

Sustainable New Homes – The Road to Zero Carbon

Consultation on the Code for Sustainable Homes and the Energy Efficiency Standard for Zero Carbon Homes

Response by SSE

1 Introduction

SSE welcomes the opportunity to respond to this consultation, and strongly supports efforts to decarbonise the building stock.

2 Answers to specific consultation questions

Question 1: Do you agree that the Code energy methodology should be aligned with the revised Part L 2010 when published?

Yes, although it is questionable whether the first three levels of the code should all be set at the same level (25% CO₂ reduction on 2006 building regulations), with zero credits across all three levels. Given the discussion in paragraphs 159 and 160 and question 35 on climate change being the primary focus of the code then the CO₂ rating is arguably the most important category in the code. The proposal therefore makes code levels 1 and 2 obsolete in relation to this metric.

Question 2: Do you agree that in principle we should maintain the current approach whereby the energy section of the Code (ENE 1) anticipates the 2013 and 2016 changes to regulations leading to zero carbon?

Yes, and the building regulations will also need to change such that both code and regulations converge on the zero carbon definition in 2016.

However SSE believes that there is a case for an additional code level to recognise those buildings that have achieved zero carbon entirely onsite. This would provide an incentive for developers to go further onsite should they wish to, differentiate the different approaches to zero carbon more clearly for consumers, and recognise those buildings that have achieved Code 6 as it currently stands. This would also mean there is a purpose to the code beyond 2016 in energy terms, otherwise the code will be restricted to the non energy elements since code level 6 will be required by building regulations.

Question 3: Do you agree in principle that the energy issues in the Energy category of the Code should be revised to reflect the terminology used in zero carbon hierarchy? If not, what would be your suggested approach?

Yes.

Question 4: Do you agree that introducing half credits under ENE1: Dwelling Emission Rate is an effective approach to preventing degradation of specification? If not, why?

SSE's core business is not housebuilding, so perhaps the views of organisations who are building to code standards regularly would be more important.

However, on paper the proposals look confused, and the cause appears to be a desire to keep the same total amount of credits by transferring 5 across to *ENE2: Building Fabric*. Table 3 shows 17 steps for 10 credits, close to the 15 there were before. Therefore there could still be 15 credits for the

DER and the totals needed for each code level award could be adjusted accordingly, particularly since there are minimum standards for each code level in the DER category.

As noted in Question 1, there is a case for rethinking the code levels so that there is greater distinction between the lower levels of the Code regarding energy use and emissions, given that these are considered the most important areas.

There should also be a “Level 7” for homes that achieve zero carbon entirely onsite; however this should not score more credits than Level 6.

Question 5: Would it be beneficial to introduce a further breakdown of credits available in this section? If yes, what would you propose?

No.

Question 6: Do you agree with removing 5 credits from ENE 1: Dwelling Emission Rate and reallocating them to ENE 2: Building Fabric to incentivise improvements to the energy efficiency of the building?

SSE agrees with having 7 credits for building fabric, although as noted above we are not sure whether or not 5 of these should be removed from the DER category.

Question 7: Do you agree with the proposed allocation of credits, as shown in the credit allocation table? If not, what would be your suggested approach?

As noted above, there should be further differentiation between levels 1 to 3 so that levels 2 and 3 demonstrate some improvement over 2010 building regulations, even if the improvement is modest.

Question 8: Do you have any suggestions for mechanisms for allowable solutions that could be used in the Code in advance of the introduction of a national approach to allowable solutions?

One option is to adopt an entirely voluntary system whereby developers could generate their own projects, perhaps in partnership with local authorities, such as community renewables, heat networks or insulation projects. They could submit evidence of the work carried out and the carbon savings.

The disadvantage of this is that, in the absence of a body checking compliance, the methodologies for carbon accounting might vary, so that there is not a level playing field between developers. However this would enable developers, planning authorities and other stakeholders to experiment with running projects, and this could inform the development of the allowable solutions policy to 2016.

A buyout fund could be introduced either as the sole interim solution or as one of a number. Money could be collected from developers, which could either be spent as a fund to support carbon saving projects, allocated through a competitive tendering process. If a buyout fund is to be included in the allowable solutions post 2016 then the funds could also be held until 2016 to merge with the buyout fund when the zero carbon homes policy is implemented fully. In this case clear rules would need to be in place regarding ring fencing of funds and how any returns on investment from the fund would be allocated.

Question 9: Do you agree that ENE2: Building Fabric be changed from its current name to ENE2: Fabric Energy Efficiency to reflect the zero carbon hierarchy?

Yes.

Question 10: Do you agree that we should adopt the new energy efficiency metric and levels for the 2016 zero carbon definition into the Code now? If not, why not?

Yes, provided the tools are available to developers and enforcement agencies to calculate the metric.

