

Cynulliad Cenedlaethol Cymru Pwyllgor Amgylchedd a Chynaliadwyedd	National Assembly for Wales Environment and Sustainability Committee
Dyfodol Ynni Craffach i Gymru?	Smarter energy future for Wales?
Ymateb gan Nwy Prydain (Saesneg yn unig)	Response from British Gas
SEFW 06	SEFW 06



Cynulliad  
Cenedlaethol  
Cymru

National  
Assembly for  
Wales



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**Inquiry: A Smarter Energy Future for Wales**

British Gas response to the Environment and Sustainability Committee

September 2015

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## Introduction

- 1.1 British Gas welcomes the opportunity to contribute to the Environment and Sustainability Committee’s inquiry into A Smarter Energy Future for Wales. As Britain’s largest energy supplier, British Gas supplies gas and electricity to around 375,000 homes in Wales. We deliver more energy efficiency measures than any other supplier and believe that improving energy efficiency will make a significant and positive difference to households and businesses across the country. We are delivering on energy efficiency programmes run by UK and Welsh governments – and are proud to manage the Welsh Government’s Nest programme.
- 1.2 We are also at the forefront of the smarter energy future, leading the roll out of smart meters with nearly 2 million now installed in homes and businesses across Britain, as well as an increasing range of innovative products to give customers more control over their energy bills.
- 1.3 We therefore believe we have a shared interest in finding answers to the “energy trilemma” which is at the heart of the committee’s inquiry and want to work with governments across Britain to deliver programmes that address these issues.
- 1.4 This response focuses on how British Gas is acting to promote energy efficiency and the smarter energy use we all want to see.

## Energy efficiency and demand reduction

- 2.1 British Gas notes the committee’s request for views on how the planning system and building regulations could be used to improve the energy efficiency of houses. We make the following suggestions.
- 2.2 We believe there is potential to improve guidance for loft insulation installers. Current guidance on the installation of loft insulation is very generic. This makes it open to interpretation which can lead to poor installation quality. In particular, guidance could be improved around specific areas to ensure that there is a) adequate ventilation in a loft to prevent condensation; b) loft hatches are adequately insulated to minimise any heat loss and c) loft boards are correctly laid. The committee should encourage Welsh Government to work with the Department of Energy and Climate Change to develop robust loft insulation guidance for installers and ensure that installers operating in Wales adopt it.
- 2.3 The planning system should support the installation of Solid Wall Insulation (SWI). Where installed, SWI has a number of benefits from improved comfort and noise reduction to social benefits of regeneration, as well as improving energy efficiency. We recommend that planning applications for SWI in conservation areas should be assessed on a case by case basis rather than being rejected outright.
- 2.4 There is also a role for the planning system in supporting district heating installations. Planning officers should be “minded to approve” a scheme unless there is a good reason

for why the scheme cannot go ahead. When considering district heating, planning officers should take account of the positive environmental impact that a district heating scheme can have.

- 2.5 We would also encourage the committee to use this inquiry to explore how non-domestic buildings can benefit from a smarter energy future. As a British business, we are fully aware of the pressures faced by businesses across the country. We know that energy costs are a material component of many companies' expenditure and recognise that good energy management has the potential to achieve substantial savings to give scope for business growth and further investment. Our 950,000 non-domestic customers - around 50,000 in Wales - range from the smallest SME businesses right up to large corporate, as well as local authorities, hospitals and other public sector organisations. Our Services division offers a range of energy efficiency technologies including building controls and renewable energy systems, as well as boiler installation and maintenance, compliance and servicing.
- 2.6 British Gas is committed to helping our business customers to use less energy, and we're leading the way in installing smart meters, helping these customers to monitor and manage their energy costs. For large organisations we offer Energy Performance Partnerships (EPP); self-funding agreements designed to reduce energy consumption through investment in low-energy technologies.
- 2.7 British Gas is already working with public and private sector partners across Wales on a range of energy efficiency initiatives which will substantially reduce their manufacturing costs. There are a number of barriers to the promotion of energy efficiency in non-domestic properties.
- 2.8 The non-domestic building stock is incredibly varied, with a far broader range of uses and types than in the domestic sector. Many energy efficiency investment decisions in the private sector are based around expected payback times of five years or less<sup>1</sup>, and many measures have longer payback times. As a result, larger projects are less likely to happen, and cost effective replacement technologies - such as high efficiency lighting - are the most popular measures<sup>2</sup>.
- 2.9 Non-domestic property owners are business people, and will be motivated to act if there is a clear commercial case for them to do so. As such, a combination of "carrots and sticks" is required to drive improvements.
- 2.10 In our experience, the use of Energy Performance Contracts<sup>3</sup> has been successful for encouraging organisations to take a longer term view of their energy usage and

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<sup>1</sup> Energy Efficiency Trends Vol.8 (October 2014) Figure 17. Trends in expected payback periods.

<sup>2</sup> Energy Efficiency Trends Vol.8 (October 2014) Figure 11. Uptake of energy efficiency technologies.

<sup>3</sup> Energy Performance Contracts are long-term partnership arrangements – typically 3-15 years – designed to reduce an organisation's energy bills through a detailed energy audit, the installation of energy efficiency measures and on-site renewable energy generation, and ongoing performance management

energy efficiency measures, but these have generally only been deployed in the public sector.

