

## **2012 Consultation on Changes to the Building Regulations in Wales Part L (Conservation of fuel and power)**

### **Consultation – summary of responses**

#### **Part 2**

- #39 - FITP Working party c-o Glass & Glazing Federation**
- #40 - Glass & Glazing Federation**
- #42 - CIOB Wales Cymru**
- #45 – Engineering Panels in Construction**
- #46 - Gwynedd Consultancy Building Control - Gwynedd Council**
- #48 - Construction Products Association**
- #49 - Torfaen County Borough Council**
- #50 - Wales Low Zero Carbon Hub**
- #51 - FGMA (Flat Glass Manufacturers Association)**
- #54 - David Jones**
- #56 - ECA**
- #57 - Kingspan Insulation Limited**
- #60 - Council for Aluminium in Building**
- #61 - British Board of Agrement**
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- #71 - British Glass Manufacturers' Confederation**

**#39 - FITP Working party c-o Glass & Glazing Federation**

# 2012 consultation on changes to the Building Regulations in Wales

## Part L (Conservation of fuel and power)

### Consultation Response Form

Your name: Giles Willson

Organisation (if applicable): FITP working party c/o  
Glass & Glazing Federation

- (i) **Are the views expressed on this consultation an official response from the organisation you represent or your own personal views?**

Organisational ☒ Personal Views ☐

- (ii) **Are your views expressed on this consultation in connection with your membership or support of any group? If yes please state name of group:**

Yes ☒ No ☐

Name of group:

Fenestration Industry Thermal Performance (FITP) Working Group. FITP represents the views of the following industry trade associations:

Glass and Glazing Federation  
Flat Glass Manufacturers Association  
British Plastics Federation  
British Woodworking Federation  
Steel Window Association  
National Federation of Glaziers  
Composite Door Manufacturers Association  
WER Scheme operators Group  
Competent persons scheme operators  
British Glass Manufacturing Confederation

**(iii) Please tick the one box that best describes your organisation:**

<b>Builders/Developers:</b>  Builder / Main contractor: <input type="checkbox"/> Builder/ Small builder: (extensions/repairs/maintenance, etc) <input type="checkbox"/> Installer/ special sub-contractor <input type="checkbox"/> Commercial developer <input type="checkbox"/> House builder <input type="checkbox"/>	<b>Property Management:</b>  Housing association (registered social landlord) <input type="checkbox"/> Residential landlord, private sector <input type="checkbox"/> Commercial <input type="checkbox"/> Public sector <input type="checkbox"/>
<b>Building occupier:</b>  Home owner <input type="checkbox"/> Tenant (residential) <input type="checkbox"/> Commercial Building <input type="checkbox"/>	<b>Building Control Bodies:</b>  Local authority building control <input type="checkbox"/> Approved Inspector <input type="checkbox"/>
<b>Energy Sector</b> <input type="checkbox"/>	<b>Fire and Rescue Authority</b> <input type="checkbox"/>

<b>Designers/Engineers/Surveyors:</b>  Architect <input type="checkbox"/> Civil/Structural engineer <input type="checkbox"/> Building services engineer <input type="checkbox"/> Surveyor <input type="checkbox"/>	<b>Specific Interest:</b>  Competent person scheme operator <input type="checkbox"/> National representative or trade body <input checked="" type="checkbox"/> Professional body or institution <input type="checkbox"/> Research/ academic organisation <input type="checkbox"/>
<b>Manufacturer/ Supply Chain</b> <input type="checkbox"/>	<b>Other</b> ( <i>please specify</i> ) <input type="text"/>

(iv) Please tick the **one** box which best describes the size of your or your organisation's business?

- Micro – typically 0 to 9 full-time or equivalent employees (incl. sole traders) ☐
- Small – typically 10 to 49 full-time or equivalent employees ☐
- Medium – typically 50 to 249 full-time or equivalent employees ☐
- Large – typically 250+ full-time or equivalent employees ☐
- None of the above (please specify) Members of associations represented by FITP range from micro-enterprises to multi-national companies. ☒

(vi) Are you or your organisation a member of a competent person scheme?

Yes ☒ No ☐

Name of scheme:

One of the FITP member organisations is the Competent Persons Scheme Operators, representing FENSA, BSI and CERTASS.

**(vii) Would you be happy for us to contact you again in relation to this consultation?**Yes ☒ No ☐

WG will process any personal information that you provide us with in accordance with the data protection principles in the Data Protection Act 1998. In particular, we shall protect all responses containing personal information by means of all appropriate technical security measures and ensure that they are only accessible to those with an operational need to see them. You should, however, be aware that as a public body, the Welsh Government is subject to the requirements of the Freedom of Information Act 2000, and may receive requests for all responses to this consultation. If such requests are received we shall take all steps to anonymise responses that we disclose, by stripping them of the specifically personal data – name and e-mail address – you supply in responding to this consultation. If, however, you consider that any of the responses that you provide to this survey would be likely to identify you irrespective of the removal of your overt personal data, then we should be grateful if you would indicate that, and the likely reasons, in your response, for example in the relevant comments box.

**Questions:****New homes**

1. Do you agree with the Government's preference for a CO<sub>2</sub> saving of 40% reduction in carbon dioxide emissions compared to Part L 2010.

No change to 2010	<input type="checkbox"/>
40% CO <sub>2</sub> saving	<input checked="" type="checkbox"/>
25% CO <sub>2</sub> saving	<input type="checkbox"/>
Something else (please explain below)	<input type="checkbox"/>
Don't know	<input type="checkbox"/>

Comments

40% preferred, so as to avoid a more dramatic change when zero carbon standards are introduced in future revisions.

2. Do you agree with the proposal for an 'aggregate' approach to CO<sub>2</sub> target setting for new homes in 2015? The CO<sub>2</sub> target for any individual dwelling varies depending on the ease with which the building can achieve the target, with the overall required CO<sub>2</sub> saving achieved when aggregated over the build mix.

Yes ☒ No ☐ Don't know ☐

## Comments

3. Do you agree with the proposal for a compliant option based on a consistent recipe of elemental specifications for fabric, services plus an additional CO<sub>2</sub> saving equivalent to an amount of photovoltaic (PV). Please justify your choice.

Yes ☒ No ☐ Don't know ☐

## Comments

We are firm believers in a "fabric first" approach, because this minimises the demand for energy from any source (renewable or non-renewable). The performance of the building fabric is permanent, consistent and (generally) maintenance-free. A high standard of fabric performance is essential to ensure the building remains energy-efficient and comfortable in the event of renewable energy supply failing, under-performing or being repaired.

4. The main difference between the recipes is the required system efficiency for each fuel, which is appropriate for the heating system type. By adopting this approach to different fuel types, there is no need for a separate fuel factor. Do you agree with the proposed approach?

Yes ☒ No ☐ Don't know ☐

## Comments

5. For the CO<sub>2</sub> savings proposed, are the recipe specifications a sensible way of achieving them? Please justify your choice.

Yes ☒ No ☐ Don't know ☐

## Comments

The specifications are available with current technology.

6. In approaching the selection of the amount of PV to be installed on dwellings, do you prefer?

Fixed percentage of building foundation area

☒

Proportion of gross internal floor area with a practical cap

☐

Don't know

☐

## Comments

Because roof area (where the PVs are most likely to be placed) will be similar to foundation area.

7. Do you agree that the limits on design flexibility 'backstop' values for fabric elements in new homes should be changed from the current reasonable provision in the technical guidance to become mandatory?

Yes ☐ No ☒ Don't know ☐

## Comments

The current system, in which the backstop values are regarded as "reasonable provision", works satisfactorily.

8. Do you agree with the changes to the 'backstop' values proposed? Please explain your decision.

Yes ☐ No ☐ Don't know ☒

## Comments

It seems reasonable for them to be improved in line with other improving standards for new build. However, some FITP members feel the proposed value of 1.6 for windows and doors was too severe, and prefer an interim

9. Do you have any other comments on the proposed changes to Approved Document L1A or the domestic National Calculation Methodology? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

## Comments

We note that in the proposals there is no intention to have a Target Fabric Efficiency Level, as is proposed for the revisions to the England Part L. While this does not directly impact on our industry, we draw your attention to the fact that housebuilders and designers will inevitably have to deal with different ways of demonstrating compliance in these two parts of the UK. This adds to the general regulatory and administrative burden on companies, to no advantage or benefit to anyone.

10. The Impact Assessment makes a number of assumptions on fabric/services/ renewables costs, new build rates, phase-in rates, learning rates, etc for new homes. Do you think these assumptions are fair and reasonable? Please justify your views.

Yes ☐ No ☐ Don't know ☒

## Comments

Windows and glazing not referenced or costed in isolation in the IA, so we cannot comment.

11. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for new homes? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

## Comments

Windows and glazing not referenced or costed in isolation in the IA, so we cannot comment.



## New non-domestic buildings

12. Do you agree with the proposal for 2013 for non-domestic buildings to explicitly regulate energy efficiency separately from low carbon technologies through the assessment of primary energy consumption (PEC)? Does PEC seem like a reasonable basis for standard setting?

Yes ☐ No ☒ Don't know ☐

### Comments

For the reasons given in our comments on Q9, we think the introduction of the PEC criterion creates burdens on designers and builders, without commensurate benefit.

13. Which package of fabric and services should be selected: 7% or 10%? Please give reasons for your choice.

7% ☐

10% ☒

Don't know ☐

### Comments

We prefer the 10% option which achieves 11% CO2 reduction without renewables (table 3.3 in the Consultation Document). It is important to maximise the savings through the building fabric, and to minimise the reliance on energy supply (whether renewable or not), so that the building remains energy-efficient, comfortable and habitable in the event of the energy supply system under-performing due to eg failure, disruption or lack of maintenance.

14. Do you foresee any particular issues for certain categories of building to meet the TPEC or TER?

Yes ☐ No ☐ Don't know ☒

## Comments

Not qualified to comment

15. Which approach should be utilized to incorporate the contribution of low carbon technologies into the setting of the Target Emission Rate (TER), for non domestic buildings?

Fixed carbon reduction (in kg.CO<sub>2</sub>/m<sup>2</sup>/year)

☐

Percentage of roof area of PV

☐

Other

☐

Don't know

☒

Please give reasons for your choice

16. The proposals explain the Government's preference for a 20% aggregate improvement in CO<sub>2</sub> performance standards for new non-domestic buildings from October 2013. Which option do you prefer and why?

No change

☐

Target A: 10% aggregate improvement (1% PV)

☐

Target B: 11% aggregate improvement (No PV)

☒

Target C: 20% aggregate improvement (5% PV)

☐

Don't know

☐

Please give reasons for your choice

Please see our answer to Q13. However, we have no objection to target C as long as it does not permit the building envelope performance to be inferior to that in target B.

17. Do the proposed 2013 notional buildings as set out in the changes to the National Calculation Methodology seem like a reasonable basis for standards setting? Please provide comments on the method used to develop the notional buildings and particular elements of one or more of the notional buildings, if relevant.

Yes ☒ No ☐ Don't know ☐

Comments

18. Do you think that a further recipe should be created for buildings under 250m<sup>2</sup> and aligned with the proposed domestic recipe? Are there particular reasons why smaller buildings find compliance with the non-domestic recipes difficult? Please justify your views.

Yes ☒ No ☐ Don't know ☐

Comments

Small non-dwellings are likely to be domestic in character and form of construction.

19. Although we recognise that some buildings may need to be serviced in a particular way for legitimate functional or environmental reasons, should Part L incentivise a lower carbon servicing strategy (as with the current Energy Performance Certificate methodology), by basing the notional building on mixed-mode ventilation?

Yes ☐ No ☐ Don't know ☒

Comments

Not qualified to comment

20. Do you have any other comments on the proposed changes to Approved Document L2A or the non-domestic National Calculation Methodology? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

The comments we made in answer to Q9 and Q12 apply equally to the unilateral introduction of the BPEC criterion.

21. The Impact Assessment makes a number of assumptions on the costs of fabric/services/renewables, new build rates, etc for new non-domestic buildings. Do you think these assumptions are fair and reasonable? Please justify your views.

Yes ☐ No ☐ Don't know ☒

Comments

22. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for new non-domestic buildings?

Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

Comments

## Cumulative impact of policies

23. Overall, do you think the assessment of the impact on development is broadly fair and reasonable? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

Comments

## National Planning Policy Review

24. What role should planning play in facilitating higher carbon standards? Should it focus on facilitating site wide energy opportunities that will be needed as we move towards zero or near zero carbon buildings?

Views

Planning should play no role. Building Regulations alone should determine the appropriate standards for energy efficiency in buildings. Please keep administrative procedures and hurdles to a

25. What are the implications from future (and regular) changes to the Code for Sustainable Homes and BREEAM on the implementation of the policy?

Views

Again, Building Regulations should be the mechanism, and should be sufficient.

26. Are the costs of assessment and certification now disproportionate to the costs and benefits of achieving a minimum sustainable buildings standard level?

Yes ☐ No ☐ Don't know ☒

Comments

27. What should be the role of local planning authorities in setting local standards above and beyond Building Regulations? How can we ensure there is a level playing field of standards across Wales?

Views

As in our answer to Q24, energy efficiency in buildings should be a matter for Building Regulations alone.

28. What do you see as the positive/negative impacts of removing Part B of the policy expecting buildings to be certified against Code/BREEAM?

Views

29. Is there a better, alternative, way to rewards and secure sustainable buildings (above the regulatory minimum) other than using national planning policy? What opportunities are there for future changes to Building Regulations?

Views

30. To what extent are duplication of standard and approval systems an issue? Would the removal of the PfSB policy assist in reducing duplication?

Views

31. What opportunities are there for higher standards to be delivered on strategic sites identified as part of the Local Development Plan?

Views

## Existing buildings

32. Do you agree with the proposal to raise performance standards for domestic replacement windows? Please explain your answer.

Yes ☐ No ☐ Don't know ☒

Comments

The question asks if we agree with the proposal to raise standards, but the Consultation Document proposes no change to current standards. FITP members have different views on what the standards should be, and will make these views clear in the submissions of their individual associations. However, all members are united in deploring any divergence in standards (and timings) in the requirements for England and Wales. Such differing requirements would require proliferation of glass and window product specifications, resulting in extra cost to the manufacturers

33. Do you agree with the proposal to raise performance standards for domestic extensions? Please explain your answer.

Yes ☒ No ☐ Don't know ☐

Comments

Ideally the standards required for extensions should be the same as for new build (to simplify matters for those in the supply chain).

34. Do you agree with the proposal to raise performance standards for non-domestic extensions? Please explain your answer.

Yes ☒ No ☐ Don't know ☐

Comments

Ideally the standards required for extensions should be the same as for new build (to simplify matters for those in the supply chain).

35. Do you agree that the exemption for conservatories or porches should be removed where an individual room heat or air conditioning unit is installed? How effective would this change be in limiting energy use/emissions, or are there other ways by which energy performance might be improved where conservatories or porches are installed?

Yes ☒ No ☐ Don't know ☐

Comments

FITP agrees this will achieve energy savings. As an additional comment, we believe the interpretation of Part L would be improved if the technical guidance included a definition of a conservatory. In earlier versions of Part L a perfectly satisfactory definition was included, and should be revisited.

36. Do you agree with the proposal to require consequential improvements upon extensions or increases in habitable space in existing homes below 1000m<sup>2</sup>? Please explain your view.

Yes ☒ No ☐ Don't know ☐

Comments

The recast Energy Performance of Buildings Directive probably requires this anyway. We do however feel that the consequential improvements should not be limited to the single option of loft, cavity and cylinder insulation (see answer to Q37 below).

37. The consultation explains that the regulatory requirement for consequential improvements upon domestic extensions or increases in habitable space would be limited to a list of measures comprising a minimum standard of loft insulation, hot water cylinder insulation and the installation of cavity wall insulation.

Do you agree with this list of measures?

☐

Should this list be different (please explain below)?

☒

Another approach (please explain below)

☐

Don't know

☐

Comments

For non-domestic buildings, Part L already offers a range of consequential improvement options; the same principle should apply to dwellings, and replacement windows should be included in the list of

38. What effect do you think the requirements for consequential improvements may have on the demand for repair, maintenance and improvement activity? Please use evidence to explain your answer.

Increase demand

☐

Reduce demand

☐

No effect

☐

Don't know

☒

Comments

Difficult to comment on this as the situation has not existed before – however, it will probably increase the consequential activity but marginally reduce the building of extensions. The consultation document makes no reference to replacement windows triggering consequential improvements. This is to be welcomed; if such a requirement were introduced, it would have a devastating effect on the replacement window industry.

39. Do you agree with the proposal to introduce consequential improvements upon extensions or increases in habitable space in non-domestic buildings under 1000m<sup>2</sup>? Please explain your view.

Yes ☒ No ☐ Don't know ☐

Comments

Anyway, it is a requirement of the recast Energy Performance of Buildings Directive.



40. The consultation proposes that for non-domestic buildings, any measure from list which is used to generate Green Deal assessments, the list in SBEM used to generate Energy Performance Certificate recommendations and the existing list of typical consequential improvement measures from Approved Document L2B should be eligible to be a consequential improvement. Do you agree?

Yes

☒

No

☐

Prefer a different list (please specify)

☐

Don't know

☐

Comments

41. Do you agree that there should not be major problems in extending the requirement for consequential improvements for the building control process? If you do foresee issues, what are they and how might these be addressed?

Yes

☐

No

☒

Don't know

☐

Comments

Extra administration.

42. Do you have any other comments on the proposed changes to Approved Document L1B? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

43. Do you have any other comments on the proposed changes to Approved Document L2B? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

#### Comments

1. We note that the proposed standards for replacement windows in non-domestic buildings are different from those proposed for England. This will mean the window supply chain will have to manufacture, supply and install windows to different specifications either side of the border. This will add to industry and consumer costs.  
2. We note there are no proposals related to curtain walling. We amplify this

44. Do you think that the Impact Assessment is a fair and reasonable assessment of the potential costs and benefits of raising the performance standards for replacement domestic windows and domestic/non-domestic extensions? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

#### Comments

Windows and glazing are not costed in isolation in the IA, so we cannot comment.

45. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for consequential improvements in existing homes? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

#### Comments

Windows and glazing not costed in isolation in the IA, so we cannot

46. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for consequential improvements in existing non-domestic buildings? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

#### Comments

Windows and glazing are not costed in isolation in the IA, so we cannot comment

## Compliance and Performance

47. For new dwellings, Welsh Government is proposing to develop a compliance checklist. Do you think such a checklist would be used sufficiently to warrant its development?

Yes ☐ No ☐ Don't know ☒

Comments

48. If such a checklist was developed, what should it cover?

Comments

Windows and glazing have a major impact on the energy performance of dwellings, and should therefore be included.

49. If the checklist was taken forward, who should be involved in its development?

Comments

FITP would be happy to be consulted on fenestration aspects.

50. Would any other approach be likely to prove more effective instead (such as a PAS<sup>1</sup> type approach).

Yes ☐ No ☐ Don't know ☒

Comments

<sup>1</sup> A PAS is a Publically Available Specification, and the PAS would set out a quality assurance approach.

- 51a. Would it be preferable for buildings of a domestic nature to be able to achieve compliance through applying the recipe in AD L1A, in acknowledgement of the domestic nature of such buildings, rather than demonstrating compliance with AD L2A?

Yes ☒ No ☐ Don't know ☐

Comments

See comment in 51b

- 51b. What are the arguments for and against this approach?

Comments

Some small domestic-style non dwellings might require air conditioning, so the dwelling fabric standards might not be appropriate.

52. Additional views and suggestions for addressing compliance and performance issues in new non domestic buildings would be welcome.

Comments

53. Is the newly formatted ADL1B easier to understand and use?

Yes ☒ No ☐ Don't know ☐

Comments

54. Are there any further amendments to the newly formatted ADL1B that you would recommend? If so, please provide details.

Yes ☒ No ☐ Don't know ☐

Comments

As in the current Part L, there should be a requirement for the overall U value of curtain walling. It should be no greater than the better of 1.8 or  $0.8 + \{(1.2 + (\text{FOL} \times 0.5)) \times \text{GF}\}$  (where FOL is the fraction of opening lights, and GF is the glazed fraction)

55. How do the consultation proposals impact on the work of Local Authorities and Approved Inspectors? Please give positive and negative impacts.

Comments

56. We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

As referred to in our responses to several questions, we deplore the different compliance criteria and performance standards between the proposals for Wales and England. Designers, builders, manufacturers and installers generally operate in both these parts of the UK, so the divergent requirements will add to bureaucracy and cost, and not a little confusion.

## #40 - Glass & Glazing Federation

# 2012 consultation on changes to the Building Regulations in Wales

## Part L (Conservation of fuel and power)

### Consultation Response Form

Your name: Giles Willson

Organisation (if applicable): Glass & Glazing  
Federation

- (v) Are the views expressed on this consultation an official response from the organisation you represent or your own personal views?

Organisational ☒ Personal Views ☐

- (vi) Are your views expressed on this consultation in connection with your membership or support of any group? If yes please state name of group:

Yes ☒ No ☐

Name of group:

Glass and Glazing Federation

- (vii) Please tick the one box that best describes your organisation:

<p><b>Builders/Developers:</b></p> <p>Builder / Main contractor: <input type="checkbox"/></p> <p>Builder/ Small builder: <input type="checkbox"/> (extensions/repairs/maintenance, etc)</p> <p>Installer/ special sub-contractor <input type="checkbox"/></p> <p>Commercial developer <input type="checkbox"/></p> <p>House builder <input type="checkbox"/></p>	<p><b>Property Management:</b></p> <p>Housing association <input type="checkbox"/> (registered social landlord)</p> <p>Residential landlord, <input type="checkbox"/> private sector</p> <p>Commercial <input type="checkbox"/></p> <p>Public sector <input type="checkbox"/></p>
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<p><b>Building occupier:</b></p> <p>Home owner <input type="checkbox"/></p> <p>Tenant (residential) <input type="checkbox"/></p> <p>Commercial Building <input type="checkbox"/></p>	<p><b>Building Control Bodies:</b></p> <p>Local authority building control <input type="checkbox"/></p> <p>Approved Inspector <input type="checkbox"/></p>
<p><b>Energy Sector</b> <input type="checkbox"/></p>	<p><b>Fire and Rescue Authority</b> <input type="checkbox"/></p>
<p><b>Designers/Engineers/Surveyors:</b></p> <p>Architect <input type="checkbox"/></p> <p>Civil/Structural engineer <input type="checkbox"/></p> <p>Building services engineer <input type="checkbox"/></p> <p>Surveyor <input type="checkbox"/></p>	<p><b>Specific Interest:</b></p> <p>Competent person scheme operator <input type="checkbox"/></p> <p>National representative or trade body <input checked="" type="checkbox"/></p> <p>Professional body or institution <input type="checkbox"/></p> <p>Research/ academic organisation <input type="checkbox"/></p>

<b>Manufacturer/ Supply Chain</b> <input type="checkbox"/>	<b>Other</b> <i>(please specify)</i> <input style="width: 100%;" type="text"/>
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**(viii) Please tick the *one* box which best describes the size of your or your organisation's business?**

- Micro – typically 0 to 9 full-time or equivalent employees (incl. sole traders) ☐
- Small – typically 10 to 49 full-time or equivalent employees ☒
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- Large – typically 250+ full-time or equivalent employees ☐
- None of the above (please specify) ☐

**(vi) Are you or your organisation a member of a competent person scheme?**

Yes ☒ No ☐

Name of scheme:

GGF own FENSA a competent person scheme operator for the window and door industry.

**(vii) Would you be happy for us to contact you again in relation to this consultation?**

Yes ☒ No ☐

WG will process any personal information that you provide us with in accordance with the data protection principles in the Data Protection Act 1998. In particular, we shall protect all responses containing personal information by means of all appropriate technical security measures and ensure that they are only accessible to those with an operational need to see them. You should, however, be aware that as a public body, the Welsh Government is subject to the requirements of the Freedom of Information Act 2000, and may receive requests for all responses to this



consultation. If such requests are received we shall take all steps to anonymise responses that we disclose, by stripping them of the specifically personal data – name and e-mail address – you supply in responding to this consultation. If, however, you consider that any of the responses that you provide to this survey would be likely to identify you irrespective of the removal of your overt personal data, then we should be grateful if you would indicate that, and the likely reasons, in your response, for example in the relevant comments box.

## Questions:

### New homes

1. Do you agree with the Government's preference for a CO<sub>2</sub> saving of 40% reduction in carbon dioxide emissions compared to Part L 2010.

No change to 2010

☐

40% CO<sub>2</sub> saving

☒

25% CO<sub>2</sub> saving

☐

Something else (please explain below)

☐

Don't know

☐

Comments

40% preferred, so as to avoid a more dramatic change when zero carbon standards are introduced in future revisions.

2. Do you agree with the proposal for an 'aggregate' approach to CO<sub>2</sub> target setting for new homes in 2015? The CO<sub>2</sub> target for any individual dwelling varies depending on the ease with which the building can achieve the target, with the overall required CO<sub>2</sub> saving achieved when aggregated over the build mix.

Yes ☒ No ☐ Don't know ☐

Comments

3. Do you agree with the proposal for a compliant option based on a consistent recipe of elemental specifications for fabric, services plus an additional CO<sub>2</sub> saving equivalent to an amount of photovoltaic (PV). Please justify your choice.

Yes ☒ No ☐ Don't know ☐

## Comments

We are firm believers in a “fabric first” approach, because this minimises the demand for energy from any source (renewable or non-renewable). The performance of the building fabric is permanent, consistent and (generally) maintenance-free. A high standard of fabric performance is essential to ensure the building remains energy-efficient and comfortable in the event of renewable energy supply failing, under-performing or being repaired.

4. The main difference between the recipes is the required system efficiency for each fuel, which is appropriate for the heating system type. By adopting this approach to different fuel types, there is no need for a separate fuel factor. Do you agree with the proposed approach?

Yes ☒ No ☐ Don't know ☐

## Comments

5. For the CO<sub>2</sub> savings proposed, are the recipe specifications a sensible way of achieving them? Please justify your choice.

Yes ☒ No ☐ Don't know ☐

## Comments

The specifications are available with current technology.

6. In approaching the selection of the amount of PV to be installed on dwellings, do you prefer?

Fixed percentage of building foundation area

☒

Proportion of gross internal floor area with a practical cap

☐

Don't know

☐

Comments

Because roof area (where the PVs are most likely to be placed) will be similar to foundation area. We are firm believers in a "fabric first" approach, because this minimises the demand for energy from any source (renewable or non-renewable).

7. Do you agree that the limits on design flexibility 'backstop' values for fabric elements in new homes should be changed from the current reasonable provision in the technical guidance to become mandatory?

Yes ☐

No ☒

Don't know ☐

Comments

The current system, in which the backstop values are regarded as "reasonable provision", works satisfactorily.

8. Do you agree with the changes to the 'backstop' values proposed? Please explain your decision.

Yes ☒

No ☐

Don't know ☐

Comments

It seems reasonable for them to be improved in line with other improving standards for new build.

9. Do you have any other comments on the proposed changes to Approved Document L1A or the domestic National Calculation Methodology? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

#### Comments

We note that in the proposals there is no intention to have a Target Fabric Efficiency Level. While this does not directly impact on our industry, we draw your attention to the fact that housebuilders and designers will inevitably have to deal with different ways of demonstrating compliance in these two parts of the UK. This adds to the general regulatory and administrative burden on companies, to no advantage or benefit to anyone.

10. The Impact Assessment makes a number of assumptions on fabric/services/ renewables costs, new build rates, phase-in rates, learning rates, etc for new homes. Do you think these assumptions are fair and reasonable? Please justify your views.

Yes ☐ No ☐ Don't know ☒

#### Comments

Windows and glazing not referenced or costed in isolation in the IA, so we cannot comment.

11. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for new homes? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

#### Comments

Windows and glazing not referenced or costed in isolation in the IA, so we cannot comment.

## New non-domestic buildings

12. Do you agree with the proposal for 2013 for non-domestic buildings to explicitly regulate energy efficiency separately from low carbon technologies through the assessment of primary energy consumption (PEC)? Does PEC seem like a reasonable basis for standard setting?

Yes ☐ No ☒ Don't know ☐

### Comments

For the reasons given in our comments on Q9, we think the introduction of the PEC criterion creates burdens on designers and builders, without commensurate benefit.

13. Which package of fabric and services should be selected: 7% or 10%? Please give reasons for your choice.

7% ☐

10% ☒

Don't know ☐

### Comments

We prefer the 10% option which achieves 11% CO2 reduction without renewables (table 3.3 in the Consultation Document). It is important to maximise the savings through the building fabric, and to minimise the reliance on energy supply (whether renewable or not), so that the building remains energy-efficient, comfortable and habitable in the event of the energy supply system under-performing due to eg failure, disruption or lack of maintenance.

14. Do you foresee any particular issues for certain categories of building to meet the TPEC or TER?

Yes ☐ No ☐ Don't know ☒

### Comments

Not qualified to comment

15. Which approach should be utilized to incorporate the contribution of low carbon technologies into the setting of the Target Emission Rate (TER), for non domestic buildings?

Fixed carbon reduction (in kg.CO<sub>2</sub>/m<sup>2</sup>/year)

☐

Percentage of roof area of PV

☐

Other

☐

Don't know

☒

Please give reasons for your choice

16. The proposals explain the Government's preference for a 20% aggregate improvement in CO<sub>2</sub> performance standards for new non-domestic buildings from October 2013. Which option do you prefer and why?

No change

☐

Target A: 10% aggregate improvement (1% PV)

☐

Target B: 11% aggregate improvement (No PV)

☒

Target C: 20% aggregate improvement (5% PV)

☐

Don't know

☐

Please give reasons for your choice

Please see our answer to Q13. However, we have no objection to target C as long as it does not permit the building envelope performance to be inferior to that in target B.

17. Do the proposed 2013 notional buildings as set out in the changes to the National Calculation Methodology seem like a reasonable basis for standards setting? Please provide comments on the method used to develop the notional buildings and particular elements of one or more of the notional buildings, if relevant.

Yes ☒ No ☐ Don't know ☐

Comments

18. Do you think that a further recipe should be created for buildings under 250m<sup>2</sup> and aligned with the proposed domestic recipe? Are there particular reasons why smaller buildings find compliance with the non-domestic recipes difficult? Please justify your views.

Yes ☒ No ☐ Don't know ☐

Comments

Small non-dwellings are likely to be domestic in character and form of construction.

19. Although we recognise that some buildings may need to be serviced in a particular way for legitimate functional or environmental reasons, should Part L incentivise a lower carbon servicing strategy (as with the current Energy Performance Certificate methodology), by basing the notional building on mixed-mode ventilation?

Yes ☐ No ☐ Don't know ☒

Comments

Not qualified to comment

20. Do you have any other comments on the proposed changes to Approved Document L2A or the non-domestic National Calculation Methodology? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

The comments we made in answer to Q9 and Q12 apply equally to the unilateral introduction of the BPEC criterion.

21. The Impact Assessment makes a number of assumptions on the costs of fabric/services/renewables, new build rates, etc for new non-domestic buildings. Do you think these assumptions are fair and reasonable? Please justify your views.

Yes ☐ No ☐ Don't know ☒

Comments

22. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for new non-domestic buildings?

Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

Comments

## Cumulative impact of policies

23. Overall, do you think the assessment of the impact on development is broadly fair and reasonable? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

Comments

## National Planning Policy Review

24. What role should planning play in facilitating higher carbon standards? Should it focus on facilitating site wide energy opportunities that will be needed as we move towards zero or near zero carbon buildings?

Views

Planning should play no role. Building Regulations alone should determine the appropriate standards for energy efficiency in buildings. Please keep administrative procedures and hurdles to a



25. What are the implications from future (and regular) changes to the Code for Sustainable Homes and BREEAM on the implementation of the policy?

Views

Again, Building Regulations should be the mechanism, and should be sufficient.

26. Are the costs of assessment and certification now disproportionate to the costs and benefits of achieving a minimum sustainable buildings standard level?

Yes ☐ No ☐ Don't know ☒

Comments

27. What should be the role of local planning authorities in setting local standards above and beyond Building Regulations? How can we ensure there is a level playing field of standards across Wales?

Views

As in our answer to Q24, energy efficiency in buildings should be a matter for Building Regulations alone.

28. What do you see as the positive/negative impacts of removing Part B of the policy expecting buildings to be certified against Code/BREEAM?

Views

29. Is there a better, alternative, way to rewards and secure sustainable buildings (above the regulatory minimum) other than using national planning policy? What opportunities are there for future changes to Building Regulations?

Views

30. To what extent are duplication of standard and approval systems an issue? Would the removal of the PfSB policy assist in reducing duplication?

Views

31. What opportunities are there for higher standards to be delivered on strategic sites identified as part of the Local Development Plan?

Views

## Existing buildings

32. Do you agree with the proposal to raise performance standards for domestic replacement windows? Please explain your answer.

Yes ☒ No ☐ Don't know ☐

Comments

The GGF welcome the proposal to retain the existing U value 1.6 and WER band C and Centre pane U value of 1.2. However, the GGF do feel the WER requirement could be raised to Band B. The GGF do not understand why there should be different requirements from the 4 different regions of the UK because this would require proliferation of glass and window product specifications, resulting in extra cost to the manufacturers and installers across the UK.

33. Do you agree with the proposal to raise performance standards for domestic extensions? Please explain your answer.

Yes ☒ No ☐ Don't know ☐

Comments

The GGF are happy with the proposed requirements for windows and doors within extensions.

34. Do you agree with the proposal to raise performance standards for non-domestic extensions? Please explain your answer.

Yes ☒ No ☐ Don't know ☐

Comments

Ideally the standards required for extensions should be the same as for new build (to simplify matters for those in the supply chain).

35. Do you agree that the exemption for conservatories or porches should be removed where an individual room heat or air conditioning unit is installed? How effective would this change be in limiting energy use/emissions, or are there other ways by which energy performance might be improved where conservatories or porches are installed?

Yes ☒ No ☐ Don't know ☐

Comments

The GGF believe a definition for a conservatory is required, a proposed definition is:  
*A ground floor, single storey construction of floor area less than 30m<sup>2</sup> with not less than three quarters of the roof area and not less than one half of the external wall area made of translucent material, (excluding any wall area required to be opaque for other planning considerations such as boundary walls and walls within 1m of the boundary), separated from the main building by external grade doors and windows and, if heated, having a heating system which is separate from that of the main building.*

The heating or cooling proposal could not be policed or enforced, if a conservatory is constructed with no heating or cooling that can be controlled by building regulations however, the owners actions cannot be regulated once the installer has left the site.

36. Do you agree with the proposal to require consequential improvements upon extensions or increases in habitable space in existing homes below 1000m<sup>2</sup>? Please explain your view.

Yes ☒ No ☐ Don't know ☐

Comments

The recast Energy Performance of Buildings Directive probably requires this anyway. We do however feel that the consequential improvements should not be limited to the single option of loft, cavity and cylinder insulation, instead this should allow any measure stated within PAS 2030.

37. The consultation explains that the regulatory requirement for consequential improvements upon domestic extensions or increases in habitable space would be limited to a list of measures comprising a minimum standard of loft insulation, hot water cylinder insulation and the installation of cavity wall insulation.

Do you agree with this list of measures? ☐

Should this list be different (please explain below)? ☒

Another approach (please explain below) ☐

Don't know ☐

Comments

For non-domestic buildings, Part L already offers a range of consequential improvement options; the same principle should apply to dwellings, and any measure listed within PAS 2030 should be included as an improvement..

38. What effect do you think the requirements for consequential improvements may have on the demand for repair, maintenance and improvement activity? Please use evidence to explain your answer.

Increase demand

☐

Reduce demand

☒

No effect

☐

Don't know

☐

Comments

The GGF are concerned that this question does not clearly explain what the implications mean. An improvement activity to a building could be to replace windows and doors, if this was to lead to consequential improvements this would have a negative impact. CI on replacement windows and doors would put owners off improving the energy efficiency of their building by installing these measures. If you are improving the energy efficiency of a building these measures should not trigger CI's

39. Do you agree with the proposal to introduce consequential improvements upon extensions or increases in habitable space in non-domestic buildings under 1000m<sup>2</sup>? Please explain your view.

Yes

☒

No

☐

Don't know

☐

Comments

Anyway, it is a requirement of the recast Energy Performance of Buildings Directive.

40. The consultation proposes that for non-domestic buildings, any measure from list which is used to generate Green Deal assessments, the list in SBEM used to generate Energy Performance Certificate recommendations and the existing list of typical consequential improvement measures from Approved Document L2B should be eligible to be a consequential improvement. Do you agree?

Yes

☒

No

☐

Prefer a different list (please specify)

☐

Don't know

☐

Comments

41. Do you agree that there should not be major problems in extending the requirement for consequential improvements for the building control process? If you do foresee issues, what are they and how might these be addressed?

Yes ☐ No ☒ Don't know ☐

Comments

Extra administration and potential for items not being enforced which undermines the whole regulatory requirements.

42. Do you have any other comments on the proposed changes to Approved Document L1B? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

43. Do you have any other comments on the proposed changes to Approved Document L2B? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

We note that the proposed standards for replacement windows in non-domestic buildings are different from those within other regions of the UK. The GGF do not understand why there should be difference throughout the UK. Different requirement will result in the window supply chain to manufacture, supply and install windows to different specifications across the UK. This can only place burdens on industry and add to costs.

44. Do you think that the Impact Assessment is a fair and reasonable assessment of the potential costs and benefits of raising the performance standards for replacement domestic windows and domestic/non-domestic extensions? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

## Comments

Windows and glazing are not costed in isolation in the IA, so we cannot comment.

45. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for consequential improvements in existing homes? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

## Comments

Windows and glazing not costed in isolation in the IA, so we cannot

46. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for consequential improvements in existing non-domestic buildings? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

## Comments

Windows and glazing are not costed in isolation in the IA, so we cannot comment

## Compliance and Performance

47. For new dwellings, Welsh Government is proposing to develop a compliance checklist. Do you think such a checklist would be used sufficiently to warrant its development?

Yes ☐ No ☐ Don't know ☒

## Comments

48. If such a checklist was developed, what should it cover?

## Comments

Windows and glazing have a major impact on the energy performance of dwellings, and should therefore be included.

49. If the checklist was taken forward, who should be involved in its development?

Comments

The GGF working with the FITP would be happy to be consulted on fenestration aspects.

50. Would any other approach be likely to prove more effective instead (such as a PAS<sup>2</sup> type approach).

Yes ☐ No ☐ Don't know ☒

Comments

51a. Would it be preferable for buildings of a domestic nature to be able to achieve compliance through applying the recipe in AD L1A, in acknowledgement of the domestic nature of such buildings, rather than demonstrating compliance with AD L2A?

Yes ☒ No ☐ Don't know ☐

Comments

Some small domestic-style non dwellings might require air conditioning, so the dwelling fabric standards might not be appropriate.

51b. What are the arguments for and against this approach?

Comments

Some small domestic-style non dwellings might require air conditioning, so the dwelling fabric standards might not be appropriate.

52. Additional views and suggestions for addressing compliance and performance issues in new non domestic buildings would be welcome.

Comments

<sup>2</sup> A PAS



53. Is the newly formatted ADL1B easier to understand and use?

Yes ☒ No ☐ Don't know ☐

Comments

54. Are there any further amendments to the newly formatted ADL1B that you would recommend? If so, please provide details.

Yes ☐ No ☒ Don't know ☐

Comments

55. How do the consultation proposals impact on the work of Local Authorities and Approved Inspectors? Please give positive and negative impacts.

Comments

56. We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

As referred to in our responses to several questions, we deplore the different compliance criteria and performance standards between the proposals for Wales and England. Designers, builders, manufacturers and installers generally operate in both these parts of the UK, so the divergent requirements will add to bureaucracy and cost, and not a little confusion.

## #42 - CIOB Wales Cymru

# 2012 consultation on changes to the Building Regulations in Wales

## Part L (Conservation of fuel and power)

### Consultation Response Form

Your name: Laura Clarke

Organisation (if applicable): CIOB Wales /Cymru

- (ix) Are the views expressed on this consultation an official response from the organisation you represent or your own personal views?

Organisational ☒ Personal Views ☐

- (x) Are your views expressed on this consultation in connection with your membership or support of any group? If yes please state name of group:

Yes ☒ No ☐

Name of group: CIOB Wales/ Cymru– Regional Branch

- (xi) Please tick the one box that best describes your organisation:

<p><b>Builders/Developers:</b></p> <p>Builder / Main contractor: <input type="checkbox"/></p> <p>Builder/ Small builder: <input type="checkbox"/> (extensions/repairs/maintenance, etc)</p> <p>Installer/ special sub-contractor <input type="checkbox"/></p> <p>Commercial developer <input type="checkbox"/></p> <p>House builder <input type="checkbox"/></p>	<p><b>Property Management:</b></p> <p>Housing association <input type="checkbox"/> (registered social landlord)</p> <p>Residential landlord, <input type="checkbox"/> private sector</p> <p>Commercial <input type="checkbox"/></p> <p>Public sector <input type="checkbox"/></p>
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<b>Building occupier:</b>  Home owner <input type="checkbox"/>  Tenant (residential) <input type="checkbox"/>  Commercial Building <input type="checkbox"/>	<b>Building Control Bodies:</b>  Local authority building control <input type="checkbox"/>  Approved Inspector <input type="checkbox"/>
<b>Energy Sector</b> <input type="checkbox"/>	<b>Fire and Rescue Authority</b> <input type="checkbox"/>
<b>Designers/Engineers/Surveyors:</b>  Architect <input type="checkbox"/> Civil/Structural engineer <input type="checkbox"/> Building services engineer <input type="checkbox"/> Surveyor <input type="checkbox"/>	<b>Specific Interest:</b>  Competent person scheme operator <input type="checkbox"/>  National representative or trade body <input type="checkbox"/>  Professional body or institution <input checked="" type="checkbox"/>  Research/ academic organisation <input type="checkbox"/>

<b>Manufacturer/ Supply Chain</b> <input type="checkbox"/>	<b>Other</b> ( <i>please specify</i> ) <input style="width: 100%;" type="text"/>
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(xii) Please tick the **one** box which best describes the size of your or your organisation's business?

Micro – typically 0 to 9 full-time or equivalent employees (incl. sole traders) ☐

Small – typically 10 to 49 full-time or equivalent employees ☐

Medium – typically 50 to 249 full-time or equivalent employees ☐

Large – typically 250+ full-time or equivalent employees ☐

None of the above (please specify) **Professional Institute – 44,500 members** ☒  
**(Represented regionally by 1500 members)**

(vi) Are you or your organisation a member of a competent person scheme?

Yes ☐ No ☒

Name of scheme:

(vii) Would you be happy for us to contact you again in relation to this consultation?

Yes ☒ No ☐

WG will process any personal information that you provide us with in accordance with the data protection principles in the Data Protection Act 1998. In particular, we shall protect all responses containing personal information by means of all appropriate technical security measures and ensure that they are only accessible to those with an operational need to see them. You should, however, be aware that as a public body, the Welsh Government is subject to the requirements of the Freedom of Information Act 2000, and may receive requests for all responses to this consultation. If such requests are received we shall take all steps to anonymise responses that we disclose, by stripping them of the specifically personal data – name and e-mail address – you supply in responding to this consultation. If, however, you consider that any of the responses that you provide to this survey would be likely to identify you irrespective of the removal of your overt

personal data, then we should be grateful if you would indicate that, and the likely reasons, in your response, for example in the relevant comments box.

## Questions:

### New homes

1. Do you agree with the Government's preference for a CO<sub>2</sub> saving of 40% reduction in carbon dioxide emissions compared to Part L 2010.

No change to 2010

☐

40% CO<sub>2</sub> saving

☒

25% CO<sub>2</sub> saving

☐

Something else (please explain below)

☐

Don't know

☐

Comments

Yes, in respect of the reduction in carbon dioxide emissions we agree with the maximum saving (40%) on the basis there will be no further changes to fabric. This should assist with contractors/mfts/suppliers who currently deal with changes on a regular basis; it will be far simpler if the insulation requirements for floor, walls and roofs are fixed and will not change in future amendments.

