Written evidence submitted by Smart Energy GB (SMB03)

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1. Summary

Smart Energy GB is the national consumer engagement body supporting the smart meter rollout. It's our task to help everyone in Great Britain understand smart meters, the national rollout and how to use their new meters to get their gas and electricity under control. Our role, as defined in law, within the overall smart metering rollout is set out in figure 1 in section 2 of this paper.

Smart meters are a vital technology providing the platform for a smarter energy grid, and there is much evidence to show how they are already helping consumers become better engaged in their energy usage. Smart meters are critical to the digitisation of the GB energy sector (which is the last major remaining analogue retail sector) and as such are critical to the future reliability and sustainability of energy supply in Britain.

As the organisation leading consumer engagement to support this national rollout, we recognise the necessity of maintaining the Secretary of State's existing powers relating to smart metering policy to 2023. This will enable government and all the parties involved in the rollout to work within a framework to enable the benefits of the rollout to be fully realised further into the period covered by the cost benefit analysis.

We also recognise the important role of a precautionary special administration regime for the national smart meter communication and data service provider.

2. About Smart Energy GB

Following the initiation of the smart metering rollout by government, Smart Energy GB was established in recognition of the benefits in terms of efficiency and effectiveness for the public education and engagement campaign on the benefits of smart meters to be delivered by a single national body. Our status, aims and structure are defined in law (via secondary legislation, in the *Modifications to the Standard Conditions of Electricity & Gas Supply, Electricity Distribution and Gas Transporter Licences*; laid in Parliament on 13 December 2012).

Smart Energy GB was established in 2013 as an independent, not-for-profit company and governed by a non-executive board. This is made up of representatives from consumer organisations and the energy industry, as well as observers from government, Ofgem and the energy networks. The independent non-executive chair of the board is Mark Lund OBE and the executive team is led by Chief Executive, Sacha Deshmukh.

We publish our *Consumer Engagement Plan and Annual Budget* each year on our website, alongside our *Annual Report*.[1]

Our role, alongside that of the energy suppliers who are responsible for delivering smart meter installations, in the smart meter consumer journey was defined by government.

Figure 1 below illustrates the split of these responsibilities.

Figure 1: Role of Smart Energy GB and the energy suppliers in the consumer journey

Predominantly Smart Energy GB

Energy suppliers (Smart Energy GB is not responsible for installation)

Smart Energy GB and energy suppliers

3. Responsibility for setting Smart Energy GB's targets

The scale of our activity in any year is determined by the targets that we are tasked with achieving. The legal responsibility for setting our targets for any year (and scrutinising our performance against them) rests with Relevant Energy Suppliers (i.e. the group of energy suppliers with over 250,000 domestic customers).

They set out our targets in a structure called the Performance Management Framework (PMF).

The group of Relevant Suppliers who set out targets meet in the PMF forum, independently chaired by Maxine Frerk who is a former Director and Partner from Ofgem.

Since our launch in 2014, the strong performance of our campaign has been recognised by independent evaluation of our activity.

We have consistently met, and often exceeded the targets set by the PMF forum. Full details of our performance against our targets are contained in our annual reports, which are published on our website.

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[1] Latest publications available for Smart Energy GB here https://www.smartenergygb.org/en/about-us/essential-documents

4. The customer activation funnel in the smart meter rollout and the scale of our task

In early summer 2017, the PMF forum undertook an analysis of the operation of the "customer activation funnel" across the smart meter rollout. What is meant by the "customer activation funnel" is set out below in figure 2. The analysis included one of the most detailed data gathering exercises to date of the current operation across energy suppliers of the customer funnel for activation (i.e. the journey from customers being enthusiastic to seek or accept a smart meter, through their discussions with their energy supplier to book their installation, through to the completion of that installation).

Reflecting the complexity and comprehensiveness of this analysis, it was conducted by a joint research team that brought together the mixture of skills needed to properly examine the information and data; this team was drawn from research agencies Populus, Hall & Partners and Annalect.

