

Upping the ambition level for smart meter data

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The smart meter rollout has featured regularly in the news over recent months, with much debate about the wisdom of maintaining the 2020 deadline and with the distinction between SMETS1 and SMETS2 having made it into everyday parlance.

Sustainability First has long supported the case for smart meters as key to delivering many of the changes needed in the energy system going forwards, and demand response in particular. However there is a question in our minds as to whether the smart meter programme is being ambitious enough in how the smart meter data might be used in the wider public interest.

This is the topic of a major multi-partner project currently being led jointly by Sustainability First and the Centre for Sustainable Energy.

The project involves a programme of research, analysis, stakeholder engagement and a process of dialogue with the PIAG (Public Interest Advisory Group) membership which includes a wide mix of academics, companies, trade bodies, government, NGOs and consumer bodies. The issues are complex and involve balancing valid privacy concerns with wider public interest considerations. But through a robust process of dialogue informed by a series of well-researched stimulus papers we hope to move towards a broad consensus.

What's clear from a review of the international experience is that the questions we are asking are in step with leading thinking globally but the GB position is quite unique with all other countries having some sort of central repository of smart meter data while GB has focussed on consumers being able to control access to their data. In the US the states that led the way in supporting third party access to individual customer data with customer consent through the Green Button initiative are now beginning to require aggregated data to be made available for public interest purposes. We didn't know this when we set out but clearly other countries are thinking the same way which tells us we are onto something.

What's clear from a review of data ethics across different sectors in GB such as health is that – again – what we are looking at is right on trend. Government is committed to making the most of big data to improve services and to provide a statistical and research base to improve policy making. And other sectors are having to grapple with how to balance ethical and privacy issues with the wider public interest in making data available. Concepts like the "5 safes" set out how data can be managed safely by approved researchers to deliver projects with public benefit. And the value of Ethics boards and other governance arrangements have been proven in situations from health to social research. Looking across sectors has also helped sharpen our view of what constitutes the public interest – which we see as the outcome of a process rather than something that can be tightly defined.

Reflecting this wider agenda, the Digital Economy Act gave new powers to the ONS to collect and facilitate access to a much broader range of data including from private sector companies. We believe smart meter data should be considered as part of that opportunity.

And what's clear from reviewing the consumer research in this space is that most consumers are willing to share their energy data if they can see a benefit for themselves or for society at large. Smart meter data is less sensitive than much other data and, although consumers are perhaps now more alert to risks around data linking and sale to third parties, they would generally accept that the benefits of sharing energy consumption data to improve the working of the system outweigh the risks. We have commissioned Ipsos-Mori to bring together a number of consumer experts together to test our interpretation of the existing research and provide a stronger evidence base to feed into policy decisions.

Finally, by talking to stakeholders we have identified a number of potential use cases that we consider are in the public interest – from improving the timeliness and accuracy of national statistics, to supporting more regional planning by local authorities and providing a "synthetic" but statistically robust data set linked to wider socio-demographic data to support analysis and research by bodies like the Committee on Climate Change. In all cases the output data that would be shared would be aggregated or anonymised but it would require someone somewhere to access the raw data to compile it.

The issues that we have been exploring have a direct bearing on a number of live policy debates. BEIS is currently reviewing the data access and privacy framework governing smart meter data. Our key message to BEIS is to urge the government to keep the door open for smart meter data to be used for 'public interest' purposes in the future. While our PIAG project is not yet complete, we believe that we have already produced sufficient evidence to support a case for access to smart meter data for public interest purposes in the future – and therefore to justify a clear signal from BEIS that they will indeed return to this issue at a future date.

We are also engaging with Ofgem who are looking at reform of the electricity settlement arrangements and in particular the question of whether the half-hourly data should be made available to facilitate half-hourly settlement. We have taken issue with their proposal to allow an opt-out from this process – and indeed to require an explicit opt in from customers who already have a smart meter (which will be the overwhelming majority by the time any new rules come into effect). Of course privacy should be respected but we believe the system benefits here are too great to leave it to customers to opt in and that the majority of customers would not have concerns about the use of their data for such purposes. This was the basis on which Ofgem approved WPD's privacy plan which would see them accessing individual customers' half-hourly data but then immediately aggregating or anonymising it and deleting the raw data.

Our submission points out that the original BEIS commitment was to allow consumers complete choice over use of their data except where this data is needed for a regulated purpose. We believe that the case to treat energy system settlement as a regulated purpose is very strong. Customer half-hourly data should be made available to the settlement system as a regulated requirement – rather than a matter of individual customer choice – subject to minimising potential privacy impacts.

Our final PIAG report is due in spring 2019 and will set out principles and explore some of the practical challenges in providing appropriate and secure routes / gateways to smart meter data for public policy purposes.

All the research and analysis we have undertaken is available on the PIAG microsite – www.smartenergydatapiag.org.uk/

We hope it will prove useful to policy makers as they navigate through some difficult decisions.

Of course not all PIAG members will agree with all aspects of our thinking but we value the debate that we have had and the broad consensus that has emerged on the majority of issues. As always, we are grateful to our sponsors who reflect the broad reach of the PIAG membership – UCL, Ofgem, The Energy Systems Catapult, National Grid, Northern Power Grid, Smart DCC and Elexon. We are also grateful to BEIS plus a number of government, consumer and other bodies who have given their time and expertise to help inform this important debate.