2. Do you agree with the proposal for an 'aggregate' approach to CO<sub>2</sub> target setting for new homes in 2015? The CO<sub>2</sub> target for any individual dwelling varies depending on the ease with which the building can achieve the target, with the overall required CO<sub>2</sub> saving achieved when aggregated over the build mix.

Yes ☒ No ☐ Don't know ☐

Comments

Yes – Currently larger dwellings which may typically have a bigger cost margins are meeting compliance far easier than smaller more affordable housing. The aggregate approach will support the CO<sub>2</sub> saving to be achieved with similar specifications across a mix of dwellings types.

3. Do you agree with the proposal for a compliant option based on a consistent recipe of elemental specifications for fabric, services plus an additional CO<sub>2</sub> saving equivalent to an amount of photovoltaic (PV). Please justify your choice.

Yes ☒ No ☐ Don't know ☐

Comments

Yes- recipe is a good and simpler solution for SME'S. This will allow SME's to adhere to a standard specification and guarantee compliance; this will also allow manufactures to produce innovative methods of meeting u-values. Problems may arise with meeting compliance is Air Pressure Testing; further training is required for SME contractors to understand what building an air tight building entails. Clarification is also required around thermal bridging, Accredited Construction Details do not allow for enough flexibility.

4. The main difference between the recipes is the required system efficiency for each fuel, which is appropriate for the heating system type. By adopting this approach to different fuel types, there is no need for a separate fuel factor. Do you agree with the proposed approach?

Yes ☒ No ☐ Don't know ☐

Comments

- Yes, current regulations unfairly penalise off grid solutions
- An issue particularly in rural areas in respect of fuel availability would seem sensible.
- Some fuels may not be suitable due to safety issues such as high rise apartments.

5. For the CO<sub>2</sub> savings proposed, are the recipe specifications a sensible way of achieving them? Please justify your choice.

Yes ☒ No ☐ Don't know ☐

Comments

Yes - simpler for contractors, Part L SAP increasingly complex. Should help to improve a move towards standardisation and familiarity in construction and best practice, however too much bias to PV with no mention of alternative proven options and it may discourage innovation. Could foresee maintenance issues for the end user.

6. In approaching the selection of the amount of PV to be installed on dwellings, do you prefer?

Fixed percentage of building foundation area

☒

Proportion of gross internal floor area with a practical cap

☐

Don't know

☐

Comments

Fixed Percentage of Building Footprint – we feel term Foundation is misleading area could be mis-interpreted. A percentage of building foundation area is sensible however this may not necessarily fit with multi-level high rise building types with apartments. Area needs to be practical and linked to space to accommodate.

7. Do you agree that the limits on design flexibility 'backstop' values for fabric elements in new homes should be changed from the current reasonable provision in the technical guidance to become mandatory?

Yes ☒ No ☐ Don't know ☐

Comments

The mandatory limits proposed seem to align with and work towards stretching CO2 Targets. This will support future proof of homes and reduce likelihood for future upgrades.

8. Do you agree with the changes to the 'backstop' values proposed? Please explain your decision.

Yes ☒ No ☐ Don't know ☐

Comments

Yes – If the new regulations are not going to take into account any Fabric Energy Efficiency Standards (FEES) then these backstop u-values are essential.

9. Do you have any other comments on the proposed changes to Approved Document L1A or the domestic National Calculation Methodology? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

No Comment

10. The Impact Assessment makes a number of assumptions on fabric/services/ renewables costs, new build rates, phase-in rates, learning rates, etc for new homes. Do you think these assumptions are fair and reasonable? Please justify your views.

Yes ☐ No ☐ Don't know ☒

Comments

There is a tendency to steer towards solutions which are easier to model mathematically for example active discouragement of solar gain, heat distribution and AC systems.

11. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for new homes? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

Comments

No comment in respect of impact assessment questions– appear reasonable

## New non-domestic buildings

12. Do you agree with the proposal for 2013 for non-domestic buildings to explicitly regulate energy efficiency separately from low carbon technologies through the assessment of primary energy consumption (PEC)? Does PEC seem like a reasonable basis for standard setting?

Yes ☒ No ☐ Don't know ☐

Comments

- Yes – appears to be a sensible solution considering the varying energy requirements from different buildings.
- PEC will ensure a fabric first approach

13. Which package of fabric and services should be selected: 7% or 10%? Please give reasons for your choice.

7% ☐

10% ☒

Don't know ☐

Comments

10%



14. Do you foresee any particular issues for certain categories of building to meet the TPEC or TER?

Yes ☒ No ☐ Don't know ☐

Comments

Yes – Industrial type buildings will struggle to meet TPEC in a cost effective manner, shell and core developments will also be problematic.

15. Which approach should be utilized to incorporate the contribution of low carbon technologies into the setting of the Target Emission Rate (TER), for non domestic buildings?

Fixed carbon reduction (in kg.CO<sub>2</sub>/m<sup>2</sup>/year) ☒

Percentage of roof area of PV ☐

Other ☐

Don't know ☐

Please give reasons for your choice

Fixed carbon reduction – do not want the impression PV is a requirement and stop other potentially innovative solutions. This will incentivise renewables.

16. The proposals explain the Government's preference for a 20% aggregate improvement in CO<sub>2</sub> performance standards for new non-domestic buildings from October 2013. Which option do you prefer and why?

No change ☐

Target A: 10% aggregate improvement (1% PV) ☐

Target B: 11% aggregate improvement (No PV) ☐

Target C: 20% aggregate improvement (5% PV) ☒

Don't know ☐

Please give reasons for your choice

20% - This will save it from being changed again in a few years' time. There is a higher target for fabric and service recipes and the proposals to use PV (5%) as proxy for renewables compared to 11% improvement.

17. Do the proposed 2013 notional buildings as set out in the changes to the National Calculation Methodology seem like a reasonable basis for standards setting? Please provide comments on the method used to develop the notional buildings and particular elements of one or more of the notional buildings, if relevant.

Yes ☒ No ☐ Don't know ☐

Comments

No Comment

18. Do you think that a further recipe should be created for buildings under 250m<sup>2</sup> and aligned with the proposed domestic recipe? Are there particular reasons why smaller buildings find compliance with the non-domestic recipes difficult? Please justify your views.

Yes ☒ No ☐ Don't know ☐

Comments

Yes – Too onerous and complex, domestic house builders (SMEs) sometimes undertake small non-domestic schemes; this will assist to simplify requirements.

19. Although we recognise that some buildings may need to be serviced in a particular way for legitimate functional or environmental reasons, should Part L incentivise a lower carbon servicing strategy (as with the current Energy Performance Certificate methodology), by basing the notional building on mixed-mode ventilation?

Yes ☒ No ☐ Don't know ☐

Comments

Agree – in line with the reality on site.

20. Do you have any other comments on the proposed changes to Approved Document L2A or the non-domestic National Calculation Methodology? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

No Comment

21. The Impact Assessment makes a number of assumptions on the costs of fabric/services/renewables, new build rates, etc for new non-domestic buildings. Do you think these assumptions are fair and reasonable? Please justify your views.

Yes ☐ No ☐ Don't know ☐

Comments

No comment in respect of impact assessment questions

22. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for new non-domestic buildings?

Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☐

Comments

No Comment

## Cumulative impact of policies

23. Overall, do you think the assessment of the impact on development is broadly fair and reasonable? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☐

Comments

No Comment

## National Planning Policy Review

24. What role should planning play in facilitating higher carbon standards? Should it focus on facilitating site wide energy opportunities that will be needed as we move towards zero or near zero carbon buildings?

Views

None – the Planning department have limited understanding of requirements. Planning should be there to consider sustainability as a general topic and only carbon reductions in an indirect manor i.e. transport. Direct carbon reductions should be dealt with by Building Regulations.

25. What are the implications from future (and regular) changes to the Code for Sustainable Homes and BREEAM on the implementation of the policy?

#### Views

In reality will Planning departments take enforcement action? Regular and future changes will cause difficulties (as they have already – planning conditions in respect of the Code and BREEAM are varied, unsuitable and unenforceable in my opinion).

If planning policy kept requirements to rating band only (BREEAM Very Good/CSH Level 3) without specific credits in specific sections then future/regular changes will not be an issue.

26. Are the costs of assessment and certification now disproportionate to the costs and benefits of achieving a minimum sustainable buildings standard level?

Yes ☐ No ☐ Don't know ☒

#### Comments

The additional cost for the developer is great particularly for schemes that are still at risk (not only for assessment, for requirement of other consultants notwithstanding the extra on site costs required to achieve minimum standard).

Costs at early stages are disproportionate however long term benefits are not being considered here. Alan Crane (CIOB President 2011-13) states *"Designing, building and operating to BREEAM standards yields hugely beneficial energy savings for minimal capital cost, reducing both operational expenditure and carbon emissions"*

27. What should be the role of local planning authorities in setting local standards above and beyond Building Regulations? How can we ensure there is a level playing field of standards across Wales?

#### Views

None, I do not feel setting standards above and beyond building regulations is a planning function. It has long been recognised that the building regulations are the national standard to meet. Utilising Building Control will ensure a level playing field for the standards across Wales.

Planning should stick to wider sustainability issues only, with carbon reduction being met by building regulations. Standard should be set above building regulations because they are different issues.

28. What do you see as the positive/negative impacts of removing Part B of the policy expecting buildings to be certified against Code/BREEAM?

Views

Positive –save at risk costs; avoid duplication; encourage development.

Negative –however leaving Part C in policy could result in a potential lack of consistency (subjective).

Negative – Although building regulations will surpass the energy requirements set out in both CSH and BREEAM there are a number issues that are being ignored here. For example Ene2: Fabric Energy Efficiency will reward properties which maximise energy saving measures brought about by fabric first approach. With regards to BREEAM, schemes are tailored to development types and therefore there are number of credits that ensure all round sustainability, including ecological, social and environmental.

In general both schemes encourage all round better quality developments. Loss of industry surrounding these assessments including; assessors, ecologists, acousticians.

There is also an indirect reduction in carbon emissions as results to these assessments that is not being considered.

29. Is there a better, alternative, way to rewards and secure sustainable buildings (above the regulatory minimum) other than using national planning policy? What opportunities are there for future changes to Building Regulations?

Views

No Comment

30. To what extent are duplication of standard and approval systems an issue? Would the removal of the PfSB policy assist in reducing duplication?

Views

Duplication will not be an issue if no requirements in regards to CO2 are stated within planning policy.

31. What opportunities are there for higher standards to be delivered on strategic sites identified as part of the Local Development Plan?

Views

No Comment

## Existing buildings

32. Do you agree with the proposal to raise performance standards for domestic replacement windows? Please explain your answer.

Yes ☒ No ☐ Don't know ☐

Comments

- As Technology evolves this is a natural progression.  
  
Remove the emphasis on the need for replacement windows. It should be noted that research indicates that an existing window can be repaired, draught proofed and have secondary glazing installed could produce a U-Value than a replace, emit window.
- This should be an easy target to achieve through a consistent technical approach. Unsure as to how this will be implemented.

33. Do you agree with the proposal to raise performance standards for domestic extensions? Please explain your answer.

Yes ☒ No ☐ Don't know ☐

Comments

Yes – the main query on site is why the standard keeps changing; no one has an issue with the standard itself. If we have a standard; albeit higher than existing; that is constant most contractors/mfts/suppliers will be content.

Caution is needed in many circumstances as there could be extreme cases of "thermal bridging".

34. Do you agree with the proposal to raise performance standards for non-domestic extensions? Please explain your answer.

Yes ☒ No ☐ Don't know ☐

Comments

Why not improve? If standards are to be raised then all elements should be addressed to embed a consist approach to our building solutions

35. Do you agree that the exemption for conservatories or porches should be removed where an individual room heat or air conditioning unit is installed? How effective would this change be in limiting energy use/emissions, or are there other ways by which energy performance might be improved where conservatories or porches are installed?

Yes ☒ No ☐ Don't know ☐

## Comments

Yes – would seem sensible, but what stops someone from post installing a room heat or AC unit later.

36. Do you agree with the proposal to require consequential improvements upon extensions or increases in habitable space in existing homes below 1000m<sup>2</sup>? Please explain your view.

Yes ☒ No ☐ Don't know ☐

## Comments

Yes – although some reservations in how homeowners would consider this requirement?

Yes - This may deter most home owners from considering extensions. Some improvements may have already been undertaken, further improvements may not be suitable for the type of house/dwelling. This should be benchmarked.

37. The consultation explains that the regulatory requirement for consequential improvements upon domestic extensions or increases in habitable space would be limited to a list of measures comprising a minimum standard of loft insulation, hot water cylinder insulation and the installation of cavity wall insulation.

Do you agree with this list of measures?

☐ Yes

Should this list be different (please explain below)?

☐

Another approach (please explain below)

☐ Yes

Don't know

☐

## Comments

Some of these could be problematic (cavity wall insulation in extreme weather exposure areas) and there are additional elements that could be considered (e.g. windows). Caveat in Building Regulations ensures that cavity wall insulation does not have to be installed where it is not "technically, functionally and economically feasible"

An interactive tool is being developed by the Sustainable Traditional Buildings Alliance (STBA) and this should be used to develop the most effective measures - this is particularly important for traditional (pre 1919) buildings, which equate to 34% of the building stock in Wales. The approach should also focus on ensuring that buildings are kept in good repair to ensure energy efficiency. Research highlights that a damp wall can release up to 38% more heat than a dry wall, thus emphasising the need to keep walls in good repair.

38. What effect do you think the requirements for consequential improvements may have on the demand for repair, maintenance and improvement activity? Please use evidence to explain your answer.

Increase demand

☒

Reduce demand

☐

No effect

☐

Don't know

☐

Comments

If comments on the need for repair as an energy efficiency measure.

39. Do you agree with the proposal to introduce consequential improvements upon extensions or increases in habitable space in non-domestic buildings under 1000m<sup>2</sup>? Please explain your view.

Yes

☒

No

☐

Don't know

☐

Comments

The type of consequential improvement should be affordable and suitable, but this may be a deterrent to potential improvements

40. The consultation proposes that for non-domestic buildings, any measure from list which is used to generate Green Deal assessments, the list in SBEM used to generate Energy Performance Certificate recommendations and the existing list of typical consequential improvement measures from Approved Document L2B should be eligible to be a consequential improvement. Do you agree?

Yes

☒

No

☐

Prefer a different list (please specify)

☐

Don't know

☐

Comments

No Further Comments



41. Do you agree that there should not be major problems in extending the requirement for consequential improvements for the building control process? If you do foresee issues, what are they and how might these be addressed?

Yes ☒ No ☐ Don't know ☐

Comments

If the consequential improvements are as noted above they will be simple and should not in themselves attract additional fee.

42. Do you have any other comments on the proposed changes to Approved Document L1B? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

Flowchart is effective

Reference to paragraph 3.1 referring to pay back. The reference to SAP calculations will provide potentially inaccurate paybacks. Please see the STBA report.

Paragraph 3.8 c - the "special consideration" should be required to undertake work such as solid wall insulation due to known and unknown risks (see STBA report).

Paragraph 5.13. Table 3: Data on the U Value of existing walls is inaccurate so we don't know what current U Values are unless institution tests are undertaken which can take 2 - 3 weeks. It is therefore impossible to understand what new U Value is being created. In some circumstances the proposed U Values for walls will be impossible to achieve.

43. Do you have any other comments on the proposed changes to Approved Document L2B? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

No Comment

44. Do you think that the Impact Assessment is a fair and reasonable assessment of the potential costs and benefits of raising the performance standards for replacement domestic windows and domestic/non-domestic extensions? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☐

Comments

No Comment

45. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for consequential improvements in existing homes? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☐

Comments

No Comment

46. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for consequential improvements in existing non-domestic buildings? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☐

Comments

No Comment

## Compliance and Performance

47. For new dwellings, Welsh Government is proposing to develop a compliance checklist. Do you think such a checklist would be used sufficiently to warrant its development?

Yes ☒ No ☐ Don't know ☐

Comments

BCB already note much of the information required in any case through the inspection regime

48. If such a checklist was developed, what should it cover?

Comments

No Comment

49. If the checklist was taken forward, who should be involved in its development?

Comments

BCB

50. Would any other approach be likely to prove more effective instead (such as a PAS<sup>3</sup> type approach).

Yes ☐ No ☐ Don't know ☐

Comments

No Comment

51a. Would it be preferable for buildings of a domestic nature to be able to achieve compliance through applying the recipe in AD L1A, in acknowledgement of the domestic nature of such buildings, rather than demonstrating compliance with AD L2A?

Yes ☒ No ☐ Don't know ☐

Comments

Yes – This would simplify the process for SME's used to domestic developments

51b. What are the arguments for and against this approach?

Comments

No Comment

<sup>3</sup> A PAS is a Publicly Available Specification, and the PAS would set out a quality assurance approach.

52. Additional views and suggestions for addressing compliance and performance issues in new non domestic buildings would be welcome.

Comments

No Comment

53. Is the newly formatted ADL1B easier to understand and use?

Yes ☐ No ☐ Don't know ☒

Comments

No further Comment

54. Are there any further amendments to the newly formatted ADL1B that you would recommend? If so, please provide details.

Yes ☐ No ☐ Don't know ☒

Comments

No further Comment

55. How do the consultation proposals impact on the work of Local Authorities and Approved Inspectors? Please give positive and negative impacts.

Comments

This will give more responsibility and may require additional resource to manage.

56. We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Not sure that the consultation has taken into account recent and on-going studies, particularly with existing domestic. In Wales there are 1.3million existing homes with a 5,000-10,000 per annum new build rate. Whilst new build needs to be targeted, consequential improvements could have the greatest impact for this exercise. Consequential improvements may not be suitable for many house types.

## #45 – Engineering Panels in Construction

# 2012 consultation on changes to the Building Regulations in Wales

Part L (Conservation of fuel and power)

### Consultation Response Form

Your name: **Peter Trew**

Organisation (if applicable): **EPIC [Engineered Panels  
in Construction]**

(xiii) Are the views expressed on this consultation an official response from the organisation you represent or your own personal views?

Organisational **YES**      Personal Views ☐

(xiv) Are your views expressed on this consultation in connection with your membership or support of any group? If yes please state name of group:

Yes ☐ No ☐

Name of group:

(xv) Please tick the one box that best describes your organisation:

<p><b>Builders/Developers:</b></p> <p>Builder / Main contractor: <input type="checkbox"/></p> <p>Builder/ Small builder: (extensions/repairs/maintenance, etc) <input type="checkbox"/></p> <p>Installer/ special sub-contractor <input type="checkbox"/></p> <p>Commercial developer <input type="checkbox"/></p> <p>House builder <input type="checkbox"/></p>	<p><b>Property Management:</b></p> <p>Housing association (registered social landlord) <input type="checkbox"/></p> <p>Residential landlord, private sector <input type="checkbox"/></p> <p>Commercial <input type="checkbox"/></p> <p>Public sector <input type="checkbox"/></p>
<p><b>Building occupier:</b></p> <p>Home owner <input type="checkbox"/></p> <p>Tenant (residential) <input type="checkbox"/></p> <p>Commercial Building <input type="checkbox"/></p>	<p><b>Building Control Bodies:</b></p> <p>Local authority building control <input type="checkbox"/></p> <p>Approved Inspector <input type="checkbox"/></p>
<p><b>Energy Sector</b> <input type="checkbox"/></p>	<p><b>Fire and Rescue Authority</b> <input type="checkbox"/></p>

<b>Designers/Engineers/Surveyors:</b>  Architect <input type="checkbox"/> Civil/Structural engineer <input type="checkbox"/> Building services engineer <input type="checkbox"/> Surveyor <input type="checkbox"/>	<b>Specific Interest:</b>  Competent person scheme operator <input type="checkbox"/> National representative or trade body <input type="checkbox"/> Professional body or institution <input type="checkbox"/> Research/ academic organisation <input type="checkbox"/>
<b>Manufacturer/ Supply Chain YES – Association of UK manufacturers of Insulated Panels for the building envelope – Non-domestic buildings</b>	<b>Other (please specify)</b> <input type="text"/>

(xvi) Please tick the **one** box which best describes the size of your or your organisation's business?

Micro – typically 0 to 9 full-time or equivalent employees (incl. sole traders) ☐

Small – typically 10 to 49 full-time or equivalent employees ☐

Medium – typically 50 to 249 full-time or equivalent employees ☐

Large – typically 250+ full-time or equivalent employees ☐

None of the above (please specify)

**Manufacturing members of the Association are both 'Large' and 'Medium' organisations**

(vi) Are you or your organisation a member of a competent person scheme?

Yes ☐ No ☒

Name of scheme:

(vii) Would you be happy for us to contact you again in relation to this

**consultation?**Yes **YES** No ☐

WG will process any personal information that you provide us with in accordance with the data protection principles in the Data Protection Act 1998. In particular, we shall protect all responses containing personal information by means of all appropriate technical security measures and ensure that they are only accessible to those with an operational need to see them. You should, however, be aware that as a public body, the Welsh Government is subject to the requirements of the Freedom of Information Act 2000, and may receive requests for all responses to this consultation. If such requests are received we shall take all steps to anonymise responses that we disclose, by stripping them of the specifically personal data – name and e-mail address – you supply in responding to this consultation. If, however, you consider that any of the responses that you provide to this survey would be likely to identify you irrespective of the removal of your overt personal data, then we should be grateful if you would indicate that, and the likely reasons, in your response, for example in the relevant comments box.

**Questions:****New homes**

1. Do you agree with the Government's preference for a CO<sub>2</sub> saving of 40% reduction in carbon dioxide emissions compared to Part L 2010.

No change to 2010 ☐40% CO<sub>2</sub> saving ☐25% CO<sub>2</sub> saving ☐Something else (please explain below) ☐Don't know ☐

Comments

2. Do you agree with the proposal for an 'aggregate' approach to CO<sub>2</sub> target setting for new homes in 2015? The CO<sub>2</sub> target for any individual dwelling varies depending on the ease with which the building can achieve the target, with the overall required CO<sub>2</sub> saving achieved when aggregated over the build mix.

Yes ☐ No ☐ Don't know ☐



Comments

3. Do you agree with the proposal for a compliant option based on a consistent recipe of elemental specifications for fabric, services plus an additional CO<sub>2</sub> saving equivalent to an amount of photovoltaic (PV). Please justify your choice.

Yes ☐ No ☐ Don't know ☐

Comments

4. The main difference between the recipes is the required system efficiency for each fuel, which is appropriate for the heating system type. By adopting this approach to different fuel types, there is no need for a separate fuel factor. Do you agree with the proposed approach?

Yes ☐ No ☐ Don't know ☐

Comments

5. For the CO<sub>2</sub> savings proposed, are the recipe specifications a sensible way of achieving them? Please justify your choice.

Yes ☐ No ☐ Don't know ☐

Comments

6. In approaching the selection of the amount of PV to be installed on dwellings, do you prefer?

Fixed percentage of building foundation area ☐

Proportion of gross internal floor area with a practical cap ☐

Don't know

☐

Comments

7. Do you agree that the limits on design flexibility 'backstop' values for fabric elements in new homes should be changed from the current reasonable provision in the technical guidance to become mandatory?

Yes ☐ No ☐ Don't know ☐

Comments

8. Do you agree with the changes to the 'backstop' values proposed? Please explain your decision.

Yes ☐ No ☐ Don't know ☐

Comments

9. Do you have any other comments on the proposed changes to Approved Document L1A or the domestic National Calculation Methodology? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

10. The Impact Assessment makes a number of assumptions on fabric/services/ renewables costs, new build rates, phase-in rates, learning rates, etc for new homes. Do you think these assumptions are fair and reasonable? Please justify your views.

Yes ☐ No ☐ Don't know ☐

Comments

11. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for new homes? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☐

Comments

## New non-domestic buildings

12. Do you agree with the proposal for 2013 for non-domestic buildings to explicitly regulate energy efficiency separately from low carbon technologies through the assessment of primary energy consumption (PEC)? Does PEC seem like a reasonable basis for standard setting?

Yes ☐ No ☒ Don't know ☐

Comments

Concerns re consistency with England and doubts regarding enforcement

13. Which package of fabric and services should be selected: 7% or 10%? Please give reasons for your choice.

7% ☐

10% ☒

Don't know ☐

Comments

NOTE: There is a limit to the airtightness improvements that are realistic and economically feasible for industrial type non-domestic buildings up to 2500 m<sup>2</sup>

14. Do you foresee any particular issues for certain categories of building to meet the TPEC or TER?

Yes ☒ No ☐ Don't know ☐

## Comments

See Q13 and Q16. There are concerns about the difficulties of compliance of smaller industrial buildings

15. Which approach should be utilized to incorporate the contribution of low carbon technologies into the setting of the Target Emission Rate (TER), for non domestic buildings?

Fixed carbon reduction (in kg.CO<sub>2</sub>/m<sup>2</sup>/year)

☒

Percentage of roof area of PV

☐

Other

☐

Don't know

☐

Please give reasons for your choice

There are a greater number of renewable generation technologies for non-dom buildings of which PV is one. PV should not be the only reference listed as determining an equivalent performance from an alternative technology is complex and not well defined

16. The proposals explain the Government's preference for a 20% aggregate improvement in CO<sub>2</sub> performance standards for new non-domestic buildings from October 2013. Which option do you prefer and why?

No change

☐

Target A: 10% aggregate improvement (1% PV)

☐

Target B: 11% aggregate improvement (No PV)

☐

Target C: 20% aggregate improvement (5% PV)

☒

Don't know

☐

Please give reasons for your choice

EPIC's preference is for the 20% aggregate improvement. However it is important that the amendments agreed between the Industrial Buildings Group and DCLG for smaller buildings and currently being incorporated in SBEM [Aug 2012] are made if the target 20% is to be achievable.

Many of the smaller footprint buildings, below 1500m<sup>2</sup>, already have difficulty in complying. A further 20% improvement is likely to require a substantial use of renewables.

17. Do the proposed 2013 notional buildings as set out in the changes to the National Calculation Methodology seem like a reasonable basis for standards setting? Please provide comments on the method used to develop the notional buildings and particular elements of one or more of the notional buildings, if relevant.

Yes ☐ No ☒ Don't know ☐

Comments

There is no transparency regarding the new aggregate proportions expected from each of the building types outlined in the 2010 documents. Serious concern was expressed at that time whether industrial buildings could realize the proposed level of savings. Stakeholders should be informed of the new proportionate breakdowns for 2013 because typical industrial buildings cannot provide the same compound increase this time.

18. Do you think that a further recipe should be created for buildings under 250m<sup>2</sup> and aligned with the proposed domestic recipe? Are there particular reasons why smaller buildings find compliance with the non-domestic recipes difficult? Please justify your views.

Yes ☒ No ☐ Don't know ☐

Comments

There is also a strong case for a further recipe for non-dom industrial buildings under 2500 m<sup>2</sup> incorporating revised airtightness levels (see Para 16 above) to enable them reasonably and economically to achieve compliance without a higher than average use of renewables.

NOTE. Part 2 Pages 156-8 Tables 5 and 6 state values of 3m<sup>3</sup> and 5m<sup>3</sup> that are not reasonably achievable for smaller industrial

19. Although we recognise that some buildings may need to be serviced in a particular way for legitimate functional or environmental reasons, should Part L incentivise a lower carbon servicing strategy (as with the current Energy Performance Certificate methodology), by basing the notional building on mixed-mode ventilation?

Yes ☐ No ☐ Don't know ☒

Comments

20. Do you have any other comments on the proposed changes to Approved Document L2A or the non-domestic National Calculation Methodology? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

## Comments

21. The Impact Assessment makes a number of assumptions on the costs of fabric/services/renewables, new build rates, etc for new non-domestic buildings. Do you think these assumptions are fair and reasonable? Please justify your views.

Yes ☐ No ☐ Don't know ☒

## Comments

The assumptions are neither clear nor readily available and therefore it is not possible to comment objectively

22. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for new non-domestic buildings?

Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☒ Don't know ☐

## Comments

EPIC has serious concerns about some of the assumptions made by AECOM. For example the claim that improved airtightness can be achieved at no cost. The majority of current non-dom below 2500m<sup>2</sup> footprint struggle to achieve better than 7m<sup>3</sup> with the current level of supervision. Achieving the proposed enhanced levels will require significantly increased costs in terms of improved details and particularly the extent and quality of supervision and planning.

## Cumulative impact of policies

23. Overall, do you think the assessment of the impact on development is broadly fair and reasonable? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

## Comments

24. What role should planning play in facilitating higher carbon standards? Should it focus on facilitating site wide energy opportunities that will be needed as we move towards zero or near zero carbon buildings?

Views

We doubt the ability of planning to take a role as they do not understand the technical issues

25. What are the implications from future (and regular) changes to the Code for Sustainable Homes and BREEAM on the implementation of the policy?

Views

26. Are the costs of assessment and certification now disproportionate to the costs and benefits of achieving a minimum sustainable buildings standard level?

Yes ☐ No ☐ Don't know ☒

Comments

27. What should be the role of local planning authorities in setting local standards above and beyond Building Regulations? How can we ensure there is a level playing field of standards across Wales?

Views

This would further complicate the process, create uncertainty and misunderstanding and most likely create additional costs.

28. What do you see as the positive/negative impacts of removing Part B of the policy expecting buildings to be certified against Code/BREEAM?

Views

29. Is there a better, alternative, way to rewards and secure sustainable buildings (above the regulatory minimum) other than using national planning policy? What opportunities are there for future changes to Building Regulations?

Views

30. To what extent are duplication of standard and approval systems an issue? Would the removal of the PfSB policy assist in reducing duplication?

Views

31. What opportunities are there for higher standards to be delivered on strategic sites identified as part of the Local Development Plan?

Views

## Existing buildings

32. Do you agree with the proposal to raise performance standards for domestic replacement windows? Please explain your answer.

Yes ☐ No ☐ Don't know ☐

Comments

33. Do you agree with the proposal to raise performance standards for domestic extensions? Please explain your answer.

Yes ☐ No ☐ Don't know ☐

Comments

34. Do you agree with the proposal to raise performance standards for non-domestic extensions? Please explain your answer.



Yes ☒ No ☐ Don't know ☐

Comments

35. Do you agree that the exemption for conservatories or porches should be removed where an individual room heat or air conditioning unit is installed? How effective would this change be in limiting energy use/emissions, or are there other ways by which energy performance might be improved where conservatories or porches are installed?

Yes ☐ No ☐ Don't know ☐

Comments

36. Do you agree with the proposal to require consequential improvements upon extensions or increases in habitable space in existing homes below 1000m<sup>2</sup>? Please explain your view.

Yes ☐ No ☐ Don't know ☐

Comments

37. The consultation explains that the regulatory requirement for consequential improvements upon domestic extensions or increases in habitable space would be limited to a list of measures comprising a minimum standard of loft insulation, hot water cylinder insulation and the installation of cavity wall insulation.

Do you agree with this list of measures? ☐

Should this list be different (please explain below)? ☐

Another approach (please explain below) ☐

Don't know ☐

Comments

38. What effect do you think the requirements for consequential improvements may have on the demand for repair, maintenance and improvement activity? Please use evidence to explain your answer.

Increase demand

☐

Reduce demand

☐

No effect

☐

Don't know

☐

Comments

39. Do you agree with the proposal to introduce consequential improvements upon extensions or increases in habitable space in non-domestic buildings under 1000m<sup>2</sup>? Please explain your view.

Yes ☒ No ☐ Don't know ☐

Comments

40. The consultation proposes that for non-domestic buildings, any measure from list which is used to generate Green Deal assessments, the list in SBEM used to generate Energy Performance Certificate recommendations and the existing list of typical consequential improvement measures from Approved Document L2B should be eligible to be a consequential improvement. Do you agree?

Yes

☒

No

☐

Prefer a different list (please specify)

☐

Don't know

☐

Comments

The Green Deal is clearly not working for non-domestic work and without any incentive from Government the only option to achieve some contribution to Carbon /energy savings is to raise the performance levels.

41. Do you agree that there should not be major problems in extending the requirement for consequential improvements for the building control process? If you do foresee issues, what are they and how might these be addressed?

Yes ☐ No ☐ Don't know ☒

Comments

42. Do you have any other comments on the proposed changes to Approved Document L1B? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

43. Do you have any other comments on the proposed changes to Approved Document L2B? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

44. Do you think that the Impact Assessment is a fair and reasonable assessment of the potential costs and benefits of raising the performance standards for replacement domestic windows and domestic/non-domestic extensions? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

Comments

45. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for consequential improvements in existing homes? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☐

Comments

46. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for consequential improvements in existing non-domestic buildings? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

Comments

## Compliance and Performance

47. For new dwellings, Welsh Government is proposing to develop a compliance checklist. Do you think such a checklist would be used sufficiently to warrant its development?

Yes ☐ No ☐ Don't know ☐

Comments

48. If such a checklist was developed, what should it cover?

Comments

49. If the checklist was taken forward, who should be involved in its development?

Comments

50. Would any other approach be likely to prove more effective instead (such as a PAS<sup>4</sup> type approach).

Yes ☐ No ☐ Don't know ☐

Comments

- 51a. Would it be preferable for buildings of a domestic nature to be able to achieve compliance through applying the recipe in AD L1A, in acknowledgement of the domestic nature of such buildings, rather than demonstrating compliance with AD L2A?

Yes ☐ No ☐ Don't know ☐

Comments

- 51b. What are the arguments for and against this approach?

Comments

52. Additional views and suggestions for addressing compliance and performance issues in new non domestic buildings would be welcome.

Comments

53. Is the newly formatted ADL1B easier to understand and use?

Yes ☐ No ☐ Don't know ☐

Comments

<sup>4</sup> A PAS

54. Are there any further amendments to the newly formatted ADL1B that you would recommend? If so, please provide details.

Yes ☐ No ☐ Don't know ☐

Comments

55. How do the consultation proposals impact on the work of Local Authorities and Approved Inspectors? Please give positive and negative impacts.

Comments

56. We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

**#46 - Gwynedd Consultancy Building Control - Gwynedd Council**

# 2012 consultation on changes to the Building Regulations in Wales

## Part L (Conservation of fuel and power)

### Consultation Response Form

Your name: Gwynedd Consultancy Building Control

Organisation: Gwynedd Council

**(xvii) Are the views expressed on this consultation an official response from the organisation you represent or your own personal views?**

Organisational ☒ Personal Views ☐

**(xviii) Are your views expressed on this consultation in connection with your membership or support of any group? If yes please state name of group:**

Yes ☒ No ☐

Name of group:

Gwynedd Building Control

**(xix) Please tick the one box that best describes your organisation:**

<p><b>Builders/Developers:</b></p> <p>Builder / Main contractor: <input type="checkbox"/></p> <p>Builder/ Small builder: (extensions/repairs/maintenance, etc) <input type="checkbox"/></p> <p>Installer/ special sub-contractor <input type="checkbox"/></p> <p>Commercial developer <input type="checkbox"/></p> <p>House builder <input type="checkbox"/></p>	<p><b>Property Management:</b></p> <p>Housing association (registered social landlord) <input type="checkbox"/></p> <p>Residential landlord, private sector <input type="checkbox"/></p> <p>Commercial <input type="checkbox"/></p> <p>Public sector <input checked="" type="checkbox"/></p>
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<p><b>Building occupier:</b></p> <p>Home owner <input type="checkbox"/></p> <p>Tenant (residential) <input type="checkbox"/></p> <p>Commercial Building <input type="checkbox"/></p>	<p><b>Building Control Bodies:</b></p> <p>Local authority building control <input checked="" type="checkbox"/></p> <p>Approved Inspector <input type="checkbox"/></p>
<p><b>Energy Sector</b> <input type="checkbox"/></p>	<p><b>Fire and Rescue Authority</b> <input type="checkbox"/></p>
<p><b>Designers/Engineers/Surveyors:</b></p> <p>Architect <input type="checkbox"/></p> <p>Civil/Structural engineer <input type="checkbox"/></p> <p>Building services engineer <input type="checkbox"/></p> <p>Surveyor <input checked="" type="checkbox"/></p>	<p><b>Specific Interest:</b></p> <p>Competent person scheme operator <input type="checkbox"/></p> <p>National representative or trade body <input checked="" type="checkbox"/></p> <p>Professional body or institution <input checked="" type="checkbox"/></p> <p>Research/ academic organisation <input type="checkbox"/></p>



<b>Manufacturer/ Supply Chain</b> <input type="checkbox"/>	<b>Other</b> ( <i>please specify</i> ) <input style="width: 100%;" type="text"/>
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**(xx) Please tick the *one* box which best describes the size of your or your organisation's business?**

- Micro – typically 0 to 9 full-time or equivalent employees (incl. sole traders) ☐
- Small – typically 10 to 49 full-time or equivalent employees ☐
- Medium – typically 50 to 249 full-time or equivalent employees ☐
- Large – typically 250+ full-time or equivalent employees ☐
- None of the above – Local Authority ☒

**(vi) Are you or your organisation a member of a competent person scheme?**

Yes ☐ No ☒

Name of scheme:

**(vii) Would you be happy for us to contact you again in relation to this consultation?**

Yes ☒ No ☐

WG will process any personal information that you provide us with in accordance with the data protection principles in the Data Protection Act 1998. In particular, we shall protect all responses containing personal information by means of all appropriate technical security measures and ensure that they are only accessible to those with an operational need to see them. You should, however, be aware that as a public body, the Welsh Government is subject to the requirements of the Freedom of Information Act 2000, and may receive requests for all responses to this consultation. If such requests are received we shall take all steps to anonymise responses that we disclose, by stripping them of the specifically personal data – name and e-mail address – you supply in responding to this consultation. If, however, you consider that any of the responses that you provide to this survey would be likely to identify you irrespective of the removal of your overt

personal data, then we should be grateful if you would indicate that, and the likely reasons, in your response, for example in the relevant comments box.

## Questions:

### New homes

1. Do you agree with the Government's preference for a CO<sub>2</sub> saving of 40% reduction in carbon dioxide emissions compared to Part L 2010.

No change to 2010

☐

40% CO<sub>2</sub> saving

☐

25% CO<sub>2</sub> saving

☒

Something else (please explain below)

☐

Don't know

☐

Comments

We tend to disagree in principal with the preferred option and would prefer the later. This would be a more phased approach and would not have as much impact initially than the 40% improvement would. This would give the industry a few years to adapt before making further changes in 2016.

We also belive that the 40% saving would have a greater impact with regard to cost burdens on developers/contractors on what is already a fragile industry.

2. Do you agree with the proposal for an 'aggregate' approach to CO<sub>2</sub> target setting for new homes in 2015? The CO<sub>2</sub> target for any individual dwelling varies depending on the ease with which the building can achieve the target, with the overall required CO<sub>2</sub> saving achieved when aggregated over the build mix.

Yes ☒ No ☐ Don't know ☐

Comments

3. Do you agree with the proposal for a compliant option based on a consistent recipe of elemental specifications for fabric, services plus an additional CO<sub>2</sub> saving equivalent to an amount of photovoltaic (PV). Please justify your choice.

Yes ☒ No ☐ Don't know ☐

## Comments

The recipe seems to be a very practical solution but its success is dependant on factors such as; simplified and straightforward solutions, appropriate technical guidance sheets (or similar) produced.

4. The main difference between the recipes is the required system efficiency for each fuel, which is appropriate for the heating system type. By adopting this approach to different fuel types, there is no need for a separate fuel factor. Do you agree with the proposed approach?

Yes ☒ No ☐ Don't know ☐

## Comments

This seems to simplify the process, thus said, the industry needs to catch up to satisfy the new requirements/changes. Provides a fairer approach to remote areas in Wales.

5. For the CO<sub>2</sub> savings proposed, are the recipe specifications a sensible way of achieving them? Please justify your choice.

Yes ☒ No ☐ Don't know ☐

## Comments

It should simplify and make compliance much straightforward, considering several sectors within the industry are still struggling with the 2006 and 2010 changes, the proposed recipe specification will be a welcome simplified method of achieving compliance. As above, its success will depend on the industry's ability to catch up.

6. In approaching the selection of the amount of PV to be installed on dwellings, do you prefer?

Fixed percentage of building foundation area ☒

Proportion of gross internal floor area with a practical cap ☐

Don't know ☐

## Comments

Seems to be the fairest method. That said, if the proportion of internal floor was to be the preferred option, clear definitions and simple calculation methodologies would need to be included.

7. Do you agree that the limits on design flexibility 'backstop' values for fabric elements in new homes should be changed from the current reasonable provision in the technical guidance to become mandatory?

Yes ☒ No ☐ Don't know ☐

Comments

Targets would become easier to achieve on site.

8. Do you agree with the changes to the 'backstop' values proposed? Please explain your decision.

Yes ☒ No ☐ Don't know ☐

Comments

Brings it in line with proposed standards

9. Do you have any other comments on the proposed changes to Approved Document L1A or the domestic National Calculation Methodology? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

The documents in general needs to become much easier to read and follow. Although BCO's might find the technical jargon and methods behind some aspects of the document interesting, developers don't care and simply want a simple document and clear cut ways of achieve compliance.

10. The Impact Assessment makes a number of assumptions on fabric/services/ renewables costs, new build rates, phase-in rates, learning rates, etc for new homes. Do you think these assumptions are fair and reasonable? Please justify your views.

Yes ☐ No ☐ Don't know ☒

Comments

No comment

11. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for new homes? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

Comments

As above

## New non-domestic buildings

12. Do you agree with the proposal for 2013 for non-domestic buildings to explicitly regulate energy efficiency separately from low carbon technologies through the assessment of primary energy consumption (PEC)? Does PEC seem like a reasonable basis for standard setting?

Yes ☒ No ☐ Don't know ☐

Comments

Previous 'loop-holes' as such in previous calculation software packages to achieve compliance with masses of alternative technologies. A fabric first approach would be a much sensible and effective form of construction.

13. Which package of fabric and services should be selected: 7% or 10%? Please give reasons for your choice.

7% ☒

10% ☐

Don't know ☐

Comments

Set's a more achievable target, and would have less of an impact on the already fragile industry. See also our opinion in Q1

14. Do you foresee any particular issues for certain categories of building to meet the TPEC or TER?

Yes ☐ No ☐ Don't know ☒

Comments

No comment

15. Which approach should be utilized to incorporate the contribution of low carbon technologies into the setting of the Target Emission Rate (TER), for non domestic buildings?

Fixed carbon reduction (in kg.CO<sub>2</sub>/m<sup>2</sup>/year) ☐

Percentage of roof area of PV ☒

Other ☐

Don't know ☐

Please give reasons for your choice

High rise buildings will prove difficult if they have small roof areas for the use of PV's, a fixed carbon reduction may become problematic and unachievable.

16. The proposals explain the Government's preference for a 20% aggregate improvement in CO<sub>2</sub> performance standards for new non-domestic buildings from October 2013. Which option do you prefer and why?

No change ☐

Target A: 10% aggregate improvement (1% PV) ☐

Target B: 11% aggregate improvement (No PV) ☒

Target C: 20% aggregate improvement (5% PV) ☐

Don't know ☐

Please give reasons for your choice

To much reliance on PV's in the consultation documents. Alternative methods of compliance should have been explored.

17. Do the proposed 2013 notional buildings as set out in the changes to the National Calculation Methodology seem like a reasonable basis for standards setting? Please provide comments on the method used to develop the notional buildings and particular elements of one or more of the notional buildings, if relevant.

Yes ☒ No ☐ Don't know ☐

Comments

No comment

18. Do you think that a further recipe should be created for buildings under 250m<sup>2</sup> and aligned with the proposed domestic recipe? Are there particular reasons why smaller buildings find compliance with the non-domestic recipes difficult? Please justify your views.

Yes ☒ No ☐ Don't know ☐

Comments

Domestic house builders tend to also venture into non-domestic developments. Their understanding of non-domestic developments can be very vague at times therefore a simplified method similar to the recipe for dwellings would be a major advantage.

19. Although we recognise that some buildings may need to be serviced in a particular way for legitimate functional or environmental reasons, should Part L incentivise a lower carbon servicing strategy (as with the current Energy Performance Certificate methodology), by basing the notional building on mixed-mode ventilation?