Energy suppliers, amounting to over 90 per cent of the domestic energy supply market, responded to the PMF forum's consultation data request for this analysis (the analysts modelled up to 100 per cent of the market by assuming that the remaining suppliers would have provided similar responses to the smaller suppliers who responded to the consultation).

Figure 2: the principle of the customer activation funnel in the Great Britain smart meter rollout
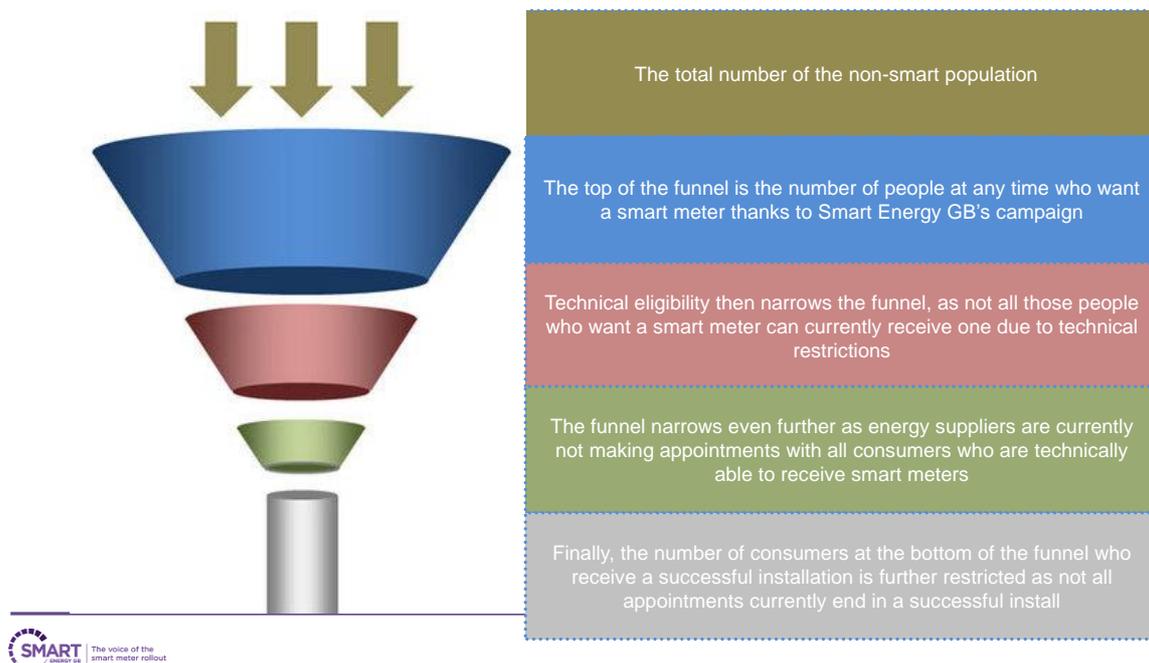
4.1 Ensuring that Smart Energy GB is delivering against the strongest possible task at the top of the funnel

In order to ensure that Smart Energy GB is targeted to achieve the strongest possible metric of consumer enthusiasm to get smart meters (i.e. a metric that most strongly correlates to real action to get a smart meter), the PMF forum considered research which analysed attitudinal data from consumers who had taken up smart meters, or who had sought a smart meter installation from their energy supplier but who may not yet have received their

installation. This research was conducted by Populus and Hall & Partners, and was conducted with a sample of 992 consumers.

Through this research, Populus and Hall & Partners established the strongest metric relating to consumer activation (i.e. that has been shown by research to have the hardest correlation to actual seeking and/or acceptance of smart meter action on the part of consumers.)

