



Association for the
Conservation of
Energy

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Department of Energy and Climate Change: *Smart Metering Implementation Programme*

ACE response – October 2010

Introduction to the views of ACE

The Association for the Conservation of Energy is a lobbying, campaigning and policy research organisation, and has worked in the field of energy efficiency since 1981. Our lobbying and campaigning work represents the interests of our membership: major manufacturers and distributors of energy saving equipment in the United Kingdom. Our policy research is funded independently, and is focused on three key themes: policies and programmes to encourage increased energy efficiency; the environmental, social and economic benefits of increased energy efficiency; and organisational roles in the process of implementing energy efficiency policy.

We welcome the opportunity to respond to this consultation.

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1 Overview

ACE welcomes the Government's decision to bring forward the rollout of electricity and gas smart meters for all households. Cutting carbon emissions from homes is vital in the fight against climate change and ACE believes this can be done through providing real time accurate information on energy use to spur behavioural change.

However, the provision of smart meters needs to be part of a wider energy education programme. It is vital that the roll-out of smart meters, with the provision of real-time displays is coupled with a wider Government climate change awareness campaign which includes advice, information and financial incentives for improving energy efficiency. Provision of consumption data in itself will not necessarily lead to changes in behaviour. ACE is calling for each household to be provided with an accurate home energy audit and EPC (Energy Performance Certificate) alongside the smart meter and in-house displays (IHDs) – this would allow households to have a better understanding of the changes they could make to reduce their energy use at a salient moment in time.

While involvement of the community and local authorities has been touched upon in this consultation, ACE believes that a community approach would successfully engage larger numbers of households in the climate change agenda and so we welcome suggestions that there should be obligations on local coordination in the future.

We are disappointed that the Government has announced that there will be no obligation on energy suppliers to provide small businesses with smart meters and IHDs. Not only do the small businesses themselves stand to benefit from the installation of smart meters, but the carbon savings would be significant. We see no reason why the arrangements for provision of smart meters to domestic consumers couldn't be extended to small non-domestic consumers.

Below is our response to individual questions, for which the later deadline of October 28th applies. We have confined ourselves to responding to those questions of relevance to ACE.

2 Answers to Questions

Question 1: Do you have any comments on the proposed minimum functional requirements and arrangements for provision of the in-home display device?

Since interoperability of smart meters from different energy suppliers is going to be key to the future success of this scheme, we welcome the publication of minimum functional requirements for smart meters. We welcome the announcement in the consultation document that one of the required high level functions of the smart meters will be an in house display of "real time" information. A smart meter roll-out on its own will only benefit suppliers. The success of the scheme will rely on the engagement of the energy consumers, and so the design of the in-house display is crucial to enable customers to manage and reduce their energy consumption as well as a requirement on suppliers to provide accurate monthly bills. It is simultaneously important to ensure compatibility

between all smart meters and IHDs to allow a free and innovative market in these devices that can meet evolving consumer needs.

While previously the Government has not been explicit about the requirement for the IHD to provide historical data, ACE is relieved to see that in paragraph 2.7 the announcement that this will now be a minimum requirement. Access to historical data is essential as this will help customers maximise their use of the technology by allowing comparisons to be made on energy consumption over periods of time.

ACE agrees with the requirement in paragraph 2.15 that consumers should be able to access the information stored in the smart meter free of charge and in an accessible/understandable format. If householders are going to establish positive opinions of the scheme it is important that they are not made to pay to receive all the benefits. Indeed those who are most likely to benefit from access to information about their energy use will be the fuel poor, many of whom are on low incomes and therefore are unlikely to be willing to pay for the additional service.

ACE is relieved to see that the capacity for smart meters to communicate with micro-generators is to be included as a required high-level function. Smart meters should have the ability to cope with the import and export of electricity and be compatible with microgeneration; this will encourage householders to produce their own low carbon energy but most importantly for this scheme it will remove the hassle and cost of having to get a new metering system to cope with microgeneration. However we think that a greater understanding of energy use and production can be gained by the householder if there is also a requirement to show this information on the IHD.

It is important that the display of consumption in terms of carbon emissions is a minimum function for IHDs. Displaying carbon would help to solidify the abstract problem of our emissions and also pave the way for future consumer-oriented carbon policy and markets.

The consultation lists no minimum functions for the IHD that ACE disagrees with, however in addition we recommend that the following minimum requirements are applied to displays:

- a) That the IHD be installed in a visible and convenient location
- b) That the IHD does not use more than 1-2W of electricity
- c) The IHD should display consumption in terms of carbon as well as kWh
- d) A valid and accurate EPC, following a home energy audit, should be provided alongside the smart-meter and IHD
- e) That the IHD should show data on energy production through microgeneration alongside energy use

ACE agrees that the responsibility to provide the IHD should lie with the energy supplier, but are concerned that without proper regulation there is a risk that the costs of provision could be passed on to the consumer. Energy suppliers stand to benefit hugely from the installation of smart meters – not only through reduced customer service costs but also through reduced connection and disconnection costs. The consultation document itself describes that “*predicted benefits across the*

domestic and smaller non-domestic sectors [are] £17.8 billion over the next twenty years and a net benefit of £7.2 billion". These savings must be passed onto the consumer.