Yes ☐ No ☐ Don't know ☒

Comments

No comment

20. Do you have any other comments on the proposed changes to Approved Document L2A or the non-domestic National Calculation Methodology? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

The documents in general needs to become much easier to read and follow. Although BCO's might find the technical jargon and methods behind some aspects of the document interesting, developers don't care and simply want a simple document and clear cut ways of achieve compliance.

21. The Impact Assessment makes a number of assumptions on the costs of fabric/services/ renewables, new build rates, etc for new non-domestic buildings. Do you think these assumptions are fair and reasonable? Please justify your views.

Yes ☐ No ☐ Don't know ☒

Comments

Following local consultation with Builders Merchants etc, Costs are not accurate. These need to be revised as costs are way off.

22. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for new non-domestic buildings? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

## Comments

See above

## Cumulative impact of policies

23. Overall, do you think the assessment of the impact on development is broadly fair and reasonable? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

## Comments

No comment

## National Planning Policy Review

24. What role should planning play in facilitating higher carbon standards? Should it focus on facilitating site wide energy opportunities that will be needed as we move towards zero or near zero carbon buildings?

## Views

Minimal input. Planning officers usually have a limited understanding of the requirements, Building Control would have the know how and expertise to deal with the changes. If planning were to remain a controlling body, a statutory consultation with Building Control would need to be set up.

25. What are the implications from future (and regular) changes to the Code for Sustainable Homes and BREEAM on the implementation of the policy?

## Views

It would increase complexity of the whole process as it would result in the overlapping of Planning & Building Control legislation. The changes should concentrate on simplifying things and duplication should be avoided

26. Are the costs of assessment and certification now disproportionate to the costs and benefits of achieving a minimum sustainable buildings standard level?

Yes ☒ No ☐ Don't know ☐



## Comments

Saving energy is one thing but it appears that costs and recovering benefits are at a cost to the developer and end users don't seem to benefit from future financial gain.

27. What should be the role of local planning authorities in setting local standards above and beyond Building Regulations? How can we ensure there is a level playing field of standards across Wales?

### Views

Unpractical. Powers of this nature should be dealt with by Building Control only and this should be consistent across Wales. Currently different Counties with different local Planning policies complicate things.

28. What do you see as the positive/negative impacts of removing Part B of the policy expecting buildings to be certified against Code/BREEAM?

### Views

In theory this should speed up the planning process. The positives would be the reduction in initial cost, reduction in duplication and would further encourage the growth in new developments. The negative implications would possibly be a lack in consistency

29. Is there a better, alternative, way to reward and secure sustainable buildings (above the regulatory minimum) other than using national planning policy? What opportunities are there for future changes to Building Regulations?

### Views

Should be enforced by Building Control in accordance with national standards

30. To what extent are duplication of standard and approval systems an issue? Would the removal of the PfSB policy assist in reducing duplication?

### Views

Yes

31. What opportunities are there for higher standards to be delivered on strategic sites identified as part of the Local Development Plan?

## Views

It would be sensible to stick with national policy – How can Building Control ask for standards above minimum requirements?

## Existing buildings

32. Do you agree with the proposal to raise performance standards for domestic replacement windows? Please explain your answer.

Yes ☒ No ☐ Don't know ☐

### Comments

A balance is required between cost and practicability. Developments of new more effective products required.

33. Do you agree with the proposal to raise performance standards for domestic extensions? Please explain your answer.

Yes ☒ No ☐ Don't know ☐

### Comments

See above

34. Do you agree with the proposal to raise performance standards for non-domestic extensions? Please explain your answer.

Yes ☒ No ☐ Don't know ☐

### Comments

No further comment – see Q32

35. Do you agree that the exemption for conservatories or porches should be removed where an individual room heat or air conditioning unit is installed? How effective would this change be in limiting energy use/emissions, or are there other ways by which energy performance might be improved where conservatories or porches are installed?

Yes ☒ No ☐ Don't know ☐

Comments

Definition on conservatory required.  
This 'loop-hole' has been exploited for too long, a reduction in the 30m<sup>2</sup> would be advisable.

36. Do you agree with the proposal to require consequential improvements upon extensions or increases in habitable space in existing homes below 1000m<sup>2</sup>? Please explain your view.

Yes ☒ No ☐ Don't know ☐

Comments

An introduction of a points system could be the answer whereas property owners who have recently spent on upgrading the existing structure could be awarded with a points system, and if all elements have recently been upgraded there would be no requirements to make any further improvements.

37. The consultation explains that the regulatory requirement for consequential improvements upon domestic extensions or increases in habitable space would be limited to a list of measures comprising a minimum standard of loft insulation, hot water cylinder insulation and the installation of cavity wall insulation.

Do you agree with this list of measures? ☒

Should this list be different (please explain below)? ☐

Another approach (please explain below) ☐

Don't know ☐

Comments

What happens if these measures have already been done in the past couple of years? How about including New windows, New boiler? See above

38. What effect do you think the requirements for consequential improvements may have on the demand for repair, maintenance and improvement activity? Please use evidence to explain your answer.

Increase demand

☐

Reduce demand

☒

No effect

☐

Don't know

☐

Comments

People will carry out repairs and maintenance when funds are available, long term it should reduce the demand.

39. Do you agree with the proposal to introduce consequential improvements upon extensions or increases in habitable space in non-domestic buildings under 1000m<sup>2</sup>? Please explain your view.

Yes ☒ No ☐ Don't know ☐

Comments

The proposals need to be technically, functional and economically feasible to succeed. General thought are that 1000m<sup>2</sup> is too high.

40. The consultation proposes that for non-domestic buildings, any measure from list which is used to generate Green Deal assessments, the list in SBEM used to generate Energy Performance Certificate recommendations and the existing list of typical consequential improvement measures from Approved Document L2B should be eligible to be a consequential improvement. Do you agree?

Yes

☒

No

☐

Prefer a different list (please specify)

☐

Don't know

☐

Comments

No comment

41. Do you agree that there should not be major problems in extending the requirement for consequential improvements for the building control process? If you do foresee issues, what are they and how might these be addressed?

Yes ☒ No ☐ Don't know ☐

Comments

People interpret the regulations differently, needs to be monitored for a level playing field to exist.  
Consider reducing VAT rates  
Proposals will result in more visits, resulting in arising issues on site and in turn a possible rise in fees.

42. Do you have any other comments on the proposed changes to Approved Document L1B? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

The documents in general needs to become much easier to read and follow. Although BCO's might find the technical jargon and methods behind some aspects of the document interesting, developers don't care and simply want a simple document and clear cut ways of achieve compliance.

Also greater Publicity needed we are still experiencing difficulties with Renovation of Thermal Elements that came in during 2006. WG should drive a publicity campaign for any proposed changes.

43. Do you have any other comments on the proposed changes to Approved Document L2B? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

See above

44. Do you think that the Impact Assessment is a fair and reasonable assessment of the potential costs and benefits of raising the performance standards for replacement domestic windows and domestic/non-domestic extensions? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

Comments

Not our field of expertise

45. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for consequential improvements in existing homes? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

Comments

Not our field of expertise

46. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for consequential improvements in existing non-domestic buildings? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

Comments

Not our field of expertise

## Compliance and Performance

47. For new dwellings, Welsh Government is proposing to develop a compliance checklist. Do you think such a checklist would be used sufficiently to warrant its development?

Yes ☒ No ☐ Don't know ☐

Comments

Would be a very hand tool to have when carrying out inspections. Possibly the new SAP/SBEM software could generate such a list as the checklist would need to have the values set out in calculation in it.

48. If such a checklist was developed, what should it cover?

Comments

All elements that have been accounted for in as design SAP calculation.

49. If the checklist was taken forward, who should be involved in its development?

Comments

Building Control, LABC, BRE

50. Would any other approach be likely to prove more effective instead (such as a PAS<sup>5</sup> type approach).

Yes ☐ No ☐ Don't know ☒

Comments

No comment

51a. Would it be preferable for buildings of a domestic nature to be able to achieve compliance through applying the recipe in AD L1A, in acknowledgement of the domestic nature of such buildings, rather than demonstrating compliance with AD L2A?

Yes ☒ No ☐ Don't know ☐

Comments

Would simplify things for the smaller developer

51b. What are the arguments for and against this approach?

Comments

**For** - Simpler compliance **Against** – Open to abuse

52. Additional views and suggestions for addressing compliance and performance issues in new non domestic buildings would be welcome.

Comments

Simplify the guidance

<sup>5</sup> A PAS is a Publicly Available Specification, and the PAS would set out a quality assurance approach.

53. Is the newly formatted ADL1B easier to understand and use?

Yes ☒ No ☐ Don't know ☐

Comments

Yes in parts, but still a bit complex in some areas. Flowcharts on alternative ways of compliance etc seem to be an effective tool.

54. Are there any further amendments to the newly formatted ADL1B that you would recommend? If so, please provide details.

Yes ☒ No ☐ Don't know ☐

Comments

No comment

55. How do the consultation proposals impact on the work of Local Authorities and Approved Inspectors? Please give positive and negative impacts.

Comments

Extra work load and dependence will fall on BCB's. WG need to take appropriate action to educate all professions within the industry, from your small builder and builders merchant to larger developers.

56. We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

Reduce the rate of VAT for all related work to cushion the blow of increased costs and kick start the construction sector on related work.  
Need to get Planning Conservation Officers on board. Notably with regard to conservation, Listed buildings, developments within the National Park



## #48 - Construction Products Association

# 2012 consultation on changes to the Building Regulations in Wales

## Part L (Conservation of fuel and power)

**Minor amendments indicated in red**

### Consultation

### Response Form

Your name: Duncan King

Organisation (if applicable): Construction Products Association

**(xxi) Are the views expressed on this consultation an official response from the organisation you represent or your own personal views?**

Organisational ☒ Personal Views ☐

**(xxii) Are your views expressed on this consultation in connection with your membership or support of any group? If yes please state name of group:**

Yes ☒ No ☐

Name of group:

Construction Products Association

**(xxiii) Please tick the one box that best describes your organisation:**

<p><b>Builders/Developers:</b></p> <p>Builder / Main contractor: <input type="checkbox"/></p> <p>Builder/ Small builder: <input type="checkbox"/> (extensions/repairs/maintenance, etc)</p> <p>Installer/ special sub-contractor <input type="checkbox"/></p> <p>Commercial developer <input type="checkbox"/></p> <p>House builder <input type="checkbox"/></p>	<p><b>Property Management:</b></p> <p>Housing association <input type="checkbox"/> (registered social landlord)</p> <p>Residential landlord, <input type="checkbox"/> private sector</p> <p>Commercial <input type="checkbox"/></p> <p>Public sector <input type="checkbox"/></p>
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<p><b>Building occupier:</b></p> <p>Home owner <input type="checkbox"/></p> <p>Tenant (residential) <input type="checkbox"/></p> <p>Commercial Building <input type="checkbox"/></p>	<p><b>Building Control Bodies:</b></p> <p>Local authority building control <input type="checkbox"/></p> <p>Approved Inspector <input type="checkbox"/></p>
<p><b>Energy Sector</b> <input type="checkbox"/></p>	<p><b>Fire and Rescue Authority</b> <input type="checkbox"/></p>
<p><b>Designers/Engineers/Surveyors:</b></p> <p>Architect <input type="checkbox"/></p> <p>Civil/Structural engineer <input type="checkbox"/></p> <p>Building services engineer <input type="checkbox"/></p> <p>Surveyor <input type="checkbox"/></p>	<p><b>Specific Interest:</b></p> <p>Competent person scheme operator <input type="checkbox"/></p> <p>National representative or trade body <input checked="" type="checkbox"/></p> <p>Professional body or institution <input type="checkbox"/></p> <p>Research/ academic organisation <input type="checkbox"/></p>

<b>Manufacturer/ Supply Chain</b> <input type="checkbox"/>	<b>Other</b> ( <i>please specify</i> ) <input style="width: 100%;" type="text"/>
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**(xxiv) Please tick the *one* box which best describes the size of your or your organisation's business?**

- Micro – typically 0 to 9 full-time or equivalent employees (incl. sole traders) ☐
- Small – typically 10 to 49 full-time or equivalent employees ☐
- Medium – typically 50 to 249 full-time or equivalent employees ☐
- Large – typically 250+ full-time or equivalent employees ☐
- None of the above (please specify) ☒

We represent over -

45 major Trade Associations,  
 24 Company Members,  
 5 Affiliate Members  
 30 Associate Members

**(vi) Are you or your organisation a member of a competent person scheme?**

Yes ☐ No ☐

Name of scheme:

Some member organisations are

**(vii) Would you be happy for us to contact you again in relation to this consultation?**

Yes ☒ No ☐

WG will process any personal information that you provide us with in accordance with the data protection principles in the Data Protection Act 1998. In particular, we shall protect all responses containing personal information by means of all appropriate technical security measures and

ensure that they are only accessible to those with an operational need to see them. You should, however, be aware that as a public body, the Welsh Government is subject to the requirements of the Freedom of Information Act 2000, and may receive requests for all responses to this consultation. If such requests are received we shall take all steps to anonymise responses that we disclose, by stripping them of the specifically personal data – name and e-mail address – you supply in responding to this consultation. If, however, you consider that any of the responses that you provide to this survey would be likely to identify you irrespective of the removal of your overt personal data, then we should be grateful if you would indicate that, and the likely reasons, in your response, for example in the relevant comments box.

## Questions:

### New homes

1. Do you agree with the Government's preference for a CO<sub>2</sub> saving of 40% reduction in carbon dioxide emissions compared to Part L 2010.

No change to 2010

☐

40% CO<sub>2</sub> saving

☐

25% CO<sub>2</sub> saving

☐

Something else (please explain below)

☐

Don't know

☒

Comments

There is a wide range of views across industry ranging from no change to the full 40%.

2. Do you agree with the proposal for an 'aggregate' approach to CO<sub>2</sub> target setting for new homes in 2015? The CO<sub>2</sub> target for any individual dwelling varies depending on the ease with which the building can achieve the target, with the overall required CO<sub>2</sub> saving achieved when aggregated over the build mix.

Yes ☒ No ☐ Don't know ☐

Comments

3. Do you agree with the proposal for a compliant option based on a consistent recipe of elemental specifications for fabric, services plus an additional CO<sub>2</sub> saving equivalent to an amount of photovoltaic (PV). Please justify your choice.

Yes ☒ No ☐ Don't know ☐

Comments

This would appear to most to be simpler than the English Fuel Factor system.

4. The main difference between the recipes is the required system efficiency for each fuel, which is appropriate for the heating system type. By adopting this approach to different fuel types, there is no need for a separate fuel factor. Do you agree with the proposed approach?

Yes ☒ No ☐ Don't know ☐

Comments

This would appear to most to be simpler than the English Fuel Factor system.

5. For the CO<sub>2</sub> savings proposed, are the recipe specifications a sensible way of achieving them? Please justify your choice.

Yes ☐ No ☐ Don't know ☒

Comments

Those who agree with the 40% change see the recipe as sensible, but those who disagree with the 40% option do not see the recipe specifications as practicable.

6. In approaching the selection of the amount of PV to be installed on dwellings, do you prefer?

Fixed percentage of building foundation area ☐

Proportion of gross internal floor area with a practical cap ☐

Don't know ☒

Comments

There are a range of views.

7. Do you agree that the limits on design flexibility 'backstop' values for fabric elements in new homes should be changed from the current reasonable provision in the technical guidance to become mandatory?

Yes ☐ No ☐ Don't know ☒

Comments

There is a range of views.

8. Do you agree with the changes to the 'backstop' values proposed? Please explain your decision.

Yes ☐ No ☐ Don't know ☒

Comments

There is a range of views. If the values are to be mandatory then they must be significantly different from those in the recipe specification, otherwise there is no flexibility.

9. Do you have any other comments on the proposed changes to Approved Document L1A or the domestic National Calculation Methodology? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

No.

10. The Impact Assessment makes a number of assumptions on fabric/services/ renewables costs, new build rates, phase-in rates, learning rates, etc for new homes. Do you think these assumptions are fair and reasonable? Please justify your views.

Yes ☐ No ☐ Don't know ☒

Comments

11. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for new homes? Please justify your view and provide alternative evidence if necessary.

☐ ☐ ☒

Yes                      No                      Don't know

Comments

## New non-domestic buildings

12. Do you agree with the proposal for ~~2013~~ 2014 for non-domestic buildings to explicitly regulate energy efficiency separately from low carbon technologies through the assessment of primary energy consumption (PEC)? Does PEC seem like a reasonable basis for standard setting?

Yes ☐      No ☒      Don't know ☐

Comments

The majority do not agree although they differ in their reasons why. These include consistency between Welsh and English approaches maintaining maximum flexibility to reduce costs and practical issues

13. Which package of fabric and services should be selected: 7% or 10%? Please give reasons for your choice.

7% ☒

10% ☒

Don't know ☐

Comments

There are supporters for both the 7% and 10% options.

14. Do you foresee any particular issues for certain categories of building to meet the TPEC or TER?

Yes ☒      No ☐      Don't know ☐

Comments

See the detailed response from the industrial shed sector via MCRMA and EPIC.

15. Which approach should be utilized to incorporate the contribution of low carbon technologies into the setting of the Target Emission Rate (TER), for non domestic buildings?

Fixed carbon reduction (in kg.CO <sub>2</sub> /m <sup>2</sup> /year)	<input type="checkbox"/>
Percentage of roof area of PV	<input type="checkbox"/>
Percentage of floor area of PV	<input type="checkbox"/>
Other	<input type="checkbox"/>
Don't know	<input checked="" type="checkbox"/>

Please give reasons for your choice

There is support for each option.

16. The proposals explain the Government's preference for a 20% aggregate improvement in CO<sub>2</sub> performance standards for new non-domestic buildings from ~~October 2013~~ June 2014. Which option do you prefer and why?

No change	<input type="checkbox"/>
Target A: 10% aggregate improvement (1% PV)	<input type="checkbox"/>
Target B: 11% aggregate improvement (No PV)	<input type="checkbox"/>
Target C: 20% aggregate improvement (5% PV)	<input checked="" type="checkbox"/>
Don't know	<input type="checkbox"/>

Please give reasons for your choice

From those that gave a view, Target C was the majority view.

17. Do the proposed ~~2013~~ 2014 notional buildings as set out in the changes to the National Calculation Methodology seem like a reasonable basis for standards setting? Please provide comments on the method used to develop the notional buildings and particular elements of one or more of the notional buildings, if relevant.

Yes ☐ No ☒ Don't know ☐

Comments

See answer to Q.14 and there are concerns over domestic style non-domestic buildings e.g. small doctors surgeries.



18. Do you think that a further recipe should be created for buildings under 250m<sup>2</sup> and aligned with the proposed domestic recipe? Are there particular reasons why smaller buildings find compliance with the non-domestic recipes difficult? Please justify your views.

Yes ☒ No ☒ Don't know ☐

Comments

Essentially members feel that domestic style buildings should be in L1A and small non-domestic treated as noted in Q.14.

19. Although we recognise that some buildings may need to be serviced in a particular way for legitimate functional or environmental reasons, should Part L incentivise a lower carbon servicing strategy (as with the current Energy Performance Certificate methodology), by basing the notional building on mixed-mode ventilation?

Yes ☐ No ☐ Don't know ☒

Comments

20. Do you have any other comments on the proposed changes to Approved Document L2A or the non-domestic National Calculation Methodology? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

We are unconvinced that a separate Welsh National Calculation Methodology is necessary and it is likely to increase costs.

21. The Impact Assessment makes a number of assumptions on the costs of fabric/services/renewables, new build rates, etc for new non-domestic buildings. Do you think these assumptions are fair and reasonable? Please justify your views.

Yes ☐ No ☐ Don't know ☒

Comments

22. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for new non-domestic buildings?

Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

Comments

### Cumulative impact of policies

23. Overall, do you think the assessment of the impact on development is broadly fair and reasonable? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

Comments

### National Planning Policy Review

24. What role should planning play in facilitating higher carbon standards? Should it focus on facilitating site wide energy opportunities that will be needed as we move towards zero or near zero carbon buildings?

Views

If anyone is to ask for higher standards then it should be through Building Regulations methodology. The concern is that planners do not understand the technical issues.

25. What are the implications from future (and regular) changes to the Code for Sustainable Homes and BREEAM on the implementation of the policy?

Views

Given the uncertain future of the Code for Sustainable Homes we cannot answer this question.

26. Are the costs of assessment and certification now disproportionate to the costs and benefits of achieving a minimum sustainable buildings standard level?

Yes ☐ No ☐ Don't know ☒

Comments

27. What should be the role of local planning authorities in setting local standards above and beyond Building Regulations? How can we ensure there is a level playing field of standards across Wales?

Views

Local planners should not set local standards. We need a nationally consistent framework.

28. What do you see as the positive/negative impacts of removing Part B of the policy expecting buildings to be certified against Code/BREEAM?

Views

The Code and BREEAM, whilst not universally supported, did at the very least set a consistent framework and this would be lost.

29. Is there a better, alternative, way to rewards and secure sustainable buildings (above the regulatory minimum) other than using national planning policy? What opportunities are there for future changes to Building Regulations?

Views

If local planners are allowed to call for higher standards, then a framework such as the Code for Sustainable Homes or BREEAM is needed.

30. To what extent are duplication of standard and approval systems an issue? Would the removal of the PfSB policy assist in reducing duplication?

Views

A single framework minimises duplication.

31. What opportunities are there for higher standards to be delivered on strategic sites identified as part of the Local Development Plan?

#### Views

There are some who do not support any standards higher than building regulations.

### Existing buildings

- ~~32. Do you agree with the proposal to raise performance standards for domestic replacement windows? Please explain your answer.~~

~~Yes ☐ No ☐ Don't know ☐~~

#### Comments

33. Do you agree with the proposal to raise performance standards for domestic extensions? Please explain your answer.

Yes ☐ No ☒ Don't know ☐

#### Comments

It is felt by the majority that the step is too far.

34. Do you agree with the proposal to raise performance standards for non-domestic extensions? Please explain your answer.

Yes ☐ No ☐ Don't know ☒

#### Comments

The industrial shed sector is in agreement but other members disagree.

35. Do you agree that the exemption for conservatories or porches should be removed where an individual room heat or air conditioning unit is installed? How effective would this change be in limiting energy use/emissions, or are there other ways by which energy performance might be improved where conservatories or porches are installed?

Yes ☐ No ☐ Don't know ☒

Comments

36. Do you agree with the proposal to require consequential improvements upon extensions or increases in habitable space in existing homes below 1000m<sup>2</sup>? Please explain your view.

Yes ☒ No ☐ Don't know ☐

Comments

Our major companies support the principal of consequential works for extensions or increased habitable space where the work increases the carbon footprint of the building. Within trade association membership there is majority support. The concerns are that consequential improvement requirements could reduce the amount of building work at a time when there is a growth agenda.

37. The consultation explains that the regulatory requirement for consequential improvements upon domestic extensions or increases in habitable space would be limited to a list of measures comprising a minimum standard of loft insulation, hot water cylinder insulation and the installation of cavity wall insulation.

Do you agree with this list of measures? ☐

Should this list be different (please explain below)? ☒

Another approach (please explain below) ☐

Don't know ☐

Comments

We believe that the principle should be that only those extra works that would be fundamental under a Green Deal Plan should be required. There needs to be a 'deminus' rule so that home owners do not end up having to take out a Green Deal Plan for very small amounts. Our calculations suggest that Green Deal funding can stretch to a maximum of £12 capital spend for each £1 of annual fuel saving so a rule of thumb guide could be developed on this

38. What effect do you think the requirements for consequential improvements may have on the demand for repair, maintenance and improvement activity? Please use evidence to explain your answer.

Increase demand

☐

Reduce demand

☐

No effect

☐

Don't know

☒

Comments

Views vary but we believe that if a voluntary scheme were introduced then demand would increase.

39. Do you agree with the proposal to introduce consequential improvements upon extensions or increases in habitable space in non-domestic buildings under 1000m<sup>2</sup>? Please explain your view.

Yes ☒ No ☐ Don't know ☐

Comments

40. The consultation proposes that for non-domestic buildings, any measure from list which is used to generate Green Deal assessments, the list in SBEM used to generate Energy Performance Certificate recommendations and the existing list of typical consequential improvement measures from Approved Document L2B should be eligible to be a consequential improvement. Do you agree?

Yes

☒

No

☐

Prefer a different list (please specify)

☐

Don't know

☐

Comments

There should always be the opportunity to offer a different technical solution such as a before and after SBEM to show no net increase in CO<sub>2</sub>

41. Do you agree that there should not be major problems in extending the requirement for consequential improvements for the building control process? If you do foresee issues, what are they and how might these be addressed?

Yes ☐ No ☐ Don't know ☒

Comments

42. Do you have any other comments on the proposed changes to Approved Document L1B? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

No

43. Do you have any other comments on the proposed changes to Approved Document L2B? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

No

44. Do you think that the Impact Assessment is a fair and reasonable assessment of the potential costs and benefits of raising the performance standards for ~~replacement domestic windows and~~ domestic/non-domestic extensions? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

Comments

45. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for consequential improvements in existing homes? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

Comments

46. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for consequential improvements in existing non-domestic buildings? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

Comments

## Compliance and Performance

47. For new dwellings, Welsh Government is proposing to develop a compliance checklist. Do you think such a checklist would be used sufficiently to warrant its development?

Yes ☒ No ☐ Don't know ☐

Comments

48. If such a checklist was developed, what should it cover?

Comments

It should be based on the principles that Robust Details uses to derive its checklists basically looking at all the key areas.

49. If the checklist was taken forward, who should be involved in its development?

Comments

Building Control, builders, supply chain



50. Would any other approach be likely to prove more effective instead (such as a PAS<sup>6</sup> type approach).

Yes ☐ No ☒ Don't know ☐

Comments

The key issue is for all parties to take responsibility and for builders to be more careful to adhere to the specification.

- 51a. Would it be preferable for buildings of a domestic nature to be able to achieve compliance through applying the recipe in AD L1A, in acknowledgement of the domestic nature of such buildings, rather than demonstrating compliance with AD L2A?

Yes ☒ No ☐ Don't know ☐

Comments

- 51b. What are the arguments for and against this approach?

Comments

52. Additional views and suggestions for addressing compliance and performance issues in new non domestic buildings would be welcome.

Comments

We would refer you to the detailed comments of the MCRMA.

<sup>6</sup> A PAS is a Publicly Available Specification, and the PAS would set out a quality assurance approach.

53. Is the newly formatted ADL1B easier to understand and use?

Yes ☐ No ☐ Don't know ☒

Comments

54. Are there any further amendments to the newly formatted ADL1B that you would recommend? If so, please provide details.

Yes ☐ No ☐ Don't know ☒

Comments

55. How do the consultation proposals impact on the work of Local Authorities and Approved Inspectors? Please give positive and negative impacts.

Comments

56. We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

## #49 - Torfaen County Borough Council

**PLANNING & PUBLIC PROTECTION SERVICE**  
**GWASANAETH CYNLLUNIO A GWARCHOD Y CYHOEDD**  
**Chief Officer/Prif Swyddog**  
**Duncan Smith**



Your ref/Eich

cyf:

Our ref/Ein

cyf:

Date/Dyddiad 22<sup>nd</sup> October 2012

:

Please

contact/Cysyllter â

Adrian Wilcock

Building Regulations Consultation  
Construction Unit  
Environment & Sustainable Development Directorate  
Welsh Government, Rhyd y Car Offices  
Merthyr Tydfil  
CF48 1UZ

Dear Sir / Madam

### **RE: 2012 CONSULTATION ON CHANGES TO PART L OF THE BUILDING REGULATIONS**

In response to the above consultation I would make the above comments on behalf of the Council's Planning service; noting that the Council's Building Control service have commented separately via the LABC.

The Council supports the Welsh Government's commitment to tackling climate change, sustainable development and the aspiration that all new buildings in Wales should be zero carbon.

The Council also supports the withdrawal of the sustainable buildings planning policy national minimum standard as this is a matter best dealt with by the Building Control rather than the Planning service. It is also agreed that planning should still have a role; both in the master planning of strategic sites and design guidance via Supplementary Planning Guidance through the Local Development Plan. However, there is a concern that meeting any new Part L Standards needs to be addressed early in the design process which may not be the case if the matter is dealt with at the end of the process by building control.

However, the Council's main concern is the timescales for achieving zero carbon in the current economic climate and the likely detrimental effect this will have on securing affordable housing on development sites and the development of employment sites, especially in marginal areas.

We also have concerns that this detrimental effect will be compounded if the proposed new rules on fire sprinklers are also introduced adding to the development costs of a new dwelling.

If the Welsh Government still wishes to deliver on zero carbon by the end of the decade, we suggest that a phased approach to improving energy efficiency is used as hopefully the housing market (and more importantly house prices) improves over time. In viability terms, this would mean that the additional construction costs of improving energy efficiency could be paid for by the increased housing value otherwise the Council would have to reduce the affordable housing or another S106 obligation cost, such as much needed children play and recreation facilities.

Whilst Torfaen has not assessed the impact of introducing code level 4 on affordable housing levels, Newport City Council (and several other local planning authorities) have in their recent Affordable Housing Viability Study; the result of which, evidence the above concerns. These studies also show that introducing code level 4 dwellings would have a greater effect in areas of lower new house values, possibly even making new house building uneconomic in some areas of the Heads of the Valleys.

Finally, please do not hesitate to contact me if you require any further information.

Yours faithfully



**Adrian Wilcock**  
**PRINCIPAL PLANNER**  
**FORWARD PLANNING**

**#50 - Wales Low Zero Carbon Hub**

## 2012 consultation on changes to the Building Regulations in Wales

Part L (Conservation of fuel and power)

**Consultation  
Response Form**

Your name: **Emma Thomas**

Organisation (if applicable): **Wales Low Zero Carbon  
Hub**

**(xxv) Are the views expressed on this consultation an official response from the organisation you represent or your own personal views?**

Organisational ☒ Personal Views ☐

**(xxvi) Are your views expressed on this consultation in connection with your membership or support of any group? If yes please state name of group:**

Yes ☐ No ☐

Name of group:

**(xxvii) Please tick the one box that best describes your organisation:**

<p><b>Builders/Developers:</b></p> <p>Builder / Main contractor: <input type="checkbox"/></p> <p>Builder/ Small builder: (extensions/repairs/maintenance, etc) <input type="checkbox"/></p> <p>Installer/ special sub-contractor <input type="checkbox"/></p> <p>Commercial developer <input type="checkbox"/></p> <p>House builder <input type="checkbox"/></p>	<p><b>Property Management:</b></p> <p>Housing association (registered social landlord) <input type="checkbox"/></p> <p>Residential landlord, private sector <input type="checkbox"/></p> <p>Commercial <input type="checkbox"/></p> <p>Public sector <input type="checkbox"/></p>
<p><b>Building occupier:</b></p> <p>Home owner <input type="checkbox"/></p> <p>Tenant (residential) <input type="checkbox"/></p> <p>Commercial Building <input type="checkbox"/></p>	<p><b>Building Control Bodies:</b></p> <p>Local authority building control <input type="checkbox"/></p> <p>Approved Inspector <input type="checkbox"/></p>
<p><b>Energy Sector</b> <input type="checkbox"/></p>	<p><b>Fire and Rescue Authority</b> <input type="checkbox"/></p>

<b>Designers/Engineers/Surveyors:</b>  Architect <input type="checkbox"/> Civil/Structural engineer <input type="checkbox"/> Building services engineer <input type="checkbox"/> Surveyor <input type="checkbox"/>	<b>Specific Interest:</b>  Competent person scheme operator <input type="checkbox"/> National representative or trade body <input checked="" type="checkbox"/> Professional body or institution <input type="checkbox"/> Research/ academic organisation <input type="checkbox"/>
<b>Manufacturer/ Supply Chain</b> <input type="checkbox"/>	<b>Other</b> ( <i>please specify</i> ) <input type="text"/>

(xxviii) Please tick the **one** box which best describes the size of your or your organisation's business?

- Micro – typically 0 to 9 full-time or equivalent employees (incl. sole traders) ☐
- Small – typically 10 to 49 full-time or equivalent employees ☐
- Medium – typically 50 to 249 full-time or equivalent employees ☐
- Large – typically 250+ full-time or equivalent employees ☐
- None of the above (please specify) ☒

(vi) Are you or your organisation a member of a competent person scheme?

Yes ☐ No ☒

Name of scheme:

(vii) Would you be happy for us to contact you again in relation to this consultation?

Yes ☒ No ☐

WG will process any personal information that you provide us with in accordance with the data protection principles in the Data Protection Act 1998. In particular, we shall protect all responses containing personal information by means of all appropriate technical security measures and ensure that they are only accessible to those with an operational need to see them. You should, however, be aware that as a public body, the Welsh Government is subject to the requirements of the Freedom of Information Act 2000, and may receive requests for all responses to this consultation. If such requests are received we shall take all steps to anonymise responses that we disclose, by stripping them of the specifically personal data – name and e-mail address – you supply in responding to this consultation. If, however, you consider that any of the responses that you provide to this survey would be likely to identify you irrespective of the removal of your overt personal data, then we should be grateful if you would indicate that, and the likely reasons, in your response, for example in the relevant comments box.

## Questions:

### New homes

1. Do you agree with the Government's preference for a CO<sub>2</sub> saving of 40% reduction in carbon dioxide emissions compared to Part L 2010.

No change to 2010	<input type="checkbox"/>
40% CO <sub>2</sub> saving	<input checked="" type="checkbox"/>
25% CO <sub>2</sub> saving	<input type="checkbox"/>
Something else (please explain below)	<input type="checkbox"/>
Don't know	<input type="checkbox"/>

Comments

Although the target for new homes is challenging, it is the feeling of this body that the Government must put steps into place to tackle climate change. There are concerns however, that the use of micro generation of renewable energy is neither the most efficient or cost effective method. The use of the energy hierarchy is welcomed and supported to deliver improved carbon reduction targets. Steps should be taken as soon as practicable by the WG to inform industry where the remaining carbon reduction savings will be realised to achieve the 2018 recast EPBD, a clear vision on the mechanism of Allowable Solutions or whatever mechanism the WG choose to deliver these additional savings.



2. Do you agree with the proposal for an 'aggregate' approach to CO<sub>2</sub> target setting for new homes in 2015? The CO<sub>2</sub> target for any individual dwelling varies depending on the ease with which the building can achieve the target, with the overall required CO<sub>2</sub> saving achieved when aggregated over the build mix.

Yes ☒ No ☐ Don't know ☐

#### Comments

The implementation of an aggregated approach is welcomed and long overdue, the recognition of good build form and construction is to be supported. The approach to standardise the construction performance and acknowledge the limitations of mid terrace and apartments to improve above a cost effective limit is appropriate.

3. Do you agree with the proposal for a compliant option based on a consistent recipe of elemental specifications for fabric, services plus an additional CO<sub>2</sub> saving equivalent to an amount of photovoltaic (PV). Please justify your choice.

Yes ☒ No ☐ Don't know ☐

#### Comments

In principle we agree with the recipe approach, but the use of renewable energy at the micro level is neither efficient nor cost effective. A simpler approach to compliance is welcomed for smaller contractors and the WLZCH acknowledges the difficulties that will be experienced by Welsh Construction companies. The National House builders will always benefit from design teams, and expertise to deliver any improvements, but the SME sector in Wales will need significant support and guidance on the most cost effective route to delivering low carbon housing.

We do have concerns that the recipe approach will be neither the cheapest or in many cases the most appropriate route to low carbon housing, which strengthens our view that the WG should ensure that appropriate guidance and support is in place long before any new standards are introduced.

4. The main difference between the recipes is the required system efficiency for each fuel, which is appropriate for the heating system type. By adopting this approach to different fuel types, there is no need for a separate fuel factor. Do you agree with the proposed approach?

Yes ☒ No ☐ Don't know ☐

#### Comments

Although we welcome the recipe approach for each individual fuel type, we must express concerns that the removal of the fuel factor and the setting of challenging standards concurrently will be both challenging and costly to the industry. Historically, the use of fuel factors has delivered solutions to low carbon housing which are neither "low carbon" or user friendly. The need to

5. For the CO<sub>2</sub> savings proposed, are the recipe specifications a sensible way of achieving them? Please justify your choice.

Yes ☒ No ☐ Don't know ☐

#### Comments

To deliver the CO<sub>2</sub> savings expressed in the consultation there is no other way to achieve them other than the use of renewable energy. We would reiterate our earlier comments that the use of micro generation is neither the most efficient or effective way of reducing CO<sub>2</sub>. The use of many smaller networks will in many cases only deliver electricity when the home owner is not there and the ineffective exportation of energy to the grid be the resulting outcome. Additional costs may be incurred by this route with the need to strengthen the local grid to ensure it has the capacity to safely deal with the generated energy. Renewable energy generation should be left to the macro level and used at source, or stored to be used later when the residents return.

6. In approaching the selection of the amount of PV to be installed on dwellings, do you prefer?

Fixed percentage of building foundation area ☐

Proportion of gross internal floor area with a practical cap ☒

Don't know ☐

#### Comments

If the standard is set by a fixed proportion of the foundation area, it will restrict the design and configuration of larger properties, resulting in bland and featureless developments. It is important that the Planning system is engaged at the earliest date to ensure that they recognise and allow good orientation and build form, the current focus is set on "Place and Build Line" all of which do not always allow the most appropriate solution to low carbon buildings to be used.

7. Do you agree that the limits on design flexibility 'backstop' values for fabric elements in new homes should be changed from the current reasonable provision in the technical guidance to become mandatory?

Yes ☒ No ☐ Don't know ☐

#### Comments

We agree fully that the backstop values should be mandatory, if the WG is to deliver a truly fabric first approach then the setting off of one element against another must be curtailed.

Other steps must be put in place to ensure that the U-values submitted and the initial stage are actually delivered on site, with rigorous checks and validation of the "as built" standards. The current system is both lax and open to abuse. It should become necessary that the Building Control Bodies and the SAP Assessors should have as part of their remit a requirement to check the construction details submitted against those that are used on site, there is little evidence that this is the current state of play.

8. Do you agree with the changes to the 'backstop' values proposed? Please explain your decision.

Yes ☒ No ☐ Don't know ☐

#### Comments

With current technologies and materials, the values proposed represent a sensible and cost effective level. Steps should be made however to encourage manufacturers to provide more energy efficient materials at a more realistic price. Current manufacturers will in the future have a monopoly of the market should the backstops be reduced further, we feel that this would be neither healthy for the industry or the economy.

9. Do you have any other comments on the proposed changes to Approved Document L1A or the domestic National Calculation Methodology? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

No comment

10. The Impact Assessment makes a number of assumptions on fabric/services/ renewables costs, new build rates, phase-in rates, learning rates, etc for new homes. Do you think these assumptions are fair and reasonable? Please justify your views.

Yes ☐ No ☐ Don't know ☐

Comments

11. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for new homes? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☐

Comments

## New non-domestic buildings

12. Do you agree with the proposal for 2013 for non-domestic buildings to explicitly regulate energy efficiency separately from low carbon technologies through the assessment of primary energy consumption (PEC)? Does PEC seem like a reasonable basis for standard setting?

Yes ☒ No ☐ Don't know ☐

### Comments

The use of PEC is required by the EPBD and the non domestic market is the most logical starting point for industry to accept its use.

The changes to Part L 2010 resulted in there being little room for improvement in the fabric of non domestic buildings, it is therefore more appropriate that the use of energy efficient services and generation are the method of subsequent improvement. The fact that the buildings are in use when energy generation is likely makes its use more appropriate.

13. Which package of fabric and services should be selected: 7% or 10%? Please give reasons for your choice.

7% ☐

10% ☒

Don't know ☐

### Comments

The setting of the standard at 10% above Part L 2010 will help to ensure that this change to the Building Regulations is the last and will allow industry and manufacturers to spend more time designing energy efficient buildings.

Although we support the use of renewable energy on non- domestic buildings, we will feel it should introduced with the need to demonstrate that it will be both used or/and stored at the point of generation through either energy stores or batteries to obviate the need to export to an inefficient grid system.

14. Do you foresee any particular issues for certain categories of building to meet the TPEC or TER?

Yes ☒ No ☐ Don't know ☐

### Comments

The setting of TPEC is required as part of the EPBD, but coupled with any removal of the fuel factors this could pose significant problems with the introduction of the proposed standards.

15. Which approach should be utilized to incorporate the contribution of low carbon technologies into the setting of the Target Emission Rate (TER), for non domestic buildings?

Fixed carbon reduction (in kg.CO<sub>2</sub>/m<sup>2</sup>/year) ☒

Percentage of roof area of PV ☐

Other ☐

Don't know ☐

Please give reasons for your choice

The use of the kg.CO<sub>2</sub>/m<sup>2</sup>/year metric keeps the target in line with the approach of using FEES. To set a primary energy use based on floor area sets the standard for the future and allows incremental improvements should they be required in the future.

The complexity of FEES and the energy metric usage is more in line with the non-domestic market as these buildings are historically delivered by professional consultants and design teams.

16. The proposals explain the Government's preference for a 20% aggregate improvement in CO<sub>2</sub> performance standards for new non-domestic buildings from October 2013. Which option do you prefer and why?

No change ☐

Target A: 10% aggregate improvement (1% PV) ☐

Target B: 11% aggregate improvement (No PV) ☐

Target C: 20% aggregate improvement (5% PV) ☒

Don't know ☐

Please give reasons for your choice

To set the 20% aggregate improvement should hopefully deliver this change being the last change to Part L. With current technologies, understanding and materials, this should be welcomed.

With the revised introduction of the proposed measures by the Welsh Ministers, to set a standard other than the 20% is not logical. If a lower standard was set as the requirement the WG and industry would have to consider another change almost as soon as the requirement is brought in during 2015 to meet the long stop date set out in the re cast EPBD. The monies that would have to be spent by the WG to undertake this process again would be better used providing guidance and help to industry to deliver low carbon buildings in a more efficient way.

17. Do the proposed 2013 notional buildings as set out in the changes to the National Calculation Methodology seem like a reasonable basis for standards setting? Please provide comments on the method used to develop the notional buildings and particular elements of one or more of the notional buildings, if relevant.

Yes ☒ No ☐ Don't know ☐

Comments

18. Do you think that a further recipe should be created for buildings under 250m<sup>2</sup> and aligned with the proposed domestic recipe? Are there particular reasons why smaller buildings find compliance with the non-domestic recipes difficult? Please justify your views.

Yes ☒ No ☐ Don't know ☐

Comments

To set a recipe for a building given a notional size is not in our opinion the most sensible approach; a more reasonable approach would be set the recipe based on activity and function of that building. Just because a building is small does not mean in reality that it is simple, but the complexity of any building is set by its function and activities undertaken within it.

The recipe approach does however, have difficulties with the use of FEES, the balance of U values, size, bridging, air tightness and build forms is not easily proscribed, and would potentially result in bland featureless structures, in the desire to be simpler.

We would also express concern that the recipe approach is not potentially the most cost effective or efficient approach to delivering low carbon buildings.

19. Although we recognise that some buildings may need to be serviced in a particular way for legitimate functional or environmental reasons, should Part L incentivise a lower carbon servicing strategy (as with the current Energy Performance Certificate methodology), by basing the notional building on mixed-mode ventilation?

Yes ☒ No ☐ Don't know ☐

#### Comments

The use of mixed mode in the Notional Building would help to ensure that the design teams and consultants do not as a first stop use mechanical cooling and ventilation. This approach will encourage designers and engineers to evaluate the potential for appropriate night time cooling, and natural ventilation before opting for a purely mechanical approach. The use of mixed mode will also help to reduce the potential for green washing buildings from the outset.

20. Do you have any other comments on the proposed changes to Approved Document L2A or the non-domestic National Calculation Methodology? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

#### Comments

N/A

21. The Impact Assessment makes a number of assumptions on the costs of fabric/services/renewables, new build rates, etc for new non-domestic buildings. Do you think these assumptions are fair and reasonable? Please justify your views.

Yes ☐ No ☐ Don't know ☒

#### Comments



22. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for new non-domestic buildings?

Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

Comments

### Cumulative impact of policies

23. Overall, do you think the assessment of the impact on development is broadly fair and reasonable? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☐

Comments

The impact of development on the environment needs to be addressed, the impact on built environment will be a positive effect. The amendment to Part L for those able to change and innovate will be an opportunity, a long term economic opportunity for the Welsh construction industry take a lead on low carbon construction.