Question 11: Do you agree that we should adopt the new energy efficiency levels for the 2016 zero carbon definition into the Code as a mandatory requirement at Code levels 5 and 6 and award 5 credits?

Yes.

Question 12: Do you agree that Code level 4 should mirror the outcome of the consultation on the energy efficiency definition (see Part B) for interim measures to be introduced into regulations in 2013?

Yes.

Question 13: Do you agree that the credits for internal lighting will no longer be required once the Code is updated in 2010 and it is therefore appropriate to delete ENE3: Internal Lighting and reallocate the points elsewhere in the energy section?

Yes. However there might still be scope to reduce energy use for lighting further, for example by using LED technology, photoelectric sensors and occupancy sensors. These measures could perhaps be captured in the allowable solutions as energy efficient appliances.

Question 14: Do you agree that evidence must be provided by developers on the energy efficiency of appliances provided as optional extras if they choose to gain the credit for leaflet provision?

Yes.

Credits should only be awarded at all where some additionality can be demonstrated. This is in line with the current debate regarding the eligibility of energy efficient appliances within CERT.

For example, nearly all domestic fridges and freezers are now A rated. It is therefore extremely likely that the developer or the customer moving into the home would buy A rated units in any event and so the developer should not be credited for supplying these. Some other appliances such as tumble driers are much more likely to be less efficient models and there is therefore a case for incentivising the supply of efficient versions through code credits.

Question 15: Do you agree that the 2 points awarded for external lighting should be reduced to 1 point?

No comment.

Question 16: Do you agree that this issue is renamed from ENE7 Low and Zero Carbon Technologies to ENE3: Renewable Technologies to better reflect the zero carbon hierarchy?

No. This issue should be removed altogether. Microgeneration is already incentivised through its impact on the level of carbon compliance and by the Feed-in Tariff and Renewable Heat Incentive schemes. Awarding extra credits is unnecessary and skews the incentives within carbon compliance away from energy efficiency towards microgeneration.

Question 17: Do you agree that for technologies under 50kW_e and 300kW_{th} certification under the Microgeneration Certification Scheme should be a requirement for allocating credits and for all renewable CHP schemes over 50kW_e assurance under the CHPQA should be a requirement for allocating credits?

If credits are allocated for renewables, then SSE supports the use of MCS in order to gain the credits. For other renewables, eligibility criteria for FITs, RHI and RO could be used to determine eligibility for code credits.

Question 18: Do you agree that a new issue should be introduced into the Code for the provision of energy display devices?

SSE strongly supports the use of energy display devices in general. The new version of the code is due to be introduced in 2010, and there would be a further delay while dwellings are built to the new code. Although the timing of the smart meter rollout is not yet finalised, it seems likely that the provision of energy display devices will be a short-lived measure. Government should ensure that the costs of amending the code in this way are justified by the benefits of energy display devices over this short timescale.

Question 19: Do you agree with the proposed credit allocation for this new issue? If not, why not?

The number of credits seems disproportionately high, especially given the short term nature of this measure prior to the rollout of smart meters, when compared to the 10 credits proposed for the dwelling emission rate for example.

Question 20: Do you agree that we should postpone making the Lifetime Homes Standards (as revised) a mandatory requirement from Code level 4 upwards pending a review in 2010?

No comment

Question 21: Do you agree with our proposal to introduce an exemption on steeply sloping sites for the external Lifetime Homes requirements and award 3 out of the 4 available points?

No comment.

Question 22: Do you agree with the definition of a steeply sloping site as having a predominant gradient of 1:12 or greater?

No comment.

Question 23: Do you agree with the proposals for measuring gradients?

No comment.

Question 24: Do you agree with the proposed changes to the technical guide criteria in order to better reflect current thinking and standards on accessibility? If not, which proposals do you disagree with, and why?

No comment.

Question 25: Do you agree that current Code requirements cause duplication for some developers who already have a corporate site waste management plan in place? If yes, please provide evidence of experiences to support your answer.

No comment.

Question 26: Should the mandatory requirement for Site Waste Management Plans be removed and replaced with voluntary credits for minimising or diverting waste to landfill as set out above and in the technical guide?

No comment.

Question 27: Do you agree with the proposed methodology and requirements for dealing with doubling external space where there is a fortnightly collection? If not, what methodology/requirements do you think should be used?

No comment.

Question 28: Do you agree that waste compactors should be allowed on sites where there are space restrictions for storing waste? If yes, do you agree with the proposed requirements?

No comment.

Question 29: Should communal cycle storage in large scale, high density developments be reduced, remain the same or be increased? We would welcome evidence from respondents of experiences with this issue.

Question 30: If we were to rescale the communal storage requirements for certain sized developments, what threshold should be used to describe a development as 'large scale' and allow a rescaled requirement to be applied, e.g. 100 dwellings, 200 dwellings, etc.? Why do you consider this threshold to be appropriate?

