Cynulliad Cenedlaethol Cymru Pwyllgor Amgylchedd a Chynaliadwyedd	National Assembly for Wales Environment and Sustainability Committee
Dyfodol Ynni Craffach i Gymru?	A Smarter Energy Future for Wales?
Ymateb gan Ynni Clyfar GB	Response from Smart Energy GB
SEFW 09	SEFW 09

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Environment and Sustainability Committee
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SMART ENERGY GB RESPONSE TO THE NATIONAL ASSEMBLY FOR WALES CONSULTATION ON "A SMARTER ENERGY FUTURE FOR WALES'

Approach to our response:

Smart Energy GB is the national campaign for the smart meter rollout. The rollout is one of the biggest infrastructure projects undertaken across Great Britain in recent times. It will involve the installation of over 50 million smart meters in 26 million homes and 4 million microbusinesses in Wales, Scotland and England. It will deliver £6bn in savings to the country.

Smart meters are an essential upgrade to digitise the retail energy market, empower consumers and help to ensure our energy infrastructure is ready to meet future demand. With smart meters, consumers will be able to see what they are spending on energy in real time and in pounds and pence, information which will enable better informed decisions about energy use and give consumers greater confidence when shopping around for the best energy deal.

Smart meters will also put in place the infrastructure needed to enable faster switching, better energy demand management and the widespread uptake of low carbon technologies such as electric vehicles.

Whilst smart meters are being introduced as part of an overall UK Government Programme, they have relevance and impact for a number of Welsh Government policy areas including energy efficiency, tackling poverty, and technology and innovation. They create opportunites for significant behavioural change in energy use and spend by consumers, as well as providing energy suppliers with the potential to target management of load through tariff controls and more detailed information for networks on load and voltage. This data can enable investment and innovative decisions across Wales based on accurate information.

In considering our response, we have focused on the area of community engagement and address the two questions you raise in detail below.

Detailed Responses:

Question: How can communities, businesses and industry contribute to transforming the way that Wales thinks about energy?

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1. Smart meters will transform the way consumers and small businesses think about their energy use and costs. When installed, all consumers[1] are offered a smart meter display that directly communicates with their meters showing them near real time consumption[2] of energy and its cost, based on their tariff and standing charges.

2. The UK Government's Impact Assessment for the smart meter programme assumes that, as a conservative estimate, domestic consumers using the information from their smart meters will save a minimum of 2.8% and 2% for electricity and gas respectively, with non-domestic consumers saving 2.8% and 4.5%.

3. For networks the Impact Assessment attributes significant benefits amounting to £0.99bn. In discussing the realisation of these benefits the UK Government acknowledges that smart meters and the data that they provided to suppliers and networks create the opportunities to:
    i. Identify losses for network operators and prevent them continuing
    ii. Use the alarms and alerts from smart meters to significantly improve outages and manage electricity demand
    iii. Improve and investigate voltage across networks to increase efficiency and drive down consumer complaints
    iv. Provide significant data to drive more informed investment decisions across the network in the future
4. Smart meters are acknowledged to create the environment where sophisticated types of tariffs may incentivise Demand Side Response (DSR) or load shifting to be a reality. Additionally they offer the industry the potential to deploy wide scale future technologies from heat pumps to onsite energy storage and electric car volume capacity. Benefits identified in the Impact Assessment indicate that the savings could be:
    i. Generation short run marginal costs £113m
    ii. Generation capacity management £690m
    iii. Network capacity investment savings £40m
    iv. Carbon savings £26m

    (Note that all the above costs are GB savings and the Impact Assessment does not permit individual nation savings to be readily identified.)

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[1] For non-domestic consumers they may be offered an energy display but the industry is not mandated to do so.
[2] Up to 10 seconds for electricity and ½ hourly for gas.

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5. The rich data provided from the rollout of smart meters that drives all the benefits outlined above is dependent upon achieving the UK Government's target of changing 53m meters across GB by 2020. Engaging with Welsh Government and local authorities across the programme and maximising the benefits that can be derived from its delivery, will support the rollout and actively encourage community programmes across Wales to utilise the technology not only to achieve energy savings targets, but potentially to significantly improve them.

6. Smart Energy GB will also be working in partnership with organisations from the voluntary, public and private sectors to support our engagement with communities and individuals the length and breadth of Wales. Our partnership programme, due to launch in 2016, will help to ensure that our engagement reaches across the population, and in particular ensuring that we reach some of the most vulnerable communities.

Question: Does the answer to this challenge lie in enabling communities to take greater responsibility for meeting their future energy needs?

7. Smart Energy GB believes that where communities at all levels are engaged in the delivery of the smart meter programme, then both individual consumers and the communities will derive the maximum benefits. Within Wales we consult with relevant stakeholders to ensure that our campaign takes account of specific issues including the challenges of those not connected to the gas grid, rural isolation and language of choice. We will continue to do this throughout the rollout.
8. The data provided from smart meters will enable future investment decisions on generation and supply to be based on factual information and can factor in growth using real data. This information has not previously been readily available across all sectors. Smart meters therefore offer the potential to communities to actively participate in the development, management and cost of future supply. They can lay the foundations for a smart platform to optimise micro and community energy generation. Building generation on the most accurate possible view of what a local community uses in energy allows generation to be planned, and supports the best community managed decisions about when to buy or sell electricity to and from the grid. With smart meters, the managers of community generation schemes can most effectively plan and deliver energy to households in the community and plan accurately for the total consumption needs of their community and how best to meet them.

We hope that this written evidence is useful to the Committee's inquiry. We are keen to provide the Committee with more information on any of areas summarized in this evidence where it would be useful.

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