### National Planning Policy Review

24. What role should planning play in facilitating higher carbon standards? Should it focus on facilitating site wide energy opportunities that will be needed as we move towards zero or near zero carbon buildings?

Views

The role of Planning should be set on ensuring any opportunities for site wide solutions are not lost. It should focus, with the help of Building Control, on the most cost effective and efficient options being put forward, and submitted for approval.

Planning Departments need to be educated in the process of delivering low carbon buildings and site wide energy solutions, the current interpretation of Planning and the requirement for low carbon buildings are not compatible

25. What are the implications from future (and regular) changes to the Code for Sustainable Homes and BREEAM on the implementation of the policy?

#### Views

The use of the Code and BREEAM should be recognised for what they are designed to deliver, namely a route map to future changes and above regulation requirements. Many aspects of the mechanisms have delivered quantifiable improvements to the built environment, and the removal of any such standards needs careful consideration.

The WG and Westminster have historically aligned. The need for additional and differing sustainability standards should be approached cautiously. Sustainability considerations may be best suited to the Planning system and not the Building Regulations. To deliver sustainability as part of the Building Regulations has been demonstrated by the Scottish Parliament as ineffective. It resulted in a standard so weak as to prove pointless. The only other way to deliver sustainability via the Building Regulations would prove too prescriptive and negate innovation.

The WG currently holds a position as the most sustainable. The removal of independent certification of sustainability may not be the best approach to improve or maintain this position.

26. Are the costs of assessment and certification now disproportionate to the costs and benefits of achieving a minimum sustainable buildings standard level?

Yes ☐ No ☒ Don't know ☐

#### Comments

The costs of certification and assessment are minimal compared to the benefits delivered. We should be addressing the cost of poor design, ineffective solutions put forward by design teams and poor construction. There are many examples across Wales where both BREEAM and the Code for Sustainable Homes, when considered at the outset cost no more than Building Regulation compliant solutions. Often, high costs on investigation are as a result of poor design, poor construction or the late consideration of both standards resulting in a green washing of buildings, or the nonsensical chase for inappropriate credits.

Should the WG desire to set sustainability standards there is no practical reason why they should not set an independent mechanism for doing so themselves, which they would be in control of any future changes or amendments, rather than just aligning to an English standard.

27. What should be the role of local planning authorities in setting local standards above and beyond Building Regulations? How can we ensure there is a level playing field of standards across Wales?

#### Views

The role of Planning is to set requirements at a Master Plan and macro level to ensure that developments are linked to existing infrastructure and facilities. The setting of practical standards and requirements at National Level has removed the confusion experienced in England where LA's have historically resorted to one upmanship in setting standards.

Clear parameters and guidance set out at national level will deliver a more cohesive and logical approach to sustainability, without removing the facility for LA's to set higher standards if it sees fit through the existing framework of LDP and SPG's.

28. What do you see as the positive/negative impacts of removing Part B of the policy expecting buildings to be certified against Code/BREEAM?

#### Views

The effects of removing the standards will result in confusion and local interpretation of standards; the National Parks in Wales are a good example of the likely outcomes. The setting of the standards, albeit with a need to align with more Welsh issues rather than adopting an English standard will help to ensure that the sustainability is considered at the outset rather than as an afterthought, to remove the requirement could be a backward step for industry and the environment.

The cost of delivering both standards in the most effective way is minimal. Often cost predictions of achieving the Code/BREEAM often factor in the additional cost of the Assessors or other sustainability consultant's advice and guidance on delivering the standard. This is no different to any other learning rate that will be experienced in the Building Regulations, and has been factored into the WG RIA. Once this lesson is learnt the cost of learning reduces, the cost of not delivering sustainability cannot be reduced by the environment at a later date.

29. Is there a better, alternative, way to rewards and secure sustainable buildings (above the regulatory minimum) other than using national planning policy? What opportunities are there for future changes to Building Regulations?

#### Views

The Building Regulations should focus on the role it is designed to deliver. Sustainability can be delivered in a number of ways taking a more holistic approach than any prescription in the Building Regulations. The Scottish example is a clear indication of the ineffectiveness of trying to use a mechanism that was designed for one function subsequently trying to deliver another function. It clearly results in an ineffective prescriptive standard which does little deliver sustainability or guidance.

30. To what extent are duplication of standard and approval systems an issue? Would the removal of the PfSB policy assist in reducing duplication?

#### Views

Any duplication should be factored out by the creation of a sustainability standard that considers all the systems. The situation has been created by the adoption of an existing standard. The duplication could be removed through the creation of a standard that was tailored to the Welsh environment.

There is more confusion over delivering low carbon buildings and endeavouring to obtain Planning permission than the use of the PfSB policy.

To remove the standards does not sit comfortably with the issues over Climate Change and the wider sustainability agenda that until now the WG has been a strong advocate for.

This may be construed that the first time that the WG has control over the Built Environment it is seen to back track on its standards.

31. What opportunities are there for higher standards to be delivered on strategic sites identified as part of the Local Development Plan?

#### Views

This mechanism has always been in place, and is not seen to be anything new. The delivery of higher standards at the strategic level is welcomed, but it has only been delayed by the lack of progress at local level to deliver robust UDP's and LDP policies.

The LA's should concentrate on ensuring opportunities for site wide solutions in the energy reduction delivery sector are not lost, and that guidance is produced for Planning Officers on the principles of low carbon buildings and how these principles affect the build form and orientation of any new buildings.

## Existing buildings

32. Do you agree with the proposal to raise performance standards for domestic replacement windows? Please explain your answer.

Yes ☒ No ☐ Don't know ☐

## Comments

The existing stock is the main opportunity in Wales to tackle climate change and deliver carbon reduction targets; data suggests that the delivery of replacement windows is undertaken at a significant level in Wales. The added advantage of this increased standard is that the demand for replacement windows is customer driven rather than regulatory enforced, and will ensure over a relatively short period that reductions in carbon will be delivered across Wales.

It should also be noted that currently within the replacement window market there is no requirement or standard to improve the thermal bridging at the connection of the window frame to the existing building, this lack of a standard or requirement results in a significant drop in the performance of a window. It is a clear recommendation from this body that the WG takes urgent steps to start the process for introducing this requirement, discussions with FENSA and other glazing organisations should commence as soon as practicable.

33. Do you agree with the proposal to raise performance standards for domestic extensions? Please explain your answer.

Yes ☒ No ☐ Don't know ☐

## Comments

The improvement to the standards for extension in Wales is essential if Wales is to deliver its carbon reduction targets.

There are as many extensions constructed in Wales as new build properties. With the current economic situation residents are more likely to stay in their properties and extend rather than move on.

Any requirement for improved standards to extensions should reflect the capabilities of the industry that will deliver them and the ability or typical construction in Wales to achieve them. This is demonstrated in the consultation document, should the standards be set any higher then we feel that this would significantly increase costs and reduce the number of extensions constructed, in turn impacting on the level of construction activity affecting an already under pressure industry.

34.

Do you agree with the proposal to raise performance standards for non-domestic extensions?  
Please explain your answer.

Yes ☒ No ☐ Don't know ☐

#### Comments

Extension in the non domestic sector are more widespread than new build non domestic buildings in Wales and offer a one off chance to improve standards.

Data analysis indicates that in many cases extensions to non domestic buildings are often larger than the original buildings and therefore this significant increase in energy demand must be tackled and improved if the WG is too meet its carbon reduction targets.

35. Do you agree that the exemption for conservatories or porches should be removed where an individual room heat or air conditioning unit is installed? How effective would this change be in limiting energy use/emissions, or are there other ways by which energy performance might be improved where conservatories or porches are installed?

Yes ☐ No ☐ Don't know ☒

#### Comments

This is an area of the industry that is historically difficult to legislate for, the current system of exempting a conservatory as it will not be heated results in the BCB issuing an exemption certificate without ever visiting the property. This is reliant on the accuracy of the information provided at submission and the successful delivery of the original intention not to heat or cool the space.

In the eventuality of there being no fixed heating or cooling in the extension at the point of construction, there is no mechanism for ensuring that any future heating system expansion is not considered for the extension or the use of portable heating or cooling units.

This body feels that a mechanism for checking this anomaly should be considered, that is along the lines of an occupation certificate being required for all extensions regardless of heating or cooling and that there is a mechanism for a 1 year on inspection of extensions to ascertain actual performance. Although we recognise that this may be problematic, this area of construction is one of the most difficult areas to regulate, but must however be tackled.

36. Do you agree with the proposal to require consequential improvements upon extensions or increases in habitable space in existing homes below 1000m<sup>2</sup>? Please explain your view.

Yes ☒ No ☐ Don't know ☐

#### Comments

The threshold for CI has always been set too high and has resulted in significant opportunities for improvement being lost in the past. As referred to previously many extensions are larger than the initial building and this increase in energy demand offers a one off opportunity to be addressed,

The mechanism proposed in the consultation is both reasonable and practical and should deliver significant reductions in energy demand over a period of time.

37. The consultation explains that the regulatory requirement for consequential improvements upon domestic extensions or increases in habitable space would be limited to a list of measures comprising a minimum standard of loft insulation, hot water cylinder insulation and the installation of cavity wall insulation.

Do you agree with this list of measures? ☒

Should this list be different (please explain below)? ☐

Another approach (please explain below) ☐

Don't know ☐

#### Comments

The list of measures proposed offers a pragmatic and reasonable solution, we do however feel that given the issues in Wales regarding high exposure and the risks of inappropriate cavity filling well documented, clearer guidance should be set out in the requirements for when and how a cavity should be declared suitable for filling.

The current situation is open for abuse and incorrect assessment, as the surveyors undertaking the decisions are linked to the installers and suppliers of the measures, and the correct level of independence is not always evident.

38. What effect do you think the requirements for consequential improvements may have on the demand for repair, maintenance and improvement activity? Please use evidence to explain your answer.

Increase demand

☐

Reduce demand

☒

No effect

☐

Don't know

☐

#### Comments

With the introduction of any new requirement there are two likely scenarios, there will either be a rush before legislation to get in before the new rules or there will be an initial down turn in activity. It is important that the WG produce guidance and support on the reasoning for the need for CI and the mechanisms that exist to support the cost of the additional requirements, (ECO, Green Deal or other).

As the setting of the CI will fall on the BCB this is the mechanism best suited to deliver the advice and guidance, therefore before any new standard is introduced the WG should take steps to ensure that the right support mechanism is in place to deliver the requirement.

39. Do you agree with the proposal to introduce consequential improvements upon extensions or increases in habitable space in non-domestic buildings under 1000m<sup>2</sup>? Please explain your view.

Yes ☒ No ☐ Don't know ☐

#### Comments

For reasons previously discussed due to the historic size of extensions in Wales, this mechanism offers a one off opportunity to deliver carbon reduction to the existing stock.

The use of the Building Regulations to trigger improvements to the existing stock is limited and any carbon reduction that is delivered in this sector is down to incentives and grants, therefore this one off opportunity must be taken full advantage of, as only a subsequent change of use or further extension will offer the same opportunity again.



40. The consultation proposes that for non-domestic buildings, any measure from list which is used to generate Green Deal assessments, the list in SBEM used to generate Energy Performance Certificate recommendations and the existing list of typical consequential improvement measures from Approved Document L2B should be eligible to be a consequential improvement. Do you agree?

Yes

☒

No

☐

Prefer a different list (please specify)

☐

Don't know

☐

Comments

An independent assessment of the eligible improvements is essential to meet the requirements of the re cast EPBD (cost optimal approach), without this mechanism there are two likely outcomes, either buildings that could be improved will not, or buildings that shouldn't be improved due to inappropriate and non cost effective solutions being proposed. Either of these outcomes is fundamentally flawed, and it is the responsibility of the WG to ensure that the measures proposed by any of the assessment methods meets the requirements of the cost optimal approach.

41. Do you agree that there should not be major problems in extending the requirement for consequential improvements for the building control process? If you do foresee issues, what are they and how might these be addressed?

Yes

☒

No

☐

Don't know

☐

Comments

The main issue in this area is one of notification rather than difficulty in implementing the process, there is a risk that should the standard be set too high then the works will either not happen or be subsequently driven underground and be subject to non notification.

42. Do you have any other comments on the proposed changes to Approved Document L1B? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

## Comments

43. Do you have any other comments on the proposed changes to Approved Document L2B? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

## Comments

44. Do you think that the Impact Assessment is a fair and reasonable assessment of the potential costs and benefits of raising the performance standards for replacement domestic windows and domestic/non-domestic extensions? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

## Comments

45. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for consequential improvements in existing homes? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

## Comments

46. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for consequential improvements in existing non-domestic buildings? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

## Comments

## Compliance and Performance

47. For new dwellings, Welsh Government is proposing to develop a compliance checklist. Do you think such a checklist would be used sufficiently to warrant its development?

Yes ☐ No ☒ Don't know ☐

## Comments

There is no evidence that checklists on developments actually work and would no doubt result in additional administrative burden without the delivery of any improvements or benefits.

The National House builders will benefit from a design team and the SME sector will not in our opinion use one.

If BCB see the benefit of a checklist there is no reason why they could not produce one themselves.

48. If such a checklist was developed, what should it cover?

## Comments

49. If the checklist was taken forward, who should be involved in its development?

## Comments

50. Would any other approach be likely to prove more effective instead (such as a PAS<sup>7</sup> type approach).

Yes ☒ No ☐ Don't know ☐

#### Comments

The production of a PAS may prove useful but it would be necessary to ensure that it was SME friendly, in the past standards such as these have been produced that are difficult to implement or follow.

As England are in the process of delivering such a standard and the CPA are currently working on a similar approach it would be beneficial for the WG to be part of these discussions and adopt a process that is suited to the SME and self build market in Wales.

- 51a. Would it be preferable for buildings of a domestic nature to be able to achieve compliance through applying the recipe in AD L1A, in acknowledgement of the domestic nature of such buildings, rather than demonstrating compliance with AD L2A?

Yes ☐ No ☒ Don't know ☐

#### Comments

We feel that there is no real benefit to the "domestic in character" non domestic buildings taking this approach, as we do not feel it is the most cost effective or appropriate mechanism for delivering a low carbon building where there is the presence of a design team.

- 51b. What are the arguments for and against this approach?

#### Comments

As stated previously the recipe is neither cost effective or the most efficient process for deliver low carbon buildings, but in its defence it is simpler and easier to understand.

It does not however remove the requirement to assess over heating risk so the benefits are limited to the small house builder. We feel that the WG should be very clear in its guidance that the recipe approach is neither the cheapest or the most cost effective way of meeting the requirements.

<sup>7</sup> A PAS is a Publically Available Specification, and the PAS would set out a quality assurance approach.

52. Additional views and suggestions for addressing compliance and performance issues in new non domestic buildings would be welcome.

Comments

The use of SBEM as a design tool is inappropriate and it is not the most effective way of demonstrating compliance. It should be a requirements that only simple form buildings, and non complex buildings should be assessed using SBEM. Any building that is either complex in form or function should be designed with the use of a Dynamic Simulation Model, there should be a clear rule of thumb, simple building SBEM, complex building DSM.

53.

Yes ☒ No ☐ Don't know ☐

Comments

54. Are there any further amendments to the newly formatted ADL1B that you would recommend? If so, please provide details.

Yes ☐ No ☐ Don't know ☐

Comments

55. How do the consultation proposals impact on the work of Local Authorities and Approved Inspectors? Please give positive and negative impacts.

Comments

The whole issue of BCB in Wales needs reviewing and the level of service provided by both considered. At the moment there is one set of Building Regulations but the bodies responsible for delivering compliance have inequitable requirements set upon them, the rules covering both bodies should be aligned and levelled.

The service provision from both bodies should be equitable with the level of fees allowed published by both or neither. There needs to be a root and branch review of how the Building Regulations are implemented in Wales as currently the level of service and expertise is not equitable.

The role of BCB's has been inherited, and there now is the opportunity to create a level playing field in Wales.

56. We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

**#51 - FGMA (Flat Glass Manufacturers Association)**

## 2012 consultation on changes to the Building Regulations in Wales

### Part L (Conservation of fuel and power)

**Consultation  
Response Form**

Your name: Alain Skelding

Organisation (if applicable): FGMA (Flat Glass  
Manufacturers Association)

**(xxix) Are the views expressed on this consultation an official response from the organisation you represent or your own personal views?**

Organisational ☒ Personal Views ☐

**(xxx) Are your views expressed on this consultation in connection with your membership or support of any group? If yes please state name of group:**

Yes ☐ No ☐

Name of group:

..

**(xxxi) Please tick the one box that best describes your organisation:**

<p><b>Builders/Developers:</b></p> <p>Builder / Main contractor: <input type="checkbox"/></p> <p>Builder/ Small builder: (extensions/repairs/maintenance, etc) <input type="checkbox"/></p> <p>Installer/ special sub-contractor <input type="checkbox"/></p> <p>Commercial developer <input type="checkbox"/></p> <p>House builder <input type="checkbox"/></p>	<p><b>Property Management:</b></p> <p>Housing association (registered social landlord) <input type="checkbox"/></p> <p>Residential landlord, private sector <input type="checkbox"/></p> <p>Commercial <input type="checkbox"/></p> <p>Public sector <input type="checkbox"/></p>
<p><b>Building occupier:</b></p> <p>Home owner <input type="checkbox"/></p> <p>Tenant (residential) <input type="checkbox"/></p> <p>Commercial Building <input type="checkbox"/></p>	<p><b>Building Control Bodies:</b></p> <p>Local authority building control <input type="checkbox"/></p> <p>Approved Inspector <input type="checkbox"/></p>
<p><b>Energy Sector</b> <input type="checkbox"/></p>	<p><b>Fire and Rescue Authority</b> <input type="checkbox"/></p>



<b>Designers/Engineers/Surveyors:</b>  Architect <input type="checkbox"/> Civil/Structural engineer <input type="checkbox"/> Building services engineer <input type="checkbox"/> Surveyor <input type="checkbox"/>	<b>Specific Interest:</b>  Competent person scheme operator <input type="checkbox"/> National representative or trade body <input checked="" type="checkbox"/> Professional body or institution <input type="checkbox"/> Research/ academic organisation <input type="checkbox"/>
<b>Manufacturer/ Supply Chain</b> <input type="checkbox"/>	<b>Other</b> ( <i>please specify</i> ) <input type="text"/>

**(xxxii) Please tick the *one* box which best describes the size of your or your organisation's business?**

- Micro – typically 0 to 9 full-time or equivalent employees (incl. sole traders) ☒
- Small – typically 10 to 49 full-time or equivalent employees ☐
- Medium – typically 50 to 249 full-time or equivalent employees ☐
- Large – typically 250+ full-time or equivalent employees ☐
- None of the above (please specify) Members of associations represented by FITP range from micro-enterprises to multi-national companies. ☐

**(vi) Are you or your organisation a member of a competent person scheme?**

Yes ☐ No ☒

Name of scheme:

**(vii) Would you be happy for us to contact you again in relation to this consultation?**Yes ☒ No ☐

WG will process any personal information that you provide us with in accordance with the data protection principles in the Data Protection Act 1998. In particular, we shall protect all responses containing personal information by means of all appropriate technical security measures and ensure that they are only accessible to those with an operational need to see them. You should, however, be aware that as a public body, the Welsh Government is subject to the requirements of the Freedom of Information Act 2000, and may receive requests for all responses to this consultation. If such requests are received we shall take all steps to anonymise responses that we disclose, by stripping them of the specifically personal data – name and e-mail address – you supply in responding to this consultation. If, however, you consider that any of the responses that you provide to this survey would be likely to identify you irrespective of the removal of your overt personal data, then we should be grateful if you would indicate that, and the likely reasons, in your response, for example in the relevant comments box.

**Questions:****New homes**

1. Do you agree with the Government's preference for a CO<sub>2</sub> saving of 40% reduction in carbon dioxide emissions compared to Part L 2010.

No change to 2010	<input type="checkbox"/>
40% CO <sub>2</sub> saving	<input checked="" type="checkbox"/>
25% CO <sub>2</sub> saving	<input type="checkbox"/>
Something else (please explain below)	<input type="checkbox"/>
Don't know	<input type="checkbox"/>

Comments

40% preferred, so as to avoid a more dramatic change when zero carbon standards are introduced in future revisions.

2. Do you agree with the proposal for an 'aggregate' approach to CO<sub>2</sub> target setting for new homes in 2015? The CO<sub>2</sub> target for any individual dwelling varies depending on the ease with which the building can achieve the target, with the overall required CO<sub>2</sub> saving achieved when aggregated over the build mix.

Yes ☒ No ☐ Don't know ☐

Comments

3. Do you agree with the proposal for a compliant option based on a consistent recipe of elemental specifications for fabric, services plus an additional CO<sub>2</sub> saving equivalent to an amount of photovoltaic (PV). Please justify your choice.

Yes ☒ No ☐ Don't know ☐

Comments

We are firm believers in a “fabric first” approach, because this minimises the demand for energy from any source (renewable or non-renewable). The performance of the building fabric is permanent, consistent and (generally) maintenance-free. A high standard of fabric performance is essential to ensure the building remains energy-efficient and comfortable in the event of renewable energy supply failing, under-performing or being repaired.

4. The main difference between the recipes is the required system efficiency for each fuel, which is appropriate for the heating system type. By adopting this approach to different fuel types, there is no need for a separate fuel factor. Do you agree with the proposed approach?

Yes ☒ No ☐ Don't know ☐

Comments

5. For the CO<sub>2</sub> savings proposed, are the recipe specifications a sensible way of achieving

them? Please justify your choice.

Yes ☒ No ☐ Don't know ☐

Comments

The specifications are available with current technology.

6. In approaching the selection of the amount of PV to be installed on dwellings, do you prefer?

Fixed percentage of building foundation area ☒

Proportion of gross internal floor area with a practical cap ☐

Don't know ☐

Comments

Because roof area (where the PVs are most likely to be placed) will be similar to foundation area.

7. Do you agree that the limits on design flexibility 'backstop' values for fabric elements in new homes should be changed from the current reasonable provision in the technical guidance to become mandatory?

Yes ☐ No ☒ Don't know ☐

Comments

The current system, in which the backstop values are regarded as "reasonable provision", works satisfactorily.

8. Do you agree with the changes to the 'backstop' values proposed? Please explain your decision.

Yes ☒ No ☐ Don't know ☐

Comments

9. Do you have any other comments on the proposed changes to Approved Document L1A or the domestic National Calculation Methodology? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

10. The Impact Assessment makes a number of assumptions on fabric/services/ renewables costs, new build rates, phase-in rates, learning rates, etc for new homes. Do you think these assumptions are fair and reasonable? Please justify your views.

Yes ☐ No ☐ Don't know ☒

Comments

Windows and glazing not referenced or costed in isolation in the IA, so we cannot comment.

11. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for new homes? Please justify your view and provide alternative evidence if necessary.

☐ ☐ ☒

Yes                      No                      Don't know

Comments

Answer as above Q10

## New non-domestic buildings

12. Do you agree with the proposal for 2013 for non-domestic buildings to explicitly regulate energy efficiency separately from low carbon technologies through the assessment of primary energy consumption (PEC)? Does PEC seem like a reasonable basis for standard setting?

Yes ☐      No ☒      Don't know ☐

Comments

For the reasons given in our comments on Q9, we think the introduction of the PEC creates burdens on designers and builders, without commensurate benefit.

13. Please give reasons for your choice.

7% ☐

10% ☒

Don't know ☐

Comments

We prefer the 10% option which achieves 11% CO2 reduction without renewables (table 3.3 in the Consultation Document). It is important to maximise the savings through the building fabric, and to minimise the reliance on energy supply (whether renewable or not), so that the building remains energy-efficient, comfortable and habitable in the event of the energy supply system under-performing due to eg failure, disruption or lack of maintenance.

14. Do you foresee any particular issues for certain categories of building to meet the TPEC or TER?

Yes ☐      No ☐      Don't know ☒

Comments

Not qualified to comment

15. Which approach should be utilized to incorporate the contribution of low carbon technologies into the setting of the Target Emission Rate (TER), for non domestic buildings?

Fixed carbon reduction (in kg.CO<sub>2</sub>/m<sup>2</sup>/year) ☐

Percentage of roof area of PV ☐

Other ☐

Don't know ☒

Please give reasons for your choice

16. The proposals explain the Government's preference for a 20% aggregate improvement in CO<sub>2</sub> performance standards for new non-domestic buildings from October 2013. Which option do you prefer and why?

No change ☐

Target A: 10% aggregate improvement (1% PV) ☐

Target B: 11% aggregate improvement (No PV) ☒

Target C: 20% aggregate improvement (5% PV) ☐

Don't know ☐

Please give reasons for your choice

17. Do the proposed 2013 notional buildings as set out in the changes to the National Calculation Methodology seem like a reasonable basis for standards setting? Please provide comments on the method used to develop the notional buildings and particular elements of one or more of the notional buildings, if relevant.

Yes ☒ No ☐ Don't know ☐

Comments

18. Do you think that a further recipe should be created for buildings under 250m<sup>2</sup> and aligned with the proposed domestic recipe? Are there particular reasons why smaller buildings find compliance with the non-domestic recipes difficult? Please justify your views.

☒ ☐ ☐

Yes                      No                      Don't know

Comments

Small non-dwellings are likely to be domestic in character and form of construction.

19. Although we recognise that some buildings may need to be serviced in a particular way for legitimate functional or environmental reasons, should Part L incentivise a lower carbon servicing strategy (as with the current Energy Performance Certificate methodology), by basing the notional building on mixed-mode ventilation?

Yes ☐      No ☐      Don't know ☒

Comments

No comment

20. Do you have any other comments on the proposed changes to Approved Document L2A or the non-domestic National Calculation Methodology? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

The comments we made in answer to Q9 and Q12 apply equally to the unilateral introduction of the BPEC criterion.

21. The Impact Assessment makes a number of assumptions on the costs of fabric/services/renewables, new build rates, etc for new non-domestic buildings. Do you think these assumptions are fair and reasonable? Please justify your views.

Yes ☐      No ☐      Don't know ☒

Comments

22. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for new non-domestic buildings?



Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

Comments

## Cumulative impact of policies

23. Overall, do you think the assessment of the impact on development is broadly fair and reasonable? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

Comments

## National Planning Policy Review

24. What role should planning play in facilitating higher carbon standards? Should it focus on facilitating site wide energy opportunities that will be needed as we move towards zero or near zero carbon buildings?

Views

Planning should play no role. Building Regulations alone should determine the appropriate standards for energy efficiency in buildings. Please keep administrative procedures and hurdles to a

25. What are the implications from future (and regular) changes to the Code for Sustainable Homes and BREEAM on the implementation of the policy?

Views

Again, Building Regulations should be the mechanism, and should be sufficient.

26. Are the costs of assessment and certification now disproportionate to the costs and benefits of achieving a minimum sustainable buildings standard level?

Yes ☐ No ☐ Don't know ☒

## Comments

27. What should be the role of local planning authorities in setting local standards above and beyond Building Regulations? How can we ensure there is a level playing field of standards across Wales?

### Views

As in our answer to Q24, energy efficiency in buildings should be a matter for Building Regulations alone.

28. What do you see as the positive/negative impacts of removing Part B of the policy expecting buildings to be certified against Code/BREEAM?

### Views

29. Is there a better, alternative, way to rewards and secure sustainable buildings (above the regulatory minimum) other than using national planning policy? What opportunities are there for future changes to Building Regulations?

### Views

30. To what extent are duplication of standard and approval systems an issue? Would the removal of the PfSB policy assist in reducing duplication?

### Views

31. What opportunities are there for higher standards to be delivered on strategic sites identified as part of the Local Development Plan?

### Views

## Existing buildings

32. Do you agree with the proposal to raise performance standards for domestic replacement windows? Please explain your answer.

Yes ☐ No ☐ Don't know ☒

Comments

The question asks if we agree with the proposal to raise standards, but the Consultation Document proposes no change in standards! It is therefore inconsistent with the content of the Consultation Document. WER B and 1.4 should be introduced but there should be a target of A & 1.2. Windows are available that achieve B or 1.4 and many installations achieve WERs of B & A. No new technology is required, as the products offering this performance (and better) are readily available. No change to window performance values goes against the stated ambition of the Welsh Government to have the tightest approach to building standards, Section 2.3 Para 26 of the document: [Current analysis indicates some potential to further raise performance standards for extensions and replacement windows and potential improvements in controlled services like non-domestic lighting](#) we do not wish to see any divergence in standards and implementation dates in the requirements for England and Wales. Such differing requirements would increase glass and window product specifications, resulting in

33. Do you agree with the proposal to raise performance standards for domestic extensions? Please explain your answer.

Yes ☒ No ☐ Don't know ☐

Comments

The standards required for extensions should be the same as for new build to simplify the supply chain.

34. Do you agree with the proposal to raise performance standards for non-domestic extensions? Please explain your answer.

Yes ☒ No ☐ Don't know ☐

Comments

The standards required for extensions should be the same as for new build to simplify the supply chain.

35. Do you agree that the exemption for conservatories or porches should be removed where an individual room heat or air conditioning unit is installed? How effective would this change

be in limiting energy use/emissions, or are there other ways by which energy performance might be improved where conservatories or porches are installed?

Yes ☒ No ☐ Don't know ☐

Comments

This is likely to achieve energy savings. Part L would be improved if the technical guidance included a definition of a conservatory. In earlier versions of Part L a perfectly satisfactory definition was included, and should be included.

36. Do you agree with the proposal to require consequential improvements upon extensions or increases in habitable space in existing homes below 1000m<sup>2</sup>? Please explain your view.

Yes ☒ No ☐ Don't know ☐

Comments

The Energy Performance of Buildings Directive requires this. We do however feel that the consequential improvements should not be limited to the single option of loft, cavity and cylinder insulation (see answer to Q37 below).

37. The consultation explains that the regulatory requirement for consequential improvements upon domestic extensions or increases in habitable space would be limited to a list of measures comprising a minimum standard of loft insulation, hot water cylinder insulation and the installation of cavity wall insulation.

Do you agree with this list of measures? ☐

Should this list be different (please explain below)? ☒

Another approach (please explain below) ☐

Don't know ☐

Comments

For non-domestic buildings, Part L already offers a range of consequential improvement options; the same principle should apply to dwellings, and replacement windows & glazing and secondary glazing should be included in the list of options.

38. What effect do you think the requirements for consequential improvements may have on the demand for repair, maintenance and improvement activity? Please use evidence to explain your answer.

☐

Increase demand

Reduce demand

No effect

Don't know

☐
☐
☒

Comments

This situation has not existed before – however, it will probably increase the consequential activity but reduce the building of extensions.

39. Do you agree with the proposal to introduce consequential improvements upon extensions or increases in habitable space in non-domestic buildings under 1000m<sup>2</sup>? Please explain your view.

Yes ☒ No ☐ Don't know ☐

Comments

The recast Energy Performance of Buildings Directive requires CI. Conservatories should not be classed as extensions and be given a specific specification.

40. The consultation proposes that for non-domestic buildings, any measure from list which is used to generate Green Deal assessments, the list in SBEM used to generate Energy Performance Certificate recommendations and the existing list of typical consequential improvement measures from Approved Document L2B should be eligible to be a consequential improvement. Do you agree?

Yes ☒

No ☐

Prefer a different list (please specify) ☐

Don't know ☐

Comments

41. Do you agree that there should not be major problems in extending the requirement for consequential improvements for the building control process? If you do foresee issues, what are they and how might these be addressed?

Yes ☐ No ☒ Don't know ☐

Comments

Increased Red Tape and bureaucracy and ultimately cost to the consumer.

42. Do you have any other comments on the proposed changes to Approved Document L1B? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

43. Do you have any other comments on the proposed changes to Approved Document L2B? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

The Welsh regulations should be consistent with those for England to overcome duplication of product range.

44. Do you think that the Impact Assessment is a fair and reasonable assessment of the potential costs and benefits of raising the performance standards for replacement domestic windows and domestic/non-domestic extensions? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

Comments

Windows and glazing are not in the IA, so we cannot comment.

45. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for consequential improvements in existing homes? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

Comments

Windows and glazing not in the IA, so we cannot comment.

46. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for consequential improvements in existing non-domestic buildings? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

Comments

Windows and glazing are not in the IA, so we cannot comment.

## Compliance and Performance

47. For new dwellings, Welsh Government is proposing to develop a compliance checklist. Do you think such a checklist would be used sufficiently to warrant its development?

Yes ☐ No ☐ Don't know ☒

Comments

48. If such a checklist was developed, what should it cover?

Comments

Windows and glazing have a major impact on the energy performance of dwellings, and should therefore be included.

49. If the checklist was taken forward, who should be involved in its development?

Comments

FGMA would welcome the chance to be consulted on this.

50. Would any other approach be likely to prove more effective instead (such as a PAS<sup>8</sup> type approach).

☐ ☐ ☒

<sup>8</sup> A PAS is a Publicly Available Specification, and the PAS would set out a quality assurance approach.

Yes                      No                      Don't know

Comments

- 51a. Would it be preferable for buildings of a domestic nature to be able to achieve compliance through applying the recipe in AD L1A, in acknowledgement of the domestic nature of such buildings, rather than demonstrating compliance with AD L2A?

Yes ☒                      No ☐                      Don't know ☐

Comments

See comment in 51b

- 51b. What are the arguments for and against this approach?

Comments

Some small domestic-style non dwellings might require air conditioning, so the dwelling fabric standards might not be appropriate.

52. Additional views and suggestions for addressing compliance and performance issues in new non domestic buildings would be welcome.

Comments

53. Is the newly formatted ADL1B easier to understand and use?

Yes ☒                      No ☐                      Don't know ☐

Comments



54. Are there any further amendments to the newly formatted ADL1B that you would recommend? If so, please provide details.

Yes ☐ No ☐ Don't know ☒

Comments

55. How do the consultation proposals impact on the work of Local Authorities and Approved Inspectors? Please give positive and negative impacts.

Comments

56. We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

We want to see a Fabric First approach – improve the building then add on all the other enhancements.

## #54 - David Jones

# 2012 consultation on changes to the Building Regulations in Wales

## Part L (Conservation of fuel and power)

Minor amendments indicated in red

### Consultation

**Response Form** Your name: David Jones C Eng M.I.C.E.

(xxxiii) Are the views expressed on this consultation an official response from the organisation you represent or your own personal views?

Organisational ☐ Personal Views ☒

(xxxiv) Are your views expressed on this consultation in connection with your membership or support of any group? If yes please state name of group:

Yes ☐ No ☒

Name of group:

(xxxv) Please tick the one box that best describes your organisation:

<p><b>Builders/Developers:</b></p> <p>Builder / Main contractor: <input type="checkbox"/></p> <p>Builder/ Small builder: <input type="checkbox"/> (extensions/repairs/maintenance, etc)</p> <p>Installer/ special sub-contractor <input type="checkbox"/></p> <p>Commercial developer <input type="checkbox"/></p> <p>House builder <input type="checkbox"/></p>	<p><b>Property Management:</b></p> <p>Housing association <input type="checkbox"/> (registered social landlord)</p> <p>Residential landlord, <input type="checkbox"/> private sector</p> <p>Commercial <input type="checkbox"/></p> <p>Public sector <input type="checkbox"/></p>
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<p><b>Building occupier:</b></p> <p>Home owner <input type="checkbox"/></p> <p>Tenant (residential) <input type="checkbox"/></p> <p>Commercial Building <input type="checkbox"/></p>	<p><b>Building Control Bodies:</b></p> <p>Local authority building control <input type="checkbox"/></p> <p>Approved Inspector <input type="checkbox"/></p>
<p><b>Energy Sector</b> <input type="checkbox"/></p>	<p><b>Fire and Rescue Authority</b> <input type="checkbox"/></p>
<p><b>Designers/Engineers/Surveyors:</b></p> <p>Architect <input type="checkbox"/></p> <p>Civil/Structural engineer <input checked="" type="checkbox"/></p> <p>Building services engineer <input type="checkbox"/></p> <p>Surveyor <input type="checkbox"/></p>	<p><b>Specific Interest:</b></p> <p>Competent person scheme operator <input type="checkbox"/></p> <p>National representative or trade body <input type="checkbox"/></p> <p>Professional body or institution <input type="checkbox"/></p> <p>Research/ academic organisation <input type="checkbox"/></p>

<b>Manufacturer/ Supply Chain</b> <input type="checkbox"/>	<b>Other</b> ( <i>please specify</i> ) <input style="width: 100%;" type="text"/>
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**(xxxvi) Please tick the *one* box which best describes the size of your or your organisation's business?**

- Micro – typically 0 to 9 full-time or equivalent employees (incl. sole traders) ☒
- Small – typically 10 to 49 full-time or equivalent employees ☐
- Medium – typically 50 to 249 full-time or equivalent employees ☐
- Large – typically 250+ full-time or equivalent employees ☐
- None of the above (please specify) ☐

**(vi) Are you or your organisation a member of a competent person scheme?**

Yes ☐ No ☒

Name of scheme:

**(vii) Would you be happy for us to contact you again in relation to this consultation?**

Yes ☒ No ☐

WG will process any personal information that you provide us with in accordance with the data protection principles in the Data Protection Act 1998. In particular, we shall protect all responses containing personal information by means of all appropriate technical security measures and ensure that they are only accessible to those with an operational need to see them. You should, however, be aware that as a public body, the Welsh Government is subject to the requirements of the Freedom of Information Act 2000, and may receive requests for all responses to this consultation. If such requests are received we shall take all steps to anonymise responses that we disclose, by stripping them of the specifically personal data – name and e-mail address – you supply in responding to this consultation. If, however, you consider that any of the responses that

you provide to this survey would be likely to identify you irrespective of the removal of your overt personal data, then we should be grateful if you would indicate that, and the likely reasons, in your response, for example in the relevant comments box.

## Questions:

### New homes

1. Do you agree with the Government's preference for a CO<sub>2</sub> saving of 40% reduction in carbon dioxide emissions compared to Part L 2010.

No change to 2010

☐

40% CO<sub>2</sub> saving

☐

25% CO<sub>2</sub> saving

☐

Something else (please explain below)

☒

Don't know

☐

Comments

Incorporate fabric requirements only without requirement for PV or equivalent

2. Do you agree with the proposal for an 'aggregate' approach to CO<sub>2</sub> target setting for new homes in 2015? The CO<sub>2</sub> target for any individual dwelling varies depending on the ease with which the building can achieve the target, with the overall required CO<sub>2</sub> saving achieved when aggregated over the build mix.

Yes

☒

No

☐

Don't know

☐

Comments

None

3. Do you agree with the proposal for a compliant option based on a consistent recipe of elemental specifications for fabric, services plus an additional CO<sub>2</sub> saving equivalent to an amount of photovoltaic (PV). Please justify your choice.

Yes ☐ No ☒ Don't know ☐

Comments

As noted above just fabric with no additional PV or equivalent. PV is at present still a very expensive way to reduce carbon and only sustained by FIT although in fact decreasing. The FIT in turn is supported by a levy on all utility customers. The poor are in effect subsidizing the rich who can afford the cost of initial installation. PV technology and other renewable technologies are changing but it will take some years for the MCS system to catch up when new technologies are introduced in UK.

4. The main difference between the recipes is the required system efficiency for each fuel, which is appropriate for the heating system type. By adopting this approach to different fuel types, there is no need for a separate fuel factor. Do you agree with the proposed approach?

Yes ☒ No ☐ Don't know ☐

Comments

None

5. For the CO<sub>2</sub> savings proposed, are the recipe specifications a sensible way of achieving them? Please justify your choice.

Yes ☒ No ☐ Don't know ☐

Comments

None

6. In approaching the selection of the amount of PV to be installed on dwellings, do you prefer?

Fixed percentage of building foundation area

☐

Proportion of gross internal floor area with a practical cap

☐

Don't know

☐

Comments

No PV nor renewables at present to comply with B Regs. Eg As a more efficient and alternative way to reduce carbon the use of CO2 refrigerant based DHW heat pumps are being encouraged particularly in Japan and France. This technology is at present not recognised by the MCS scheme in the UK. These heat pumps are more relevant as DHW becomes a greater proportion of the energy use and are non GW such as the present MSC approved HFC pumps.

7. Do you agree that the limits on design flexibility 'backstop' values for fabric elements in new homes should be changed from the current reasonable provision in the technical guidance to become mandatory?

Yes ☐

No ☐

Don't know

☒

Comments

None

8. Do you agree with the changes to the 'backstop' values proposed? Please explain your decision.

Yes ☐

No ☐

Don't know

☒

Comments

None

9. Do you have any other comments on the proposed changes to Approved Document L1A or the domestic National Calculation Methodology? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

None

10. The Impact Assessment makes a number of assumptions on fabric/services/ renewables costs, new build rates, phase-in rates, learning rates, etc for new homes. Do you think these assumptions are fair and reasonable? Please justify your views.

Yes ☐ No ☐ Don't know ☒

Comments

None

11. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for new homes? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

Comments

None

## New non-domestic buildings

12. Do you agree with the proposal for ~~2013~~ 2014 for non-domestic buildings to explicitly regulate energy efficiency separately from low carbon technologies through the assessment of primary energy consumption (PEC)? Does PEC seem like a reasonable basis for standard setting?

Yes ☐ No ☐ Don't know ☒

Comments

None

13. Which package of fabric and services should be selected: 7% or 10%? Please give reasons for your choice.

7% ☐

10% ☐

Don't know ☒

Comments



None

14. Do you foresee any particular issues for certain categories of building to meet the TPEC or TER?

Yes ☐ No ☐ Don't know ☒

Comments

None

15. Which approach should be utilized to incorporate the contribution of low carbon technologies into the setting of the Target Emission Rate (TER), for non domestic buildings?

Fixed carbon reduction (in kg.CO<sub>2</sub>/m<sup>2</sup>/year) ☐

Percentage of roof area of PV ☐

Percentage of floor area of PV ☐

Other ☐

Don't know ☒

Please give reasons for your choice

None

16. The proposals explain the Government's preference for a 20% aggregate improvement in CO<sub>2</sub> performance standards for new non-domestic buildings from ~~October 2013~~ June 2014. Which option do you prefer and why?

No change ☐

Target A: 10% aggregate improvement (1% PV) ☐

Target B: 11% aggregate improvement (No PV) ☒

Target C: 20% aggregate improvement (5% PV) ☐

Don't know ☐

Please give reasons for your choice

No PV for reasons indicated previously. PV technology changing, MCS system needs time to assimilate changes eg BIPV

17. Do the proposed ~~2013~~ 2014 notional buildings as set out in the changes to the National Calculation Methodology seem like a reasonable basis for standards setting? Please provide comments on the method used to develop the notional buildings and particular elements of one or more of the notional buildings, if relevant.

Yes ☐ No ☐ Don't know ☒

Comments

None

18. Do you think that a further recipe should be created for buildings under 250m<sup>2</sup> and aligned with the proposed domestic recipe? Are there particular reasons why smaller buildings find compliance with the non-domestic recipes difficult? Please justify your views.

Yes ☐ No ☐ Don't know ☒

Comments

None

19. Although we recognise that some buildings may need to be serviced in a particular way for legitimate functional or environmental reasons, should Part L incentivise a lower carbon servicing strategy (as with the current Energy Performance Certificate methodology), by basing the notional building on mixed-mode ventilation?

Yes ☐ No ☐ Don't know ☒

Comments

None

20. Do you have any other comments on the proposed changes to Approved Document L2A or the non-domestic National Calculation Methodology? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

None

21. The Impact Assessment makes a number of assumptions on the costs of fabric/services/renewables, new build rates, etc for new non-domestic buildings. Do you think these assumptions are fair and reasonable? Please justify your views.

Yes ☐ No ☐ Don't know ☒

Comments

None

22. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for new non-domestic buildings?

Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

Comments

None

## Cumulative impact of policies

23. Overall, do you think the assessment of the impact on development is broadly fair and reasonable? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

Comments

None

## National Planning Policy Review

24. What role should planning play in facilitating higher carbon standards? Should it focus on facilitating site wide energy opportunities that will be needed as we move towards zero or near zero carbon buildings?

