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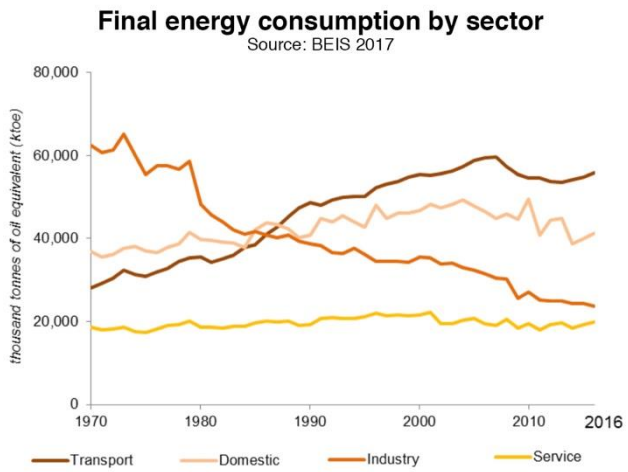
SMEs and Energy Workshop

meeting note

On June 4th 2018 over 30 energy and business experts met at Keble College to discuss the role of small and medium enterprises (SMEs) in the transition to a low carbon economy. The day aimed to bring researchers from the energy, policy and business studies communities together to share knowledge, identify knowledge and policy gaps, and lay a foundation for future research in the field.

Setting the context

SMEs consume more than 13% of the world's energy, yet their relationship with energy and the environment is relatively understudied. They are also rarely the subject of government policy, dismissed for being 'too difficult' to reach or out of concerns for creating 'red tape' that may limit economic growth. Given that the UK has committed to an 80% reduction in carbon emissions by 2050, it is important that this community is engaged with and researched in far greater detail. While SMEs are mainly understood as consumers of energy, they also play a role as innovators, and providers of services and products which influence others' energy use. As the graph below shows, while industrial energy use has declined in recent decades, services have remained broadly stable, which includes the energy use of many SMEs.



What we know about SMEs & energy

In what would become a common theme in the discussion, several presentations highlighted the diversity which exists within SMEs in terms of size, sector and values. While a little is known about energy use of SMEs on a macro scale, more stratified knowledge is lacking. One participant commented accurately that "this is a research area defined by what we don't know more than what we do".

SMEs and energy efficiency

While energy efficiency is often described as a 'free lunch', SMEs systematically underinvest in energy efficiency. In order to understand why this is, researchers must look beyond returns on investment and more towards the attitudes, values and social norms of individuals within the businesses. One concept introduced to the workshop participants was that investments in energy efficiency needed to be 'salient' with business owners to in order to be implemented. This means that they must be presented in terms of the multiple benefits which they bring about, not just for having a short payback period. While success stories are rare, the NABERS energy labelling program in Australia was mentioned as an SME oriented energy efficiency policy which has been effective at improving the efficiency of

commercial buildings as well as increasing productivity and asset values.

SMEs in the retail energy market

SMEs remain mostly unengaged in the retail energy market and are less protected by regulation than domestic consumers. The SMEs who do interact with the market tend to do so through third party intermediaries, of which there are over 1300 in the UK. These brokers are currently unregulated, notwithstanding weak protections under the Misleading Marketing Regulations. Evidence indicates that one of the CMA's chosen remedies to increase switching, a database of unengaged SMEs to be given to intermediaries, may be unpopular with businesses, many of whom have a negative opinion of brokers. The regulator may also be missing many SMEs in their analysis as OFGEM only look at SMEs with non-domestic supply contracts, which eliminates around 50% who have domestic contracts or where a landlord deals with energy.

Policies to engage SMEs

Innovative policy measures were discussed which have the potential to increase engagement with SMEs, such as energy efficiency networks, peer to peer support, 'scores on the doors' for energy efficiency and greater engagement by local and regional government. Delegates also heard about several promising policies which have the potential to be important for SMEs such as the smart meter rollout and the Non-domestic Smart Energy Management Innovation Competition run by BEIS.

Helping SMEs make better decisions

Some of the government support for SMEs is channelled through Local Enterprise Partnerships, who are now interested in not just growth but what type of growth happens in the local economy. However, there is variation in the ways in which LEPs integrate energy efficiency into their policies. Research from the Environmental Change Institute shows that it's hard for these organisations to engage with SMEs on energy. While calculating payback times and return on investments is important, it's the 'soft stuff' that's harder, including talking to business owners about their values and ethics. Policy should focus as much on the people in the business as the building the business occupies. Research was also presented which highlighted the value of engaging SMEs' employees around their everyday practices and routines, instead of focusing purely on investment decisions by senior management.

Concluding thoughts

Despite the diversity of SMEs and the lack of current research, attendees agreed that there are many fruitful areas for future research and collaboration. Much of the discussion focused on SME heterogeneity, which presents both challenges and opportunities. For example, many SMEs do not prioritise growth, and as such they may be a role model for the wider economy if it is to develop sustainably.

We need to break the link between growth and consumption, and explore the role of SMEs in a globalised world where emissions can be moved offshore.

Research and policy agenda	Gap in knowledge	Ways forward
Policy for a segmented market	• Currently SMEs are only differentiated by size. Other factors also need to be understood including geography, values, building occupancy, access to data, energy consumption and levels of flexibility in energy use. • Understanding organisational energy cultures, including the different agendas and information needs of actors within organisations	• Values based approach to SME engagement • Explore novel ways of categorising SMEs, e.g. by the knowledge intensity of their work.
Improving data on SMEs	• Need for disaggregated and segmented industry and energy data • Difficult to pitch scale of problems, and benefits of potential solutions, to policymakers. • Need better data on energy use to allow engagement with DSR.	• Smart meters to allow greater knowledge of energy usage, but issues of privacy need to be considered • Co-creation of research alongside SMEs or trade associations.
Understanding decision-making in SMEs	• Companies only undertake 30-40% of cost effective measures, need to understand how that can be increased. • What will be the role of smart technologies to engage, e.g. through smart meters? • What are the priorities for SMEs? • Working *with* SMEs rather than trying to tell them what they should be doing.	• Learning from other successful policies e.g. energy efficiency networks and peer support. • Greater engagement at municipal level • Understand values and practices of businesses
Interdisciplinary research	• Assumptions about economic rationality of decision making need to be challenged. • There is potential for social science to complement data analysis, especially with smart meters providing a new source of data.	• Greater interdisciplinary research and knowledge sharing.

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