

The Future Homes Standard Consultation Response

Submitted on Friday 31 January 2020



Question	December 2019 Consultation Response
Chapter 2 "The Future Homes Standard"	
<p>Q1 Do you agree with our expectation that a home built to the Future Homes Standard should produce 75-80% less CO2 emissions than one built to current requirements?</p> <p>a. Yes</p> <p>b. No – 75-80% is too high a reduction in CO2</p> <p>c. No – 75-80% is too low a reduction in CO2</p> <p>If no, please explain your reasoning and provide evidence to support this.</p>	<p>The 75-80% standard is not high enough; 75% is already achievable, technology exists to deliver this and there are case studies at scale to provide evidence.</p> <p>A fabric first approach should be taken ; this would remove the need for building upgrades in 2050</p> <p>The calculation methodology is based on a "notional" building - what is this? The emphasis should be on energy reduction rather than CO2</p> <p>Higher performance and added value will be driven by setting a zero carbon target, not by reduction measures</p> <p>The consultation anticipates there will be some financial consequences from the suggested additional measures - those can be mitigated by improved design and building fabric.</p> <p>The resilience of the standard should be measured in terms of health benefits, air quality and post occupancy costs</p> <p>Post occupancy monitoring and evaluation is critical to bringing the FHS to life and there is a significant role for an active and knowledgeable client side role, particularly in projects of scale.</p>
<p>Q2 We think heat pumps and heat networks should typically be used to deliver the low carbon heating requirement of the Future Homes Standard. What are your views on this and in what circumstances should other low carbon technologies, such as direct electric heating, be used?</p>	<p>The Future Homes Standard should be technologically agnostic; reducing and managing heat demand should be at the core with innovation encouraged across all heating measures.</p> <p>Depending on one technology has been found to be too restrictive and certain technologies</p>

	<p>may work better with different house types</p> <p>Users should be consulted and all technologies should be supported by straightforward interfaces.</p> <p>Again, fabric first and performance outcomes should lead. The affordability test is too vague and a requirement to reduce running costs would be more effective</p>
<p>Q3 Do you agree that the fabric package for Option 1 (Future Homes Fabric) set out in Chapter 3 and Table 4 of the impact assessment provides a reasonable basis for the fabric performance of the Future Homes Standard?</p> <p>a. Yes</p> <p>b. No – the fabric standard is too demanding</p> <p>c. No – the fabric standard is not demanding enough</p> <p>If no, please explain your reasoning.</p>	<p>c. Getting the fabric standard right will reduce energy consumption straight away.</p> <p>The Dutch Engiesprong method is recommended for retrofitting with energy reduction measures</p>
<p>Q4 When, if at all, should the government commence the amendment to the Planning and Energy Act 2008 to restrict local planning authorities from setting higher energy efficiency standards for dwellings?</p> <p>a. In 2020 alongside the introduction of any option to uplift to the energy efficiency standards of Part L</p> <p>b. In 2020 but only in the event of the introduction of a 31% uplift (option 2) to the energy efficiency standards of Part L</p> <p>c. In 2025 alongside the introduction of the Future Homes Standard</p> <p>d. The government should not commence the amendment to the Planning and Energy Act</p> <p>Please explain your reasoning.</p>	<p>d. This should be permissive; local energy standards progressed by the Green Core Cities have progressively moved standards close to those that the FHS is seeking to achieve and when the market can support higher standards, then this should be allowed</p>

Chapter 3 Part L	
<p>Q6 What level of uplift to the energy efficiency standards in the Building Regulations should be introduced in 2020?</p> <p>a. No change b. Option 1 – 20% CO2 reduction c. Option 2 – 31% CO2 reduction (the government’s preferred option) d. Other</p> <p>Please explain your reasoning.</p>	<p>The focus should be on 2025 standards with a sensible stepping stone to move the industry towards this.</p> <p>Option 2 moves us closer to this.</p> <p>There is a clear link between achieving high energy performance and good building quality, correct in detail and supported by testing.</p> <p>However, for those public land sites with residual zero land value within Homes England's programmes, a form of government financial support will be needed to achieve any uplift in energy efficiency standards.</p>
<p>Q7 Do you agree with using primary energy as the principal performance metric?</p> <p>a. Yes – primary energy should be the principal performance metric b. No – CO2 should remain the principal performance metric c. No – another measure should be the principal performance metric</p> <p>Please explain your reasoning and evidence to support this</p>	<p>c. There should be a third metric - energy use intensity.</p> <p>Primary energy relates to how efficient the grid is - but our focus should be on how energy efficient the home is. We should be comparing meter readings with as-designed expectations</p>

Q11 Do you agree with the proposed minimum fabric standards set out in Table 3.1?

If you do not agree with any one or more of the proposed standards, please explain your reasoning and provide evidence to support this.

Table 3.1 - Minimum standards for fabric performance

		Yes	No – should be more insulating	No – should be less insulating
External walls	0.26 W/m ² .K			
Party walls	0.20 W/m ² .K			
Floor	0.18 W/m ² .K			
Roof	0.16 W/m ² .K			
Windows, roof windows, glazed roof lights, curtain walling, and pedestrian doors	1.6 W/m ² .K			
Roof-lights	2.2 W/m ² .K			
Air permeability	8m ³ /m ² .K at 50Pa			

These standards are in adequate and have been in use now for over 10 years. There should be a significant rise in standards as follows

Party Walls 0

Floor 0.1

Roof 0.1

Air permeability 3 but a stretch target of 1 or 2 should be applied on most projects. Level 3 and better will require mechanical ventilation both for extraction and to prevent ingress of air pollution, so will become a standard in all new housing

Q21 Do you agree with the proposal to adopt the latest Standard Assessment Procedure, SAP 10?

a. Yes

b. No

If no, please explain your reasoning.

b. SAP 10 has already been adopted and is in use. PHPP (Passivhaus Planning Package) should now take its place and consultation on how this should be applied in practice

Chapter 5 Airtightness	
<p>Q52 Currently, small developments are excluded from the requirement to undergo any airtightness tests. Do you agree with including small developments in this requirement?</p> <p>a. Yes</p> <p>b. No</p> <p>If no, please explain your reasoning and evidence to support this.</p>	<p>b. All dwellings should be included</p>
Chapter 7 Transitional arrangements	
<p>Q65 Do you agree that the transitional arrangements for the energy efficiency changes in 2020 should not apply to individual buildings where work has not started within a reasonable period – resulting in those buildings having to be built to the new energy efficiency standard?</p> <p>If yes, please suggest a suitable length of time for the reasonable period in which building work should have started</p> <p>If no, please explain your reasoning and provide evidence to support this</p> <p>a. Yes – where building work has commenced on an individual building within a reasonable period, the transitional arrangements should apply to that building, but not to the buildings on which building work has not commenced</p> <p>b. No – the transitional arrangements should continue to apply to all building work on a development, irrespective of whether or not building work has commenced on individual buildings</p> <p>If yes, please suggest a suitable length of time for the reasonable period in which building work should have started.</p> <p>If no, please explain your reasoning and provide to support this.</p>	<p>a. The transitional arrangements should only apply to buildings that have actually started. This should be time driven and one year is regarded as a reasonable length of time. A clear time line is a signal to the industry and developers and all the supply chain can be equipped to deal with this.</p> <p>Further clarification will be essential in cases of complex, high density, high rise developments with linkages between individual blocks. The arrangements need to reflect how different such scenarios are from low rise estates</p>