Views

None

25. What are the implications from future (and regular) changes to the Code for Sustainable Homes and BREEAM on the implementation of the policy?

Views

None

26. Are the costs of assessment and certification now disproportionate to the costs and benefits of achieving a minimum sustainable buildings standard level?

Yes ☒ No ☐ Don't know ☐

Comments

This is clearly illustrated in the impact assessment. Only the mechanism of carbon pricing makes further fabric improvement viable and hence the costs of assessment and certification becomes

27. What should be the role of local planning authorities in setting local standards above and beyond Building Regulations? How can we ensure there is a level playing field of standards across Wales?

Views

None

28. What do you see as the positive/negative impacts of removing Part B of the policy expecting buildings to be certified against Code/BREEAM?

Views

None

29. Is there a better, alternative, way to rewards and secure sustainable buildings (above the regulatory minimum) other than using national planning policy? What opportunities are there for future changes to Building Regulations?

Views

At present improvements to Building Regs for Part L should be limited to the max fabric improvements that can be sensibly achieved. At this stage the use of renewables (PV or other) should be voluntary not mandatory. Regarding future changes, with 1/3 of housing in Wales either off gas or with solid walls there is a growing number of households who are reinstalling wood stoves. The wood stove sales are purported to have increased 4 fold in the last 3 years as the consumer attempts to lessen the effects of utility price increases. The majority of these stoves are inefficient and increase particulates. Part J and F need urgently updating to allow for more efficient pellet stoves, high temperature gasification stoves and installations to bring into line with other EU countries such as France Germany and Italy. Part L in the future should make allowances for these efficient renewables particularly with regard to room sealed units. However the consumer needs educating alongside these changes and this can only be by government led promotion in order to more efficiently use available biomass. The manufacture and use of Welsh grown timber for construction eg windows etc needs to be better supported by government

At present the MCS approved heat pump technologies are all based on using HFC refrigerant, in order to obtain acceptable operating efficiencies (only GSHP are comparable with gas with reference to operating costs). HFC based refrigerants have a GWP of 1500 to 2500 times CO2!! Other countries in the EU are actively pursuing policies to phase out HFC with natural gases such as CO2.

There still doesn't exist in Wales a comprehensive body that is looking (independent of government) into latest and emerging practices in sustainable construction with particular emphasis on use of efficient use of energy and capturing carbon in construction rather than producing it. Construction Excellence and the Zero Low Carbon are commendable but are too related to existing practices. The new body needs to be of the "Think Tank" kind.

30. To what extent are duplication of standard and approval systems an issue? Would the removal of the PfSB policy assist in reducing duplication?

Views

None

31. What opportunities are there for higher standards to be delivered on strategic sites identified as part of the Local Development Plan?

#### Views

There obviously can exist opportunities. CHPs sited alongside Employment zoning or adjacent housing as just one example. But, before this, fundamental problems in the planning process must be addressed particularly to environmental issues. At present there is no requirement for statutory consultees to stipulate any pre monitoring or special requirements related to allocation of a site within the Local Development Plan, even though they have given approval or voiced no objection to the allocation of the site. This is particularly important where sites within the LDP are partially or wholly within a SSSI. A developer or manufacturer for example looking to construct on an employment zone site can initially meet with objections from CCW, at the planning stage, solely based on a presumption against any development. Even after planning approval it is possible for CCW to then introduce a requirement at the condition stage to establish a "regime" for the site. This is to compare any changes to the environment pre, during and post construction. This type of delaying tactic can mean that a project may not proceed for at least 1 year while a regime is established for all seasons. This is simply an absurd situation and should be sorted at the allocation stage within the LDP and regime monitoring implemented if required. This would particularly apply if there was a potentially contentious allocation of a CHP biomass plant for a site.

### Existing buildings

- ~~32. Do you agree with the proposal to raise performance standards for domestic replacement windows? Please explain your answer.~~

~~Yes ☐ No ☐ Don't know ☐~~

#### ~~Comments~~

33. Do you agree with the proposal to raise performance standards for domestic extensions? Please explain your answer.

Yes ☒ No ☐ Don't know ☐

#### Comments

Only fabric and services

34. Do you agree with the proposal to raise performance standards for non-domestic extensions? Please explain your answer.

Yes ☒ No ☐ Don't know ☐

Comments

None

35. Do you agree that the exemption for conservatories or porches should be removed where an individual room heat or air conditioning unit is installed? How effective would this change be in limiting energy use/emissions, or are there other ways by which energy performance might be improved where conservatories or porches are installed?

Yes ☐ No ☒ Don't know ☐

Comments

In most cases a conservatory is used when the sun is shining and there is mostly a heat gain. (In some installations I have witnessed any excess heat has been ducted to the adjacent living room area). A high standard of E Glazing should be required so that on a cold sunny day heat can be retained. Natural ventilation with openable windows can be specified. There should be a facility for a patio door or similar to be used to isolate the conservatory or porch.

The above would reduce the need for room heating or cooling and only be required in extreme conditions. If an air to air A/C is used these have high COPs. I am not aware of any data that shows that the energy used either to heat or cool is of any consequence to warrant imposing changes

36. Do you agree with the proposal to require consequential improvements upon extensions or increases in habitable space in existing homes below 1000m<sup>2</sup>? Please explain your view.

Yes ☒ No ☐ Don't know ☐

Comments

None

37. The consultation explains that the regulatory requirement for consequential improvements upon domestic extensions or increases in habitable space would be limited to a list of measures comprising a minimum standard of loft insulation, hot water cylinder insulation and the installation of cavity wall insulation.

Do you agree with this list of measures?

☒

Should this list be different (please explain below)?

☐

Another approach (please explain below)

☐

Don't know

☐

Comments

Yes as long as internal or external wall insulation is not required for solid wall properties.

38. What effect do you think the requirements for consequential improvements may have on the demand for repair, maintenance and improvement activity? Please use evidence to explain your answer.

Increase demand

☐

Reduce demand

☐

No effect

☐

Don't know

☒

Comments

None

39. Do you agree with the proposal to introduce consequential improvements upon extensions or increases in habitable space in non-domestic buildings under 1000m<sup>2</sup>? Please explain your view.

Yes

☒

No

☐

Don't know

☐

Comments

None



40. The consultation proposes that for non-domestic buildings, any measure from list which is used to generate Green Deal assessments, the list in SBEM used to generate Energy Performance Certificate recommendations and the existing list of typical consequential improvement measures from Approved Document L2B should be eligible to be a consequential improvement. Do you agree?

Yes

☐

No

☐

Prefer a different list (please specify)

☐

Don't know

☒

Comments

None

41. Do you agree that there should not be major problems in extending the requirement for consequential improvements for the building control process? If you do foresee issues, what are they and how might these be addressed?

Yes

☐

No

☐

Don't know

☒

Comments

None

42. Do you have any other comments on the proposed changes to Approved Document L1B? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

None

43. Do you have any other comments on the proposed changes to Approved Document L2B? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

None

44. Do you think that the Impact Assessment is a fair and reasonable assessment of the potential costs and benefits of raising the performance standards for ~~replacement domestic windows and~~ domestic/non-domestic extensions? Please justify your view and provide alternative evidence if necessary.

Yes

☒

No

☐

Don't know

☐

Comments

None

45. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for consequential improvements in existing homes? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☒ Don't know ☐

Comments

Cavity wall and loft insulation are amongst the most effective ways of improving the thermal performance of the fabric of houses and provide real energy savings. However, when they are installed, the actual energy savings derived from measurements of before and after consumptions are commonly found to be less than expected from the predictions of models such as BREDEM. This discrepancy, termed a 'reduction factor' is caused in part by changed internal temperatures, a 'comfort factor', with the remainder due to other causes such as insulation performance, occupancy and ventilation. This is part of a report located at the DECC [http://www.decc.gov.uk/assets/decc/what we do/supporting consumers/saving\\_energy/analysis/insulationmeasures-review.pdf](http://www.decc.gov.uk/assets/decc/what_we_do/supporting_consumers/saving_energy/analysis/insulationmeasures-review.pdf). A reduction factor of 50% should be applied to the projected theoretical savings and not 15% as used in the Impact Assessment. Prelim results from the Arbed programme also show that the savings in energy are a lot less than forecast and in some cases no savings were achieved at all. This fundamentally changes the anticipated carbon savings projected for existing housing although obviously there is an improvement in the quality of the housing stock due to becoming more energy efficient.

46. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for consequential improvements in existing non-domestic buildings? Please justify your view and provide alternative evidence if necessary.

Yes ☒ No ☐ Don't know ☐

Comments

None

## Compliance and Performance

47. For new dwellings, Welsh Government is proposing to develop a compliance checklist. Do you think such a checklist would be used sufficiently to warrant its development?

Yes ☐ No ☐ Don't know ☒

Comments

None

48. If such a checklist was developed, what should it cover?

Comments

None

49. If the checklist was taken forward, who should be involved in its development?

Comments

None

50. Would any other approach be likely to prove more effective instead (such as a PAS<sup>9</sup> type approach).

Yes ☐ No ☐ Don't know ☒

Comments

None

51a. Would it be preferable for buildings of a domestic nature to be able to achieve compliance through applying the recipe in AD L1A, in acknowledgement of the domestic nature of such buildings, rather than demonstrating compliance with AD L2A?

Yes ☐ No ☐ Don't know ☒

Comments

None

<sup>9</sup> A PAS is a Publicly Available Specification, and the PAS would set out a quality assurance approach.

51b. What are the arguments for and against this approach?

Comments

None

52. Additional views and suggestions for addressing compliance and performance issues in new non domestic buildings would be welcome.

Comments

None

53. Is the newly formatted ADL1B easier to understand and use?

Yes ☐ No ☐ Don't know ☒

Comments

None

54. Are there any further amendments to the newly formatted ADL1B that you would recommend? If so, please provide details.

Yes ☐ No ☐ Don't know ☒

Comments

None

55. How do the consultation proposals impact on the work of Local Authorities and Approved Inspectors? Please give positive and negative impacts.

Comments

None

56. We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

Reference is made to the use of the Green Deal as a means of financing upfront costs for compliance or assistance with the proposed regulations. To rely on a mechanism, yet untried, to help deliver the proposed increase in standards is wrong. I provide an example which I believe is not untypical.

A house owner in a uninsulated solid wall detached property would have a high energy use if heating the whole house. Like most house owners he therefore chooses to save on heating costs and just heats most of the time one living room. If he upgraded the wall insulation then the cost would be in the order of possibly £8000 to £12000. Like most house owners on completion he would take benefit of the comfort factor and start using more or all of the house. His energy bill would most probably be equal or very similar to his bill prior to improvement. In these circumstances he would not satisfy the Golden Rule and therefore would not satisfy conditions for the Green Deal.

#56 - ECA

## 2012 consultation on changes to the Building Regulations in Wales

### Part L (Conservation of fuel and power)

#### Consultation Response Form

Your names: Giuliano Digilio / Paul Reeve

Organisation (if applicable): ECA

(xxxvii) **Are the views expressed on this consultation an official response from the organisation you represent or your own personal views?**

Organisational ☒ Personal Views ☐

(xxxviii) **Are your views expressed on this consultation in connection with your membership or support of any group? If yes please state name of group:**

Yes ☒ No ☐

Name of group:

This response represents the views of the Electrical Contractors'  
Association (ECA)

(xxxix) **Please tick the one box that best describes your organisation:**

<p><b>Builders/Developers:</b></p> <p>Builder / Main contractor: <input type="checkbox"/></p> <p>Builder/ Small builder: (extensions/repairs/maintenance, etc) <input type="checkbox"/></p> <p>Installer/ special sub-contractor <input type="checkbox"/></p> <p>Commercial developer <input type="checkbox"/></p> <p>House builder <input type="checkbox"/></p>	<p><b>Property Management:</b></p> <p>Housing association (registered social landlord) <input type="checkbox"/></p> <p>Residential landlord, private sector <input type="checkbox"/></p> <p>Commercial <input type="checkbox"/></p> <p>Public sector <input type="checkbox"/></p>
<p><b>Building occupier:</b></p> <p>Home owner <input type="checkbox"/></p> <p>Tenant (residential) <input type="checkbox"/></p> <p>Commercial Building <input type="checkbox"/></p>	<p><b>Building Control Bodies:</b></p> <p>Local authority building control <input type="checkbox"/></p> <p>Approved Inspector <input type="checkbox"/></p>
<p><b>Energy Sector</b> <input type="checkbox"/></p>	<p><b>Fire and Rescue Authority</b> <input type="checkbox"/></p>

<b>Designers/Engineers/Surveyors:</b>  Architect <input type="checkbox"/> Civil/Structural engineer <input type="checkbox"/> Building services engineer <input type="checkbox"/> Surveyor <input type="checkbox"/>	<b>Specific Interest:</b>  Competent person scheme operator <input type="checkbox"/> National representative or trade body <input checked="" type="checkbox"/> Professional body or institution <input type="checkbox"/> Research/ academic organisation <input type="checkbox"/>
<b>Manufacturer/ Supply Chain</b> <input type="checkbox"/>	<b>Other</b> ( <i>please specify</i> ) <input type="text"/>

(xi) Please tick the **one** box which best describes the size of your or your organisation's business?

- Micro – typically 0 to 9 full-time or equivalent employees (incl. sole traders) ☐
- Small – typically 10 to 49 full-time or equivalent employees ☒
- Medium – typically 50 to 249 full-time or equivalent employees ☐
- Large – typically 250+ full-time or equivalent employees ☐
- None of the above (please specify) ☐

(vi) Are you or your organisation a member of a competent person scheme?

Yes ☐ No ☒

Name of scheme:

No, however the ECA Group owns and runs the Competent Person Scheme, ELECSA.

(vii) Would you be happy for us to contact you again in relation to this consultation?



Yes ☒ No ☐

WG will process any personal information that you provide us with in accordance with the data protection principles in the Data Protection Act 1998. In particular, we shall protect all responses containing personal information by means of all appropriate technical security measures and ensure that they are only accessible to those with an operational need to see them. You should, however, be aware that as a public body, the Welsh Government is subject to the requirements of the Freedom of Information Act 2000, and may receive requests for all responses to this consultation. If such requests are received we shall take all steps to anonymise responses that we disclose, by stripping them of the specifically personal data – name and e-mail address – you supply in responding to this consultation. If, however, you consider that any of the responses that you provide to this survey would be likely to identify you irrespective of the removal of your overt personal data, then we should be grateful if you would indicate that, and the likely reasons, in your response, for example in the relevant comments box.

## Questions:

### New homes

1. Do you agree with the Government's preference for a CO<sub>2</sub> saving of 40% reduction in carbon dioxide emissions compared to Part L 2010.

No change to 2010	<input type="checkbox"/>
40% CO <sub>2</sub> saving	<input type="checkbox"/>
25% CO <sub>2</sub> saving	<input checked="" type="checkbox"/>
Something else (please explain below)	<input type="checkbox"/>
Don't know	<input type="checkbox"/>

Comments

We have already seen tough carbon targets set by Government, but what is needed is an achievable target.

2. Do you agree with the proposal for an 'aggregate' approach to CO<sub>2</sub> target setting for new homes in 2015? The CO<sub>2</sub> target for any individual dwelling varies depending on the ease with which the building can achieve the target, with the overall required CO<sub>2</sub> saving achieved when aggregated over the build mix.

Yes ☒ No ☐ Don't know ☐

## Comments

All buildings should apply reasonably practicable measures, in order to maximise carbon savings.

3. Do you agree with the proposal for a compliant option based on a consistent recipe of elemental specifications for fabric, services plus an additional CO<sub>2</sub> saving equivalent to an amount of photovoltaic (PV). Please justify your choice.

Yes ☒ No ☐ Don't know ☐

## Comments

The 'proxy PV' metric is readily understandable and good for benchmarking.

4. The main difference between the recipes is the required system efficiency for each fuel, which is appropriate for the heating system type. By adopting this approach to different fuel types, there is no need for a separate fuel factor. Do you agree with the proposed approach?

Yes ☐ No ☐ Don't know ☒

## Comments

5. For the CO<sub>2</sub> savings proposed, are the recipe specifications a sensible way of achieving them? Please justify your choice.

Yes ☐ No ☐ Don't know ☒

## Comments

-

6. In approaching the selection of the amount of PV to be installed on dwellings, do you prefer?

Fixed percentage of building foundation area ☐

Proportion of gross internal floor area with a practical cap ☒

Don't know ☐

## Comments

Internal floor area gives better indication of energy demand.

7. Do you agree that the limits on design flexibility 'backstop' values for fabric elements in new homes should be changed from the current reasonable provision in the technical guidance to become mandatory?

Yes ☒ No ☐ Don't know ☐

## Comments

All reasonably practicable measures should be used to reduce carbon and energy demand.

8. Do you agree with the changes to the 'backstop' values proposed? Please explain your decision.

Yes ☐ No ☐ Don't know ☒

## Comments

-

9. Do you have any other comments on the proposed changes to Approved Document L1A or the domestic National Calculation Methodology? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

## Comments

No

10. The Impact Assessment makes a number of assumptions on fabric/services/ renewables costs, new build rates, phase-in rates, learning rates, etc for new homes. Do you think these assumptions are fair and reasonable? Please justify your views.

Yes ☐ No ☐ Don't know ☒

## Comments

We cannot offer further information or analysis to this assessment.

11. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for new homes? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

Comments

As above.

## New non-domestic buildings

12. Do you agree with the proposal for ~~2013~~ 2014 for non-domestic buildings to explicitly regulate energy efficiency separately from low carbon technologies through the assessment of primary energy consumption (PEC)? Does PEC seem like a reasonable basis for standard setting?

Yes ☒ No ☐ Don't know ☐

Comments

PEC is a useful tool for assessing 'carbon demand'.

13. Which package of fabric and services should be selected: 7% or 10%? Please give reasons for your choice.

7% ☐

10% ☐

Don't know ☒

Comments

-

14. Do you foresee any particular issues for certain categories of building to meet the TPEC or TER?

Yes ☒ No ☐ Don't know ☐

## Comments

Yes, there could be problems with some old and/or listed buildings.

15. Which approach should be utilized to incorporate the contribution of low carbon technologies into the setting of the Target Emission Rate (TER), for non domestic buildings?

Fixed carbon reduction (in kg.CO<sub>2</sub>/m<sup>2</sup>/year) ☐

Percentage of roof area of PV ☐

Percentage of floor area of PV ☐

Other ☐

Don't know ☒

Please give reasons for your choice

-

16. The proposals explain the Government's preference for a 20% aggregate improvement in CO<sub>2</sub> performance standards for new non-domestic buildings from ~~October 2013~~ June 2014. Which option do you prefer and why?

No change ☐

Target A: 10% aggregate improvement (1% PV) ☐

Target B: 11% aggregate improvement (No PV) ☐

Target C: 20% aggregate improvement (5% PV) ☒

Don't know ☐

Please give reasons for your choice

The ECA supports the 20% improvement option as there is potential to design buildings to an increasingly energy efficient standard through better collaboration as well as utilising energy control and renewable energy technologies. For instance, with regards to better collaboration, if specialist contractors are consulted in the design phase, buildings can be designed in a far more energy efficient manner than if electrical contractors, for instance,

are simply commissioned to carry out works after the design of a building has been decided upon by others. The 20% option will benefit the client with much lower energy bills.

That said, it is important to caveat our support with the view that awareness and understanding of the current Part L standards is very low. This needs to be addressed otherwise the benefits of improved energy performance will not be recognised as intended. ECA is ready to help build that awareness.

The guidance regarding Part L is currently too complex. We would be happy to help develop guidance that can be practically followed by building services/electrical contractors.

The problem of current low compliance, however, goes beyond complex guidance. Beyond the big building projects, we believe that Part L is going widely unenforced (with budgets for local authority building control (LABC) checks being limited). We have been advised by ECA members that contractors factoring the environmental standards demanded by Part L into their quotes are losing out on business to contractors who charge less and carry out work to a lower environmental standard. Further to this, when building control officers do check and test developments, it is often after the building has been erected, meaning verification as to whether a contractor has followed Part L is more difficult or not feasible. Once again, ECA will be pleased to contribute to initiatives that support compliance and 'during the work' verification.

The ECA offers members and registrants a low cost self-certification assessment for Part L as a core element of membership. Detailed guidance and telephone support lines are also available. We have, however, found that most responses point to a lack of enforcement from building control as the root cause. We are currently looking at how we can create an enhanced service to help resolve the above compliance issues.

We believe we could work with building control officers to develop a process where random audits of in-progress developments are conducted to ensure full compliance of an electrical contractor's work. This would take the form of a checklist, which we could help develop, and which would form the basis of a declaration by contractors that works comply with the Building Regulations. This declaration would ensure that energy efficiency measures in the original design are matched in the completed building and that any deviation from original specification is highlighted.

We believe that this service, if replicated by other industry bodies and providers, could be an efficient way of promoting awareness and strengthening compliance rates across Wales in a way that is neither costly to LABC, the taxpayer or the contractor, or is time-consuming for the latter. We would welcome the opportunity to meet with your officials to discuss this idea and how compliance rates can be increased more widely.

17. Do the proposed ~~2013~~ 2014 notional buildings as set out in the changes to the National Calculation Methodology seem like a reasonable basis for standards setting? Please provide comments on the method used to develop the notional buildings and particular elements of one or more of the notional buildings, if relevant.

☒
☐
☐

Yes                      No                      Don't know

Comments

It is better than the current NCM but until the software for the Green Deal is issued then it is difficult to assess the full effect.

18. Do you think that a further recipe should be created for buildings under 250m<sup>2</sup> and aligned with the proposed domestic recipe? Are there particular reasons why smaller buildings find compliance with the non-domestic recipes difficult? Please justify your views.

Yes ☒                      No ☐                      Don't know ☐

Comments

Economies of scale (e.g. for control systems) are not there in small buildings.

19. Although we recognise that some buildings may need to be serviced in a particular way for legitimate functional or environmental reasons, should Part L incentivise a lower carbon servicing strategy (as with the current Energy Performance Certificate methodology), by basing the notional building on mixed-mode ventilation?

Yes ☐                      No ☐                      Don't know ☒

Comments

-

20. Do you have any other comments on the proposed changes to Approved Document L2A or the non-domestic National Calculation Methodology? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

Wherever possible, the document should separate mandatory requirements from background and other narrative, so it is easy for all to see what is required.

21. The Impact Assessment makes a number of assumptions on the costs of fabric/services/renewables, new build rates, etc for new non-domestic buildings. Do you think these assumptions are fair and reasonable? Please justify your views.

Yes ☐ No ☐ Don't know ☒

Comments

-

22. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for new non-domestic buildings?

Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

Comments

-

## Cumulative impact of policies

23. Overall, do you think the assessment of the impact on development is broadly fair and reasonable? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

Comments

-

## National Planning Policy Review

24. What role should planning play in facilitating higher carbon standards? Should it focus on facilitating site wide energy opportunities that will be needed as we move towards zero or near zero carbon buildings?

Views

Planning policy should aim to ensure that all new build incorporates an effective mix of reasonably practicable energy measures.



25. What are the implications from future (and regular) changes to the Code for Sustainable Homes and BREEAM on the implementation of the policy?

Views

26. Are the costs of assessment and certification now disproportionate to the costs and benefits of achieving a minimum sustainable buildings standard level?

Yes ☒ No ☐ Don't know ☐

Comments

Competent installers, such as ECA members, should be deemed competent without the need for costly additional assessment and certification.

27. What should be the role of local planning authorities in setting local standards above and beyond Building Regulations? How can we ensure there is a level playing field of standards across Wales?

Views

They should start with advising, checking and enforcing to ensure that the minimum standards are complied with. A regulatory 'Fee for Intervention' when material non-compliance is spotted should be considered (note recent FFI system introduced on 1

28. What do you see as the positive/negative impacts of removing Part B of the policy expecting buildings to be certified against Code/BREEAM?

Views

BREEAM covers too many green parameters to be the optimal measure of carbon or energy demand.

29. Is there a better, alternative, way to rewards and secure sustainable buildings (above the regulatory minimum) other than using national planning policy? What opportunities are there for future changes to Building Regulations?

Views

Consider a 'Fee for Intervention' regime. This is where administrative costs are ranged against the duty holder if there are material breaches of Building Regulations and correspondence is

30. To what extent is duplication of standard and approval systems an issue? Would the removal of the PfSB policy assist in reducing duplication?

Views

31. What opportunities are there for higher standards to be delivered on strategic sites identified as part of the Local Development Plan?

Views

## Existing buildings

32. Do you agree with the proposal to raise performance standards for domestic replacement windows? Please explain your answer.

Yes ☐ No ☐ Don't know ☒

Comments

33. Do you agree with the proposal to raise performance standards for domestic extensions? Please explain your answer.

Yes ☒ No ☐ Don't know ☐

Comments

If tough targets are to be met then it seems illogical to allow significantly energy inefficient or even non-optimal build to be added to the housing stock.

34. Do you agree with the proposal to raise performance standards for non-domestic extensions? Please explain your answer.

Yes ☒ No ☐ Don't know ☐

Comments

If tough targets are to be met then it seems illogical to add significantly energy inefficient or even non-optimal non-domestic build to the UK building stock.

35. Do you agree that the exemption for conservatories or porches should be removed where an individual room heat or air conditioning unit is installed? How effective would this change be in limiting energy use/emissions, or are there other ways by which energy performance might be improved where conservatories or porches are installed?

Yes ☒ No ☐ Don't know ☐

Comments

See answer to 33.

36. Do you agree with the proposal to require consequential improvements upon extensions or increases in habitable space in existing homes below 1000m<sup>2</sup>? Please explain your view.

Yes ☒ No ☐ Don't know ☐

Comments

See answer to 33.

37. The consultation explains that the regulatory requirement for consequential improvements upon domestic extensions or increases in habitable space would be limited to a list of measures comprising a minimum standard of loft insulation, hot water cylinder insulation and the installation of cavity wall insulation.

Do you agree with this list of measures?

☐

Should this list be different (please explain below)?

☒

Another approach (please explain below)

☐
☐

Don't know

Comments

The list should include all Green Deal (GD) listed (which are 'cost effective' in terms of meeting the GD Golden Rule) active and passive energy saving measures.

38. What effect do you think the requirements for consequential improvements may have on the demand for repair, maintenance and improvement activity? Please use evidence to explain your answer.

Increase demand

☒

Reduce demand

☐

No effect

☐

Don't know

☐

Comments

The proposal for requiring full consideration of consequential improvements in certain situations has the potential to increase activity

39. Do you agree with the proposal to introduce consequential improvements upon extensions or increases in habitable space in non-domestic buildings under 1000m<sup>2</sup>? Please explain your view.

Yes ☒ No ☐ Don't know ☐

Comments

The ECA supports this proposal. Non-domestic occupiers are more likely to take a long-term view about the benefits of energy efficiency and renewable measures.

40. The consultation proposes that for non-domestic buildings, any measure from list which is used to generate Green Deal assessments, the list in SBEM used to generate Energy Performance Certificate recommendations and the existing list of typical consequential improvement measures from Approved Document L2B should be eligible to be a consequential improvement. Do you agree?

Yes

☒

No

☐
☐

Prefer a different list (please specify)

Don't know

☐

Comments

We are not sure SBEM covers enough energy saving measures, but we believe that the Green Deal list is a good basis to work on, since it includes 'cost effective measures' which are not a financial burden..

41. Do you agree that there should not be major problems in extending the requirement for consequential improvements for the building control process? If you do foresee issues, what are they and how might these be addressed?

Yes

☒

No

☐

Don't know

☐

Comments

-

42. Do you have any other comments on the proposed changes to Approved Document L1B? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

The actual requirements should be very clear, and kept separate from supporting information and narrative.

43. Do you have any other comments on the proposed changes to Approved Document L2B? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

The actual requirements should be very clear, and kept separate from supporting information and narrative.

44. Do you think that the Impact Assessment is a fair and reasonable assessment of the potential costs and benefits of raising the performance standards for domestic/non-domestic extensions? Please justify your view and provide alternative evidence if necessary.

Yes

☐

No

☐

Don't know

☒

## Comments

-

45. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for consequential improvements in existing homes? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

## Comments

-

46. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for consequential improvements in existing non-domestic buildings? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

## Comments

-

## Compliance and Performance

47. For new dwellings, Welsh Government is proposing to develop a compliance checklist. Do you think such a checklist would be used sufficiently to warrant its development?

Yes ☒ No ☐ Don't know ☐

## Comments

Absolutely yes, and this is in line with our comments above.

48. If such a checklist was developed, what should it cover?

Comments

All building functions and all building elements and building services that affect the energy performance of a building.

49. If the checklist was taken forward, who should be involved in its development?

Comments

All organisations involved within the relevant building/construction process. ECA would be pleased to contribute to this document.

50. Would any other approach be likely to prove more effective instead (such as a PAS<sup>10</sup> type approach)?

Yes ☒ No ☐ Don't know ☐

Comments

A checklist could evolve into a PAS.

51a. Would it be preferable for buildings of a domestic nature to be able to achieve compliance through applying the recipe in AD L1A, in acknowledgement of the domestic nature of such buildings, rather than demonstrating compliance with AD L2A?

Yes ☐ No ☐ Don't know ☒

Comments

-

51b. What are the arguments for and against this approach?

Comments

-

<sup>10</sup> A PAS

52. Additional views and suggestions for addressing compliance and performance issues in new non domestic buildings would be welcome.

Comments

Consider Fee for Intervention on the duty holder for material breaches of the Building Regulations.

53. Is the newly formatted ADL1B easier to understand and use?

Yes ☐ No ☐ Don't know ☒

Comments

-

54. Are there any further amendments to the newly formatted ADL1B that you would recommend? If so, please provide details.

Yes ☐ No ☐ Don't know ☒

Comments

55. How do the consultation proposals impact on the work of Local Authorities and Approved Inspectors? Please give positive and negative impacts.

Comments

-



56. We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

Building regulations need to dovetail with listed Green Deal measures, since GD measures are essentially cost effective and do not represent a financial burden – indeed they may remove some of

**#57 - Kingspan Insulation Limited**

# 2012 consultation on changes to the Building Regulations in Wales

## Part L (Conservation of fuel and power)

### Consultation Response Form

Your name: Jonathan Ducker

Organisation (if applicable):Kingspan Insulation Limited

**(xli) Are the views expressed on this consultation an official response from the organisation you represent or your own personal views?**

Organisational ☒ Personal Views ☐

**(xlii) Are your views expressed on this consultation in connection with your membership or support of any group? If yes please state name of group:**

Yes ☐ No ☒

Name of group:

**(xlili) Please tick the one box that best describes your organisation:**

<b>Builders/Developers:</b>  Builder / Main contractor: <input type="checkbox"/> Builder/ Small builder: (extensions/repairs/maintenance, etc) <input type="checkbox"/> Installer/ special sub-contractor <input type="checkbox"/> Commercial developer <input type="checkbox"/> House builder <input type="checkbox"/>	<b>Property Management:</b>  Housing association (registered social landlord) <input type="checkbox"/> Residential landlord, private sector <input type="checkbox"/> Commercial <input type="checkbox"/> Public sector <input type="checkbox"/>
<b>Building occupier:</b>  Home owner <input type="checkbox"/> Tenant (residential) <input type="checkbox"/> Commercial Building <input type="checkbox"/>	<b>Building Control Bodies:</b>  Local authority building control <input type="checkbox"/> Approved Inspector <input type="checkbox"/>
<b>Energy Sector</b> <input type="checkbox"/>	<b>Fire and Rescue Authority</b> <input type="checkbox"/>
<b>Designers/Engineers/Surveyors:</b>  Architect <input type="checkbox"/> Civil/Structural engineer <input type="checkbox"/> Building services engineer <input type="checkbox"/> Surveyor <input type="checkbox"/>	<b>Specific Interest:</b>  Competent person scheme operator <input type="checkbox"/> National representative or trade body <input type="checkbox"/> Professional body or institution <input type="checkbox"/> Research/ academic organisation <input type="checkbox"/>

<b>Manufacturer/ Supply Chain</b> <input checked="" type="checkbox"/>	<b>Other</b> ( <i>please specify</i> ) <div style="border: 1px solid black; height: 20px; width: 100%;"></div>
---	---

**(xliv) Please tick the *one* box which best describes the size of your or your organisation's business?**

- Micro – typically 0 to 9 full-time or equivalent employees (incl. sole traders) ☐
- Small – typically 10 to 49 full-time or equivalent employees ☐
- Medium – typically 50 to 249 full-time or equivalent employees ☐
- Large – typically 250+ full-time or equivalent employees ☒
- None of the above (please specify) ☐

**(vi) Are you or your organisation a member of a competent person scheme?**

Yes ☒ No ☐

Name of scheme:

TIMSA (U-value calculation competency); On Construction Domestic Energy Assessor (ECMK & STROMA)

**(vii) Would you be happy for us to contact you again in relation to this consultation?**

Yes ☒ No ☐

WG will process any personal information that you provide us with in accordance with the data protection principles in the Data Protection Act 1998. In particular, we shall protect all responses containing personal information by means of all appropriate technical security measures and ensure that they are only accessible to those with an operational need to see them. You should, however, be aware that as a public body, the Welsh Government is subject to the requirements of the Freedom of Information Act 2000, and may receive requests for all responses to this

consultation. If such requests are received we shall take all steps to anonymise responses that we disclose, by stripping them of the specifically personal data – name and e-mail address – you supply in responding to this consultation. If, however, you consider that any of the responses that you provide to this survey would be likely to identify you irrespective of the removal of your overt personal data, then we should be grateful if you would indicate that, and the likely reasons, in your response, for example in the relevant comments box.

## Questions:

### New homes

1. Do you agree with the Government's preference for a CO<sub>2</sub> saving of 40% reduction in carbon dioxide emissions compared to Part L 2010.

No change to 2010

☐

40% CO<sub>2</sub> saving

☒

25% CO<sub>2</sub> saving

☐

Something else (please explain below)

☐

Don't know

☐

Comments

This is a good step towards Zero Carbon, but further on-site improvements should certainly start to be considered by 2016, in order to achieve the levels needed to achieve the country's Climate Change Act 2020 targets.

New insulation products, construction methods and renewable technologies are entering the market, and what is achievable on-site is constantly changing the goal posts. Whilst off-site is also important, by 2016 there will be further scope to improve standards for new build.

2. Do you agree with the proposal for an 'aggregate' approach to CO<sub>2</sub> target setting for new homes in 2015? The CO<sub>2</sub> target for any individual dwelling varies depending on the ease with which the building can achieve the target, with the overall required CO<sub>2</sub> saving achieved when aggregated over the build mix.

Yes ☒ No ☐ Don't know ☐

Comments

An aggregate approach is the best solution to overall hitting the levels of improvement required.

Some house types and forms are not conducive to much improvement in carbon emissions (although can often be fairly low emissions wise. Whilst there is an argument that such built forms should perhaps be discouraged in favour of more efficient forms, the reality is that less efficient forms will continue to be required by and built for the market.

3. Do you agree with the proposal for a compliant option based on a consistent recipe of elemental specifications for fabric, services plus an additional CO<sub>2</sub> saving equivalent to an amount of photovoltaic (PV). Please justify your choice.

Yes ☒ No ☐ Don't know ☐

Comments

Provided a strong fabric specification is at the heart of the recipe, an additional CO<sub>2</sub> saving equivalent to an amount of PV should be understandable by specifiers. Although manufacturers of other renewable technologies are unlikely to agree.

4. The main difference between the recipes is the required system efficiency for each fuel, which is appropriate for the heating system type. By adopting this approach to different fuel types, there is no need for a separate fuel factor. Do you agree with the proposed approach?

Yes ☐ No ☐ Don't know ☒

Comments

The carbon emissions for the various packages should be the same / similar for setting compliance levels.

If a heating/fuel choice has higher emissions, this should be compensated for with technologies / specifications that can be equivalent emissions wise.

5. For the CO<sub>2</sub> savings proposed, are the recipe specifications a sensible way of achieving them? Please justify your choice.

Yes ☒ No ☐ Don't know ☒

Comments

There is a general acknowledgement that a notional package strongly influences designers and specifiers.

If the recipe specifications are set with the notional U-values for external elements at a good level, It sends a message to designers to think in terms of minimising heat losses and that they should consider the fabric.

There is however scope to improve the target set for the floor U-value in particular.

The backstops would still allow for flexibility.

We agree that recipe specifications are a sensible approach.

6. In approaching the selection of the amount of PV to be installed on dwellings, do you prefer?

Fixed percentage of building foundation area

☒

Proportion of gross internal floor area with a practical cap

☐

Don't know

☐

Comments

In most circumstances, this should give an approximation of available roof area. As long as multiple dwellings within a single building footprint (e.g. apartments) are adequately considered.

7. Do you agree that the limits on design flexibility 'backstop' values for fabric elements in new homes should be changed from the current reasonable provision in the technical guidance to become mandatory?

Yes ☒ No ☐ Don't know ☐

Comments

As long as the area weighted average U-value requirement (calculated in accordance with BS E N IOS 6946:1997 Annex C) is retained, with individual elements requirement set to ensuring that interstitial, surface condensation and mould growth are not predicted to be problematic within the constructions for the single worst point e.g. following the guidance of BS5250:2002, or alternatively following the limiting values from Approved Document C.

This is particularly of relevance for tapered roofing insulation products, where further guidance is available currently in LABC technical Guidance Note 08/03

8. Do you agree with the changes to the 'backstop' values proposed? Please explain your decision.

Yes ☒ No ☐ Don't know ☐

Comments

BUT, there exists opportunity to tighten these still further. Floors in particular can achieve much improved levels.



9. Do you have any other comments on the proposed changes to Approved Document L1A or the domestic National Calculation Methodology? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

#### Comments

- As FEES target has been omitted this time around and there is a possibility that fabric may not be revisited for 2016, fabric heat losses should be aggressively reduced this time around. Or a commitment acknowledged now, to revisit the fabric prior to 2016.

High performance products and construction methods are on the market now (and improved products are emerging) for fabric specifications generally.

Parts of Europe, especially Scandinavian countries, already target specifications far superior to those currently considered.

- Competency level for SAP Assessors to produce Design Stage Calculations should be set at 'Must be an accredited On Construction Domestic Energy Assessor' in line with requirement for producing an EPC. Thereby hopefully ensuring that assessors are following the regulations, SAP methodology and SAP conventions.
- U-value calculations undertaken to support both L1A and L1B (and L2A / L2B) should be undertaken by Competent Persons, such as members of an accredited scheme (e.g. TIMSA backed BBA scheme), in order to improve levels of confidence in calculations. (Could even consider adding a 25% confidence factor onto U-values undertaken by non competent persons...). We see a lot of calculations that have been done with no bridging allowed for, condensation problems, or just taking entirely wrong values.
- Need to ensure that transitional arrangements are better managed for the regulations implementation than was the case for the 2010 regulations change:
  - Each plot should be started within the transitional period to stay under current regulations, not one per site.
  - From figures suggested following 2010 regulations change for England and Wales, 150,000 additional plots were notified under 2006 regulations beyond the normal in the last couple of months before October 2010, thereby managing to avoid reducing their emissions to 2010 required levels by locking in their regulations to L1A2006 and then not doing more than the minimum required to stay locked in.

10. The Impact Assessment makes a number of assumptions on fabric/services/ renewables costs, new build rates, phase-in rates, learning rates, etc for new homes. Do you think these assumptions are fair and reasonable? Please justify your views.

Yes ☐ No ☐ Don't know ☒

Comments

The impact assessments underlying theory to not disadvantage dwellings built using poorer emissions heating fuels should be thought about more thoroughly.

Whilst agreed that dwellings off-gas would find it harder to achieve lower targets, if it transpires that the majority of dwellings end up being off-gas, then the carbon emissions targets won't in reality be met.

With costs of PV and other renewables technologies coming down in price and fuel bills year on year rocketing, it is particularly important to ensure that heating demand is minimised to the greatest extent possible and that higher carbon emissions associated with some heating types are offset as far as possible.

11. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for new homes? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

Comments

From Appendix 1 'Assumed annual energy consumption per property and fuel type', the specification is improved for the 40% option over the 25% option, but projected space heating and hot water requirement is shown as unchanged.

## New non-domestic buildings

12. Do you agree with the proposal for 2013 for non-domestic buildings to explicitly regulate energy efficiency separately from low carbon technologies through the assessment of primary energy consumption (PEC)? Does PEC seem like a reasonable basis for standard setting?

Yes ☒ No ☐ Don't know ☐

Comments

Fabric certainly needs to be better considered from the outset. Primary Energy Consumption metric at least acknowledges the necessity to reduce consumption.

13. Which package of fabric and services should be selected: 7% or 10%? Please give reasons for your choice.

7%

☐

10%

☒

Don't know

☐

Comments

Fabric specification should be tightened still further than proposals for heated buildings. Particularly where domestic in character, a reasonable step to minimise heating demand through improvements to the fabric would be to move to Package C of the original proposals for fabric purposes, moving to package D for 2016 (From Table 17 of the Impact Assessment)

Where non domestic buildings deemed to require provision of cooling, the poorer fabric specification suggested in current proposals would be more sensible, but renewable energy contribution requirement should be raised to compensate for emissions associated with increased heating due to worse fabric in winter months and for cooling where necessary through the year.

14. Do you foresee any particular issues for certain categories of building to meet the TPEC or TER?

Yes ☐

No ☒

Don't know ☐

Comments

15. Which approach should be utilized to incorporate the contribution of low carbon technologies into the setting of the Target Emission Rate (TER), for non domestic buildings?

Fixed carbon reduction (in kg.CO<sub>2</sub>/m<sup>2</sup>/year)

☐

Percentage of roof area of PV

☒

Other

☐

Don't know

☐

Please give reasons for your choice

In most circumstances, this should give an idea of available roof area

16. The proposals explain the Government's preference for a 20% aggregate improvement in CO<sub>2</sub> performance standards for new non-domestic buildings from October 2013. Which option do you prefer and why?

No change	<input type="checkbox"/>
Target A: 10% aggregate improvement (1% PV)	<input type="checkbox"/>
Target B: 11% aggregate improvement (No PV)	<input type="checkbox"/>
Target C: 20% aggregate improvement (5% PV)	<input checked="" type="checkbox"/>
Don't know	<input type="checkbox"/>

Please give reasons for your choice

If anything, the improvement level should be set more aggressively.

17. Do the proposed 2013 notional buildings as set out in the changes to the National Calculation Methodology seem like a reasonable basis for standards setting? Please provide comments on the method used to develop the notional buildings and particular elements of one or more of the notional buildings, if relevant.

Yes ☐ No ☐ Don't know ☐

Comments

There is a general acknowledgement that a notional package strongly influences designers and specifiers.

If the recipe specifications are set with the notional U-values for external elements at a good level, It sends a message to designers to think in terms of minimising heat losses and that they should consider the fabric.

There is particularly scope to improve the targets for buildings essentially domestic in character.

18. Do you think that a further recipe should be created for buildings under 250m<sup>2</sup> and aligned with the proposed domestic recipe? Are there particular reasons why smaller buildings find compliance with the non-domestic recipes difficult? Please justify your views.

Yes ☐ No ☐ Don't know ☒

Comments

If such buildings do find it particularly harder to show compliance, then possibly an additional recipe for compliance should be developed.

Increased fabric specification equivalent to domestic levels should form that recipe's basis.

Domestic building air tightness has got better and better since the wider scale increase in air tightness testing following the 2006 regulations change, so low air tightnesses are possible given good detailing and attention to detail during construction for similarly sized properties.

19. Although we recognise that some buildings may need to be serviced in a particular way for legitimate functional or environmental reasons, should Part L incentivise a lower carbon servicing strategy (as with the current Energy Performance Certificate methodology), by basing the notional building on mixed-mode ventilation?

Yes ☒ No ☐ Don't know ☐

Comments

Where non domestic buildings are 'constructed and serviced in a particular way for legitimate functional or environmental reasons', their renewable energy contribution requirement should be increased to compensate for their higher emissions associated with those fabric and servicing decisions.