This is that a consumer states that they wish to **seek or accept a smart meter in the next six months.**
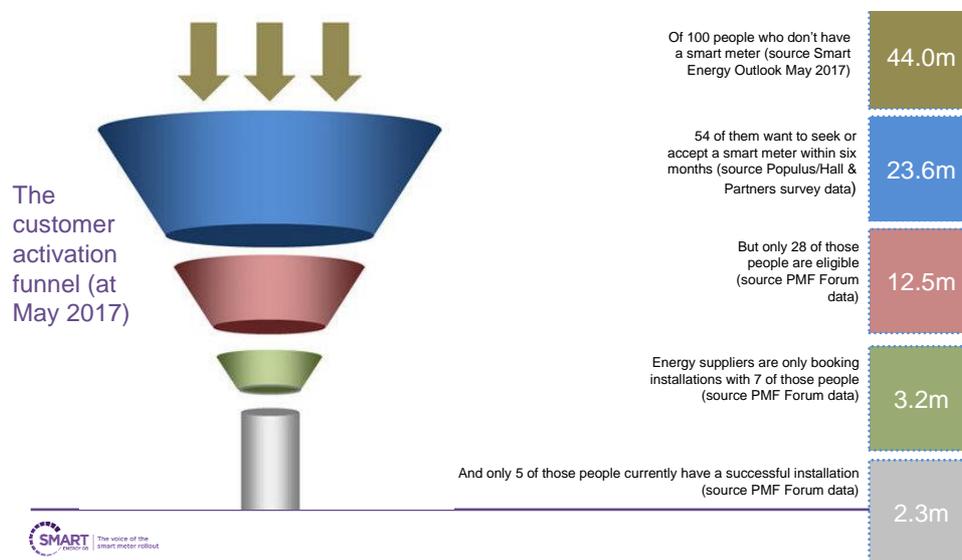
As such, the PMF forum has been able to conclude that the measure of how many non-smart consumers state that they would **'seek or accept smart meters within six months'** should be the key activation PMF metric for Smart Energy GB at the top of the funnel.

4.2 The operation of the customer activation funnel in 2017

The PMF forum's data analysis conducted in summer 2017 showed a comprehensive view of how the customer activation funnel is working across the rollout.

That analysis found that due to challenges through the funnel in service delivery by energy suppliers, (due to issues such as technical eligibility and energy supplier readiness to book and deliver installs) in 2017 Smart Energy GB has had to generate just over **ten** consumers who want a smart meter at the top of the funnel (based on the hard metric that the customer is reporting that they want to seek/accept a smart meter in the next six months) for every **one** installation that energy suppliers are able to complete at the bottom of the funnel.

Figure 3: Pan-supplier customer funnel (at May 2017)

The customer activation funnel (at May 2017)

Of 100 people who don't have a smart meter (source Smart Energy Outlook May 2017) — 44.0m

54 of them want to seek or accept a smart meter within six months (source Populus/Hall & Partners survey data) — 23.6m

But only 28 of those people are eligible (source PMF Forum data) — 12.5m

Energy suppliers are only booking installations with 7 of those people (source PMF Forum data) — 3.2m

And only 5 of those people currently have a successful installation (source PMF Forum data) — 2.3m
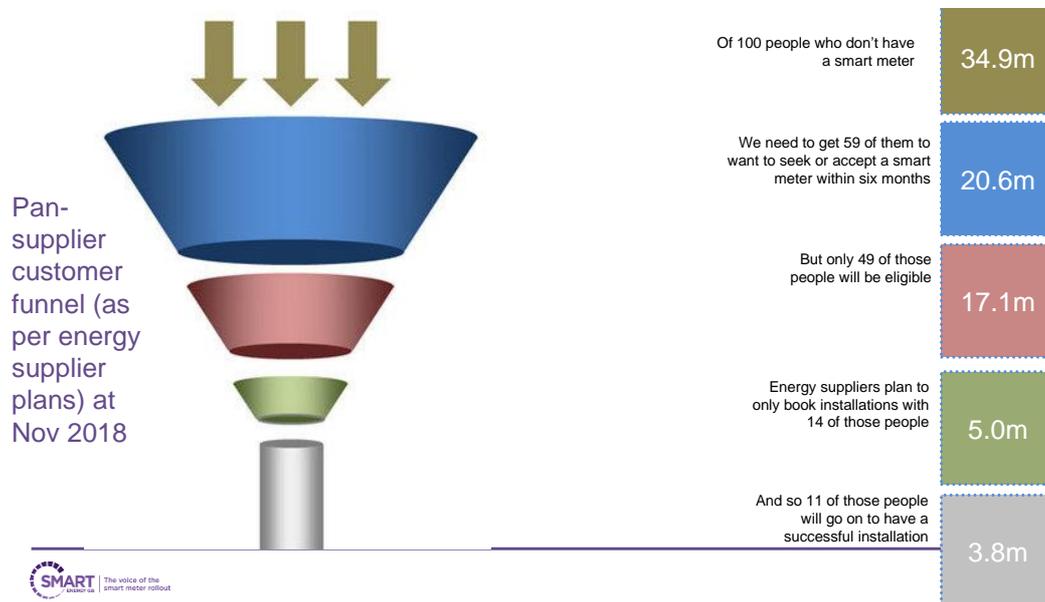
In 2018, as SMETS 2 meter rollout ramps up, and energy suppliers improve their own installation booking and installation rates, the customer activation funnel is predicted by energy suppliers in the PMF forum to become more efficient.

