

Housing Directorates response to RA response to Report of the task and Finish Group on Council Housing Zero Carbon Retrofit

The housing directorate welcomes such a comprehensive investigation of low carbon retrofit of SWT homes. The task and finish group's investigation considered, in depth, many of the key areas which will need to be addressed as the council works to produce a Low Carbon Retrofit Strategy and Delivery plan by March 2023.

The Housing Directorate would agree with the Groups comment (1.4) that there was a high degree of alignment between the thoughts of officers and the emerging conclusions and recommendations of the Task and Finish Group. The Housing Directorate have set out below a positive response to many of the Task and Finish Groups Report recommendations and a few areas where there is more diversity of thought currently. The directorate recognises that sections 3 – 17 reflects the evidence considered rather than recommendations and the service have not made comment on this section.

The Housing Directorate's thinking is aligned to many of the key recommendations including:

Using a Whole House approach to consider the measures required or Low Carbon Retrofit and staged delivery of measures

- A whole house approach is essential to successful low carbon retrofit (1.3) and that this may be achieved in stages (2.2). The Directorate would agree and stress that each architype and property type requires a walk route to its 'lowest possible/economically reasonable carbon footprint'.
- To deliver the greatest carbon benefit several stages will be essential for most houses and these stages need to align to the fabric first approach. The service will need to be aligned the stages as best possible to the capital replacement programme and available subsidy (grant).

Government subsidy is essential to achieving low carbon retrofit

- Government subsidy (grant) support will be essential to the installation of retrofit measures (1.5). The Housing Directorate would go further to suggest that the timing and form of subsidy will have a significant influence on the success of achieving any targets set regardless of how we choose to measure carbon savings (improved EPC/SAP ratings, reduced power consumption(kWh/m2/yr), regulated energy (design of the building) or non-regulated energy (design + appliances selected + habits of the occupant, etc).
- The Directorate would agree that with good stock data and an established whole house approach by property architype and form the council should be in a strong position seek to maximise any government grant opportunities which would fund identified measures (2.7.1)

Standardised Guidance

- The report recommends that various guides to retrofit would benefit by being standardised (2.1). The Housing Directorate would agree that a standardised guide would help landlords deliver the good practice/approaches for example the approach. Potentially this will eventually come in the form of building regulations.
- The Directorate is aware of the standards specified in the London Energy Transformation Initiative (LETI) retrofit guide. The Directorate recognise, as does LETI, that their guidance has not been costed and therefore its ambitions may not be the most cost-effective way to

achieve carbon saving or to achieve statutory requirements. The Directorate would question the prescriptive nature of targets, such as those set in the LETI standard for reduced power consumptions, as each landlord will have a range of architypes and property forms which will each have their optimum achievable power consumption measure. Reducing heat and power to its optimum level and then applying renewable grid supplied or on-site energy will produce a zero-carbon home. The key consideration is to create a 'property' target with as low a power consumption as practical to reduce the likelihood that the tenant will face fuel poverty when the property switches to electricity.

- The Directorate suggests that setting a standard measurement for an architype form to prevent fuel poverty is important. Measuring the carbon savings against the property's current energy use is more meaningful than measuring the property against an arbitrary target.
- The use of walk routes by architype and form helps the council maximise the carbon saving and invest in the most appropriate measures for the property.
- The walk route of measures can also ensure decisions are made in relation to investment which do not act against later investment decision, for example understanding if the insulation of the floor and decant of the customer is essential or not to avoid fuel poverty should the property start to use electricity as the source of heat and power is critical and there will be an optimum point in the sequence of measures where this is best done if required.

A whole house approach delivered in stages must begin with fabric

- The directorate enthusiastically support this approach. A whole house approach delivered in stages must begin with fabric to bring about significant power use reductions for homes and for the stock (2.2).
- The Directorate would suggest the stages will in part depend on the distance the architype has to travel to achieve carbon neutrality or the ease and number of measures required and cost constraints.
- The Directorate would also wish to note that the 2030 and 2035 requirements for social landlords to achieve EPC C will focus spend on fabric measures above secondary stage measures such as removing fossil fuel.

Removal of fossil fuels

- The Directorate agree that the removal of fossil fuel is essential to achieve zero carbon (2.2). The timing of the removal of fossil fuels is the final of three essential steps to retrofit:
 1. Gaining customer / tenant support for retrofit. In retrofit the council require access to customers' homes. Access is much easier if customers understand and share the purpose for the works.
 2. Fabric first
 3. Renewable energy via the Grid or through on site/community renewable energy
- The speed at which fossil fuels are replaced will depend on several variables:
 - Achieving EPC C and good insulation standards through a fabric first approach

- The introduction of a new SAP methodology which is likely to weight electric heat over fossil fuel heating (such as gas).
 - The speed by which a decarbonised grid is created
 - The availability of low cost on site renewable technology
 - The availability of subsidy to support introduction of renewable on-site technology
 - Access to homes
- The Directorate recognise that switching to grid fed electricity will exaggerate fuel poverty if progressed too swiftly. This will act against the requirement of the council to achieve EPC C for households in fuel poverty by 2030 and is likely to act against tenants' support for retrofit.