Doing so would incentivise designers to consider natural ventilation options, or where this is not considered feasible, would ensure that increased renewables to compensate for those design choices are

20. Do you have any other comments on the proposed changes to Approved Document L2A or the non-domestic National Calculation Methodology? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

- Competency level for Energy Assessors to produce Design Stage Calculations should be set at 'Must be an accredited Non Domestic Building Energy Assessor' in line with requirement for producing an EPC.
- U-value calculations undertaken to support L2A / L2B, should be undertaken by Competent Persons, such as members of an accredited scheme (e.g. TIMSA backed BBA scheme), in order to improve levels of confidence in calculations.
- Need to ensure that transitional arrangements are better managed for the regulations implementation than was the case for the 2010 regulations change.

21. The Impact Assessment makes a number of assumptions on the costs of fabric/services/ renewables, new build rates, etc for new non-domestic buildings. Do you think these assumptions are fair and reasonable? Please justify your views.

Yes ☐ No ☐ Don't know ☒

Comments

22. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for new non-domestic buildings?

Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

Comments

## Cumulative impact of policies

23. Overall, do you think the assessment of the impact on development is broadly fair and reasonable? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

Comments

## National Planning Policy Review

24. What role should planning play in facilitating higher carbon standards? Should it focus on facilitating site wide energy opportunities that will be needed as we move towards zero or near zero carbon buildings?

Views

Concentrate on a high standard of on-site building specific energy efficiency and on-site renewables as far as possible (what is realistically achievable on site will vary from one site to another).

Set off-site requirements more onerously so as to encourage the pushing of on-site solutions as far as possible.

Remaining carbon emissions to be offset via 'allowable solutions', which should include a raft of measures, including upgrading fabric of existing buildings (possibly paying into a fund for local upgrade of existing dwellings and non domestic buildings)

25. What are the implications from future (and regular) changes to the Code for Sustainable Homes and BREEAM on the implementation of the policy?

Views

Focus on a strong message and target setting dictated by the proposed new Welsh Part L of the building regulations.

Code for Sustainable Homes and BREEAM targets could then still be set for exemplar developments, government buildings including schools and for social housing projects.

The Code and BREEAM will no doubt be revised and updated as the regulations change to try and stay relevant – possibly moving more towards the kind of format set in Scottish Building Standards Section 7 on Sustainability.

It may be worth considering producing Welsh specific guidance along these lines.

26. Are the costs of assessment and certification now disproportionate to the costs and benefits of achieving a minimum sustainable buildings standard level?

Yes ☐ No ☐ Don't know ☒

Comments

If targets are better set by improved building standards and there is no separate requirement for a Code or BREEAM assessment, costs of SAP and SBEM calculations should not be considerably different

27. What should be the role of local planning authorities in setting local standards above and beyond Building Regulations? How can we ensure there is a level playing field of standards across Wales?

Views

Care should be considered in setting additional local requirements above and beyond Building Regulations.

Setting a national standard for Wales for sustainability similar to Section 7 of Scottish Building Standards would at least ensure that developers had an understanding of potential requirements from one location to another.

This would allow specific higher requirements to be set for some areas / developments, whilst making it easier to determine how those standards would need to be applied.

28. What do you see as the positive/negative impacts of removing Part B of the policy expecting buildings to be certified against Code/BREEAM?

Views

Cost savings to developer.

The code and BREEAM represent a standard that developers are familiar with and now have strategies in place to show compliance. Unless replaced by an alternative nationally agreed standard, it could lead to different authorities having different requirements from one area to another, resulting in more uncertainty and higher costs as a result for design.

The Code and BREEAM do lead to better, more sustainable buildings in many respects.



29. Is there a better, alternative, way to rewards and secure sustainable buildings (above the regulatory minimum) other than using national planning policy? What opportunities are there for future changes to Building Regulations?

Views

Setting a national standard for Wales for sustainability similar to Section 7 of Scottish Building Standards would at least ensure that developers had an understanding of potential requirements from one location to another.

This would allow specific higher requirements to be set for some areas / developments, whilst making it easier to determine how those standards would need to be applied.

30. To what extent are duplication of standard and approval systems an issue? Would the removal of the PfSB policy assist in reducing duplication?

Views

A single national framework would minimise duplication.

31. What opportunities are there for higher standards to be delivered on strategic sites identified as part of the Local Development Plan?

Views

Setting a national standard for Wales for sustainability similar to Section 7 of Scottish Building Standards would at least ensure that developers had an understanding of potential requirements from one location to another.

(Platinum, Gold, Silver and Bronze) levels for various elements would allow for a bespoke requirement for a given area (Bronze being regulations compliance).

This would allow specific higher requirements to be set for some areas / developments, whilst making it easier to determine how those standards would need to be applied.

## Existing buildings

32. Do you agree with the proposal to raise performance standards for domestic replacement windows? Please explain your answer.

Yes ☒ No ☐ Don't know ☐

Comments

But this should be set to the same level as proposed for England 1.40W/m<sup>2</sup>K. These levels are (I am informed) fairly well achievable for double glazed windows with good thermal spacers.

Guidance should also recommend wherever possible that opportunity to improve thermal bridging at openings should also be taken (insulated cavity closers)

33. Do you agree with the proposal to raise performance standards for domestic extensions? Please explain your answer.

Yes ☒ No ☐ Don't know ☐

Comments

There should always be the option to show a before and after energy calculation to show no net increase in emissions.

There is a solid argument to state that any extension should not increase the carbon footprint of a dwelling and also the existing dwelling should be improved at the time of works to lower emissions for the whole enlarged house from the initial start point.

34. Do you agree with the proposal to raise performance standards for non-domestic extensions? Please explain your answer.

Yes ☒ No ☐ Don't know ☐

Comments

This will provide consistency across the domestic and non-domestic sectors.

35. Do you agree that the exemption for conservatories or porches should be removed where an individual room heat or air conditioning unit is installed? How effective would this change be in limiting energy use/emissions, or are there other ways by which energy performance might be improved where conservatories or porches are installed?

Yes ☒ No ☐ Don't know ☐

Comments

Conservatories that are below a certain size and thermally separated from the dwelling could be brought within the regulations better, acknowledging that these spaces are often considered by the occupiers as part of the dwelling, with separating doors often removed by occupants once works completed.

For retrofit conservatories, an existing dwelling + conservatory should achieve the same emissions as the existing dwelling did before the conservatory was added; Taking the enlarged dwelling's emissions into account as if the conservatory were part of the heated envelope of an enlarged dwelling – this is likely to necessitate the homeowner improving the existing dwelling.

For new build compliance where a conservatory is included, compliance should be based on whole house, including conservatory, with separation between house and conservatory removed for the purpose of calculations, so you in effect compensate for the conservatory fully with the performance of the rest of the house.

36. Do you agree with the proposal to require consequential improvements upon extensions or increases in habitable space in existing homes below 1000m<sup>2</sup>? Please explain your view.

Yes ☒ No ☐ Don't know ☐

Comments

We believe it necessary to help drive improvements to the large number of existing buildings, which overshadows the comparatively smaller number of new builds.

Only a very small number of existing dwellings exceed 1000m<sup>2</sup> in size, very few (if any) improvements will have been triggered by the existing rule under the current regulations.

37. The consultation explains that the regulatory requirement for consequential improvements upon domestic extensions or increases in habitable space would be limited to a list of measures comprising a minimum standard of loft insulation, hot water cylinder insulation and the installation of cavity wall insulation.

Do you agree with this list of measures?

☒

Should this list be different (please explain below)?

☒

Another approach (please explain below)

☒

Don't know

☐

Comments

Consequential improvements triggered by works should require all measures identified to be undertaken.

However the the requirement could also include the requirement for a green deal assessment to be undertaken and put into the hands of the house owner, so as to inform them of any higher cost measures that could also be undertaken to the existing dwelling (as well as identifying other cheaper measures).

Thus providing the owner with the necessary information and projected costs of those works, so that they can decide themselves whether to consider going beyond the minimum requirements.

More costly works can be financed via Green Deal / ECO and hopefully the GD assessment might prompt the homeowner to consider more significant improvements.

Other measures that could also be considered and if undertaken, would also fulfil the requirement:

- Solid wall insulation (Internal Wall insulation or External Wall Insulation)
- Party Wall Insulation (Existing Cavity Party / Separating Walls to be insulated to prevent additional heat losses arising from thermal bypass).
- Where Existing Dwellings and Non Dom premises are sited above unheated areas e.g. over car parks / car ports / exposed areas which are not insulated at present, a significant amount of carbon / fuel costs could be saved by insulating the soffit.
- Where technically, functionally and economically feasible, improvements to ground floors should also be considered as a potential measure for upgrading the dwelling where floors are uninsulated (specific measures will depend on floor type).
- Where glazing is being replaced, proposed additional measure of inserting Insulated cavity Closers i.e. existing cavities which have already been filled with insulation, if the windows and / or doors are replaced in the future, Insulated cavity closers should be placed around the window / door openings as they are replaced, reducing heat-loss from thermal bridging around openings.
- Where cold loft spaces are likely to be used for storage/maintenance, improvements made to insulation levels should consider that potential use and focus on non-compressible insulation types.

38. What effect do you think the requirements for consequential improvements may have on the demand for repair, maintenance and improvement activity? Please use evidence to explain your answer.

Increase demand

☐

Reduce demand

☐

No effect

☐

Don't know

☒

Comments

Minimal if any – Potentially could increase demand (improvements to the existing buildings being extended)

39. Do you agree with the proposal to introduce consequential improvements upon extensions or increases in habitable space in non-domestic buildings under 1000m<sup>2</sup>? Please explain your view.

Yes ☒ No ☐ Don't know ☐

Comments

This will provide consistency across the domestic and non-domestic sectors.

This should also stimulate business for small and medium sized enterprises within the commercial and industrial sectors through requirements to undertake improvements

40. The consultation proposes that for non-domestic buildings, any measure from list which is used to generate Green Deal assessments, the list in SBEM used to generate Energy Performance Certificate recommendations and the existing list of typical consequential improvement measures from Approved Document L2B should be eligible to be a consequential improvement. Do you agree?

Yes

☒

No

☐

Prefer a different list (please specify)

☐

Don't know

☐

## Comments

There should always be the option to show a before and after energy calculation to show no net increase in emissions.

41. Do you agree that there should not be major problems in extending the requirement for consequential improvements for the building control process? If you do foresee issues, what are they and how might these be addressed?

Yes ☐ No ☐ Don't know ☒

## Comments

If Building Control made a reasonable charge to cover additional work required beyond current workload, then this would offset any manpower issues involved.

Unless they charge an additional sum, presumably Building Control will not have the resources to physically check that proposed consequential improvements have actually been installed in every case.

Allowing some of that onus to be pushed onto Green Deal Assessors (and GD Providers) would presumably help alleviate this burden to a certain extent.

BCB will certainly require specific training and educating as to the provisions and will need to be engaged in the process of making it all work

42. Do you have any other comments on the proposed changes to Approved Document L1B? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

## Comments

Disappointingly, there is no tightening of standards proposed for conversions/alterations e.g. barn conversions. The target for existing elements renovated or altered could also be set aspirationally very high (new build/new extension level), with a caveat (as now) for providing that works are technically / functionally and economically achievable.

In particular, where a total refurbishment such as a barn conversion is proposed, there is significant room to consider tightening of requirements to a standard closer to those suggested for new build over the current L1B 2010 levels. For dwellings converted from unheated buildings, target could be set as for a new build using SAP to show a TER/DER compliance. But with the notional building's thermal bridging set at  $y=0.15$  for determining the target.

43. Do you have any other comments on the proposed changes to Approved Document L2B? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

- Competency level for Energy Assessors undertaking design flexibility calculations should be set at 'Must be an accredited Non Domestic Building Energy Assessor' in line with requirement for producing an EPC.
- U-value calculations undertaken to support L2A / L2B, should be undertaken by Competent Persons, such as members of an accredited scheme (e.g. TIMSA backed BBA scheme), in order to improve levels of confidence in calculations.
- Need to ensure that transitional arrangements are better managed for the regulations implementation than was the case for the 2010 regulations change.

44. Do you think that the Impact Assessment is a fair and reasonable assessment of the potential costs and benefits of raising the performance standards for replacement domestic windows and domestic/non-domestic extensions? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

Comments

45. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for consequential improvements in existing homes? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

Comments



46. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for consequential improvements in existing non-domestic buildings? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

Comments

## Compliance and Performance

47. For new dwellings, Welsh Government is proposing to develop a compliance checklist. Do you think such a checklist would be used sufficiently to warrant its development?

Yes ☐ No ☐ Don't know ☒

Comments

48. If such a checklist was developed, what should it cover?

Comments

No view

49. If the checklist was taken forward, who should be involved in its development?

Comments

No view

50. Would any other approach be likely to prove more effective instead (such as a PAS<sup>11</sup> type approach).

Yes ☐ No ☐ Don't know ☒

Comments

- 51a. Would it be preferable for buildings of a domestic nature to be able to achieve compliance through applying the recipe in AD L1A, in acknowledgement of the domestic nature of such buildings, rather than demonstrating compliance with AD L2A?

Yes ☒ No ☐ Don't know ☐

Comments

If suitably domestic in nature.

- 51b. What are the arguments for and against this approach?

Comments

Heating and Hot water requirements due to occupancy levels and periods may be somewhat different to actual domestic levels.

52. Additional views and suggestions for addressing compliance and performance issues in new non domestic buildings would be welcome.

Comments

Ductwork air leakage and ductwork insulation thermal performance requirements on heated/chilled/dual purpose ducts should be in the same sections of Approved Document L2 (where air leakage exists now) and or/Non-Domestic Building Services Compliance Guide.

<sup>11</sup> A PAS is a Publicly Available Specification, and the PAS would set out a quality assurance approach.

53. Is the newly formatted ADL1B easier to understand and use?

Yes ☒ No ☐ Don't know ☐

Comments

54. Are there any further amendments to the newly formatted ADL1B that you would recommend? If so, please provide details.

Yes ☐ No ☐ Don't know ☒

Comments

Although clearer language and format is a good thing, this should not be at the expense of muddying intentions of guidance.

55. How do the consultation proposals impact on the work of Local Authorities and Approved Inspectors? Please give positive and negative impacts.

Comments

Additional workload in understanding changes and ensuring compliance.

56. We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

Dwellings and non-domestic buildings built in accordance with the Approved Documents L1A/L2A are fairly commonly still being built in accordance with 'Accredited Construction Details' using the generic Psi values resulting from that document, which don't differentiate between construction types. These values are a carry over from 2002 / 2006 regulations work and are based on U-values for wall constructions relating to compliance with those regulations (i.e. worse U-values).

As constructions have been improved, the additional heat losses associated with thermal bridging have become much more important and we would question some of the ACD's values being used regularly by builders and assessors as regards their reliability for 2010 and 2013 constructions.

The ACD's need revising based on actual constructions to better reflect what is actually being built - so that details modelled by competent thermal assessors are on a level playing field with them.

Some junctions are not even considered in the ACD's.

If a thermal modeller assesses a junction based on a much improved construction with a lower U-value, the Psi value is often worse than the ACD's result (From BR IP 1/06 and SAP Appendix K). In reality for the same low U-value, those ACD comparison levels would be worse than they are..

## #60 - Council for Aluminium in Building

# 2012 consultation on changes to the Building Regulations in Wales

## Part L (Conservation of fuel and power)

### Consultation Response Form

Your name:  
Martin Ford

Organisation (if applicable):  
Council for Aluminium in Building

(xlv) **Are the views expressed on this consultation an official response from the organisation you represent or your own personal views?**

Organisational ☒ Personal Views ☐

(xlvi) **Are your views expressed on this consultation in connection with your membership or support of any group? If yes please state name of group:**

Yes ☒ No ☐

Name of group:

Council for Aluminium in Building Technical Committee

(xlvii) **Please tick the one box that best describes your organisation:**

<p><b>Builders/Developers:</b></p> <p>Builder / Main contractor: <input type="checkbox"/></p> <p>Builder/ Small builder: (extensions/repairs/maintenance, etc) <input type="checkbox"/></p> <p>Installer/ special sub-contractor <input type="checkbox"/></p> <p>Commercial developer <input type="checkbox"/></p> <p>House builder <input type="checkbox"/></p>	<p><b>Property Management:</b></p> <p>Housing association (registered social landlord) <input type="checkbox"/></p> <p>Residential landlord, private sector <input type="checkbox"/></p> <p>Commercial <input type="checkbox"/></p> <p>Public sector <input type="checkbox"/></p>
<p><b>Building occupier:</b></p> <p>Home owner <input type="checkbox"/></p> <p>Tenant (residential) <input type="checkbox"/></p> <p>Commercial Building <input type="checkbox"/></p>	<p><b>Building Control Bodies:</b></p> <p>Local authority building control <input type="checkbox"/></p> <p>Approved Inspector <input type="checkbox"/></p>
<p><b>Energy Sector</b> <input type="checkbox"/></p>	<p><b>Fire and Rescue Authority</b> <input type="checkbox"/></p>

<b>Designers/Engineers/Surveyors:</b>  Architect <input type="checkbox"/> Civil/Structural engineer <input type="checkbox"/> Building services engineer <input type="checkbox"/> Surveyor <input type="checkbox"/>	<b>Specific Interest:</b>  Competent person scheme operator <input type="checkbox"/> National representative or trade body <input checked="" type="checkbox"/> Professional body or institution <input type="checkbox"/> Research/ academic organisation <input type="checkbox"/>
<b>Manufacturer/ Supply Chain</b> <input type="checkbox"/>	<b>Other</b> ( <i>please specify</i> ) <input type="text"/>

(xlviii) Please tick the **one** box which best describes the size of your or your organisation's business?

- Micro – typically 0 to 9 full-time or equivalent employees (incl. sole traders) ☐
- Small – typically 10 to 49 full-time or equivalent employees ☐
- Medium – typically 50 to 249 full-time or equivalent employees ☐
- Large – typically 250+ full-time or equivalent employees ☐
- None of the above (please specify) Members of Council for Aluminium in Building range from micro-enterprises to multi-national companies. ☒

(vi) Are you or your organisation a member of a competent person scheme?

Yes ☐ No ☒

Name of scheme:

**(vii) Would you be happy for us to contact you again in relation to this consultation?**Yes ☒ No ☐

WG will process any personal information that you provide us with in accordance with the data protection principles in the Data Protection Act 1998. In particular, we shall protect all responses containing personal information by means of all appropriate technical security measures and ensure that they are only accessible to those with an operational need to see them. You should, however, be aware that as a public body, the Welsh Government is subject to the requirements of the Freedom of Information Act 2000, and may receive requests for all responses to this consultation. If such requests are received we shall take all steps to anonymise responses that we disclose, by stripping them of the specifically personal data – name and e-mail address – you supply in responding to this consultation. If, however, you consider that any of the responses that you provide to this survey would be likely to identify you irrespective of the removal of your overt personal data, then we should be grateful if you would indicate that, and the likely reasons, in your response, for example in the relevant comments box.

**Questions:****New homes**

1. Do you agree with the Government's preference for a CO<sub>2</sub> saving of 40% reduction in carbon dioxide emissions compared to Part L 2010.

No change to 2010	<input type="checkbox"/>
40% CO <sub>2</sub> saving	<input checked="" type="checkbox"/>
25% CO <sub>2</sub> saving	<input type="checkbox"/>
Something else (please explain below)	<input type="checkbox"/>
Don't know	<input type="checkbox"/>

Comments

40% preferred, so as to avoid a more dramatic change when zero carbon standards are introduced in future revisions.

2. Do you agree with the proposal for an 'aggregate' approach to CO<sub>2</sub> target setting for new homes in 2015? The CO<sub>2</sub> target for any individual dwelling varies depending on the ease with which the building can achieve the target, with the overall required CO<sub>2</sub> saving achieved when aggregated over the build mix.



Yes ☒ No ☐ Don't know ☐

Comments

3. Do you agree with the proposal for a compliant option based on a consistent recipe of elemental specifications for fabric, services plus an additional CO<sub>2</sub> saving equivalent to an amount of photovoltaic (PV). Please justify your choice.

Yes ☒ No ☐ Don't know ☐

Comments

We believe in the “fabric first” approach, because this minimises the demand for energy from any source (renewable or non-renewable). The performance of the building fabric is permanent and consistent provided it is regularly maintained.

4. The main difference between the recipes is the required system efficiency for each fuel, which is appropriate for the heating system type. By adopting this approach to different fuel types, there is no need for a separate fuel factor. Do you agree with the proposed approach?

Yes ☒ No ☐ Don't know ☐

Comments

5. For the CO<sub>2</sub> savings proposed, are the recipe specifications a sensible way of achieving them? Please justify your choice.

Yes ☒ No ☐ Don't know ☐

Comments

6. In approaching the selection of the amount of PV to be installed on dwellings, do you prefer?

Fixed percentage of building foundation area

☐

Proportion of gross internal floor area with a practical cap

☐

Don't know

☒

Comments

7. Do you agree that the limits on design flexibility 'backstop' values for fabric elements in new homes should be changed from the current reasonable provision in the technical guidance to become mandatory?

Yes

☐

No

☒

Don't know

☐

Comments

The current system, in which the backstop values are regarded as "reasonable provision", works satisfactorily.

8. Do you agree with the changes to the 'backstop' values proposed? Please explain your decision.

Yes

☐

No

☒

Don't know

☐

Comments

We have concerns in reducing the back stop values as this may have an adverse affect on the building. In our experience we would not want this to go below U-value 1.8 W/m2.K

9. Do you have any other comments on the proposed changes to Approved Document L1A or the domestic National Calculation Methodology? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

The calculation methodology should take into consideration solar gain and light transmittance.

10. The Impact Assessment makes a number of assumptions on fabric/services/ renewables costs, new build rates, phase-in rates, learning rates, etc for new homes. Do you think these assumptions are fair and reasonable? Please justify your views.

Yes ☐ No ☐ Don't know ☒

Comments

We have serious concerns about the validity of the Impact Assessment, the overly optimistic predictions for the improvement in the UK economy up to 2015, the predicted learning rate of air tightness and thermal bridging of windows and the predicted decline in material costs.

11. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for new homes? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☒ Don't know ☐

Comments

See answer as above Q10

## New non-domestic buildings

12. Do you agree with the proposal for 2013 for non-domestic buildings to explicitly regulate energy efficiency separately from low carbon technologies through the assessment of primary energy consumption (PEC)? Does PEC seem like a reasonable basis for standard setting?

Yes ☐ No ☐ Don't know ☒

Comments

13. Which package of fabric and services should be selected: 7% or 10%? Please give reasons for your choice.

7% ☐

10% ☒

Don't know ☐

Comments

We prefer the 10% option which achieves 11% CO<sub>2</sub> reduction without renewable. It is important to maximise the savings through the building fabric, and to minimise the reliance on energy supply (whether renewable or not), so that the building remains energy efficient, comfortable and habitable in the event of the energy supply system under-performing due to failure, disruption or lack of maintenance.

14. Do you foresee any particular issues for certain categories of building to meet the TPEC or TER?

Yes ☐ No ☐ Don't know ☒

Comments

15. Which approach should be utilized to incorporate the contribution of low carbon technologies into the setting of the Target Emission Rate (TER), for non domestic buildings?

Fixed carbon reduction (in kg.CO<sub>2</sub>/m<sup>2</sup>/year) ☐

Percentage of roof area of PV ☐

Other ☐

Don't know ☒

Please give reasons for your choice

16. The proposals explain the Government's preference for a 20% aggregate improvement in CO<sub>2</sub> performance standards for new non-domestic buildings from October 2013. Which option do you prefer and why?

No change ☐

Target A: 10% aggregate improvement (1% PV) ☐

Target B: 11% aggregate improvement (No PV) ☒

Target C: 20% aggregate improvement (5% PV)

☐

Don't know

☐

Please give reasons for your choice

Please see our answer to Q13.

17. Do the proposed 2013 notional buildings as set out in the changes to the National Calculation Methodology seem like a reasonable basis for standards setting? Please provide comments on the method used to develop the notional buildings and particular elements of one or more of the notional buildings, if relevant.

Yes ☒ No ☐ Don't know ☐

Comments

18. Do you think that a further recipe should be created for buildings under 250m<sup>2</sup> and aligned with the proposed domestic recipe? Are there particular reasons why smaller buildings find compliance with the non-domestic recipes difficult? Please justify your views.

Yes ☐ No ☒ Don't know ☐

Comments

We are not aware of any similarity between non domestic buildings and dwellings

19. Although we recognise that some buildings may need to be serviced in a particular way for legitimate functional or environmental reasons, should Part L incentivise a lower carbon servicing strategy (as with the current Energy Performance Certificate methodology), by basing the notional building on mixed-mode ventilation?

Yes ☐ No ☐ Don't know ☒

Comments

Not qualified to comment

20. Do you have any other comments on the proposed changes to Approved Document L2A or the non-domestic National Calculation Methodology? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

No comments

21. The Impact Assessment makes a number of assumptions on the costs of fabric/services/renewables, new build rates, etc for new non-domestic buildings. Do you think these assumptions are fair and reasonable? Please justify your views.

Yes ☐ No ☒ Don't know ☐

Comments

See our response to Q10

22. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for new non-domestic buildings?

Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☒ Don't know ☐

Comments

See our response to Q10

## Cumulative impact of policies

23. Overall, do you think the assessment of the impact on development is broadly fair and reasonable? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☒ Don't know ☐

Comments

See our response to Q10

## National Planning Policy Review

24. What role should planning play in facilitating higher carbon standards? Should it focus on facilitating site wide energy opportunities that will be needed as we move towards zero or near zero carbon buildings?

Views

Planning should play no role. Building Regulations alone should determine the appropriate standards for energy efficiency in buildings. Please keep administrative procedures and hurdles to a minimum.

25. What are the implications from future (and regular) changes to the Code for Sustainable Homes and BREEAM on the implementation of the policy?

Views

Again, Building Regulations should be the mechanism, and should be sufficient.

26. Are the costs of assessment and certification now disproportionate to the costs and benefits of achieving a minimum sustainable buildings standard level?

Yes ☐ No ☐ Don't know ☒

Comments

27. What should be the role of local planning authorities in setting local standards above and beyond Building Regulations? How can we ensure there is a level playing field of standards across Wales?

Views

As in our answer to Q24, energy efficiency in buildings should be a matter for Building Regulations alone.

28. What do you see as the positive/negative impacts of removing Part B of the policy expecting buildings to be certified against Code/BREEAM?

Views

29. Is there a better, alternative, way to rewards and secure sustainable buildings (above the regulatory minimum) other than using national planning policy? What opportunities are there for future changes to Building Regulations?

Views

30. To what extent are duplication of standard and approval systems an issue? Would the removal of the PfSB policy assist in reducing duplication?

Views

31. What opportunities are there for higher standards to be delivered on strategic sites identified as part of the Local Development Plan?

Views

## Existing buildings

32. Do you agree with the proposal to raise performance standards for domestic replacement windows? Please explain your answer.

Yes ☐ No ☐ Don't know ☒

Comments

There is no proposal in this consultation to raise the performance standards from the current England and Wales requirements.



33. Do you agree with the proposal to raise performance standards for domestic extensions? Please explain your answer.

Yes ☒ No ☐ Don't know ☐

Comments

Ideally the standards required for extensions should be the same as for new build, but we do have concerns that this may have a negative impact on the market

34. Do you agree with the proposal to raise performance standards for non-domestic extensions? Please explain your answer.

Yes ☒ No ☐ Don't know ☐

Comments

See our response to Q33

35. Do you agree that the exemption for conservatories or porches should be removed where an individual room heat or air conditioning unit is installed? How effective would this change be in limiting energy use/emissions, or are there other ways by which energy performance might be improved where conservatories or porches are installed?

Yes ☒ No ☐ Don't know ☐

Comments

36. But we do have concerns that this will have a negative effect on the market upon extensions or increases in habitable space in existing homes below 100m<sup>2</sup>. Please explain your view.

Yes ☐ No ☒ Don't know ☐

Comments

We believe this will have a negative effect on the current declining market

37. The consultation explains that the regulatory requirement for consequential improvements upon domestic extensions or increases in habitable space would be limited to a list of measures comprising a minimum standard of loft insulation, hot water cylinder insulation and the installation of cavity wall insulation.

Do you agree with this list of measures?

☐

Should this list be different (please explain below)?

☒

Another approach (please explain below)

☐

Don't know

☐

Comments

For non-domestic buildings, Part L already offers a range of consequential improvement options; the same principle should apply to dwellings, and replacement windows should be included in the list of options.

38. What effect do you think the requirements for consequential improvements may have on the demand for repair, maintenance and improvement activity? Please use evidence to explain your answer.

Increase demand

☐

Reduce demand

☐

No effect

☐

Don't know

☒

Comments

We believe it will reduce demand in the current economic climate.

39. Do you agree with the proposal to introduce consequential improvements upon extensions or increases in habitable space in non-domestic buildings under 1000m<sup>2</sup>? Please explain your view.

Yes ☐ No ☒ Don't know ☐

Comments

40. The consultation proposes that for non-domestic buildings, any measure from list which is used to generate Green Deal assessments, the list in SBEM used to generate Energy Performance Certificate recommendations and the existing list of typical consequential improvement measures from Approved Document L2B should be eligible to be a consequential improvement. Do you agree?

Yes

☒

No

☐

Prefer a different list (please specify)

☐

Don't know

☐

Comments

41. Do you agree that there should not be major problems in extending the requirement for consequential improvements for the building control process? If you do foresee issues, what are they and how might these be addressed?

Yes ☐No ☒Don't know ☐

Comments

See previous comments about consequential improvements

42. Do you have any other comments on the proposed changes to Approved Document L1B? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

43.  Approved Document L2B? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

We have concerns about the proposed reduction in U-value of windows for buildings that are domestic in character and feel that this should be left at 1.8 W/m<sup>2</sup>.K. We also notice that there are no requirements for curtain walling in the consultation document at the table refers to paragraph 4.28 and this has not been included in the document, therefore we propose that this should remain as;

The overall U-value of curtain walling should be no greater than the better of 1.8 W/m<sup>2</sup>.k or a limiting U-value  $U_{limit}$  given by:

$$U_{limit} = 0.8 + \{(1.2 + (FOL \times 0.5)) \times GF\}$$

Where:

FOL is the fraction of opening lights

GF is the glazed fraction

44. Do you think that the Impact Assessment is a fair and reasonable assessment of the potential costs and benefits of raising the performance standards for replacement domestic windows and domestic/non-domestic extensions? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☒ Don't know ☐

Comments

Please see our response earlier as windows and doors have not been costed separately

45. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for consequential improvements in existing homes? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☒ Don't know ☐

Comments

See our response to Q44

46. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for consequential improvements in existing non-domestic buildings? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☒ Don't know ☐

Comments

Comp See our response to Q44

47. For new dwellings, Welsh Government is proposing to develop a compliance checklist. Do you think such a checklist would be used sufficiently to warrant its development?

Yes ☒ No ☐ Don't know ☐

Comments

48. If such a checklist was developed, what should it cover?

Comments

It should cover all aspects of compliance

49. If the checklist was taken forward, who should be involved in its development?

Comments

Those interested enough to respond to the consultation process

50. Would any other approach be likely to prove more effective instead (such as a PAS<sup>12</sup> type approach).

Yes ☐ No ☒ Don't know ☐

Comments

51a. Would it be preferable for buildings of a domestic nature to be able to achieve compliance through applying the recipe in AD L1A, in acknowledgement of the domestic nature of such buildings, rather than demonstrating compliance with AD L2A?

Yes ☐ No ☒ Don't know ☐

Comments

It is important that domestic and non domestic building are kept separate as they, in the main, have different requirements

51b. What are the arguments for and against this approach?

Comments

See our response to Q51a

<sup>12</sup> A PAS is a Publicly Available Specification, and the PAS would set out a quality assurance approach.

52. Additional views and suggestions for addressing compliance and performance issues in new non domestic buildings would be welcome.

Comments

53. Is the newly formatted ADL1B easier to understand and use?

Yes ☒ No ☐ Don't know ☐

Comments

54. Are there any further amendments to the newly formatted ADL1B that you would recommend? If so, please provide details.

Yes ☒ No ☐ Don't know ☐

Comments

There are more and more requirements to use curtain walling in domestic replacements, to that we propose the addition of curtain walling to the table of compliance using the formula below as specified in AD L2B

The overall U-value of curtain walling should be no greater than the better of 1.8 W/m<sup>2</sup>.k or a limiting U-value  $U_{limit}$  given by:

$$U_{limit} = 0.8 + \{(1.2 + (FOL \times 0.5)) \times GF\}$$

Where:

FOL is the fraction of opening lights

GF is the glazed fraction

55. How do the consultation proposals impact on the work of Local Authorities and Approved Inspectors? Please give positive and negative impacts.

Comments

This will only have an impact where there are additional requirements to the current building regulations

56. We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

--

**#61 - British Board of Agrément**

## 2012 consultation on changes to the Building Regulations in Wales

### Part L (Conservation of fuel and power)

#### Consultation Response Form

Your name: Jon Denyer

Organisation (if applicable): British Board of Agrément

**(xlix) Are the views expressed on this consultation an official response from the organisation you represent or your own personal views?**

Organisational ☒ Personal Views ☐

**(li) Are your views expressed on this consultation in connection with your membership or support of any group? If yes please state name of group:**

Yes ☐ No ☒

Name of group:

**(li) Please tick the one box that best describes your organisation:**



<p><b>Builders/Developers:</b></p> <p>Builder / Main contractor: <input type="checkbox"/></p> <p>Builder/ Small builder: (extensions/repairs/maintenance, etc) <input type="checkbox"/></p> <p>Installer/ special sub-contractor <input type="checkbox"/></p> <p>Commercial developer <input type="checkbox"/></p> <p>House builder <input type="checkbox"/></p>	<p><b>Property Management:</b></p> <p>Housing association (registered social landlord) <input type="checkbox"/></p> <p>Residential landlord, private sector <input type="checkbox"/></p> <p>Commercial <input type="checkbox"/></p> <p>Public sector <input type="checkbox"/></p>
<p><b>Building occupier:</b></p> <p>Home owner <input type="checkbox"/></p> <p>Tenant (residential) <input type="checkbox"/></p> <p>Commercial Building <input type="checkbox"/></p>	<p><b>Building Control Bodies:</b></p> <p>Local authority building control <input type="checkbox"/></p> <p>Approved Inspector <input type="checkbox"/></p>
<p><b>Energy Sector</b> <input type="checkbox"/></p>	<p><b>Fire and Rescue Authority</b> <input type="checkbox"/></p>

<b>Designers/Engineers/Surveyors:</b>  Architect <input type="checkbox"/> Civil/Structural engineer <input type="checkbox"/> Building services engineer <input type="checkbox"/> Surveyor <input type="checkbox"/>	<b>Specific Interest:</b>  Competent person scheme operator <input checked="" type="checkbox"/> National representative or trade body <input type="checkbox"/> Professional body or institution <input checked="" type="checkbox"/> Research/ academic organisation <input type="checkbox"/>
<b>Manufacturer/ Supply Chain</b> <input type="checkbox"/>	<b>Other</b> ( <i>please specify</i> ) <div style="border: 1px solid black; padding: 10px; margin-top: 10px;">         Certification, testing, inspection and competent person schemes for the construction industry.       </div>

(iii) Please tick the **one** box which best describes the size of your or your organisation's business?

Micro – typically 0 to 9 full-time or equivalent employees (incl. sole traders) ☐

Small – typically 10 to 49 full-time or equivalent employees ☐

Medium – typically 50 to 249 full-time or equivalent employees ☒

Large – typically 250+ full-time or equivalent employees ☐

None of the above (please specify) ☐

(vi) Are you or your organisation a member of a competent person scheme?

Yes ☐ No ☒

Name of scheme:

(vii) Would you be happy for us to contact you again in relation to this consultation?

Yes ☒ No ☐

WG will process any personal information that you provide us with in accordance with the data protection principles in the Data Protection Act 1998. In particular, we shall protect all responses containing personal information by means of all appropriate technical security measures and ensure that they are only accessible to those with an operational need to see them. You should, however, be aware that as a public body, the Welsh Government is subject to the requirements of the Freedom of Information Act 2000, and may receive requests for all responses to this consultation. If such requests are received we shall take all steps to anonymise responses that we disclose, by stripping them of the specifically personal data – name and e-mail address – you supply in responding to this consultation. If, however, you consider that any of the responses that you provide to this survey would be likely to identify you irrespective of the removal of your overt personal data, then we should be grateful if you would indicate that, and the likely reasons, in your response, for example in the relevant comments box.

## Questions:

### New homes

1. Do you agree with the Government's preference for a CO<sub>2</sub> saving of 40% reduction in carbon dioxide emissions compared to Part L 2010.

No change to 2010 ☐

40% CO<sub>2</sub> saving ☐

25% CO<sub>2</sub> saving ☐

Something else (please explain below) ☐

Don't know ☐

Comments

No comment

2. Do you agree with the proposal for an 'aggregate' approach to CO<sub>2</sub> target setting for new homes in 2015? The CO<sub>2</sub> target for any individual dwelling varies depending on the ease with which the building can achieve the target, with the overall required CO<sub>2</sub> saving achieved when aggregated over the build mix.

Yes ☐ No ☐ Don't know ☐

## Comments

No comment

3. Do you agree with the proposal for a compliant option based on a consistent recipe of elemental specifications for fabric, services plus an additional CO<sub>2</sub> saving equivalent to an amount of photovoltaic (PV). Please justify your choice.

Yes ☒ No ☐ Don't know ☐

## Comments

A 'simplified' approach would be beneficial

4. The main difference between the recipes is the required system efficiency for each fuel, which is appropriate for the heating system type. By adopting this approach to different fuel types, there is no need for a separate fuel factor. Do you agree with the proposed approach?

Yes ☒ No ☐ Don't know ☐

## Comments

This seems to broadly follow the Scottish simplified approach.

5. For the CO<sub>2</sub> savings proposed, are the recipe specifications a sensible way of achieving them? Please justify your choice.

Yes ☒ No ☐ Don't know ☐

## Comments

6. In approaching the selection of the amount of PV to be installed on dwellings, do you prefer?

Fixed percentage of building foundation area ☐

Proportion of gross internal floor area with a practical cap ☐

Don't know ☐

Comments

No comment

7. Do you agree that the limits on design flexibility 'backstop' values for fabric elements in new homes should be changed from the current reasonable provision in the technical guidance to become mandatory?

Yes ☒ No ☐ Don't know ☐

Comments

8. Do you agree with the changes to the 'backstop' values proposed? Please explain your decision.

Yes ☐ No ☐ Don't know ☐

Comments

No comment

9. Do you have any other comments on the proposed changes to Approved Document L1A or the domestic National Calculation Methodology? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

See reply to Q56.

10. The Impact Assessment makes a number of assumptions on fabric/services/ renewables costs, new build rates, phase-in rates, learning rates, etc for new homes. Do you think these assumptions are fair and reasonable? Please justify your views.

Yes ☐ No ☐ Don't know ☐

## Comments

No comment

11. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for new homes? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☐

## Comments

No comment

## New non-domestic buildings

12. Do you agree with the proposal for 2013 for non-domestic buildings to explicitly regulate energy efficiency separately from low carbon technologies through the assessment of primary energy consumption (PEC)? Does PEC seem like a reasonable basis for standard setting?

Yes ☐ No ☐ Don't know ☐

## Comments

No comment

13. Which package of fabric and services should be selected: 7% or 10%? Please give reasons for your choice.

7% ☐

10% ☐

Don't know ☐

## Comments

No comments

14. Do you foresee any particular issues for certain categories of building to meet the TPEC or TER?

Yes ☐ No ☐ Don't know ☐

Comments

No comments

15. Which approach should be utilized to incorporate the contribution of low carbon technologies into the setting of the Target Emission Rate (TER), for non domestic buildings?

Fixed carbon reduction (in kg.CO<sub>2</sub>/m<sup>2</sup>/year) ☐

Percentage of roof area of PV ☐

Other ☐

Don't know ☐

Please give reasons for your choice

No comment

16. The proposals explain the Government's preference for a 20% aggregate improvement in CO<sub>2</sub> performance standards for new non-domestic buildings from October 2013. Which option do you prefer and why?

No change ☐

Target A: 10% aggregate improvement (1% PV) ☐

Target B: 11% aggregate improvement (No PV) ☐

Target C: 20% aggregate improvement (5% PV) ☐

Don't know ☐

Please give reasons for your choice

No comment

17. Do the proposed 2013 notional buildings as set out in the changes to the National Calculation Methodology seem like a reasonable basis for standards setting? Please provide comments on the method used to develop the notional buildings and particular elements of one or more of the notional buildings, if relevant.

Yes ☐ No ☐ Don't know ☐

Comments

No comment

18. Do you think that a further recipe should be created for buildings under 250m<sup>2</sup> and aligned with the proposed domestic recipe? Are there particular reasons why smaller buildings find compliance with the non-domestic recipes difficult? Please justify your views.

Yes ☐ No ☐ Don't know ☐

Comments

Not sure, but a simplified approach does sound useful in principle.  
Do you know how often it is adopted in Scotland?

19. Although we recognise that some buildings may need to be serviced in a particular way for legitimate functional or environmental reasons, should Part L incentivise a lower carbon servicing strategy (as with the current Energy Performance Certificate methodology), by basing the notional building on mixed-mode ventilation?

Yes ☐ No ☐ Don't know ☐

Comments

No comment

20. Do you have any other comments on the proposed changes to Approved Document L2A or the non-domestic National Calculation Methodology? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

No comment



21. The Impact Assessment makes a number of assumptions on the costs of fabric/services/renewables, new build rates, etc for new non-domestic buildings. Do you think these assumptions are fair and reasonable? Please justify your views.

Yes ☐ No ☐ Don't know ☐

Comments

No comment

22. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for new non-domestic buildings?

Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☐

Comments

No comment

## Cumulative impact of policies

23. Overall, do you think the assessment of the impact on development is broadly fair and reasonable? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☐

Comments

No comment

## National Planning Policy Review

24. What role should planning play in facilitating higher carbon standards? Should it focus on facilitating site wide energy opportunities that will be needed as we move towards zero or near zero carbon buildings?

Views

No comment

25. What are the implications from future (and regular) changes to the Code for Sustainable Homes and BREEAM on the implementation of the policy?

Views

No comment

26. Are the costs of assessment and certification now disproportionate to the costs and benefits of achieving a minimum sustainable buildings standard level?

Yes ☐ No ☐ Don't know ☐

Comments

No comment

27. What should be the role of local planning authorities in setting local standards above and beyond Building Regulations? How can we ensure there is a level playing field of standards across Wales?

Views

No comment

28. What do you see as the positive/negative impacts of removing Part B of the policy expecting buildings to be certified against Code/BREEAM?

Views

No comment

29. Is there a better, alternative, way to rewards and secure sustainable buildings (above the regulatory minimum) other than using national planning policy? What opportunities are there for future changes to Building Regulations?

### Views

Confidence factors?

30. To what extent are duplication of standard and approval systems an issue? Would the removal of the PfSB policy assist in reducing duplication?

### Views

No comment

31. What opportunities are there for higher standards to be delivered on strategic sites identified as part of the Local Development Plan?

### Views

No comment

## Existing buildings

32. Do you agree with the proposal to raise performance standards for domestic replacement windows? Please explain your answer.

Yes ☒ No ☐ Don't know ☐

Comments

33. Do you agree with the proposal to raise performance standards for domestic extensions? Please explain your answer.

Yes ☒ No ☐ Don't know ☐

Comments

34. Do you agree with the proposal to raise performance standards for non-domestic extensions? Please explain your answer.

Yes ☒ No ☐ Don't know ☐

Comments

35. Do you agree that the exemption for conservatories or porches should be removed where an individual room heat or air conditioning unit is installed? How effective would this change be in limiting energy use/emissions, or are there other ways by which energy performance might be improved where conservatories or porches are installed?

Yes ☐ No ☐ Don't know ☐

Comments

No comment

36. Do you agree with the proposal to require consequential improvements upon extensions or increases in habitable space in existing homes below 1000m<sup>2</sup>? Please explain your view.

Yes ☐ No ☐ Don't know ☐

Comments

No comment

37. The consultation explains that the regulatory requirement for consequential improvements upon domestic extensions or increases in habitable space would be limited to a list of measures comprising a minimum standard of loft insulation, hot water cylinder insulation and the installation of cavity wall insulation.

