By email only to :

Vicky Mason
Consumer Protection Policy Manager SMIP, BEIS.
Victoria.Mason@beis.gov.uk

28 August 2018

Please reply to :

Maxine.frerk@sustainabilityfirst.org.uk
and judith.ward@sustainabilityfirst.org.uk
Simon.roberts@cse.org.uk

Dear Vicky

BEIS Call for Supplementary Evidence on Data Access and Privacy Framework

This submission reflects the views of Sustainability First and the Centre for Sustainable Energy (CSE). Sustainability First and CSE are two environment charities, each with a strong record in the field of energy demand-side policy and practice, and significant experience of consumer and public interest issues and approaches to regulation.

For this submission, we draw on lessons from our work with the Public Interest Advisory Group (PIAG) on access to smart meter energy data which we convene - and from PIAG workshops and discussions. The PIAG work programme is led for both organisations by Maxine Frerk and involves a group of key 'public interest' stakeholders. While at DECC, Maxine led on development of the government's Data Access and Privacy Framework. Further background on the PIAG project can be found in the Annex to this submission.

Kindly note that this submission is not a formal response on behalf of PIAG or our members, although the evidence we are submitting has previously been discussed with them.

Our key message is to urge BEIS to keep open the option for smart meter data to be used for public interest purposes and to commit now to a further review by 2020. While the PIAG process is not yet complete, we believe that we have already produced sufficient evidence supporting the case for

access to the data for such public interest purposes to justify BEIS signalling clearly that this is an issue that it will return to.

In support of this position we would like to formally submit as evidence to the DAPF Review the papers that we have developed for the PIAG project which are (or shortly will be) in the public domain on the PIAG microsite https://www.smartenergydatapiag.org.uk/

These papers include:

A review of international smart metering experience which shows that leading edge states in the US and Canada are now moving beyond making individual data available to third parties with consent (the Green Button initiative) to providing aggregated or anonymised data for public policy purposes. We would expect BEIS to be looking at such leading-edge examples which support the use of smart meter data for public policy purposes. Though not central to PIAG's work, the international experience also provides some lessons around the need to provide practical support to encourage take-up of third party access. Simply providing a legal route for access is not sufficient.

A review of the Data Ethics Landscape (and **a paper on the legal framework** which we have updated to cover the Digital Economy Act 2017) which highlights how in the years since the DAPF was first developed, the opportunity created by big data across all sectors has attracted increasing attention. Government has set out its ambition for the UK to be a world leader in AI. Looking at other sectors such as health shows how aggregated / anonymised data can be used for public interest purposes while respecting privacy considerations. Approaches to data governance and ethical use of data in other sectors provide good examples of how this could be done.

A summary of relevant consumer research which shows that while there is a small but vocal customer group who are very concerned about privacy, the majority of consumers would be content, subject to suitable privacy safeguards, for their smart meter data to be shared if this helped to support the more efficient working of the energy system. In our view the existing research would support the case for aggregated / anonymised data becoming available to support public policy uses – a view which we anticipate will be validated at an expert research roundtable that we are holding in October 2018. More generally, consumer research to date supports the position taken in the DAPF of an 'opt-in' if data is to be used for marketing purposes, which is clearly one of the particular concerns that consumers have. While issues like the Facebook debacle have heightened customer sensitivity around privacy issues, it is also clear from the consumer research that smart meter data is not seen to be as sensitive as either bank details or health data - where nonetheless data sharing is being pursued to support public interest goals.

A set of 'public policy' questions designed to frame the debate on how to balance the 'public interest' benefits of access to smart meter data while satisfying all reasonable consumer concerns on data privacy.

An initial set of high-level archetype 'public interest' use-cases based on interviews with a wide range of public policy actors at a national and local level. These highlight the value in using smart meter data to get faster and more accurate national statistics and the value in the data for local planning, at for example regional or city level. Both of these uses require geographically comprehensive smart meter data but on an aggregated basis. The challenge remains how to provide such aggregated datasets in the absence of anyone having the right to collect the data initially. With

suitable legal underpinning, including suitable approaches to consumer privacy, this role could perhaps eventually be given to the energy networks and / or perhaps to whatever body/bodies will deal with electricity and gas settlement data - subject to Ofgem changing its current position on customer 'opt-out' for providing their half-hourly electricity data for settlement. (Our 10th August response to Ofgem's consultation on Access to Half-Hourly Electricity Data for Settlement Purposes covers this issue).