Building customer awareness

- The directorate welcome the importance placed on building up customer awareness and support for retrofit and making full use of tenants as leaders (2.5) (2.9).
- We agree that retrofit projects should be monitored to check performance, tenant's satisfaction and learn lesson (2.9)
- As stated above the Directorate would consider gaining customer support as one of the three key challenges to achieving zero carbon retrofit homes. Customer enthusiasm and support is essential to;
 - allow timely access to carry out works to customers' homes,
 - collecting before and after works energy use data to evidence success
 - monitoring and maximising savings to reduce fuel poverty
- The Directorate is aware that equal to success is the enthusiasm of our workforce and supply chain who interact with customers

Alignment of the retrofit and capital decent homes programme

- The Directorate agree that the retrofit costs and decent homes capital costs should be aligned to ensure homes remain decent and efficient and economic investment is made (2.7.2)

Learning from local and national best practice

- The Directorate/SWT needs to continue to learn from local and national good practice (2.9) (2.10). The directorate support this statement.

Working with other partners

- The Directorate aims to continue to work with other social landlord partners (2.12). The recent consortium Social Housing Decarbonisation Fund submission with seven other regional Registered Providers is evidence of this. The Directorates continues to work increasingly close with Homes in Sedgemoor and through this considers approaches and common themes.

Disposal of underperforming Council Housing stock

- The Directorate agree that the disposal of Council housing stock should only be progressed where there is a clear business case supporting the overall objectives of the HRA (Housing Revenue Account) (2.12).
- The directorate is aware that many landlords use stock disposal as a means of raising the funding to allow more new build homes. This can work as the costs of maintaining an old property can be avoided and a capital receipt received.

Additional thoughts where there is more deviation of the Housing Directorate thinking.

- The directorate and the report have more diverse views on a small number of recommendations:

More intervention by the housing service in relation to tenants' appliances and equipment

- The directorate is cautious of the role of the council, other than advice and encouragement, in specifying the appliances and lighting in a tenant's home. We recognise that energy use varies significantly depending on the choices of appliances or equipment tenant uses and the energy rating of their equipment. Appliances and equipment may vary with tenants as they do across all tenures from kettles and TVs to hot tubs and tanning beds. The Directorate has limited scope under the tenancy agreement to interfere in these choices and some choices may be better remaining with the tenant and bill payer. The Directorate would be enthusiastic to see the improvement of national standards requiring manufacturers to apply low carbon principles (2.6)

Use of a comfort plan to subsidise low carbon investment

- The directorate is unsure of the mechanism that it could adopt to introduce comfort plan principles.
- We consider the comfort plan principles requires a landlord to be confident in the performance of their interventions. SWT does not currently have the expertise and data (pre works and post works) to provide this confidence.
- The directorate recognises that the principles of the comfort plan should continue to be explored as a potential source of investment (2.7.3)

Use of target setting targets through council policy and planning policy

- The Directorate is concerned that over ambitious target setting by the council, including the local planning authority, for the removal of a) fossil fuels and b) establishing household power consumption will act against the principles of whole house, fabric first and the HRAs (Housing Revenue Account) ability to invest in all the homes requiring measures.
- Without identifying new sources of investment targets in relation to fossil fuels need to reflect a staged approach to whole house solutions and understand if the target creates additional carbon savings or just increase investment costs and potentially fuel poverty.

- The LETI ambitions for energy performance should be used to reflect the 2050 goal of zero carbon. However, should new sources of funding allow a swifter move to zero carbon retrofit it will be embraced.
- The Directorate would suggest that the critical measurement is power usage per property archetype/form measured in Kwh/m²/yr. However, setting random targets such as 90, 50, 40 Kwh/m²/yr is likely to be superficial and could increase the opportunity for poor investment decisions, fuel poverty due to inability to invest in all the stock or a requirement to sell more poor stock to help close the gap with the target. The Directorate proposes that each property archetype/form will have a different optimum standard for heat and power and each target is set to ensure the customer is very unlikely to suffer fuel poverty as heat is switched over time to electricity through the grid or on-site renewables.
- Through using a walk route to zero carbon rather than target setting there will be greater and more immediate opportunity to evidence carbon reduction as it would be measured against current carbon use. Carbon could be measured at every point along the walk route as the property receives each measure. An example of this is the results from a test property which we have analysed and has a power usage of 220 Kwh/m²/yr. The best this property could achieve is 45 Kwh/m²/yr but to achieve this the tenant would need to be decanted to allow the floor to be insulated, air tightness interventions and mechanical ventilation would need to be incorporated. These measures are possible but unaffordable considering the number of units the council must retrofit. However, through fabric measures the property could achieve a power usage of 84 Kwh/m²/yr. This level of power usage would fall short of the LETI standard but would create a huge carbon saving of 136 Kwh/m²/yr or 60%. Achieving 84 Kwh/m²/yr on this property would also achieve 80% of that archetypes/forms potential power reduction.
- It is important to note that as the grid decarbonises the property would become zero carbon as long as it has electric heating and the key variable is the relationship of the tenant to fuel poverty.
- It is important to remember that the government is introducing a new SAP calculation which could alter how we prioritise our investment. We are building this new calculation into our thinking as best we can.

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