Do you agree with this list of measures? ☐

Should this list be different (please explain below)? ☐

Another approach (please explain below) ☐

Don't know ☐

Comments

No comment

38. What effect do you think the requirements for consequential improvements may have on the demand for repair, maintenance and improvement activity? Please use evidence to explain your answer.

Increase demand ☐

Reduce demand ☐

No effect ☐

Don't know ☐

Comments

No comment

39. Do you agree with the proposal to introduce consequential improvements upon extensions or increases in habitable space in non-domestic buildings under 1000m<sup>2</sup>? Please explain your view.

Yes ☐ No ☐ Don't know ☐

Comments

No comment

40. The consultation proposes that for non-domestic buildings, any measure from list which is used to generate Green Deal assessments, the list in SBEM used to generate Energy Performance Certificate recommendations and the existing list of typical consequential improvement measures from Approved Document L2B should be eligible to be a consequential improvement. Do you agree?

Yes

☐

No

☐

Prefer a different list (please specify)

☐

Don't know

☐

Comments

No comment

41. Do you agree that there should not be major problems in extending the requirement for consequential improvements for the building control process? If you do foresee issues, what are they and how might these be addressed?

Yes

☐

No

☐

Don't know

☐

Comments

No comment

42. Do you have any other comments on the proposed changes to Approved Document L1B? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

No comment

43. Do you have any other comments on the proposed changes to Approved Document L2B? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

No comment

44. Do you think that the Impact Assessment is a fair and reasonable assessment of the potential costs and benefits of raising the performance standards for replacement domestic windows and domestic/non-domestic extensions? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☐

Comments

No comment

45. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for consequential improvements in existing homes? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☐

Comments

No comment

46. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for consequential improvements in existing non-domestic buildings? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☐

Comments

No comment

## Compliance and Performance

47. For new dwellings, Welsh Government is proposing to develop a compliance checklist. Do you think such a checklist would be used sufficiently to warrant its development?

Yes ☐ No ☐ Don't know ☐

## Comments

It would help, but by itself it would not be enough.

48. If such a checklist was developed, what should it cover?

## Comments

No comment

49. If the checklist was taken forward, who should be involved in its development?

## Comments

No comment

50. Would any other approach be likely to prove more effective instead (such as a PAS<sup>13</sup> type approach).

Yes ☐ No ☐ Don't know ☐

## Comments

No comment

51a. Would it be preferable for buildings of a domestic nature to be able to achieve compliance through applying the recipe in AD L1A, in acknowledgement of the domestic nature of such buildings, rather than demonstrating compliance with AD L2A?

Yes ☐ No ☐ Don't know ☐

## Comments

Probably.

<sup>13</sup> A PAS is a Publicly Available Specification, and the PAS would set out a quality assurance approach.



51b. What are the arguments for and against this approach?

Comments

No comments

52. Additional views and suggestions for addressing compliance and performance issues in new non domestic buildings would be welcome.

Comments

53. Is the newly formatted ADL1B easier to understand and use?

Yes ☐ No ☐ Don't know ☐

Comments

No comment

54. Are there any further amendments to the newly formatted ADL1B that you would recommend? If so, please provide details.

Yes ☐ No ☐ Don't know ☐

Comments

No comment

55. How do the consultation proposals impact on the work of Local Authorities and Approved Inspectors? Please give positive and negative impacts.

Comments

No comment

56. We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

The BBA and the Project Partners comprising of BRUFMA, the NHBC foundation, MIMA, John Cotton, Web Dynamics, Carol Houghton Associates and Excel Industries would like to contribute to the Part L consultation with test results on typical tiled/slatted domestic roofs incorporating insulation at rafter level. All constructions were tested at a 45 degree angle using the Guarded Hot Box in the BBA Test facilities. The samples were constructed using three different types of insulation materials and the power required to maintain a 20 degree temperature difference across the sample was recorded. Measurements were taken for air speeds up to 7.5 m/s, which would relate to the average annual wind speed recorded in UK coastal areas and parts of Wales.

Preliminary results indicate that the thermal performance of all three constructions was significantly affected by the increase in air speed. We have provisionally translated the results to a roof U value and estimated the likely impact on the DER. As an example for a semi-detached or end terraced house with a roof U value of 0.16 W/m<sup>2</sup>K, if this U value increases by 50 % to 0.24 for an average UK wind speed (around 4.5 m/s), the DER is increased by 1 %.

We believe that these results have significance for the UK's commitment to reducing carbon emissions and for the perceived 'performance gap', and are timely in view of the current consultation. Further research on this topic would be beneficial with a view to determining real-life performance for all plain elements, exploring the possibility of introducing a suitable confidence factor in calculation standards, in identifying robust construction methods and understanding the difference between design and as-built performance. Any such further research would require using test methods where the methodology is open and transparent and results and analysis are subject to peer review". ?

Other general points include the following:

- Chapter 6, section 6.2, paragraph 138 discusses the need for improved guidance. This guidance should focus on illustrating compliant construction types and details
- Paragraph 157 refers to Competent Person schemes as a way to improve process, perhaps the BBA/TIMSA U value scheme could be seen as one of these schemes
- Section 6.6 refers to the intentions of the Welsh government to engage in further research and development and also its interest in measurement and testing process to understand the performance gap. There could be some interest here for the aforementioned warm roofs project related activities

## #62 - Mineral Products Association

Dear Sir/Madam,

Thank you for the opportunity to respond to the Welsh Part L consultation, for which I have provided a brief response at the end of this email.

The Mineral Products Association is the trade association for the aggregates, asphalt, cement, concrete, dimension stone, lime, mortar and silica sand industries. [www.mineralproducts.org](http://www.mineralproducts.org)

Yours faithfully

Tom De Saulles

Senior Manager, Building Sustainability

MPA - The Concrete Centre

# 2012 consultation on changes to the Building Regulations in Wales

## Part L (Conservation of fuel and power)

### Consultation

### Response Form

Your name: T De Saulles

Organisation (if applicable): Mineral Products Association (MPA)

(i) Are the views expressed on this consultation an official response from the organisation you represent or your own personal views?

✓ Organisational

(ii) Are your views expressed on this consultation in connection with your membership or support of any group? If yes please state name of group:

✓ Yes

Name of group:

**(iii) Please tick the one box that best describes your organisation:**

**Specific Interest:**

National representative or trade  
body



**(iv) Please tick the *one* box which best describes the size of your or your organisation's business?**

Small – typically 10 to 49 full-time or equivalent employees

**(vi) Are you or your organisation a member of a competent person scheme?**



No

Name of scheme:

**(vii) Would you be happy for us to contact you again in relation to this consultation?**



Yes

## **General response from the MPA to the 2012 consultation on changes to Part L of the Building Regulations in Wales**

We have outlined our views below on what we consider to be the key issues covered by the consultation. We apologise for deviating from the template provided and hope this does not cause any problems.

Overall, we believe that the Welsh Part L requirements should continue to align with those of England, thereby avoiding the risk of confusion in what is an increasingly complex area of the Building Regulations. This will also avert the need for house builders and developers from having to produce new specifications and designs specifically for the Welsh market, which would in turn increase costs at a time when we need to minimise barriers to house building.

Notwithstanding the comment above, there are two proposals we believe have merit:

- We support the withdrawal of the sustainable building planning policy national minimum standard for housing, and an increased emphasis on master planning for strategic sites through the Local Development Plan. If this were to proceed, provision should be retained for crediting /encouraging the use of responsibly sourced materials as there has been a great deal of work successfully undertaken to develop and improve this aspect of the supply chain.
- Airtightness – the proposal to limit air tightness to around  $5 \text{ m}^3(\text{h.m}^2)$  could help address the uncertainties around the ventilation of very airtight dwellings, at least until more research has been carried out in this area and the potential for unintended consequences can be properly addressed in the Regulations.

In respect of CO<sub>2</sub> emissions, we believe that a phased 40% improvement in Part L 2010 effective from January 2013, or a staged 25% improvement in 2014, are both too onerous at the present time, and may unduly impact on the cost of house building and the number of new homes built.

#64 - Rockwool Ltd

## 2012 consultation on changes to the Building Regulations in Wales

### Part L (Conservation of fuel and power)

**Minor amendments indicated in red**

#### Consultation

#### Response Form

Your name: Kathryn James

Organisation (if applicable): Rockwool Ltd

- (v) Are the views expressed on this consultation an official response from the organisation you represent or your own personal views?

Organisational ☒ Personal Views ☐

- (vi) Are your views expressed on this consultation in connection with your membership or support of any group? If yes please state name of group:

Yes ☐ No ☒

Name of group:

- (vii) Please tick the one box that best describes your organisation:

<p><b>Builders/Developers:</b></p> <p>Builder / Main contractor: <input type="checkbox"/></p> <p>Builder/ Small builder: (extensions/repairs/maintenance, etc) <input type="checkbox"/></p> <p>Installer/ special sub-contractor <input type="checkbox"/></p> <p>Commercial developer <input type="checkbox"/></p> <p>House builder <input type="checkbox"/></p>	<p><b>Property Management:</b></p> <p>Housing association (registered social landlord) <input type="checkbox"/></p> <p>Residential landlord, private sector <input type="checkbox"/></p> <p>Commercial <input type="checkbox"/></p> <p>Public sector <input type="checkbox"/></p>
<p><b>Building occupier:</b></p> <p>Home owner <input type="checkbox"/></p> <p>Tenant (residential) <input type="checkbox"/></p> <p>Commercial Building <input type="checkbox"/></p>	<p><b>Building Control Bodies:</b></p> <p>Local authority building control <input type="checkbox"/></p> <p>Approved Inspector <input type="checkbox"/></p>
<p><b>Energy Sector</b> <input type="checkbox"/></p>	<p><b>Fire and Rescue Authority</b> <input type="checkbox"/></p>

<b>Designers/Engineers/Surveyors:</b>  Architect <input type="checkbox"/> Civil/Structural engineer <input type="checkbox"/> Building services engineer <input type="checkbox"/> Surveyor <input type="checkbox"/>	<b>Specific Interest:</b>  Competent person scheme operator <input type="checkbox"/> National representative or trade body <input type="checkbox"/> Professional body or institution <input type="checkbox"/> Research/ academic organisation <input type="checkbox"/>
<b>Manufacturer/ Supply Chain</b> <input checked="" type="checkbox"/>	<b>Other</b> ( <i>please specify</i> ) <div style="border: 1px solid black; height: 20px; width: 100%;"></div>

**(viii) Please tick the *one* box which best describes the size of your or your organisation's business?**

- Micro – typically 0 to 9 full-time or equivalent employees (incl. sole traders) ☐
- Small – typically 10 to 49 full-time or equivalent employees ☐
- Medium – typically 50 to 249 full-time or equivalent employees ☐
- Large – typically 250+ full-time or equivalent employees ☒
- None of the above (please specify) ☐

**(vi) Are you or your organisation a member of a competent person scheme?**

Yes ☒ No ☐

Name of scheme:

BBA-TIMSA U-Value Competent Person Scheme

**(vii) Would you be happy for us to contact you again in relation to this consultation?**

Yes ☒ No ☐



WG will process any personal information that you provide us with in accordance with the data protection principles in the Data Protection Act 1998. In particular, we shall protect all responses containing personal information by means of all appropriate technical security measures and ensure that they are only accessible to those with an operational need to see them. You should, however, be aware that as a public body, the Welsh Government is subject to the requirements of the Freedom of Information Act 2000, and may receive requests for all responses to this consultation. If such requests are received we shall take all steps to anonymise responses that we disclose, by stripping them of the specifically personal data – name and e-mail address – you supply in responding to this consultation. If, however, you consider that any of the responses that you provide to this survey would be likely to identify you irrespective of the removal of your overt personal data, then we should be grateful if you would indicate that, and the likely reasons, in your response, for example in the relevant comments box.

## Questions:

### New homes

1. Do you agree with the Government's preference for a CO<sub>2</sub> saving of 40% reduction in carbon dioxide emissions compared to Part L 2010.

No change to 2010

☐

40% CO<sub>2</sub> saving

☐

25% CO<sub>2</sub> saving

☒

Something else (please explain below)

☐

Don't know

☐

## Comments

Rockwool supports the introduction of a 25% CO<sub>2</sub> saving target provided an approach combining fabric performance and renewables is taken.

Challenging targets for carbon reduction can encourage the design of cost-effective fabric solutions combining high performance fabric measures with Low and Zero Carbon Technologies setting a smoother transition to building Zero Carbon Homes in the future. Design flexibility and innovation will be critical to making this process happen and the Regulations should not restrict this by being overly prescriptive in setting very high targets for fabric elements which are unrealistic and stifle a creative approach to design.

The economic conditions that accompanied the last revision of the Building Regulations in 2010, and the resulting low levels of housebuilding that have followed, has created an unusual situation in which this revision of the Regulations cannot be done on the basis of the lessons learned from the last phase. As the 2013 Regulations are a critical step on the path to Zero Carbon, a robust framework must be in place to capture the learning over the coming years in terms of what designs can be shown to deliver high performance buildings in a cost effective way and also to capture the experience of the people who design, build and occupy these buildings to develop knowledge ahead of the introduction of Zero Carbon.

Furthermore, the impact assessment states that the rate of housebuilding in Wales has almost halved over recent years. Recovery in the construction market will be a significant benefit to the Welsh economy and would help to meet other Welsh Government targets such as increasing the supply of affordable housing. As the performance of energy efficient homes is not yet reflected in the sale or rental value, the additional costs of meeting the higher target would be borne by a construction industry which is already experiencing very difficult economic conditions. A 25% CO<sub>2</sub> reduction target combining fabric performance and renewable technologies does not place excessive burdens on the industry which would harm the recovery of the construction sector.

2. Do you agree with the proposal for an 'aggregate' approach to CO<sub>2</sub> target setting for new homes in 2015? The CO<sub>2</sub> target for any individual dwelling varies depending on the ease with which the building can achieve the target, with the overall required CO<sub>2</sub> saving achieved when aggregated over the build mix.

Yes ☒ No ☐ Don't know ☐

## Comments

Rockwool supports the proposal for an 'aggregate' approach to CO<sub>2</sub> target setting for new homes in 2015. Such an approach recognises the potential for different house types to contribute towards an overall target and therefore does not place undue burdens on certain house types while not realising the full potential of others.

3. Do you agree with the proposal for a compliant option based on a consistent recipe of elemental specifications for fabric, services plus an additional CO<sub>2</sub> saving equivalent to an amount of photovoltaic (PV). Please justify your choice.

Yes ☒ No ☐ Don't know ☐

## Comments

Rockwool agrees with the proposal for a compliant option based on a recipe of elemental specifications. This option provides a simplified and flexible approach to compliance.

4. The main difference between the recipes is the required system efficiency for each fuel, which is appropriate for the heating system type. By adopting this approach to different fuel types, there is no need for a separate fuel factor. Do you agree with the proposed approach?

Yes ☒ No ☐ Don't know ☐

## Comments

This is a simpler approach than using fuel factors.

5. For the CO<sub>2</sub> savings proposed, are the recipe specifications a sensible way of achieving them? Please justify your choice.

Yes ☐ No ☒ Don't know ☐

## Comments

Although Rockwool agrees with a recipe style approach we have concerns that the elemental recipe values are too onerous and impractical to achieve for a 25% CO<sub>2</sub> reduction.

Recipes should incorporate renewables in combination with fabric measures for the 25% CO<sub>2</sub> reduction target to make the elemental recipe values practically and economically achievable.

6. In approaching the selection of the amount of PV to be installed on dwellings, do you prefer?

Fixed percentage of building foundation area ☒

Proportion of gross internal floor area with a practical cap ☐

Don't know ☐

Comments

7. Do you agree that the limits on design flexibility 'backstop' values for fabric elements in new homes should be changed from the current reasonable provision in the technical guidance to become mandatory?

Yes ☐ No ☒ Don't know ☐

Comments

Imposing mandatory backstop values at levels close to those within the recipe specification allows no flexibility. U-value backstops are safety factors.

8. Do you agree with the changes to the 'backstop' values proposed? Please explain your decision.

Yes ☒ No ☐ Don't know ☐

Comments

Retaining realistic U-value backstop values addresses the potential risk of a single high performance element or technology failing and leaving a low performance building and also the potential risk of condensation and mould growth on elements with a low performance level. However setting mandatory figures at a highly demanding level does not deliver a proportionate increase in performance for the additional costs.

It is also known that setting challenging U-value backstop figures leads to a mistaken belief by designers that using the backstop figures as design values leads to a compliant home. Setting the values at a level which gives the safety benefits described above and which will not be mistaken as compliant allows designers flexibility to innovate with combinations of measures to create high performance, low carbon homes.

From a manufacturer's perspective we believe that the backstops proposed for walls and roofs should be in accordance with the English Part L proposals to introduce consistency in a cross-border supply chain.

9. Do you have any other comments on the proposed changes to Approved Document L1A or the domestic National Calculation Methodology? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

No

10. The Impact Assessment makes a number of assumptions on fabric/services/ renewables costs, new build rates, phase-in rates, learning rates, etc for new homes. Do you think these assumptions are fair and reasonable? Please justify your views.

Yes ☒ No ☐ Don't know ☐

Comments

The assumptions made in the Impact Assessment are fair and reasonable however the Impact Assessment does acknowledge that the potential detrimental effect of higher performance standards on the Welsh construction industry (including both construction firms and product manufacturing) has not been modelled however it should be given serious consideration.

11. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for new homes? Please justify your view and provide alternative evidence if necessary.

Yes ☒ No ☐ Don't know ☐

#### Comments

The Impact Assessment makes a fair and reasonable assessment however the Impact Assessment does acknowledge that the potential detrimental effect of higher performance standards on the Welsh construction industry (including both construction firms and product manufacturing) has not been modelled however it should be

### New non-domestic buildings

12. Do you agree with the proposal for ~~2013~~ 2014 for non-domestic buildings to explicitly regulate energy efficiency separately from low carbon technologies through the assessment of primary energy consumption (PEC)? Does PEC seem like a reasonable basis for standard setting?

Yes ☐ No ☒ Don't know ☐

#### Comments

Although we agree in principle we believe that there are practical difficulties with its implementation. In certain cases it will be less cost effective to increase fabric performance than to use renewable energy. Therefore regulations should not restrict this option particularly in difficult economic times. Increasing complexity also risks lessening compliance through lack of understanding.

13. Which package of fabric and services should be selected: 7% or 10%? Please give reasons for your choice.

7% ☒

10% ☐

Don't know ☐

#### Comments

Introducing a package of fabric and services at 7% enables design flexibility and innovation.

14. Do you foresee any particular issues for certain categories of building to meet the TPEC or TER?

Yes ☒ No ☐ Don't know ☐

#### Comments

The proposed lower air permeability value of 5m<sup>3</sup>/hr/m<sup>2</sup> will impact differently on different categories of buildings. Research carried out by the Metal Cladding and Roofing Manufacturers Association based on site testing of air permeability in new non-domestic buildings showed that air permeability targets should be differentiated by building floor area as follows:

0 - 3500 m<sup>2</sup> 7m<sup>3</sup>/hr/m<sup>2</sup>

3,501 – 10,000 m<sup>2</sup> 5m<sup>3</sup>/hr/m<sup>2</sup>

10,001 plus m<sup>2</sup> 3m<sup>3</sup>/hr/m<sup>2</sup>

15. Which approach should be utilized to incorporate the contribution of low carbon technologies into the setting of the Target Emission Rate (TER), for non domestic buildings?

Fixed carbon reduction (in kg.CO<sub>2</sub>/m<sup>2</sup>/year) ☐

Percentage of roof area of PV ☐

Percentage of floor area of PV ☐

Other ☒

Don't know ☐

Please give reasons for your choice

Incorporating the contribution of low carbon technologies should be approached by applying an additional target to the TER before applying low carbon technologies. So the TER would be calculated for the building without low carbon technologies, then an additional percentage reduction applied which would need to be met by the low carbon technologies. This enables design flexibility and recognises the increasing importance of the role of low carbon technologies in buildings without placing additional unrealistic



16. The proposals explain the Government's preference for a 20% aggregate improvement in CO<sub>2</sub> performance standards for new non-domestic buildings from ~~October 2013~~ June 2014. Which option do you prefer and why?

No change	<input type="checkbox"/>
Target A: 10% aggregate improvement (1% PV)	<input type="checkbox"/>
Target B: 11% aggregate improvement (No PV)	<input type="checkbox"/>
Target C: 20% aggregate improvement (5% PV)	<input checked="" type="checkbox"/>
Don't know	<input type="checkbox"/>

Please give reasons for your choice

Rockwool supports the Government preferred 20% reduction provided this does not include a TPEC or a prescriptive requirement on low carbon technology type. We support the Government approach to design flexibility by not applying unrealistic fabric requirements but instead allowing the most cost effective combination of fabric and low carbon technologies to achieve the Government preferred 20% reduction

17. Do the proposed ~~2013~~ 2014 notional buildings as set out in the changes to the National Calculation Methodology seem like a reasonable basis for standards setting? Please provide comments on the method used to develop the notional buildings and particular elements of one or more of the notional buildings, if relevant.

Yes ☐ No ☒ Don't know ☐

Comments

Air permeability targets should be differentiated by building floor area as follows:  
 0 - 3500 m<sup>2</sup> 7m<sup>3</sup>/hr/m<sup>2</sup>  
 3,501 – 10,000 m<sup>2</sup> 5m<sup>3</sup>/hr/m<sup>2</sup>  
 10,001 plus m<sup>2</sup> 3m<sup>3</sup>/hr/m<sup>2</sup>

18. Do you think that a further recipe should be created for buildings under 250m<sup>2</sup> and aligned with the proposed domestic recipe? Are there particular reasons why smaller buildings find compliance with the non-domestic recipes difficult? Please justify your views.

Yes ☐ No ☒ Don't know ☐

Comments

Smaller new non-domestic buildings which are domestic in nature should be incorporated under Part L1A. Other small non-domestic buildings which are not domestic in nature should be accommodated under the proposed Notional Building. For certain constructions e.g. top-lit metal warehouse style constructions, an increased air permeability value should be applied to reflect the increased difficulty in achieving very low air permeability values in buildings of this size and type.

19. Although we recognise that some buildings may need to be serviced in a particular way for legitimate functional or environmental reasons, should Part L incentivise a lower carbon servicing strategy (as with the current Energy Performance Certificate methodology), by basing the notional building on mixed-mode ventilation?

Yes ☐ No ☐ Don't know ☒

Comments

Building Regulations should promote the use of natural lighting and ventilation where practical.

20. Do you have any other comments on the proposed changes to Approved Document L2A or the non-domestic National Calculation Methodology? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

Rockwool supports the ambition of the Government to lead the development of a low carbon economy however in times of economic constraint, too far a deviation from the requirements applied in other parts of the UK could create compliance issues and have unintended economic impacts. Limiting the deviation in requirements would support development in Wales.

21. The Impact Assessment makes a number of assumptions on the costs of fabric/services/renewables, new build rates, etc for new non-domestic buildings. Do you think these assumptions are fair and reasonable? Please justify your views.

Yes ☐ No ☐ Don't know ☒

Comments

22. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for new non-domestic buildings?

Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

Comments

### Cumulative impact of policies

23. Overall, do you think the assessment of the impact on development is broadly fair and reasonable? Please justify your view and provide alternative evidence if necessary.

Yes ☒ No ☐ Don't know ☐

Comments

Rockwool believes that the assessment of the impact on development is broadly fair and reasonable however we do not share the view that additional capital costs can be passed on through higher property prices meaning the burden lies with the

### National Planning Policy Review

24. What role should planning play in facilitating higher carbon standards? Should it focus on facilitating site wide energy opportunities that will be needed as we move towards zero or near zero carbon buildings?

Views

The role of planning should be advisory, highlighting where opportunities exist for community or site schemes such as community heating or on-site renewables.

25. What are the implications from future (and regular) changes to the Code for Sustainable Homes and BREEAM on the implementation of the policy?

Views

De-facto regulations such as BREEAM and CfSH present disproportionate economic and practical burdens on developers. Many of the issues dealt with under the schemes could and should be part of the planning and building regulation process provided there is a robust framework for compliance and enforcement from Building Control and Local Planning.

26. Are the costs of assessment and certification now disproportionate to the costs and benefits of achieving a minimum sustainable buildings standard level?

Yes ☒ No ☐ Don't know ☐

Comments

Yes we believe the costs of assessment and certification are disproportionate to the costs and benefits of achieving a minimum sustainable buildings standard level where the key issues are already covered under Building Regulations.

27. What should be the role of local planning authorities in setting local standards above and beyond Building Regulations? How can we ensure there is a level playing field of standards across Wales?

Views

The role of local planning authorities should be in implementation and enforcement of standards and not in setting additional requirements. Simplification and standardisation of requirements reduces the complexity which would increase compliance. Increased compliance across the board would have greater benefit than locally applied enhanced standards.

28. What do you see as the positive/negative impacts of removing Part B of the policy expecting buildings to be certified against Code/BREEAM?

Views

The positive impacts of removing Part B of the policy would be to reduce complexity and the disproportionate cost burden of additional certification. However the certification framework acts as an enforcement mechanism and it must be ensured that an alternative robust framework for enforcement of regulatory requirements will be in place.

An advantage of building sustainability assessment schemes such as BREEAM is that a holistic approach is taken to assessing key building performance criteria such as the acoustic environment, embodied environmental impact and end-of-life considerations aligned to building function so designers give proper consideration to them early in the design process. Such an approach could be achieved by greater integration of the various parts of Building Regulations covering thermal, fire, acoustic etc based on the specified building function so that full consideration is given to a wide range of impacts of the building on its occupants throughout its lifetime early in the design process when amendments can be made to mitigate negative impacts.

29. Is there a better, alternative, way to reward and secure sustainable buildings (above the regulatory minimum) other than using national planning policy? What opportunities are there for future changes to Building Regulations?

Views

The Sustainability Labelling Scheme operating in Scotland which recognises buildings which go beyond the regulatory minimum for key issues such as energy use allows a simplified and flexible approach to improving building performance.

30. To what extent are duplication of standard and approval systems an issue? Would the removal of the PfSB policy assist in reducing duplication?

Views

Building Regulations should act as the sole framework for the setting of, and assessing compliance, with building standards.

31. strategic sites  
identified as part of the Local Development Plan?

Views

## Existing buildings

- ~~32. Do you agree with the proposal to raise performance standards for domestic replacement windows? Please explain your answer.~~

~~Yes~~ ☐ ~~No~~ ☐ ~~Don't know~~ ☐

~~Comments~~

33. Do you agree with the proposal to raise performance standards for domestic extensions?  
Please explain your answer.

Yes ☒ No ☐ Don't know ☐

Comments

Rockwool agrees with requirements to improve the energy performance of existing dwellings including raising the performance standards for domestic extensions. As extensions works invariably increase the carbon footprint of a dwelling, we strongly believe that consequential improvements should be introduced as a means of mitigating the extra CO<sub>2</sub> production.

The proposed wall U-values of 0.21 for domestic extensions is a significant jump from the current standards and is not proportional to the other proposed changes in elemental U-values.

From a manufacturer's perspective we believe that the elemental performance values proposed for walls and roofs should be in accordance with the English Part L proposals to introduce consistency in a cross-border supply chain.

34. Do you agree with the proposal to raise performance standards for non-domestic extensions? Please explain your answer.

Yes ☒ No ☐ Don't know ☐

Comments

Rockwool agrees with requirements to improve the energy performance of existing non-domestic buildings including raising the performance standards for extensions. As the majority of non-domestic extensions take place on buildings under the current 1000m<sup>2</sup> cap for consequential improvements, we strongly believe that consequential improvements requirements should be extended

35. Do you agree that the exemption for conservatories or porches should be removed where an individual room heat or air conditioning unit is installed? How effective would this change be in limiting energy use/emissions, or are there other ways by which energy performance might be improved where conservatories or porches are installed?

Yes ☐ No ☐ Don't know ☒

Comments

Introducing such a requirement would be difficult to police.

36. Do you agree with the proposal to require consequential improvements upon extensions or increases in habitable space in existing homes below 1000m<sup>2</sup>? Please explain your view.

Yes ☒ No ☐ Don't know ☐

Comments

Rockwool strongly supports the proposal to require consequential improvements upon extensions or increases in habitable space in all buildings.

The economic and environmental benefit potential of upgrading the energy efficiency of existing homes far exceeds that available from raising standards for new build homes. The recent launch of the Green Deal provides a route to avoiding the burden of upfront costs. The Green Deal framework for assessment and installer accreditation also means that homeowners would only receive measures that are suitable for their property and professionally installed by qualified individuals thus securing a reduction in energy use and improving the comfort of their homes.

37. The consultation explains that the regulatory requirement for consequential improvements upon domestic extensions or increases in habitable space would be limited to a list of measures comprising a minimum standard of loft insulation, hot water cylinder insulation and the installation of cavity wall insulation.

Do you agree with this list of measures?

☐

Should this list be different (please explain below)?

☒

Another approach (please explain below)

☐

Don't know

☐

Comments

As well as requiring that as a minimum these low cost energy efficiency measures are installed, requiring a Green Deal Assessment to be undertaken as a consequence of undertaking work to extend or increase the habitable space of a dwelling would improve homeowners awareness of the support available to them particularly for those in hard-to-treat properties who could receive support for the installation of more expensive measures through the Energy Company Obligation.

It is estimated that a Green Deal Assessment will cost £112.50 with most expected to be either heavily subsidised or offered for free by Green Deal Providers. Therefore introducing this requirement does not place an excessive burden on the homeowner but promotes the opportunity for take up of additional energy efficiency measures to maximise the potential for energy and CO<sub>2</sub> savings from existing homes and supports the developing energy efficiency industry in Wales.

38. What effect do you think the requirements for consequential improvements may have on the demand for repair, maintenance and improvement activity? Please use evidence to explain your answer.

Increase demand

☒

Reduce demand

☐

No effect

☐

Don't know

☐



## Comments

Rockwool believes that the introduction of Consequential Improvements have the potential to increase repair and improvement activity.

Introducing a requirement to carry out a Green Deal Assessment as a consequence of extending or increasing the habitable space of a dwelling will also increase homeowner awareness of the availability of the Green Deal and ECO as mechanisms to support the installation of energy efficiency measures. This will increase the demand for Green Deal Assessments and installations of energy efficiency measures from local tradespeople.

39. Do you agree with the proposal to introduce consequential improvements upon extensions or increases in habitable space in non-domestic buildings under 1000m<sup>2</sup>? Please explain your view.

Yes ☒ No ☐ Don't know ☐

## Comments

Rockwool strongly supports the proposal to require consequential improvements upon extensions or increases in habitable space in existing non-domestic buildings under 1000m<sup>2</sup>. The scale of the task in improving the energy efficiency of existing buildings is well understood and a step change is required in the way they are dealt with; consequential improvements represent a way to achieve this.

The introduction of the Green Deal as a complementary policy measure removes the burden of upfront costs. The Green Deal and consequential improvements can support and drive one another. The Green Deal framework includes quality assurances and protections which can also be applied to consequential improvements to ensure the full potential of the policy measure is unlocked. To achieve this, Green Deal assessments should form the basis of assessing requirements. The assessment being done under the Green Deal framework does not oblige the building owner to pursue the Green Deal as a financing route but ensures that the assessment is carried out by a qualified, accredited assessor and the measures recommended fit the criteria of being "technically, functionally and economically feasible" for the purposes of consequential improvements. A requirement to undertake a Green Deal Assessment upon extensions or increases in habitable space should be introduced as an absolute minimum. Green Deal Assessments are expected to cost around £112.50 with most being largely or wholly subsidised by Green Deal providers which does not represent an undue burden on building owners.

40. The consultation proposes that for non-domestic buildings, any measure from list which is used to generate Green Deal assessments, the list in SBEM used to generate Energy Performance Certificate recommendations and the existing list of typical consequential improvement measures from Approved Document L2B should be eligible to be a consequential improvement. Do you agree?

Yes

☒

No

☐

Prefer a different list (please specify)

☐

Don't know

☐

Comments

It is essential that there is consistency between the Green Deal, Building Assessments and Building Regulations.

41. Do you agree that there should not be major problems in extending the requirement for consequential improvements for the building control process? If you do foresee issues, what are they and how might these be addressed?

Yes

☒

No

☐

Don't know

☐

Comments

Using a Green Deal Assessment as the basis for assessing requirements provides a simple means for building control bodies to assess compliance as the Green Deal Assessment Report would act as evidence of an assessment taking place, the level of existing insulation, the suitability of the property for the measures that are required to be installed and would also list the opportunities for improvement that are technically, functionally and economically feasible.

42. Do you have any other comments on the proposed changes to Approved Document L1B? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

## Comments

Rockwool agree with the values in Table 3 for retained thermal elements should not change.

The proposed wall U-values of 0.21 for domestic extensions is a significant jump from the current standards and is not proportional to the other proposed changes in elemental U-values.

From a manufacturer's perspective we believe that the elemental performance values proposed for walls and roofs should be in accordance with the English Part L proposals to introduce consistency in a cross-border supply chain.

43. Do you have any other comments on the proposed changes to Approved Document L2B? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

## Comments

Rockwool agrees with the proposals to differentiate between buildings that are essentially domestic in character and other non-domestic buildings. However the proposed standards for buildings that are essentially domestic in character in Table 4 L2B do not correlate to the proposed standards in Table 1 L1B.

The proposed wall U-values of 0.2 (?) for non-domestic extensions in buildings which are essentially domestic in character is a significant jump from the current standards and is not proportional to the other proposed changes in elemental U-values.

44. Do you think that the Impact Assessment is a fair and reasonable assessment of the potential costs and benefits of raising the performance standards for ~~replacement domestic windows and~~ domestic/non-domestic extensions? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

## Comments

45. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for consequential improvements in existing homes? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

## Comments

46. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for consequential improvements in existing non-domestic buildings? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

## Comments

## Compliance and Performance

47. For new dwellings, Welsh Government is proposing to develop a compliance checklist. Do you think such a checklist would be used sufficiently to warrant its development?

Yes ☐ No ☐ Don't know ☒

## Comments

Rockwool supports the proposal to develop a compliance checklist and would further recommend that bespoke checklists developed by other bodies are based on this single master document. However it is very difficult to predict take up and use of such an approach where it is voluntary.

48. If such a checklist was developed, what should it cover?

## Comments

Such a checklist should include the recommendation that calculations should be undertaken by competent persons e.g. U-Value calculations being carried out by practitioners of the TIMSA-BBA U-Value competent person scheme.

The checklist should also reference other parts of the Building Regulations to ensure that full consideration is also given to other key building performance indicators

49. If the checklist was taken forward, who should be involved in its development?

Comments

The core representatives that should be included are Building Control Bodies, NHBC and housebuilders (large and small).

50. Would any other approach be likely to prove more effective instead (such as a PAS<sup>14</sup> type approach).

Yes ☒ No ☐ Don't know ☐

Comments

Rockwool strongly believes that the introduction of standardised quality assurance processes, such as a PAS type approach, and regulatory incentives will help mitigate the risks of a difference between the as-designed and as-built performance of new homes. The correct design and installation of building materials is a critical step in closing the performance gap.

Where a formal quality assurance process is not followed, a confidence factor of no less than 10% should be applied to the Dwelling Emission Rate to mitigate the risk of a building failing to perform.

51a. Would it be preferable for buildings of a domestic nature to be able to achieve compliance through applying the recipe in AD L1A, in acknowledgement of the domestic nature of such buildings, rather than demonstrating compliance with AD L2A?

Yes ☒ No ☐ Don't know ☐

Comments

See 51b for further comments.

51b. What are the arguments for and against this approach?

Comments

Smaller new non-domestic buildings which are domestic in nature should be incorporated under AD L1A. Such an approach will in theory make the compliance process simpler and create more energy savings as these buildings will be benchmarked against a methodology that was specifically created for this building type.

<sup>14</sup> A PAS

ch.

52. Additional views and suggestions for addressing compliance and performance issues in new non domestic buildings would be welcome.

#### Comments

There is an inconsistency between Part L1A and Part L2A whereby there is no requirement to restrict heat loss via cavity party wall constructions in non-domestic buildings despite the regulations for domestic buildings recognising the significant heat loss that occurs via uninsulated cavity party walls. Failure to take account of this phenomenon will have a significant impact on the as-built performance of a building.

There also needs to be a closer alignment in checking compliance between what was specified at the design stage and what was actually used in construction. Currently most assessors will simply be supplying the BRUKL and SBEM output documents which will detail each area of the building i.e. U-values, HVAC etc and if these areas are within L2A values and you get a 'pass' on the BER – TER check, the calculation is approved. There appears to be very little in depth check of the input values and the calculations themselves. This continues for the as built SBEM calculation – the calculations are approved after only superficial, administrative editing.

There also needs to be more rigour applied to air testing so that failures are highlighted early enough in the process for remedial works to be carried out in an attempt to make the building perform as designed.

We would recommend that work is undertaken to provide updated versions of generic Robust Construction Details for limiting thermal bridging and air leakage for all construction types.

53. Is the newly formatted ADL1B easier to understand and use?

Yes ☒ No ☐ Don't know ☐

#### Comments

Rockwool agrees that the newly formatted ADL1B will be much easier to understand and use.

54. Are there any further amendments to the newly formatted ADL1B that you would recommend? If so, please provide details.

Yes ☐ No ☒ Don't know ☐

Comments

We have no further changes to the formatting of ADL1B to recommend.

55. How do the consultation proposals impact on the work of Local Authorities and Approved Inspectors? Please give positive and negative impacts.

Comments

This is not within our area of expertise.

56. We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

We have made a number of comments and proposals throughout the consultation which can be summarised as follows:

1. Ensure that energy efficient building design:

- Is carried out on a whole building basis
- Allows design flexibility and innovation

Realistic fabric requirements introduced alongside challenging CO<sub>2</sub> reduction targets enables more design flexibility and innovation in meeting these challenging new targets and recognises that the construction products market will change and new cost-effective solutions will develop if given the freedom to do so.

2. Minimise the "as-built" versus "as-designed" performance gap by encouraging higher standards of on-site installation through the introduction of minimum requirements for design, on-site monitoring and application of appropriate design safety factors when a quality assurance process is not adopted.

Rockwool would strongly support a proposal to introduce a quality assurance standard covering design and installation. Such a standard could have a significant positive impact on the performance of buildings provided that appropriate levels of design safety factors are introduced for non-adoption of a quality assurance process. We propose that an appropriate level would be no less than 10%

3. Maximise the opportunities for improving the energy efficiency of existing buildings.

Rockwool strongly supports the proposals to extend consequential improvements and believe a requirement to undertake a Green Deal Assessment upon extensions or increases in habitable space should be introduced as an absolute minimum. Green Deal Assessments are expected to cost around £112.50 with most being largely or wholly subsidised by Green Deal providers which does not represent an undue burden on building owners.

The significant heat loss through cavity party walls is already recognised within Part L1A and should also be considered by other parts of the Approved Document for example by treating cavity party wall constructions as controlled elements therefore triggering improvement requirements when undergoing renovation. Furthermore, works on controlled elements should trigger consequential improvements where upgrades of the elements being renovated to the required standards are not practical or cost-effective.

4. Greater integration of the various parts of Building Regulations covering thermal, fire, acoustic etc based on the specified building function.

Key building performance criteria such as the acoustic environment, fire safety, embodied environmental impact, end-of-life considerations, etc should be recognised in a more holistic way that better represent the building function so that designers give proper consideration to them earlier in the design process. This can be achieved through closer integration of the separate parts of the Building Regulations. This holistic approach is successfully applied to building sustainability assessment methodologies such as BREEAM, and ensures that full consideration is given to a wide range of impacts of the building on its occupants throughout its lifetime early in the design process when amendments can be made to mitigate negative impacts.



#65 - Pembrokeshire County Council

# 2012 consultation on changes to the Building Regulations in Wales

## Part L (Conservation of fuel and power)

### Consultation Response Form

Richard Lawrence  
Building Control Manager  
Pembrokeshire County Council

- (ix) Are the views expressed on this consultation an official response from the organisation you represent or your own personal views?

Organisational ☒ Personal Views ☐

- (x) Are your views expressed on this consultation in connection with your membership or support of any group? If yes please state name of group:

Yes ☐ No ☒

Name of group:

- (xi) Please tick the one box that best describes your organisation:

<b>Builders/Developers:</b>  Builder / Main contractor: <input type="checkbox"/>  Builder/ Small builder: <input type="checkbox"/> (extensions/repairs/maintenance, etc)  Installer/ special sub-contractor <input type="checkbox"/>  Commercial developer <input type="checkbox"/>  House builder <input type="checkbox"/>	<b>Property Management:</b>  Housing association <input type="checkbox"/> (registered social landlord)  Residential landlord, <input type="checkbox"/> private sector  Commercial <input type="checkbox"/>  Public sector <input type="checkbox"/>
--	--

<p><b>Building occupier:</b></p> <p>Home owner <input type="checkbox"/></p> <p>Tenant (residential) <input type="checkbox"/></p> <p>Commercial Building <input type="checkbox"/></p>	<p><b>Building Control Bodies:</b></p> <p>Local authority building control <input checked="" type="checkbox"/></p> <p>Approved Inspector <input type="checkbox"/></p>
<p><b>Energy Sector</b> <input type="checkbox"/></p>	<p><b>Fire and Rescue Authority</b> <input type="checkbox"/></p>
<p><b>Designers/Engineers/Surveyors:</b></p> <p>Architect <input type="checkbox"/></p> <p>Civil/Structural engineer <input type="checkbox"/></p> <p>Building services engineer <input type="checkbox"/></p> <p>Surveyor <input type="checkbox"/></p>	<p><b>Specific Interest:</b></p> <p>Competent person scheme operator <input type="checkbox"/></p> <p>National representative or trade body <input type="checkbox"/></p> <p>Professional body or institution <input type="checkbox"/></p> <p>Research/ academic organisation <input type="checkbox"/></p>

<b>Manufacturer/ Supply Chain</b> <input type="checkbox"/>	<b>Other</b> ( <i>please specify</i> ) <input style="width: 100%;" type="text"/>
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**(xii) Please tick the *one* box which best describes the size of your or your organisation's business?**

Micro – typically 0 to 9 full-time or equivalent employees (incl. sole traders) ☐

Small – typically 10 to 49 full-time or equivalent employees ☐

Medium – typically 50 to 249 full-time or equivalent employees ☐

Large – typically 250+ full-time or equivalent employees ☒

None of the above (please specify) ☐

**(vi) Are you or your organisation a member of a competent person scheme?**

Yes ☐ No ☒

Name of scheme:

**(vii) Would you be happy for us to contact you again in relation to this consultation?**

Yes ☒ No ☐

WG will process any personal information that you provide us with in accordance with the data protection principles in the Data Protection Act 1998. In particular, we shall protect all responses containing personal information by means of all appropriate technical security measures and ensure that they are only accessible to those with an operational need to see them. You should, however, be aware that as a public body, the Welsh Government is subject to the requirements of the Freedom of Information Act 2000, and may receive requests for all responses to this consultation. If such requests are received we shall take all steps to anonymise responses that we disclose, by stripping them of the specifically personal data – name and e-mail address – you supply in responding to this consultation. If, however, you consider that any of the responses that

you provide to this survey would be likely to identify you irrespective of the removal of your overt personal data, then we should be grateful if you would indicate that, and the likely reasons, in your response, for example in the relevant comments box.

## Questions:

### New homes

1. Do you agree with the Government's preference for a CO<sub>2</sub> saving of 40% reduction in carbon dioxide emissions compared to Part L 2010.

No change to 2010	<input type="checkbox"/>
40% CO <sub>2</sub> saving	<input checked="" type="checkbox"/>
25% CO <sub>2</sub> saving	<input type="checkbox"/>
Something else (please explain below)	<input type="checkbox"/>
Don't know	<input type="checkbox"/>

Comments

We understand that this higher standard will need to be met in due course. We therefore suggest that the changes are made in a single transition to avoid repeated changes to the requirements.

2. Do you agree with the proposal for an 'aggregate' approach to CO<sub>2</sub> target setting for new homes in 2015? The CO<sub>2</sub> target for any individual dwelling varies depending on the ease with which the building can achieve the target, with the overall required CO<sub>2</sub> saving achieved when aggregated over the build mix.