The other use case examined would be for modelling purposes where there is a need for individual anonymised smart meter data linked to other socio-demographic data. We recognise that this is the thinking behind the SMRP project. However, SMRP will initially be open only to academic researchers, or via partnership with a participating university. Also, a sample of electricity consumption data reliant on voluntary participation plus an explicit consent inevitably ends up not being fully representative. As a national sample, it would also be of limited value for 'public interest' use cases, such as city-scale energy system planning, which require locality-specific data.

Together the PIAG 'public-interest' use-cases and other uses that could be delivered with the same data-outputs present clear evidence for BEIS that there are gaps that are not currently being filled by the DAPF and which at the appropriate time will need to be addressed and prioritised to maximise the public benefit from the smart metering programme.

In addition to these research papers we have now held three PIAG workshops with a broad mix of stakeholders with a strong interest in these issues. Through these discussions a number of other issues have been raised that also bear on the DAPF and which we would like to see picked up in the BEIS Review:

- The DAPF only applies to data that is collected via the DCC and hence at its most granular is half-hourly data. In the PIAG workshop we talked about this data being "inside the walled garden" while outside commercial entities such as Google could be expected to collect much more granular 10 second data through consumer access devices connected to the HAN. While subject to general data protection legislation there are concerns that consumers may not be aware of how their data is being collected and used in such cases – and that misuse of such data could be very damaging to the reputation of the smart meter programme. Consumers will not understand why lesser protection should apply to what they will still see as smart meter data. We are attracted to the Citizens Advice Proof of Concept for a smart meter dashboard to help address this.
- National Grid as Electricity System Operator (ESO) does not have any rights to smart meter electricity consumption data under the terms of the DAPF. At the time the DAPF was developed in 2012 it was unclear that National Grid had any direct need for granular end-customer consumption or export data and it was assumed that if required it could obtain data through the DNOs. With the rapid increase since 2012 in distributed generation and the potential for EVs and heat pumps, the challenge for the ESO in forecasting demand has become much greater. There would now seem to be a good case for clarifying the ESO's rights to smart meter data. While use by individual companies is out-with the scope of PIAG, for many stakeholders this would be seen as a clear public interest use of the data (particularly given the ESO's regulated status). Moreover, if the ESO also had access to end-customer data, then in due course the SO could also be considered as a further potential

secure gateway for providing the sorts of aggregated data considered in our public-interest use cases.

- While the focus of the DAPF is on consumption data there is other smart meter data that the DNOs can access including maximum load, export etc that could also have value from a public interest perspective. We believe it is right for the DAPF to remain focussed on consumption data which is where the potential for privacy concerns lie (albeit we recognise that other data may be considered personal data for the purpose of GDPR).
- Routes for third parties to get access to the data are quite complex and likely to be beyond the capabilities of most local actors (local authorities, fuel poverty and environmental charities etc). Even UCL as a well-resourced body has found the process of formal registration as a DCC user to be costly and complex. It is acknowledged that, until SMETS2 meters are rolled out at scale, it is hard to tell whether other third party actors will step in to assist. The practicalities of third party access, which clearly does offer a route to provision of many services that would be deemed to be in the public interest, needs to be kept under review in the increasingly dynamic energy system.
- The introduction of GDPR has led to a greater awareness around the need for explicit and individual consent but there is still a level of confusion even among a relatively expert group about the fact that consent is not the only legal gateway for processing smart meter data. As such your proposal to provide more guidance around the interplay of the DAPF and GDPR would be welcome.