The consultation document says that *"if within one year of the installation visit, a customer changes their mind and decides that they would like an IHD, they will be entitled to receive one from their supplier free of charge"*. We are concerned that there is a suggestion here that beyond the one year limit consumers would be asked to pay for an IHD from their energy supplier. We strongly believe that consumers should be entitled to a free first IHD at any time after the initial visit. As mentioned above in relation to free access to information, the success of smart meters in achieving carbon reductions depends on the engagement of the householders. Charging money for the IHDs will not lead to positive opinions of the scheme and so may jeopardise its success.

As we mentioned in our previous response to this consultation (Sept 28th deadline) we are concerned that if the suppliers are allowed *"flexibility over the pattern of their installations"* then there is a risk that some households will be consistently left until last. In the same way that hard-to-treat homes are often left untreated when suppliers attempt to meet their targets under energy efficiency schemes such as CERT, one could argue that certain difficult to reach homes will miss out on the benefits of early access to smart meters. We also believe the fuel poor stand to benefit the most from education about their energy use, and so those customers using pre-payment meters should be targeted first as these are usually the poorest and most vulnerable customers. In fact, the Analytical Annex for the UK Low Carbon Transition Plan indicates that the impact of smart metering **will save an average of £14 on gas bills and £15 on electricity bills by 2020¹**, and it is the poorest customers who would benefit most from this.

The idea of having local co-ordinated activities to help with consumer engagement and uptake of IHDs is hinted at in the consultation document. ACE firmly believes that involving trusted local third parties would improve the chances of the scheme being positively received – as such we propose that community level activities should be included from the start.

Question 4: Have we identified the full range of consumer protections issues related to remote disconnection and switching to prepayment?

While we recognise the role that remote disablement and enablement of supply can play in cost reduction and faster reconnection, we believe that safeguards must be put in place to protect vulnerable customers from remote disablement of gas supply. As such we welcome the suggestions in the "Consumer Protection" supporting document that pre-payment meters should not be offered to those who would be unsuitable. We appreciate that Ofgem are going to consult on what factors are relevant to an energy supplier when assessing whether a customer is vulnerable, and we ask that this is published as soon as possible. We strongly agree with the proposal that suppliers must undertake at least one visit to the property which is to be disconnected.

¹ Analytical Annex, The UK Low Carbon Transition Plan, 15 July 2009, pg 66 & 67

Question 5: Do you have any comments on the proposed approach to smaller non-domestic consumers (in particular on exceptions and access to data)?

ACE is very disappointed to read in paragraph 2.44 that the Government has chosen not to mandate the provision of IHDs in the smaller non-domestic sector. Small businesses are accountable for a large share of energy use and the use of smart meters and IHDs in this sector could contribute to large carbon reductions. This is particularly important since small businesses are not already covered under other Government carbon reduction programmes, such as the CRC Energy Efficiency Scheme. We believe that exclusion of the small non-domestic sector is a missed opportunity, especially since we see no reason why there would be any adverse implications for using the domestic delivery model for the non-domestic sector. Two million small businesses exist within the domestic sector, and given that SMEs constitute much of each other's supply chains, the exclusion of the non-domestic SME sector would represent an opportunity missed.

ACE has long been advocating that smart meters be rolled out across the business sector. In response to the BERR consultation "Smart & Advanced Metering For Small & Medium Sized Businesses & Sites & Other Non-Domestic Customers" in August 2008 we called upon the Government to mandate the roll-out of smart meters to all micro, small and medium sized businesses within 10 years. (In this context, small and medium sized businesses are those businesses with gas consumption between 73.2 MWh and 732 MWh per annum and those businesses in electricity profile classes 3 and 4 and micro-businesses are those in electricity profile classes 1 and 2 and those with gas consumption of less than 73.2 MWh per annum.) We recognise that the Government has tried to justify this decision by noting that many small businesses already have advanced meters, but ACE believes that smart meters are superior to advanced meters because they allow for two-way communication between the supplier and the meter, thereby giving customers access to accurate, real-time information on the cost of energy (communicated from the supplier to the meter), which is likely to be the greatest motivator to reduce energy consumption for business customers.

Question 8: Do you have any comments on the proposals that energy suppliers should be responsible for purchasing, installing and, where appropriate, maintaining all customer premises equipment?

With respect to purchasing and installing the smart meters and IHDs we are confident that the responsibility should lie with the energy supplier, and have explained our opinion in response to the earlier questions. In short we believe that this is the fairest way to achieve mass roll-out of the technology so long as the savings but not the costs are passed on to the customers. Maintenance of the premises equipment should also lie with the energy supplier. There is heavy emphasis in the consultation document on ensuring that the customers have a positive experience, as this will lead to greater engagement and consequently increased energy reduction. In working towards this ACE believes that the burden of maintaining the premises equipment should not lie with the customer. While some maintenance of the equipment will be simple, such as changing the batteries in the IHD, other tasks are likely to be outside the understanding of the average householder – such as maintenance of the WAN and HAN connections. But again we are anxious that any costs incurred are not passed on to the consumers.