- 2.11 This longer-term approach to energy efficiency and energy management could be extended further in the non-domestic sector if businesses had greater certainty over future requirements and obligations. For example, consideration could be given to providing a longer-term forward cost curve for carbon prices in the Carbon Reduction Commitment Energy Efficiency Scheme. For large energy users, this would provide greater certainty around the cost benefit of investments in energy efficiency, and may encourage greater investment.
- 2.12 In our experience, small and medium sized businesses are generally less well-informed about the energy efficiency options available to help them reduce their consumption. The biggest barrier to taking action to improve the energy efficiency of their businesses is, in our view, knowing where to get the reliable advice to identify the best measures to install. Relatively small investments in energy efficiency measures can result in dramatic reductions in consumption and bills – having a significant impact on many small businesses running costs.
- 2.13 Our experience also informs us that it is the largest businesses which are the most likely to have dedicated energy managers. These individuals will have expertise in, and responsibility for, keeping energy bills as low as possible. Awareness of the opportunities for reducing energy costs is significantly lower among most small business owners, who are often time poor and with a less detailed understanding of how they could reduce their energy bills. We suggest that consideration is given to how SMEs could be encouraged to invest in energy efficiency, what the barriers might be to growth in this area, and how they could be overcome. Through the Energy Efficiency Fund, we are working with Welsh Government to address these challenges.
- 2.14 There are a number of excellent examples of energy efficiency delivery in the public sector, and a significant opportunity for further work to be done. Energy Performance Partnerships can be an excellent way for organisations in the public sector to reduce their costs, replace ageing energy related infrastructure, and guarantee cost savings. For example, British Gas is working with Hywel Dda Health Board in a partnership where we have been able to guarantee a reduction in the health board's energy bills over the life-time of the contract across its sites. Funding from the Welsh Government is paying for a new biomass boiler at Glangwili Hospital in Carmarthen, as well as other measures including energy management systems and energy efficient lighting upgrades.
- 2.15 While this model can be extremely successful, there are currently some restrictions in areas of the public sector that prevent organisations from entering into arrangements such as the example above. We have found examples of schools prevented from accessing finance to fund energy efficiency projects which would reduce their running costs and their carbon emissions. We believe this is an area that should be addressed in order to help cut costs in the education sector.

## Communities – making the case for change

- 3.1 British Gas is changing the way our customers think about energy through innovation with smart meters and other products giving them greater control over their energy use.
- 3.2 British Gas is leading the roll-out of smart meters – with our domestic and business customers already seeing the benefits that this innovation is bringing. Across Britain, we have delivered around 2m smart meters to customers’ homes and businesses (more than 100,000 of these in Wales) and have a growing team of 1,200 specially trained Smart Energy Experts installing and offering advice to customers on their smart meters. In our Cardiff contact centre, we now have customer service advisors working specifically to answer calls from customers with smart meters.
- 3.3 We are already seeing average actual savings of 2% per household per year from smart dual fuel customers, with smart meters and the smart energy monitor alone. We expect this to increase to 5% once new tools are provided, such as time-of-use tariffs and the interactive online tool (my energy) which provides a breakdown of energy use, personal tips on how to be more energy efficient, and a comparison to similar households, so customers have an insight into how they can make more changes if they want to.
- 3.4 British Gas is also leading the UK market in innovative technology to help customers control their heating and hot water remotely. Our Hive Active Heating remote heat control product is already allowing customers in Welsh homes to control their heating and hot water remotely from a mobile phone. Research shows that our highest users interact with the thermostat on average 14 times per week and 60% of our customers edit their schedules.
- 3.5 We recently announced a new range of Hive products, to make it easy for people to control appliances and lights remotely, as well as being alerted to movement in their home from the Hive smartphone app.
- 3.6 We are also trialling our Connected Boiler in homes across the country. The Worcester Bosch boilers connect to a home broadband and report faults to British Gas before they even breakdown. This will make boiler service and repair far easier for customers and will mean that problems can be pre-empted and resolved quickly.
- 3.7 Together, these are just the first steps towards a smarter energy future. In time, demand side response, enabled by smart meters, will also play a role and will allow us to reduce the pressure on the grid at peak times. British Gas has been involved in trials to understand the impact of demand side response, but we believe further trials would be useful and look to work with Welsh Government on this agenda.
- 3.8 We recognise that microgeneration and heat products will also have an important role as we transition towards a low carbon future. British Gas is already working with the public and private sector across Wales to help them make use of these technologies to

manage and reduce their energy usage. For example, in Newport we are developing a biomass district heating scheme on an estate of 900 houses while last year we worked with Toyota in Deeside to launch a solar array, which will substantially reduce manufacturing costs at the plant. In order to ensure that Wales can fully benefit from solar and to reduce the administrative burden, we would encourage the committee to look at how permitted development for roof top solar arrays is already encouraging development of solar England, with changes also being considered in Scotland. We would welcome support from the committee for an increase to 1MWp permitted development in Wales.

3.9 In its recent strategic review, our parent company Centrica indicated that we see there will be new opportunities to do more in distributed energy, including helping our industrial customers with energy efficiency supporting flexible generation and providing energy management systems. We expect these developments will create further opportunities to help transform the way communities, business and industry think about energy.