In conclusion, BEIS has not indicated whether there is to be a future review of the DAPF. BEIS indicates that this is likely to depend on additional evidence. For the purpose of realising the wider 'public interest' benefits which the PIAG's work to date shows that smart meter data could bring, we believe that BEIS should indicate now that there will be a further review of the DAPF, at the latest by end-2020. Among other things such a future review would then be able to factor in:

- Greater experience of more SMETS2 meters installed – and associated evidence of consumer attitudes to data privacy;
- Progress with the Citizens Advice Data Dashboard – and similar initiatives to help consumers control access to their data in more informed ways;
- Further thinking from the PIAG project – including our final conclusions and recommendations – on smart meter data and realisation of the public interest benefits;
- Further development of the UCL Smart Meter Research Portal;
- Developments in the proposed treatment of customer privacy with respect to half-hourly electricity data for settlement purposes;
- Developments relating to adoption of DNO privacy plans and their agreed approaches to anonymisation and aggregation of customer meter data for a 'regulated purpose'; and
- Developing thinking in BEIS, in government more widely and in Ofgem on the need for access to energy-related data, including by third party actors, to drive future models of energy supply, competition and energy-related innovation.

We appreciate BEIS's support for the ongoing work of the PIAG project and hope that the evidence that we have been able to provide so far will be helpful in taking forward the BEIS Review. We were pleased to have been able to participate in the DAPF workshop held by BEIS on 11 June 2018 but if there is anything further that you would like to discuss with us we would be very happy to do so.

Yours

Judith Ward	***Maxine Frerk***	***Simon Roberts***
Judith Ward	**Maxine Frerk**	**Simon Roberts**
Associate. Sustainability First	**Associate Sustainability First**	**Chief Executive. CSE**

Annex

Smart Meter Energy Data Public Interest Advisory Group (PIAG) Sustainability First & CSE (Centre for Sustainable Energy, Bristol).

Exploring how smart energy data could better serve the public interest

Sustainability First and the Centre for Sustainable Energy (CSE) is convening a work programme to investigate how smart meter energy data could be put to work in the public interest and how that can be balanced against the need for individual's privacy and data security. The 18 month project (to Spring 2019) brings together a range of relevant stakeholders to hold an informed and structured policy dialogue on these issues.

The data being captured by the smart electricity and gas meters being installed in every home and business across Great Britain has the potential to transform our understanding of how and when energy is used. In so doing, it could significantly enhance the future design of public policy and market regulation and smarten up the planning and operation of the energy system at national and local scale.

But there are significant and legitimate privacy concerns about whether such data, if accessed without a householder's consent, could reveal too much about individual lifestyles or make people vulnerable to unsolicited marketing by energy suppliers and others. As a result, the government has put in place robust controls on access to the high resolution half-hourly consumption data recorded by the meters.

The Smart Meter Energy Data Public Interest Advisory Group (PIAG) is addressing the central question of how to obtain this better evidence-base of energy end-use data to better serve public policy-making and policy delivery (be that national, regional, local) while at the same time ensuring that customer rights to privacy and data security are observed. These fundamental public interest questions sits at the heart of the PIAG work.

PIAG is exploring how we could best realise the potentially significant 'public interest' benefits of installing smart meters in every home.

With research, analysis, stakeholder engagement and a series of exploratory workshops with the PIAG membership, the Sustainability First and CSE project team are developing an understanding of:

- Public interest principles and data ethics that could apply to smart energy data.
- Potential uses for smart energy meter data which would meet a public interest test.
- How the smart energy data would need to be accessed and analysed to serve these uses.
- Current and potential future arrangements for smart meter data access and privacy protection.
- International experience with smart meter data.

For more detail about the project including the stakeholders involved and the stimulus papers, research notes and other outputs to date from the project, please visit the project website at www.smartenergydatapiag.org.uk.

Members of PIAG include representatives of

BEIS, UCL Smart Meter Research Portal*, Ofgem*, the Energy Systems Catapult*, the Data Communications Company*, National Grid*, Elexon*, Northern Power Grid*, Citizens Advice, the Committee on Climate Change, Centre for Sustainable Energy, Energy Networks Association, Energy Saving Trust, Energy-UK, Greater London Authority, MHCLG (Ministry for Housing, Communities & Local Government), the National Infrastructure Commission, Office for National Statistics, Scottish Government, Smart Energy GB, Sustainability First, techUK, UKERC, TEDDINET / Edinburgh University, Universities of Exeter & Reading, CAR (Cambridge Architecture Research Ltd), Welsh Government, and Which?

* denotes funding partner

www.cse.org.uk

www.sustainabilityfirst.org.uk

centre for sustainable energy

Sustainability first