So, the PMF forum's analysis showed that in H2 2018 Smart Energy GB will need to generate **5.5** consumers who want a smart meter for every **one** installation that energy suppliers plan to complete.

However, with a larger number of installations planned by energy suppliers, this means that Smart Energy GB will need to create a larger pool of consumers who want smart meters through 2018 than this year (23.5m consumers in total).

Figure 4: Pan-supplier customer funnel (as per energy supplier plans) November 2018

Pan-supplier customer funnel (as per energy supplier plans) at Nov 2018

Of 100 people who don't have a smart meter — 34.9m

We need to get 59 of them to want to seek or accept a smart meter within six months — 20.6m

But only 49 of those people will be eligible — 17.1m

Energy suppliers plan to only book installations with 14 of those people — 5.0m

And so 11 of those people will go on to have a successful installation — 3.8m

5. Delivering our campaign

5.1 Value for money

To ensure value for money in all our work, the Smart Energy GB board apply the National Audit Office's Value for Money model as the model of decision making in Smart Energy GB.

In practice, this has meant using the following principles in delivering the campaign:

- Always applying an 'exceptional' approach to support the selection of channels that are the best value for money:
  - Channels must produce a guaranteed reach and frequency and acceptable control of message
  - Channels with the lowest cost per impact must be considered first
  - A channel with a higher cost per impact cannot be considered before more cost-effective alternatives have been discounted
- Maximising the use of assets we create for the campaign
- Delivering pro-active PR with executions with a strong Return On Investment (ROI) of costs per impression, and using these ROI measures to judge plans through the year
- Using marketing partnerships to actively engage key audiences who need additional support

5.2 National campaign highlights in 2017

Our national campaign is now recognised by 2 in 3 people in Great Britain and is a multi-channel campaign.

Our campaign is spearheaded by 'Gaz & Leccy' who bring to life what consumers told us about their experience buying energy today – that it is out of control, but highlight how smart meters can transform the consumer experience.

Our communications approach is built on insight, best practice in consumer engagement campaigns and with the advice of leading experts. This included the running of two consultations on important strategic areas, *Smart energy for business*[2] and *Smart energy for all*[3]; the results of which helped to define our approach to microbusiness audiences and domestic audiences with additional support needs respectively.

We also commission the largest single public attitudes tracker on energy and smart meters, published twice a year (called *Smart energy outlook*, conducted by Populus with a 10,000 person sample), as well as a range of other ongoing research and analysis to inform our campaign.

To support accessibility, we have produced advertising and educational films in five of the languages most commonly spoken in Great Britain by those who speak little or no English or Welsh. In order to reach every household, we work in partnership to deliver the campaign. Our partnerships are targeted to activate particular audiences who need more support in engaging with the new technology. To date we have partnered with a range of partners including Age UK, Post Office, PayPoint, National Housing Federation, Scottish Housing Federation and Community Housing Cymru; amongst others.

Our *Smart Energy GB in Communities* programme (managed together with National Energy Action, Energy Action Scotland and the Charities Aid Foundation) is helping us to engage people at a local level through training and local grants.

