs (Banks et al, 2012, Hampton and Fawcett, 2017) and this consultation is valuable as part of a wider process of policy development.

This response covers general issues about design of policy for energy efficiency improvement in SMEs, and offers specific evidence on Option 2: a business energy efficiency obligation. We take the view that there is not enough information on the scale and scope of the proposed scheme to come down strongly in favour of Option 1, 2 or 3. However, we note that Option 2 has a strong and successful record across many countries, and there is considerable well-documented evidence on how and why Energy Efficiency Obligation policies for business can work.

The consultation document notes that SMEs are very diverse in sector, size, energy end uses and in terms of efficiency opportunities. There might be efficiency savings available from building retrofit, specialist energy end-uses, energy management and control systems, behaviours and energy-related practices, and management of business processes. Some efficiency options, which require capital investment and changes to the building fabric or building management systems, are only open to landlords or building owners, not to the many SMEs who are tenants. Many smaller SMEs do not operate in specific business premises – they operate from home, or in clients' premises (e.g. builders, mobile hairdressers). For policy designers, the conclusion from acknowledging this diversity should be that one SME energy efficiency scheme will not be suitable for all SMEs.

Before deciding which energy efficiency policy instrument to develop further, we suggest that BEIS think carefully about which segment of SMEs it is intended to influence. There are number of different possible approaches to SME segmentation, including: size of organisation; sector; location; business strategy; building type; building tenancy; technology; problem-focussed (e.g. a focus on reducing urban air pollution); data availability; practices; determinants of behaviour (Hampton and Fawcett, 2017). Some of these segmentation approaches are easier to write into policy design than others.

Aligned to segmentation, is the issue of scale. The consultation document does not mention the scale of savings expected, or the time scale over which it might operate. These factors are also pertinent to design of the scheme.

The consultation document does not specify the sorts of energy efficiency improvements which would be in scope for the scheme. The implication is that this scheme is designed to cover investment in energy efficiency end-use equipment, or building efficiency measures.

There is no mention of improved management of working practices, buildings or business processes, which could save energy without major capital investment. These can be an important source of energy savings. Similarly, there is no mention of fuel switching, or of considering how integrating electricity use flexibility into business decisions could deliver cost savings (and carbon savings across the electricity system as a whole). These routes to carbon and energy saving are also important and often have synergies with capital investments. While the schemes suggested cannot cover all opportunities, the government's overall approach to SME policy should acknowledge the different types of opportunity available.

The consultation document suggests the options included are based on IEA's three core components for successful energy efficiency programmes. Two of these focus on who is delivering the energy efficiency advice / measures: "SMEs need information tailored to their specific needs and delivered in a convenient form from a trusted source", "programmes should … aim to build the capacity of energy consultants…". Surprisingly, there is no mention in the consultation document of existing networks of energy advisors, such as those funded via ERDF, programmes managed by LEPs, the Energy Saving Trust, the Carbon Trust. Whichever policy instrument is chosen, for it to be effective, there needs to be consideration of who can deliver the expert advice and assessments needed. Using existing experts and networks as a starting point would seem to be a good idea.

We welcome the statement that each option should increase the salience of energy efficiency among SMEs. Mallaburn (2018) works through in detail what it might mean to take salience seriously as a principle informing policy-making for energy efficiency in organisations. To pick out some key points:

- policy needs to differentiate both between organisations and sectors and to support investments as they move along the decision-making process;
- government needs to understand how salience drivers (internal and external factors influencing decision-making, and how decisions are framed) vary between target organisations and sectors, and to segment policies accordingly;
- the most effective policy will often be some degree of regulation, especially if it is carefully planned and has the support of industry;
- piloting – 'learning by doing' – is important to build capacity and market expertise in government and to build confidence in the target organisations and sectors.

Answers to specific questions

Q5: What are the pros and cons of implementing a new business ECO?

There is good quality evidence, from the EU and beyond, that well-designed Energy Efficiency Obligation schemes (EEOS) can deliver significant, cost-effective energy savings over many years (Fawcett et al, 2018). The evidence base for the social and economic value of EEOS is

strong and growing (e.g. Labanca and Bertoldi, 2016; Rosenow and Bayer, 2017). In summary, there is a long policy history within the EU and beyond of Energy Efficiency Obligation schemes which apply to the business sector. Although none of them is specifically designed for SMEs, SMEs are generally within scope and have responded to the policy. With careful detailed design, an EEOS should successfully deliver energy and carbon savings from SMEs.

