Cynulliad Cenedlaethol Cymru | National Assembly for Wales Y Pwyllgor Newid Hinsawdd, Amgylchedd a Materion Gwledig Climate Change, Environment and Rural Affairs Committee Ymchwiliad i Dlodi Tanwydd | Inquiry into Fuel Poverty FP 01 Ymateb gan : Dr Thornton Evidence from : Dr Thornton

Action to date on combatting fuel poverty: I am not aware of how successful Nest and Arbed have been, but it is highly desirable to collect data on the impact it's had in terms of living temperatures. In many instances, people who have had their homes insulated do not spend less on fuel, they simply live at a more comfortable temperature. Given that many people are living in dangerously cold homes, this is an extremely important outcome from a public health perspective; poor housing is in the top 5 costs to the NHS and it is important that people feel they can afford to heat their homes to an appropriate temperature. The benefits of insulation retrofit to health of occupants is demonstrated and data published.

Future strategy: It seems essential to monitor the success of retrofit programmes, and in particular to measure the performance gap; the difference between predicted savings and actual savings. Anecdotally, this gap is large, and the quality of many PAS 2035 projects is extremely low. PAS 2050 includes requirements for risk assessment in relation to moisture, and this will be particularly important in solid wall houses, for which many of the recommended measures installed in cavity wall buildings are regarded as risky from an interstitial condensation perspective. The public health consequences of poor quality insulation in solid walled buildings are significant.

New homes: All houses should be built to passivhaus standards. Since the homes we build now will still be occupied in 2050, it is vital that they are as low energy as possible. A zero carbon home standard is insufficient; the success or otherwise of such an initiative is highly dependent on the carbon intensity of the grid and is prone to allowing a lower quality building combined with offsetting of emissions via installation of renewables.

Passivhaus is not popular with developers, because many of them lack the capability to build to this standard, but the number of contractors with experience in passivhaus is increasing, particularly in England. Lack of skills within the Welsh construction industry should not be a reason to compromise on health and performance.