

***Social Homes Decarbonisation Project: Presentation of Key Findings
18th August 2020***

Webinar Q&A

Tai Tarian - Is it too early to consider the implication of hydrogen boilers? I am seeing there is a growing move in this area. It would be a far simpler move to replace an existing gas boiler with a 'like for like' product (blue/green hydrogen).

Since the hydrogen /biogas (decarbonised gas) will be transported in the existing natural gas grid, for homes off gas grid, the scenario remains a likely need to switch to hybrid systems for cost efficiency or all electric heating if sufficient insulation measures can be put in place.

The decarbonisation strategy for existing on-gas properties is complicated because there is uncertainty at what point decarbonised gas will become available.

Therefore, it likely that gas boilers will continue to be the best option in the near future (5-10 years). If decarbonised gas becomes available, decarb gas-ready boilers will simply appear as a product from manufacturers to displace what they sell now by evolution. The decarbonised gas ready component would simply be utilised if decarbonised gas supply become available during the lifetime of that boiler.

The fabric component of the decarb triangle between fabric - technology - grids still needs to be the best possible to maximise efficiency and minimise energy waste (regardless of type or source) to avoid increasing fuel bills for homes and over investment in grid infrastructure (the cost of which would be passed on to consumers anyway) and achieve the energy efficiency necessary for the decarbonisation of that home.

Powys County Council – Typically, we pay £7K for EWI in a very rural area, not the £2.9K that you state. This would make retro fit even more expensive.

We are reviewing the EWI costs in the WSA work.

Powys County Council - Another big issue is that installations of ASHP are being delayed in our area, as the utility company is struggling to upgrade the supply.

Clearly, the capacity of the grid is a major issue for the electrification of heat. PV, Batteries and Demand Side Response is also a very important tool to support the DNS in its grid capacity and to reduce resident bills.

Powys County Council - Our tenants in the main have a very negative opinion regarding ASHP. Maybe it would be a good idea for WG to promote through public adverts that the technology is the way forward. We have a very high percentage of off gas properties.

Noted. There does need to be a wider public engagement in heat pumps - similar to electric vehicles - to understand the problems and challenges faced by tenants as well as the benefits of homes heated differently.

Carmarthenshire County Council - Bearing in mind that a significant proportion of the stock is mostly semi-detached, have you modelled what the impact would be on a property that has had the retrofit and an unengaged tenant/private?

No, this work has not been done. Clearly, there will be different levels of engagement with new technology (from keen to negative), but any home that is heated in a fundamentally different way will require some resident engagement. This is where the importance of behaviour change lies.

Wales & West Housing - The savings from the installation of PV are quite considerable. How precise was the modelling on each property, taking account of orientation, over-shadowing, etc?

The modelling was carried out using full SAP. It was an actual real life example, so it included the orientation of PV.

Wales & West Housing - Are you able to say the extent of the impact if tenants are less than fully engaged? After all, even after many programmes running for some time, we all have large numbers of residents digitally unengaged

As [above](#), the impact of 'Behaviour Change' is critical.

Mi-Space - Were archetypes identified that were stipulated in the form of the different construction types (e.g. "Wimpy No Fines", Cornish, BISO, Airey, etc)?

Some of these, such as Cornish and No fines were included in the narratives. Obviously, across 10 case studies, we could not cover every construction variant.

Wales & West Housing - What SCOP did you use for modelling the heat pump performance?

The COP of 2.5 for heating and 1.8 for hot water based on data from the SAP database

Hafod - Do the likely costs include VAT ?

VAT is excluded

Valleys to Coast - Any thoughts on the value of joint procurement as a way of supporting decarbonisation at this point?

Great idea. It is something we are promoting through the just launched Optimised Retrofit Programme (ORP) and we know that some social landlords are pursuing this.

Good procurement is a major tool in delivering against Ministers Foundational Economy outcomes.

Valleys to Coast - If there is a mass move to ASHPs, does the national grid have the capacity to handle the increased demand without significant investment by them?

As above

Taff Housing – I imagine there will be a shortage of skills to deliver the programme (pushing prices up). Are there any plans to train a workforce to deliver the programme?

We share the concern, so we are using the 'Optimised Retrofit Programme' to illuminate training needs and gaps and drive uptake of skills development. Reasonable training costs can be covered in an ORP bid. We are engaging with organisations such as CITB and colleagues in WG 'SHELL' (Skills, Higher Education and Lifelong Learning') to develop the courses to ramp up retrofit activity.

Merthyr Valleys Homes - As well as thinking about training tenants, shouldn't we also first listen to tenants' concerns, especially those who have experienced changes in their homes, and create solutions together with tenants?

Yes, completely agree. Retrofit programmes need to include tenants as stakeholders and offer real choices to them. Successful bids under ORP will have free access to behaviour change support from the Active Building Centre (ABC) at Swansea University.

Bron Afon - Clearly, everyone is agreeing with the need to create a network of expertise. Are we clear amongst ourselves on whether there is an existing forum that does this or are we talking about setting up another network?

Thanks - this is an issue that I will add to the seminars. I know there are existing fora, and we may be able to use an existing structure or structures to share expertise.