Initially SMEs were included in the GB EEOS; suppliers were allowed to raise money from a charge on residential and small and medium enterprise (SME) customer bills and had to use this to meet energy savings targets. SMEs were no longer included in the scheme from 2002 and subsequently it has covered the residential sector only. The UK is only EU country to restrict its EEOS to this single sector.

Q6. What are the relative merits of placing the obligation on suppliers, network operators, generators or other bodies?

Different schemes across the world have chosen to put the obligation on each of these bodies, and sometimes on more than one. Analysis suggests that success is not determined by who the obligated party is, the way the targets are set, the sectors across which it operates, the degree of tradability of savings – which have varied between countries. Factors that successful schemes have in common are: (1) beginning with modest levels of savings; (2) increasing in ambition level over time; (3) learning from early phases and re-designing the EEOS to be more efficient and effective; and (4) consistently evaluating the performance of the EEOS and having an independent authority to check them and be ready to implement sanctions if savings are not delivered (Fawcett et al, 2018). Thus, the evidence would suggest the scheme can be successful whoever the obligated body.

Experience in the UK and elsewhere is that placing the obligation on suppliers has not turned them into ESCOs (as was the original hope) – so arguments about how an obligation affects the obligated party are not relevant here.

Q7. What models of EEOs would minimise costs while delivering efficiencies?

Rosenow and Bayer (2017) analyse in some detail different costs and benefits of five European EEOS. They classify costs as: programme costs; societal costs; administrative costs; start-up costs. They classify benefits as: participant benefits; utility benefits; societal benefits. The costs to the obligated company per kWh of energy saved in Europe is around 0.4–1.1 Eurocents, which is significantly less than the cost of energy supplied to the customer. Data on the societal cost are scarce. Assuming leverage ratios of 2–3 the societal costs of EEOS in Europe appear to be less than 3 Eurocents / kWh lifetime savings, which is substantially less than the cost of supplied energy. EEOS also deliver a wide range of other benefits in addition to reduced energy consumption and bill savings accruing to participants, but also the energy system and society as a whole. This includes health benefits, increased comfort, economic

stimulus, employment creation, cost savings in transmission and distribution, avoided CO_2 allowance costs, and air quality improvements.

Given this evidence, maximising the benefits which can be delivered at zero net cost to society, is a more appropriate focus than trying to minimise cost.

Q8. A number of countries operate EEOs, what can we learn from their experiences?

A great deal of detailed information is available on existing and planned schemes in the EU and beyond in the various reports of the ENSPOL project (http://enspol.eu). The project included international workshops between government departments, regulators and industry bodies – including involvement from DECC – during which detailed learning between countries occurred. Other international comparisons are given in other papers and reports listed in the references, and in the wider literature.

Q14: Do you have an alternative model for the business energy efficiency scheme that we should consider?

The suggestions are based on salience principle – as noted above – which calls for segmentation, good understanding of the sectors, use of regulation, piloting of policies. We also suggest making use of existing skills, networks and institutions. Suggestions are briefly noted below, rather than being described in full. Each would work best with particular segments of SMEs, and are not intended to apply to all businesses.

Additional ideas

- For local delivery of energy efficiency advice and information, the service from SME advice networks could be developed further. The effectiveness of the existing network of advisors could be improved by enabling them to engage with small business owners around their values and the environment (Hampton, 2018).
- Focusing on the commercial building sector, the UK could learn from the NABERS property labelling scheme which has been very effective in Australia (Mallaburn, 2018). Work is underway looking at translating this initiative to the UK context and property market, with further research work expected later this year.
- Learning Energy Efficiency Networks (LEEN) are a successful policy which was first implemented in Switzerland, and then transferred to Germany. The LEEN concept has focussed on companies with annual energy expenditure of more than half a million Euros, and has been developed largely for industrial firms (Dütschke et al, 2018). It is worth exploring whether a version of this idea would work for larger, non-industrial SMEs.

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http://enspol.eu – for a range of detailed reports on individual countries' EEO schemes, within the EU and beyond.

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