Last year we put in place the infrastructure to support the dissemination of advice about smart meters to a broad audience. We trained 439 people in 239 organisations including at least one person in every local Citizens Advice. This year we have continued to build this advisory capacity and will train another 180 advisers who specialise in support to harder to engage communities by the end of the year.

We are also supporting behaviour change through our campaign and last year published our approach to behaviour change in *A smart route to change.*[4] As an example of delivery in this area, in this year we have piloted resources for use by primary school teachers to incorporate the importance of smarter energy use in the home in the school curriculum. These assets are now available to all schools in Britain to use.

Finally, through our *Smart Energy Employers* programme we bring business into our campaign, engaging their support in talking to their workforce about smart meters and supporting those employees in their decision to take up smart meters in their homes. To date organisations that have worked with include Hilton Hotels, Edinburgh University, NHS Employers, Adnams and Transport for London.

6. How smart meters are helping people to take control of their energy use

Smart meters are already bringing about a revolution in the experience of the energy market for consumers across Great Britain. With nearly 8 million gas and electricity meters installed by energy suppliers, the smart meter rollout is already improving the experience of buying

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[2] Smart Energy GB (2015) *Smart energy for business*
[3] Smart Energy GB (2015) *Smart energy for all*
[4] Smart Energy GB (2016) *A smart route to change*

and using energy for millions of households. Smart Energy GB research has found that 82 per cent of smart meter users now have a better understanding of their energy use.

Smart meters bring an end to estimated bills, and provide real-time information on energy usage in pounds and pence. This information is helping people to understand their energy usage and cut down on energy waste, with 86 per cent of people making energy saving changes to their behaviour.

6.1 Smart prepay

Smart meters bring a particular set of benefits for pre-payment customers with 'smart prepay', including new, more convenient ways to top up, easier switching between payment methods and cheaper tariffs. This is a huge improvement for those currently using prepayment meters to buy their energy as these customers currently face higher tariffs and an inconvenient experience when buying gas and electricity.

6.2 Consumer insight: customer experiences of having a smart meter installed

Every year we speak to thousands of people about their attitudes to energy and smart meters, including through *Smart energy outlook*, a survey of 10,000 conducted by research agency Populus twice a year. The latest findings (fieldwork in May 2017) show that:

- nearly everyone (97 per cent) are aware of smart meters
- nearly half (49 per cent) of people would like to get a smart meter in the next six months if they hadn't already got one
- 82 per cent of people with smart meters say they have a better idea of their energy costs
- 76 per cent of people with smart meters would recommend them to others
- nearly three quarters (74 per cent) of people with an In-Home Display check it regularly (at least a few times a month)[5]

6.3 Consumer insight: behaviour change

Smart Energy GB also commissions regular research into how smart meters are supporting behaviour change and helping people to waste less energy. *Smart meters and energy usage: a survey of energy behaviour before and after upgrading to a smart meter* (conducted by Populus in May 2017), has found significant and sustained behaviour change amongst smart meter users. Findings include:

- 86 per cent of people with a smart meter make energy saving changes to their behaviour
- nearly four in ten (39 per cent) people with a smart meter fitted energy efficient light bulbs immediately after having one installed, and that this figure increased to more than two in three (67 per cent) of those who had their smart meter for more than two years
- 77 per cent of people are doing as much as they can to save energy immediately after getting their smart meter fitted and this rose to 83 per cent for those who had had their smart meter for longer than two years. This is consistent with energy supplier data which shows savings are being maintained over at least 2 years.[6]

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[5] Smart Energy GB (2017) *Smart energy outlook, August 2017*
[6] Populus for Smart Energy GB (2017) *Smart meters and energy use*

7. Delivering a modern and efficient energy grid

Beyond helping people to take control of their energy use, smart meters bring a range of benefits for consumers and the nation. Smart Energy GB has sought to bring these to life through thought leadership research and events, encouraging stakeholders and experts to advocate for the wider benefits of smart meters.

7.1 Reducing carbon emissions

There will be big savings in carbon reductions from smart meters, its anticipated that by 2030 smart meters will save 29.8 million tonnes of carbon, the equivalent to taking 500,000 petrol cars off the road.

