

## Response from Homebuilder Federation Wales

### National Assembly for Wales' Environment and Sustainability Committee inquiry into 'A Smarter Energy Future for Wales'.

#### **1. How can we achieve reductions in energy demand and to what extent is this linked to local community engagement?**

As new housebuilders we already consider we are playing our part in this process as the modern home build today is far more efficient than those built previously.

*A recent HBF report concluded that, on average, new homes built in England and Wales today are 65% more energy efficient than a Victorian house of the same style. Further new homes currently built in the UK are roughly 50% cheaper to run per year than the equivalent Victorian house. That could mean an annual saving of £440 for a 1-bed ground floor flat, and £1,410 for a 4-bed detached house.*

However new homes still make up a small percentage of the total housing stock, for this reason a continued drive to improve the energy efficiency of the existing stock should take place.

A lot of energy is used by the users in the home (not heating or light) and through transport and would not be stopped by physical changes to the dwelling. These require culture change, information, and better understanding of how energy is used. Areas like improved public transport, legislation around efficiency of electrical goods and better education all need to be considered.

The main service providers also use a large amount of energy providing energy to its users, investment in update infrastructure, for water, gas and electricity could help save significant amounts of energy.

We are not sure that local community engagement can help with a lot of these issues other than possibly education. However there is an opportunity for it to support small scale local production of energy from renewable resources such as wind or hydro power.

#### **2. What are the social and economic impacts of increases in building energy efficiency standards?**

If household energy bills are reduced as a result of using less energy, then this will give people more money to spend. Although a small improvement in energy efficiency in current new build is likely to have a small impact on how much money would be saved.

The new technology required to achieve this goal could lead to new companies and associated jobs created, but to counter this jobs may be lost which relate to the old technology.

The drive to be more energy efficient also needs to be balanced against other factors which can have an impact on people's health such as daylighting and ventilation regimes. The overheating of over insulated houses had already been established as an issue.

**3. What scale of housing refurbishment programme is needed and how could this realistically be managed/funded?**

The private house building industry is not in a position to comment on this .

**4. What are the skills/training implications of a large-scale energy efficiency programme?**

One of the issues in recent years and has been the lack of a long term Government commitment to renewables, without this why would companies invest in the training needed to support the industry.

If the programme of work involves physical building work to properties then there is potential for a shortage of skilled labour as this has already been felt for some time by the private house builders.

**5. What are the real barriers to building low cost, energy smart homes given that they can be built as cheaply as 'normal' homes and then can make money by generating surplus energy?**

Firstly we are not aware of the evidence base to back up the statement 'given that they can be built as cheaply as 'normal' homes'.

Secondly we are not aware of what is the accepted definition of a 'normal house' as there are a wide variety of building techniques available.

Without going into detail the ability of a house to generate a surplus supply would appear to rely on a number of factors some of which are listed below:

Building orientation- this is critical if the sun's energy is being used (one of the cheapest and easiest forms of renewable energy), if orientation was looked to be a key factor this would be extremely restrictive on which sites could be built on the type of layout and the densities achievable, all of which are likely to restrict the number of units which could be built on a site.

Ground conditions – likely to affect the use of ground source heat collection and again could affect layouts and densities.

Design – is the design of such a house likely to be acceptable in all locations and all sites. The customer also has to be willing to buy the house.

Other planning requirements – planning is always a balance between various competing policy requirements, if energy is to become the main driver then other policy requirements would have to give.

We would finally question the benefit or incentive for individuals to generate excess energy for others particularly as the UK government are looking to reduce FIT by 86% for small scale pv.

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