Question 31: Do you consider it appropriate to reduce the cycle storage requirement for certain types of development, such as specialist retirement housing. If so, what types of development would you consider it appropriate to apply the reduction to?

Question 32: Should the requirement for cycle storage remain for all developments but be flexible to allow for storage of mobility equipment applicable to the likely end user as well as cycles?

Question 29 to 32: no comment, except to say that SSE supports appropriate provision of facilities to promote cycling.

SSE also considers that credit should be awarded for providing charging points for electric vehicles, and that the electricity demand from any charging points should be excluded from the carbon emissions associated with the development.

Question 33: Do you agree that the home office space requirement for specialist housing such as retirement homes should be reduced?

No comment.

Question 34: Are there other parts of the Code you think this may apply to?

No comment.

Question 35: Should the issues in the Code not directly related to climate change remain in the Code? What are the reasons for your answer and do you have any evidence to support them?

It is important that low and zero carbon homes are desirable to consumers. Therefore any elements not directly relating to climate change, but affecting the liveability of the home need to be addressed. If this is not done within the code, it should be addressed through some other mechanism.

Question 36: Do you agree with the proposed changes set out in the technical guide to the assessment criteria in SUR1: Management of Surface Water Run-off from development? If not, why not?

No comment.

Question 37a: Do you agree in principle that the minimum door and window security standards outlined in Box B should be introduced into the Code and awarded one credit?

No comment.

Question 37b: Should an additional credit be available for consulting with the local architectural liaison officer or crime prevention design advisor and implementing their recommendations based on Secured By Design part 2?

No comment.

Question 37c: Do you think the above options would give rise to additional construction costs. If so, please state what you think those costs would be.

No comment.

Question 37d: Alternatively, to drive take up of basic physical security standards in new homes would it be necessary to make them a mandatory part of the Code?

No comment.

Question 37e: Would an alternative approach of allowing two credits for consulting an architectural liaison officer or crime prevention design advisor (whilst leaving the credit for door and window locks voluntary) be a more attractive way of encouraging take up of basic security standards?

No comment.

Question 38: Do you agree that the technical guide should only be updated in 2013 and 2016? If not, do you have any suggestions for how often updates should be issued (for instance annually or every 18 months)?

No comment.

Question 39: Do you have any comments on the redesign of the technical guide or suggestions for improving it?

No comment.

Question 40: Do you have any experience or views on how to help make the Code more accessible, visible and valuable to consumers?

There have recently been proposals to include EPC ratings on adverts for homes to increase the prominence of the EPC ratings. For those homes since 2008 that had to be rated against the code, the code rating could also be displayed alongside the EPC rating on any publicity material.

Question 41: We would welcome your thoughts on whether these areas should be considered for the future and any evidence you may have to support those views.

SSE supports the inclusion of both climate change adaptation and embodied carbon.

Question 42: Do you agree that the appropriate metric for the energy efficiency standard to support the regulatory definition of zero carbon homes should be based on the amount of energy demand for space heating and cooling per square metre per year? If not, why not?

Yes.

Question 43: Do you agree that it is right to focus on fabric and passive energy efficiency measures within the energy efficiency standard and to capture the efficiency of heating and cooling appliances and systems, mechanical ventilation, heat recovery and gains from hot water via carbon compliance? If not, why not?

Yes.

Question 44: Do you agree that it is right to differentiate the level of the fabric energy efficiency standard (expressed in kWh/m²/year) according to the type of dwelling? If not, why not?

Yes.

Question 45: Do you agree that the regulatory standard applicable from 2016 should (based on consultation SAP 2009) be 39 kWh/m²/year for apartments and mid-terrace houses and 46 kWh/m²/year for semi-detached houses? If not, do you think it should be (a) more demanding – for example equivalent to the Specification C- considered by the task group or (b) less demanding – for example equivalent to the Specification A considered by the task group?

Question 46: Do you agree that the regulatory standard applicable from 2016 should (based on consultation SAP 2009) be 46 kWh/m²/year for detached houses? If not, do you think it should be (a) more demanding – for example equivalent to the Specification C considered by the task group or (b) less demanding – for example equivalent to the Specification B considered by the task group?

Questions 45 and 46: This could have been back-calculated based on an equal percentage cost uplift for the different built forms.

Question 47: Government is minded to introduce interim requirements from 2013. Do you agree? What approach would you support, bearing in mind the considerations and ideas set out in paragraphs 220–221?

Yes. SSE favours a performance standard approach, supplemented by a programme of research to test real life against predicted performance, with testing and monitoring used to understand any mismatch between the two.

Question 48: Are the proposals set out in this chapter likely to result in any seriously adverse unintended consequences that are unlikely to be addressed through the research requirements identified in paragraph 217?

No.