In addition to these savings, by enabling the smarter grid, we will be able to rely more on renewables which are intermittent in their supply of energy. Greater flexibility will also facilitate the rollout of electric vehicles, which it's estimated could be worth £60 billion to the economy by 2050.[7]

7.2 New tariffs

Suppliers will be able to offer cheaper energy at off-peak times to help balance the grid. In our research, we have found two in three people said they'd like to be able to get cheaper energy for using appliances at off peak ties, and 59 per cent of people also said they would like their appliances to automatically turn on when energy is cheapest.[8]

A smarter grid will be cheaper and more efficient to manage, according to the National Infrastructure Commission, moving to a smart energy grid will save consumers £8bn a year.[9]

These wider benefits are also recognised by business leaders, 86 per cent of whom said that the smart meter rollout was important for Britain's economy.[10]

8. Innovation in new products and services in energy and beyond

Smart meters will be a platform for innovative new products and services, from new energy business models to advances in healthcare. Alongside our consumer engagement campaign, Smart Energy GB has been working with a range of academics and third parties to examine the benefits of the smart future.

8.1 Innovation in energy business models

As the energy market modernises, there are more suppliers and more types of companies offering energy than ever – 54 suppliers this year compared with 12 in 2010. This includes local authorities, supermarkets and charities setting up their own energy supply companies. In the future, smart meters will make shopping around for energy even quicker and easier.

In the future, we may wish to sell surplus energy we generate from renewables to neighbours or even sign up to a switching service which switches for us based on our needs. None of these innovative business models will be possible without a digitised energy grid

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[7] Figure from Tech UK in Smart Energy GB (2016) *Smarter Britain, Smarter Economy: Expert voices on Britain's smarter future*
[8] Smart Energy GB and Incite (2017) *Smarter Living: what consumers want from new smart energy products and services*
[9] National Infrastructure Commission (2016) *Smart Power report*
[10] ComRes for Smart Energy GB (2016) Survey into attitudes of big business leaders into smart meters

and smart meters. These opportunities are explored in *How will we buy energy in the smart future?* By Dr Jeff Hardy of Imperial College London.[11]

8.2 Supporting the most vulnerable

Energy data is also being used to support better healthcare. A report by University College London looked at a range of opportunities and showcased some of the activity that is taking place already. Trials at Liverpool John Moore's University are underway at the moment using smart meter data to identify Alzheimer's and Dementia. Services could also help to identify cold homes, allowing support to be targeted more efficiently.[12]

8.3 Smarter cities and communities

Cities across the country are thinking about how energy data and smart solutions can improve the lives of their residents. Research has found that the energy needs of cities are set to increase massively as transport and heating in particular become increasingly electrified.[13] Smart meters are providing the opportunity for cities to generate and manage their own energy needs.

Local communities are also playing an increasingly important role in the generation of energy for their local areas. Smart meters and their data are a huge boost to this, and a number of projects are already underway across the country which are utilising these.[14] This includes a project in Bethesda, North Wales where local residents are benefitting from a renewable energy generated from a hydro plant.

8.4 Smarter homes and smarter living

Smart meters are a platform for the development of smarter technologies in the home, such as smart appliances. People are ready to take up new technologies, with almost 9 in 10 people telling us they found at least one of the future innovations we asked them about appealing.[15] Smart meters are also an important step on the journey to engaging with these new technologies, as those with smart meters found nearly all the propositions more appealing.

Smart meters are opening up a whole new world of exciting opportunities for our energy system. The new digital infrastructure is essential for engaging consumers, reducing carbon emissions and economic growth opportunities.

November 2017

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[11] Dr Jeffrey Hardy for Smart Energy GB (2017) *How will we but energy in the smart future?*
[12] UCL for Smart Energy GB (2017) *Energising healthcare*
[13] Cebr for Smart Energy GB (2016) *Powering future cities*
[14] Arad for Smart Energy GB (2017*) Smart future for rural areas*
[15] Smart Energy GB and Incite (2017) *Smarter Living: what consumers want from new smart energy products and services*