Yes ☒ No ☐ Don't know ☐

Comments

Yes. This will ensure that Pt L targets the areas where improvements can be made most easily and will allow appropriate building types to be developed (i.e. there will not be a penalty for the development of energy efficient building types.)

3. Do you agree with the proposal for a compliant option based on a consistent recipe of elemental specifications for fabric, services plus an additional CO<sub>2</sub> saving equivalent to an amount of photovoltaic (PV). Please justify your choice.

Yes ☒ No ☐ Don't know ☐

Comments

We agree in principle with the recipe approach. It will improve the understanding of how to comply with Part L. However development control planners will need to be aware that applications are likely to be presented using the standard approach and pv's. This may cause confrontation if it does not meet with local planning policy.

4. The main difference between the recipes is the required system efficiency for each fuel, which is appropriate for the heating system type. By adopting this approach to different fuel types, there is no need for a separate fuel factor. Do you agree with the proposed approach?

Yes ☒ No ☐ Don't know ☐

Comments

5. For the CO<sub>2</sub> savings proposed, are the recipe specifications a sensible way of achieving them? Please justify your choice.

Yes ☒ No ☐ Don't know ☐

Comments

We note that research has been undertaken to ensure that acceptable solutions are readily available in the market place now.

6. In approaching the selection of the amount of PV to be installed on dwellings, do you prefer?

Fixed percentage of building foundation area ☒

Proportion of gross internal floor area with a practical cap ☐

Don't know ☐

Comments

To ensure ease of application. To ensure that it can be delivered practically (e.g. a percentage of the gross internal floor area would be difficult for multi storey developments.)

7. Do you agree that the limits on design flexibility 'backstop' values for fabric elements in new homes should be changed from the current reasonable provision in the technical guidance to become mandatory?

Yes ☒ No ☐ Don't know ☐

## Comments

To guarantee a minimum standard in the energy efficiency of new building stock.

8. Do you agree with the changes to the 'backstop' values proposed? Please explain your decision.

Yes ☒ No ☐ Don't know ☐

## Comments

9. Do you have any other comments on the proposed changes to Approved Document L1A or the domestic National Calculation Methodology? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

## Comments

Whilst the intention to reduce energy consumption is being driven by European Government policy. The early implementation in Wales will create an affordability gap with England in the short term.

10. The Impact Assessment makes a number of assumptions on fabric/services/ renewables costs, new build rates, phase-in rates, learning rates, etc for new homes. Do you think these assumptions are fair and reasonable? Please justify your views.

Yes ☐ No ☒ Don't know ☐

## Comments

We understand that the impact assessment assumes that the additional costs will be recovered as savings over the life of the building. Increased property costs are likely to further slow the housing market particularly given the current difficulty in obtaining mortgages. We do not believe that developers will reduce their return on investment and it is unlikely that land values will drop significantly in the short term since there is no increase in land availability. The contributions to social housing will therefore suffer as a result of the increased costs.

11. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for new homes? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

Comments

We are not fully conversant with current building costs.

## New non-domestic buildings

12. Do you agree with the proposal for 2013 for non-domestic buildings to explicitly regulate energy efficiency separately from low carbon technologies through the assessment of primary energy consumption (PEC)? Does PEC seem like a reasonable basis for standard setting?

Yes ☒ No ☐ Don't know ☐

Comments

It will give a true reflection of the energy used by a building. The PEC factors could change to reflect improvements in the efficiency of energy production over time.

13. Which package of fabric and services should be selected: 7% or 10%? Please give reasons for your choice.

7% ☐

10% ☐

Don't know ☒

Comments

An appropriate level should be chosen that does not stifle future development through increased costs.

14. Do you foresee any particular issues for certain categories of building to meet the TPEC or TER?

Yes ☐ No ☐ Don't know ☒

## Comments

15. Which approach should be utilized to incorporate the contribution of low carbon technologies into the setting of the Target Emission Rate (TER), for non domestic buildings?

Fixed carbon reduction (in kg.CO<sub>2</sub>/m<sup>2</sup>/year)

☒

Percentage of roof area of PV

☐

Other

☐

Don't know

☐

Please give reasons for your choice

Non domestic buildings would usually be designed by a team of technical experts. The more generic approach is therefore appropriate. However small non domestic developments on a domestic scale should relate to the recipe approach and use a percentage of roof area of PV.

16. The proposals explain the Government's preference for a 20% aggregate improvement in CO<sub>2</sub> performance standards for new non-domestic buildings from October 2013. Which option do you prefer and why?

No change

☐

Target A: 10% aggregate improvement (1% PV)

☐

Target B: 11% aggregate improvement (No PV)

☐

Target C: 20% aggregate improvement (5% PV)

☐

Don't know

☒

Please give reasons for your choice



17. Do the proposed 2013 notional buildings as set out in the changes to the National Calculation Methodology seem like a reasonable basis for standards setting? Please provide comments on the method used to develop the notional buildings and particular elements of one or more of the notional buildings, if relevant.

Yes ☐ No ☒ Don't know ☐

Comments

It would seem more appropriate to use the purpose groups from ADB Table D1. These give a better split between development types (e.g. in the proposed groups, what is a warehouse? - A large shop; a storage building; or an industrial plant, or all three?)

18. Do you think that a further recipe should be created for buildings under 250m<sup>2</sup> and aligned with the proposed domestic recipe? Are there particular reasons why smaller buildings find compliance with the non-domestic recipes difficult? Please justify your views.

Yes ☒ No ☐ Don't know ☐

Comments

Developments of this size are likely to be done by smaller developers with less technical support. A recipe approach would make compliance and subsequent checking much easier.

19. Although we recognise that some buildings may need to be serviced in a particular way for legitimate functional or environmental reasons, should Part L incentivise a lower carbon servicing strategy (as with the current Energy Performance Certificate methodology), by basing the notional building on mixed-mode ventilation?

Yes ☒ No ☐ Don't know ☐

Comments

20. Do you have any other comments on the proposed changes to Approved Document L2A or the non-domestic National Calculation Methodology? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

21. The Impact Assessment makes a number of assumptions on the costs of fabric/services/renewables, new build rates, etc for new non-domestic buildings. Do you think these assumptions are fair and reasonable? Please justify your views.

Yes ☐ No ☐ Don't know ☐

Comments

The analysis shows the additional costs being offset by future savings. Industry is unlikely to accommodate these real upfront costs in the current financial climate. This may further slow any rate of economic recovery.

22. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for new non-domestic buildings?

Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

Comments

## Cumulative impact of policies

23. Overall, do you think the assessment of the impact on development is broadly fair and reasonable? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☒ Don't know ☐

Comments

The analysis seems to focus on the reduction in land values due to the proposals. We do not believe that land values will reduce in the short term since there will not be any increase in land availability yet there is still pressure to create extensive amounts of new housing and supporting infrastructure. The net effect will be increased development costs and reduced social housing contributions until such time that land values adjust.

## National Planning Policy Review

24. What role should planning play in facilitating higher carbon standards? Should it focus on facilitating site wide energy opportunities that will be needed as we move towards zero or near zero carbon buildings?

### Views

Energy standards should be set through the BR process to ensure consistency across all developments and to avoid duplication of process. This would suggest that there is little place in the planning process for facilitating higher carbon standards. Planners would however need to be sensitive to the appropriate works necessary to comply with BR's when considering an application.

25. What are the implications from future (and regular) changes to the Code for Sustainable Homes and BREEAM on the implementation of the policy?

### Views

Repeated changes of policy and standards result in confusion in the construction sector and an inability to achieve efficiency savings by bedding in changes e.g. it is difficult to develop and improve standard building designs if the criteria keep changing. It is therefore also difficult to minimise construction defects and improve quality.

26. Are the costs of assessment and certification now disproportionate to the costs and benefits of achieving a minimum sustainable buildings standard level?

Yes ☐ No ☐ Don't know ☒

### Comments

27. What should be the role of local planning authorities in setting local standards above and beyond Building Regulations? How can we ensure there is a level playing field of standards across Wales?

### Views

Increased local standards are likely to direct developers to other areas where the financial burden on development is lower. Upwardly variable standards would not therefore seem to be appropriate particularly in less wealthy areas of Wales.

28. What do you see as the positive/negative impacts of removing Part B of the policy expecting buildings to be certified against Code/BREEAM?

## Views

BR's would provide a single point of contact for ensuring building standards. Therefore reduced determination times and costs.

29. Is there a better, alternative, way to rewards and secure sustainable buildings (above the regulatory minimum) other than using national planning policy? What opportunities are there for future changes to Building Regulations?

## Views

Setting appropriate standards in the building regulations would avoid the confusion posed by variable local standards or the need to consider further standards above the regulatory minimum.

30. To what extent are duplication of standard and approval systems an issue? Would the removal of the PfSB policy assist in reducing duplication?

## Views

Yes it would avoid duplication.

31. What opportunities are there for higher standards to be delivered on strategic sites identified as part of the Local Development Plan?

## Views

This would only apply to very high value sites where demand from developers is high (e.g. major city centre sites.) In most parts of Wales it is likely to deter development.

## Existing buildings

32. Do you agree with the proposal to raise performance standards for domestic replacement windows? Please explain your answer.

Yes ☒ No ☐ Don't know ☐

## Comments

We understand that high performance windows using insulated frames can be produced now at minimum extra cost.

33. Do you agree with the proposal to raise performance standards for domestic extensions? Please explain your answer.

Yes ☒ No ☐ Don't know ☐

Comments

The difficulty in obtaining mortgages means that many home owners are extending properties rather than moving house. There is therefore a large amount of development that can be improved upon.

34. Do you agree with the proposal to raise performance standards for non-domestic extensions? Please explain your answer.

Yes ☒ No ☐ Don't know ☐

Comments

35. Do you agree that the exemption for conservatories or porches should be removed where an individual room heat or air conditioning unit is installed? How effective would this change be in limiting energy use/emissions, or are there other ways by which energy performance might be improved where conservatories or porches are installed?

Yes ☐ No ☒ Don't know ☐

Comments

This would be meaningless since it could not be policed in any way.

36. Do you agree with the proposal to require consequential improvements upon extensions or increases in habitable space in existing homes below 1000m<sup>2</sup>? Please explain your view.

Yes ☒ No ☐ Don't know ☐

Comments

The proposed consequential improvements can be done cheaply or may already have been done under existing grant aid schemes. Once the improvements are done there is no need to do further work for a future extension.

37. The consultation explains that the regulatory requirement for consequential improvements upon domestic extensions or increases in habitable space would be limited to a list of

measures comprising a minimum standard of loft insulation, hot water cylinder insulation and the installation of cavity wall insulation.

Do you agree with this list of measures?

☒

Should this list be different (please explain below)?

☐

Another approach (please explain below)

☐

Don't know

☐

Comments

38. What effect do you think the requirements for consequential improvements may have on the demand for repair, maintenance and improvement activity? Please use evidence to explain your answer.

Increase demand

☐

Reduce demand

☐

No effect

☒

Don't know

☐

Comments

39. Do you agree with the proposal to introduce consequential improvements upon extensions or increases in habitable space in non-domestic buildings under 1000m<sup>2</sup>? Please explain your view.

Yes

☒

No

☐

Don't know

☐

Comments

40. The consultation proposes that for non-domestic buildings, any measure from list which is used to generate Green Deal assessments, the list in SBEM used to generate Energy

Performance Certificate recommendations and the existing list of typical consequential improvement measures from Approved Document L2B should be eligible to be a consequential improvement. Do you agree?

Yes

☒

No

☐

Prefer a different list (please specify)

☐

Don't know

☐

Comments

41. Do you agree that there should not be major problems in extending the requirement for consequential improvements for the building control process? If you do foresee issues, what are they and how might these be addressed?

Yes

☐

No

☒

Don't know

☐

Comments

Whilst the proposals are technically feasible, it will depend on cost. At present many of the improvements proposed can be subsidised. If this subsidy is removed then it may impact on the rate of development.

42. Do you have any other comments on the proposed changes to Approved Document L1B? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

43. Do you have any other comments on the proposed changes to Approved Document L2B? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

44. Do you think that the Impact Assessment is a fair and reasonable assessment of the potential costs and benefits of raising the performance standards for replacement domestic windows and domestic/non-domestic extensions? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

Comments

45. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for consequential improvements in existing homes? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

Comments

46. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for consequential improvements in existing non-domestic buildings? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

Comments

## Compliance and Performance

47. For new dwellings, Welsh Government is proposing to develop a compliance checklist. Do you think such a checklist would be used sufficiently to warrant its development?

Yes ☒ No ☐ Don't know ☐

Comments

Provided that it is straight forward and useable.



48. If such a checklist was developed, what should it cover?

Comments

The SAP process already ensures that the proposed details will achieve compliance. The check list should therefore ensure that the details are built as designed and that the products used are those

49. If the checklist was taken forward, who should be involved in its development?

Comments

Builders, suppliers, building control bodies such as LABC.

50. Would any other approach be likely to prove more effective instead (such as a PAS<sup>15</sup> type approach).

Yes ☐ No ☐ Don't know ☒

Comments

This depends on what materials and details are included in the specification and whether they are readily available or the most cost effective product. (Note the builder will look at cost to buy and not life cycle cost.)

51a. Would it be preferable for buildings of a domestic nature to be able to achieve compliance through applying the recipe in AD L1A, in acknowledgement of the domestic nature of such buildings, rather than demonstrating compliance with AD L2A?

Yes ☒ No ☐ Don't know ☐

Comments

This would enable SME's to compete more effectively for small non domestic works.

<sup>15</sup> A PAS is a Publicly Available Specification, and the PAS would set out a quality assurance approach.

51b. What are the arguments for and against this approach?

Comments

52. Additional views and suggestions for addressing compliance and performance issues in new non domestic buildings would be welcome.

Comments

A compliance check list to ensure that details are built correctly will require the building control body to attend site regularly. It has been suggested that some building control bodies based remotely from an application site do not make regular inspections and in some instances rely on photographs taken by the builder. How will this be

53. Is the newly formatted ADL1B easier to understand and use?

Yes ☐ No ☐ Don't know ☒

Comments

54. Are there any further amendments to the newly formatted ADL1B that you would recommend? If so, please provide details.

Yes ☐ No ☐ Don't know ☒

Comments

55. How do the consultation proposals impact on the work of Local Authorities and Approved Inspectors? Please give positive and negative impacts.

Comments

A recipe approach will hopefully make checking of plans more straight forward.  
The development control planners will need to buy into the new processes and recipe solutions or they will not work.  
The use of checklists requires regular site visits to make proper inspections of work. Consideration needs to be given to ensuring that all sectors of the building control industry provide an adequate level of service.

56. We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

How will existing planning consents with specific CfSH requirements be dealt with following the introduction of the new Part L? What will the transitional arrangements be?

#66 - BEAMA

## 2012 consultation on changes to the Building Regulations in Wales

### Part L (Conservation of fuel and power)

**Minor amendments indicated in red**

#### Consultation

#### Response Form

Your name: Kelly Butler

Organisation (if applicable): BEAMA

(xiii) Are the views expressed on this consultation an official response from the organisation you represent or your own personal views?

Organisational ☒ Personal Views ☐

(xiv) Are your views expressed on this consultation in connection with your membership or support of any group? If yes please state name of group:

Yes ☐ No ☒

Name of group:

(xv) Please tick the one box that best describes your organisation:

<p><b>Builders/Developers:</b></p> <p>Builder / Main contractor: <input type="checkbox"/></p> <p>Builder/ Small builder: (extensions/repairs/maintenance, etc) <input type="checkbox"/></p> <p>Installer/ special sub-contractor <input type="checkbox"/></p> <p>Commercial developer <input type="checkbox"/></p> <p>House builder <input type="checkbox"/></p>	<p><b>Property Management:</b></p> <p>Housing association (registered social landlord) <input type="checkbox"/></p> <p>Residential landlord, private sector <input type="checkbox"/></p> <p>Commercial <input type="checkbox"/></p> <p>Public sector <input type="checkbox"/></p>
<p><b>Building occupier:</b></p> <p>Home owner <input type="checkbox"/></p> <p>Tenant (residential) <input type="checkbox"/></p> <p>Commercial Building <input type="checkbox"/></p>	<p><b>Building Control Bodies:</b></p> <p>Local authority building control <input type="checkbox"/></p> <p>Approved Inspector <input type="checkbox"/></p>
<p><b>Energy Sector</b> <input type="checkbox"/></p>	<p><b>Fire and Rescue Authority</b> <input type="checkbox"/></p>

<b>Designers/Engineers/Surveyors:</b>  Architect <input type="checkbox"/> Civil/Structural engineer <input type="checkbox"/> Building services engineer <input type="checkbox"/> Surveyor <input type="checkbox"/>	<b>Specific Interest:</b>  Competent person scheme operator <input type="checkbox"/> National representative or trade body <input checked="" type="checkbox"/> Professional body or institution <input type="checkbox"/> Research/ academic organisation <input type="checkbox"/>
<b>Manufacturer/ Supply Chain</b> <input type="checkbox"/>	<b>Other</b> ( <i>please specify</i> ) <input type="text"/>

**(xvi) Please tick the *one* box which best describes the size of your or your organisation's business?**

- Micro – typically 0 to 9 full-time or equivalent employees (incl. sole traders) ☐
- Small – typically 10 to 49 full-time or equivalent employees ☒
- Medium – typically 50 to 249 full-time or equivalent employees ☐
- Large – typically 250+ full-time or equivalent employees ☐
- None of the above (please specify) ☐

**(vi) Are you or your organisation a member of a competent person scheme?**

Yes ☐ No ☒

Name of scheme:

**(vii) Would you be happy for us to contact you again in relation to this consultation?**

Yes ☒ No ☐

WG will process any personal information that you provide us with in accordance with the data protection principles in the Data Protection Act 1998. In particular, we shall protect all responses containing personal information by means of all appropriate technical security measures and ensure that they are only accessible to those with an operational need to see them. You should, however, be aware that as a public body, the Welsh Government is subject to the requirements of the Freedom of Information Act 2000, and may receive requests for all responses to this consultation. If such requests are received we shall take all steps to anonymise responses that we disclose, by stripping them of the specifically personal data – name and e-mail address – you supply in responding to this consultation. If, however, you consider that any of the responses that you provide to this survey would be likely to identify you irrespective of the removal of your overt personal data, then we should be grateful if you would indicate that, and the likely reasons, in your response, for example in the relevant comments box.

## Questions:

### New homes

1. Do you agree with the Government's preference for a CO<sub>2</sub> saving of 40% reduction in carbon dioxide emissions compared to Part L 2010.

No change to 2010	<input type="checkbox"/>
40% CO <sub>2</sub> saving	<input type="checkbox"/>
25% CO <sub>2</sub> saving	<input checked="" type="checkbox"/>
Something else (please explain below)	<input type="checkbox"/>
Don't know	<input type="checkbox"/>

Comments

This would be an appropriate intermediate step to allow the construction industry to kick start with the regulatory burden of cost. The saving should be mostly covered by fabric improvements.

2. Do you agree with the proposal for an 'aggregate' approach to CO<sub>2</sub> target setting for new homes in 2015? The CO<sub>2</sub> target for any individual dwelling varies depending on the ease with which the building can achieve the target, with the overall required CO<sub>2</sub> saving achieved when aggregated over the build mix.

Yes ☐ No ☐ Don't know ☐

### Comments

3. Do you agree with the proposal for a compliant option based on a consistent recipe of elemental specifications for fabric, services plus an additional CO<sub>2</sub> saving equivalent to an amount of photovoltaic (PV). Please justify your choice.

Yes ☐      No ☐      Don't know ☐

### Comments



4. The main difference between the recipes is the required system efficiency for each fuel, which is appropriate for the heating system type. By adopting this approach to different fuel types, there is no need for a separate fuel factor. Do you agree with the proposed approach?

Yes ☐ No ☒ Don't know ☐

#### Comments

BEAMA favours a fabric first approach which leads to stretching of the compliance demands on the house building industry with a direction towards long term sustainable dwellings (fabric being the longest term sustainable building element). This approach paves the way for house builders to begin utilising the types of building services required for a zero carbon home e.g. mechanical ventilation with heat recovery and electric space heating for low heat demand.

BEAMA has made it clear since 2004 that retention of the fuel factor is absolutely critical for resistive electric heating to remain a viable option for new build. There are two political imperatives that now support this long term argument:

#### Strategic Energy Policy - DECC's Future Heating' Strategy

DECC have explicitly stated within their draft heating strategy that the future for low carbon heating is electrically powered resistive heating (for low demand dwellings) and/or heat pumps. We are building new homes that are perfect for electric heating in the long term yet potentially proposing regulation that flies in the face of this strategic direction. CLG wishes to drive towards 'Low Carbon Heating' (ref: Paul Decort presentation 10th February 2012) and BEAMA maintains that low carbon heating is electric.

#### Red Tape Challenge and Economic Impact

The cost of removing the fuel factor will be a high burden on house builders who wish to use electric resistive heating. Already we are seeing the resistive heating market dry up due to punitive building regulations that are not in line with DECC's mid-to-long term strategic view. A cost of +/- £5k to specify direct electric heating is unsupportable in the current economic and regulatory climate. It would effectively impose a ban on electric heating. It should be noted that even in retaining the fuel factor with a FEES plus services approach, there is >£2k compliance cost for electric versus heat pump.

5. For the CO<sub>2</sub> savings proposed, are the recipe specifications a sensible way of achieving them? Please justify your choice.

Yes ☐ No ☒ Don't know ☐

#### Comments

We would want to see more performance based flexibility.

6. In approaching the selection of the amount of PV to be installed on dwellings, do you prefer?

Fixed percentage of building foundation area ☐

Proportion of gross internal floor area with a practical cap ☐

Don't know ☐

Comments

7. Do you agree that the limits on design flexibility 'backstop' values for fabric elements in new homes should be changed from the current reasonable provision in the technical guidance to become mandatory?

Yes ☒ No ☐ Don't know ☐

Comments

8. Do you agree with the changes to the 'backstop' values proposed? Please explain your decision.

Yes ☐ No ☒ Don't know ☐

Comments

We have assumed that the back stop values proposed are those in criterion 2 of the Part L 2013 consultation (Technical Guidance para 4.22). If this is the case then we do not believe these are acceptable backstops as the limit of 10m<sup>3</sup> for air tightness is far too high. This needs to be limited to no worse than 5m<sup>3</sup> as our past modelling has shown that air tightness has the greatest impact on DER.

9. Do you have any other comments on the proposed changes to Approved Document L1A or the domestic National Calculation Methodology? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

10. The Impact Assessment makes a number of assumptions on fabric/services/ renewables costs, new build rates, phase-in rates, learning rates, etc for new homes. Do you think these assumptions are fair and reasonable? Please justify your views.

Yes ☐ No ☐ Don't know ☐

Comments

11. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for new homes? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☐

Comments

## New non-domestic buildings

12. Do you agree with the proposal for ~~2013~~ 2014 for non-domestic buildings to explicitly regulate energy efficiency separately from low carbon technologies through the assessment of primary energy consumption (PEC)? Does PEC seem like a reasonable basis for standard setting?

Yes ☐ No ☐ Don't know ☐

Comments

13. Which package of fabric and services should be selected: 7% or 10%? Please give reasons for your choice.

7% ☐

10% ☐

Don't know ☐

Comments

14. Do you foresee any particular issues for certain categories of building to meet the TPEC or TER?

Yes ☐ No ☐ Don't know ☐

Comments

15. Which approach should be utilized to incorporate the contribution of low carbon technologies into the setting of the Target Emission Rate (TER), for non domestic buildings?

Fixed carbon reduction (in kg.CO<sub>2</sub>/m<sup>2</sup>/year) ☐

Percentage of roof area of PV ☐

Percentage of floor area of PV ☐

Other ☐

Don't know ☐

Please give reasons for your choice

16. The proposals explain the Government's preference for a 20% aggregate improvement in CO<sub>2</sub> performance standards for new non-domestic buildings from ~~October 2013~~ June 2014. Which option do you prefer and why?

No change ☐

Target A: 10% aggregate improvement (1% PV) ☐

Target B: 11% aggregate improvement (No PV) ☐

Target C: 20% aggregate improvement (5% PV) ☐

Don't know ☐

Please give reasons for your choice

17. Do the proposed ~~2013~~ 2014 notional buildings as set out in the changes to the National Calculation Methodology seem like a reasonable basis for standards setting? Please provide comments on the method used to develop the notional buildings and particular elements of one or more of the notional buildings, if relevant.

Yes ☐ No ☐ Don't know ☐

Comments

18. Do you think that a further recipe should be created for buildings under 250m<sup>2</sup> and aligned with the proposed domestic recipe? Are there particular reasons why smaller buildings find compliance with the non-domestic recipes difficult? Please justify your views.

Yes ☐ No ☐ Don't know ☐

Comments

19. Although we recognise that some buildings may need to be serviced in a particular way for legitimate functional or environmental reasons, should Part L incentivise a lower carbon servicing strategy (as with the current Energy Performance Certificate methodology), by

basing the notional building on mixed-mode ventilation?

Yes ☐ No ☐ Don't know ☐

Comments

20. Do you have any other comments on the proposed changes to Approved Document L2A or the non-domestic National Calculation Methodology? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

21. The Impact Assessment makes a number of assumptions on the costs of fabric/services/renewables, new build rates, etc for new non-domestic buildings. Do you think these assumptions are fair and reasonable? Please justify your views.

Yes ☐ No ☐ Don't know ☐

Comments

22. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for new non-domestic buildings?

Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☐

Comments

## Cumulative impact of policies

23. Overall, do you think the assessment of the impact on development is broadly fair and reasonable? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☐

Comments

## National Planning Policy Review

24. What role should planning play in facilitating higher carbon standards? Should it focus on facilitating site wide energy opportunities that will be needed as we move towards zero or near zero carbon buildings?

Views

25. What are the implications from future (and regular) changes to the Code for Sustainable Homes and BREEAM on the implementation of the policy?

Views

26. Are the costs of assessment and certification now disproportionate to the costs and benefits of achieving a minimum sustainable buildings standard level?

Yes ☐ No ☐ Don't know ☐

Comments

27. What should be the role of local planning authorities in setting local standards above and beyond Building Regulations? How can we ensure there is a level playing field of standards across Wales?

Views

28. What do you see as the positive/negative impacts of removing Part B of the policy expecting buildings to be certified against Code/BREEAM?

Views

29. Is there a better, alternative, way to rewards and secure sustainable buildings (above the regulatory minimum) other than using national planning policy? What opportunities are there for future changes to Building Regulations?

Views

30. To what extent are duplication of standard and approval systems an issue? Would the removal of the PfSB policy assist in reducing duplication?

Views

31. What opportunities are there for higher standards to be delivered on strategic sites identified as part of the Local Development Plan?

Views

## Existing buildings

- ~~32. Do you agree with the proposal to raise performance standards for domestic replacement windows? Please explain your answer.~~



~~Yes~~ ☐ ~~No~~ ☐ ~~Don't know~~ ☐

~~Comments~~

33. Do you agree with the proposal to raise performance standards for domestic extensions? Please explain your answer.

Yes ☐ No ☐ Don't know ☐

Comments

34. Do you agree with the proposal to raise performance standards for non-domestic extensions? Please explain your answer.

Yes ☐ No ☐ Don't know ☐

Comments

35. Do you agree that the exemption for conservatories or porches should be removed where an individual room heat or air conditioning unit is installed? How effective would this change be in limiting energy use/emissions, or are there other ways by which energy performance might be improved where conservatories or porches are installed?

Yes ☐ No ☐ Don't know ☐

Comments

36. Do you agree with the proposal to require consequential improvements upon extensions or increases in habitable space in existing homes below 1000m<sup>2</sup>? Please explain your view.

Yes ☒ No ☐ Don't know ☐

## Comments

37. The consultation explains that the regulatory requirement for consequential improvements upon domestic extensions or increases in habitable space would be limited to a list of measures comprising a minimum standard of loft insulation, hot water cylinder insulation and the installation of cavity wall insulation.

Do you agree with this list of measures?

☐

Should this list be different (please explain below)?

☒

Another approach (please explain below)

☐

Don't know

☐

## Comments

It is a missed opportunity to exclude heating and hot water controls from this list. This is because the main impact of an extension will be on the overall heating cost of the dwelling and controls are a cost effective way of reducing the overall heating cost. We would propose that with an extension it should be a requirement that:

- Time and temperature control (if not already in place) should be installed to the heating and hot water system for the whole dwelling.
- If the existing system is extended into the extension then all radiators on the system should also have a TRV added.

38. ents may have on use evidence to

☐

Reduce demand

☐

No effect

☐

Don't know

☐

## Comments

39. Do you agree with the proposal to introduce consequential improvements upon extensions or increases in habitable space in non-domestic buildings under 1000m<sup>2</sup>? Please explain your view.

Yes ☐ No ☐ Don't know ☐

## Comments

40. The consultation proposes that for non-domestic buildings, any measure from list which is used to generate Green Deal assessments, the list in SBEM used to generate Energy Performance Certificate recommendations and the existing list of typical consequential improvement measures from Approved Document L2B should be eligible to be a consequential improvement. Do you agree?

Yes

☐

No

☐

Prefer a different list (please specify)

☐

Don't know

☐

Comments

41. Do you agree that there should not be major problems in extending the requirement for consequential improvements for the building control process? If you do foresee issues, what are they and how might these be addressed?

Yes

☐

No

☐

Don't know

☐

Comments

42. Do you have any other comments on the proposed changes to Approved Document L1B? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

Appendix D: Building Services Efficiencies

There are inconsistencies in the requirements for minimum controls in table D1. The third paragraph reads that:

*“Separate temperature controls of heating zones should be provided using room thermostats or programmable room thermostats in all zones; or individual radiator controls such as TRVs on all radiators other than in bathrooms and rooms with a thermostat.”*

This does not make it clear that there must be a room thermostat in one zone in order to achieve the requirement for interlock. This should be rewritten as:

*“Separate temperature controls of heating zones should be provided using room thermostats or programmable room thermostats in the main zone, and either:*

- a) a room thermostat or programmable room thermostat; or*
- b) individual radiator controls such as TRVs on all radiators in the other zones.”*

In addition to this it seems a missed opportunity to not require TRVs on all radiators as a matter of course when the boiler is drained down.

43. Do you have any other comments on the proposed changes to Approved Document L2B? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

44. Do you think that the Impact Assessment is a fair and reasonable assessment of the potential costs and benefits of raising the performance standards for ~~replacement domestic windows and~~ domestic/non-domestic extensions? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☐

Comments

45. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for consequential improvements in existing homes? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☐

Comments

46. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for consequential improvements in existing non-domestic buildings? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☐

Comments

## Compliance and Performance

47. For new dwellings, Welsh Government is proposing to develop a compliance checklist. Do you think such a checklist would be used sufficiently to warrant its development?

Yes ☒ No ☐ Don't know ☐

Comments

48. If such a checklist was developed, what should it cover?

Comments

49. If the checklist was taken forward, who should be involved in its development?

Comments

50. Would any other approach be likely to prove more effective instead (such as a PAS<sup>16</sup> type approach).

Yes ☐ No ☐ Don't know ☐

Comments

51a. Would it be preferable for buildings of a domestic nature to be able to achieve compliance through applying the recipe in AD L1A, in acknowledgement of the domestic nature of such buildings, rather than demonstrating compliance with AD L2A?

Yes ☐ No ☐ Don't know ☐

Comments

51b. What are the arguments for and against this approach?

Comments

52. Additional views and suggestions for addressing compliance and performance issues in new non domestic buildings would be welcome.

<sup>16</sup> A PAS is a Publically Available Specification, and the PAS would set out a quality assurance approach.

Comments

53. Is the newly formatted ADL1B easier to understand and use?

Yes ☐ No ☐ Don't know ☐

Comments

54. Are there any further amendments to the newly formatted ADL1B that you would recommend? If so, please provide details.

Yes ☐ No ☐ Don't know ☐

Comments

55. How do the consultation proposals impact on the work of Local Authorities and Approved Inspectors? Please give positive and negative impacts.

Comments

56. We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

## #68 - Coed Cymru

Yr Hen Felin Lifio  
Tregynon  
Y Drenewydd,  
Powys, SY16 3PL



The Old Sawmill  
Tregynon  
Newtown,  
Powys, SY16 3PL

Response to the consultation on Part L Review of the Building Regulations  
October 2012

### Introduction

Building Regulations have thus far been used to set a minimum requirement for building performance in terms of energy efficiency, relating to Part L, and have not typically been seen as a mechanism for setting aspirational targets. However, national, UK and EU legislation drive carbon dioxide emission reductions. The European Energy Performance of Buildings Directive target of 'nearly zero energy' for all buildings by 2021 is an overriding consideration and provides the context for the current consultation exercise, pushing for higher energy efficient standards in all member states.

The Code for Sustainable Homes and BREEAM frameworks have set higher standards through planning requirements for buildings in Wales, and supported a number of non-energy related issues. The proposal to remove Planning for Sustainable Buildings (TAN 22) leaves a large number of 'residual' issues unsupported which need to be addressed by some other means. Welsh Government has not made it clear which route will be taken to deal with these issues and, while it is logical to propose a more streamlined approach to the various legislative requirements, it seems unwise to propose their removal without having adequate alternative redress. Although separate to Part L, these issues have severe environmental implications if left unaccounted for. On a more general note, progressing in Wales the parallel issues with England and Scotland is important to avoid creating confusion amongst builders and small businesses, creating disparate regulations in each country, for example, with different window performance requirements.

### New Homes

There is no mention of the PassivHaus standard in the consultation document; there is room for a discussion on this issue which sets higher performance requirements and the implications for manufacturers and the supply chain in Wales. It stipulates that windows need to be triple glazed, for example. The debate over the adoption of the PH standards has three main arguments:



1. The suitability of higher performing components and services in the more temperate UK climate and their comparative performance
2. The robustness and reliability of the MVHR units used in the PH standard and their user acceptability
3. The procurement of a PH Planning Package certification process which favours importing certified products and their respective supply chains rather than a Welsh supply chain

Near PassivHaus standards exist such as the AECB Gold and the near PassivHaus Tŷ Unnos Visitor Centre built at Ebbw Vale<sup>17</sup> which support a Welsh supply chain. More research is needed to identify which systems can reach which standards, particularly in the case of windows, and a method of assembling timber components without thermal bridging and rain ingress in the exposed wet and windy weather of many parts of Wales.

## Existing Buildings

Wales has some of the oldest buildings in Europe and a high proportion of these are solid walled, hard to treat buildings. Recent research by organisations such as the Sustainable Traditional Buildings Alliance and SusREF point to the need for holistic rather than piecemeal solutions to improving energy efficiency, which has been the approach so far. The Green Deal proposals for Wales are not at all clear and a number of opportunities exist to test different approaches to energy efficiency improvements, such as external and internal wall insulation and to ensure the absence of cold bridging of all elements of the fabric of a building.

It is also unclear why windows have been left out of the consequential improvements measures. Heat losses through windows account for between 11-20% of total fabric losses; improving the energy efficiency of replacement windows cannot be ignored. What discussion took place to leave replacement windows out of the consideration for consequential improvements - isn't this a lost opportunity?

## Carbon Sequestration and the role of Timber

As building energy efficiency standards improve, operational energy becomes the lesser lifecycle consideration compared to the embodied energy of the building. Timber used in buildings can store carbon over its lifetime and therefore contribute to removing atmospheric carbon in this period.

Wood for Good's 'Wood First' Rule encourages local authorities to consider using timber first in the construction of their buildings and London Borough of Hackney is considering this option for its public portfolio<sup>18</sup>. The consideration of

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<sup>17</sup>

[http://www.innovateuk.org/assets/pdf/casestudies/case%20study%20tyunos\\_welshcchouse\\_111010\\_v4.pdf](http://www.innovateuk.org/assets/pdf/casestudies/case%20study%20tyunos_welshcchouse_111010_v4.pdf)

<sup>18</sup> <http://www.ttf.co.uk/Article/Detail.aspx?ArticleUid=cbab0e43-4fc5-4098-a0ab-30a9995a2c88>

materials in buildings is catered for by the Code for Sustainable Homes and BREEAM. If the Welsh Government proposal to remove the Code and BREEAM regimes is adopted, there is no mechanism to support the use of timber, and home grown timber in particular, in construction, which is one of the aims of the RDP-sponsored Supply Chain Efficiencies Scheme projects<sup>19</sup>. It seems the time is ripe, while devolving the new Welsh Regulations, to develop a way of measuring embodied carbon and adopting the metrics in a meaningful way in order to benchmark the carbon properties of different buildings and enable accurate comparisons of their sustainability credentials.

For further information please contact:

**Haf Roberts**  
**Timber Supply Chain Manager**  
**Coed Cymru**

---

<sup>19</sup> <http://wales.gov.uk/docs/drah/publications/110713sceoverviewv3en.pdf>

**#71 - British Glass Manufacturers' Confederation**

## 2012 consultation on changes to the Building Regulations in Wales

### Part L (Conservation of fuel and power)

#### Consultation Response Form

Your name: Mr Mark Bristow  
(British Glass internal confederation contact - John  
Stockdale)

Organisation (if applicable): British Glass  
Manufacturers' Confederation – Flat Glass  
Manufacturers' FITP Working Group

**(xvii) Are the views expressed on this consultation an official response from the organisation you represent or your own personal views?**

Organisational ☒ Personal Views ☐

**(xviii) Are your views expressed on this consultation in connection with your membership or support of any group? If yes please state name of group:**

Yes ☒ No ☐

Name of group:

British Glass FITP working party - with representatives from all 3 flat glass manufacturers in the UK: Guardian, NSG and St Gobain.

**(xix) Please tick the one box that best describes your organisation:**

<p><b>Builders/Developers:</b></p> <p>Builder / Main contractor: <input type="checkbox"/></p> <p>Builder/ Small builder: (extensions/repairs/maintenance, etc) <input type="checkbox"/></p> <p>Installer/ special sub-contractor <input type="checkbox"/></p> <p>Commercial developer <input type="checkbox"/></p> <p>House builder <input type="checkbox"/></p>	<p><b>Property Management:</b></p> <p>Housing association (registered social landlord) <input type="checkbox"/></p> <p>Residential landlord, private sector <input type="checkbox"/></p> <p>Commercial <input type="checkbox"/></p> <p>Public sector <input type="checkbox"/></p>
<p><b>Building occupier:</b></p> <p>Home owner <input type="checkbox"/></p> <p>Tenant (residential) <input type="checkbox"/></p> <p>Commercial Building <input type="checkbox"/></p>	<p><b>Building Control Bodies:</b></p> <p>Local authority building control <input type="checkbox"/></p> <p>Approved Inspector <input type="checkbox"/></p>
<p><b>Energy Sector</b> <input type="checkbox"/></p>	<p><b>Fire and Rescue Authority</b> <input type="checkbox"/></p>

<b>Designers/Engineers/Surveyors:</b>  Architect <input type="checkbox"/> Civil/Structural engineer <input type="checkbox"/> Building services engineer <input type="checkbox"/> Surveyor <input type="checkbox"/>	<b>Specific Interest:</b>  Competent person scheme operator <input type="checkbox"/> National representative or trade body <input type="checkbox"/> Professional body or institution <input type="checkbox"/> Research/ academic organisation <input type="checkbox"/>
<b>Manufacturer/ Supply Chain</b> <input checked="" type="checkbox"/>	<b>Other</b> ( <i>please specify</i> ) <div style="border: 1px solid black; height: 20px; width: 100%;"></div>

**(xx) Please tick the *one* box which best describes the size of your or your organisation's business?**

- Micro – typically 0 to 9 full-time or equivalent employees (incl. sole traders) ☐
- Small – typically 10 to 49 full-time or equivalent employees ☐
- Medium – typically 50 to 249 full-time or equivalent employees ☐
- Large – typically 250+ full-time or equivalent employees ☒
- None of the above (please specify) Members of associations represented by FITP range from micro-enterprises to multi-national companies. ☐

**(vi) Are you or your organisation a member of a competent person scheme?**

Yes ☐ No ☒

Name of scheme:

**(vii) Would you be happy for us to contact you again in relation to this consultation?**Yes ☒ No ☐

WG will process any personal information that you provide us with in accordance with the data protection principles in the Data Protection Act 1998. In particular, we shall protect all responses containing personal information by means of all appropriate technical security measures and ensure that they are only accessible to those with an operational need to see them. You should, however, be aware that as a public body, the Welsh Government is subject to the requirements of the Freedom of Information Act 2000, and may receive requests for all responses to this consultation. If such requests are received we shall take all steps to anonymise responses that we disclose, by stripping them of the specifically personal data – name and e-mail address – you supply in responding to this consultation. If, however, you consider that any of the responses that you provide to this survey would be likely to identify you irrespective of the removal of your overt personal data, then we should be grateful if you would indicate that, and the likely reasons, in your response, for example in the relevant comments box.

**Questions:****New homes**

1. Do you agree with the Government's preference for a CO<sub>2</sub> saving of 40% reduction in carbon dioxide emissions compared to Part L 2010.

No change to 2010	<input type="checkbox"/>
40% CO <sub>2</sub> saving	<input checked="" type="checkbox"/>
25% CO <sub>2</sub> saving	<input type="checkbox"/>
Something else (please explain below)	<input type="checkbox"/>
Don't know	<input type="checkbox"/>

Comments

40% preferred; so as to avoid a more dramatic change when zero carbon standards are introduced in future revisions.

2. Do you agree with the proposal for an 'aggregate' approach to CO<sub>2</sub> target setting for new homes in 2015? The CO<sub>2</sub> target for any individual dwelling varies depending on the ease with which the building can achieve the target, with the overall required CO<sub>2</sub> saving achieved when aggregated over the build mix.

Yes ☒ No ☐ Don't know ☐

Comments

3. Do you agree with the proposal for a compliant option based on a consistent recipe of elemental specifications for fabric, services plus an additional CO<sub>2</sub> saving equivalent to an amount of photovoltaic (PV). Please justify your choice.

Yes ☒ No ☐ Don't know ☐

Comments

We are firm believers in a “fabric first” approach, because this minimises the demand for energy from any source (renewable or non-renewable). The performance of the building fabric is permanent, consistent and (generally) maintenance-free. A high standard of fabric performance is essential to ensure the building remains energy-efficient and comfortable in the event of renewable energy supply failing, under-performing or being repaired.

4. The main difference between the recipes is the required system efficiency for each fuel, which is appropriate for the heating system type. By adopting this approach to different fuel types, there is no need for a separate fuel factor. Do you agree with the proposed approach?

Yes ☒ No ☐ Don't know ☐

Comments

5. For the CO<sub>2</sub> savings proposed, are the recipe specifications a sensible way of achieving

them? Please justify your choice.

Yes ☒ No ☐ Don't know ☐

Comments

The specifications are available with current technology.

6. In approaching the selection of the amount of PV to be installed on dwellings, do you prefer?

Fixed percentage of building foundation area ☒

Proportion of gross internal floor area with a practical cap ☐

Don't know ☐

Comments

Because roof area (where the PVs are most likely to be placed) will be similar to foundation area.

7. Do you agree that the limits on design flexibility 'backstop' values for fabric elements in new homes should be changed from the current reasonable provision in the technical guidance to become mandatory?

Yes ☐ No ☒ Don't know ☐

Comments

The current system, in which the backstop values are regarded as "reasonable provision", works satisfactorily.



8. Do you agree with the changes to the 'backstop' values proposed? Please explain your decision.

Yes ☒ No ☐ Don't know ☐

Comments

9. Do you have any other comments on the proposed changes to Approved Document L1A or the domestic National Calculation Methodology? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

No comment

10. The Impact Assessment makes a number of assumptions on fabric/services/ renewables costs, new build rates, phase-in rates, learning rates, etc for new homes. Do you think these assumptions are fair and reasonable? Please justify your views.

Yes ☐ No ☐ Don't know ☒

Comments

Windows and glazing are not referenced or costed in isolation in the IA, so we cannot comment.

11. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for new homes? Please justify your view and provide alternative evidence if necessary.

☐ ☐ ☒

Yes                      No                      Don't know

Comments

Answer as above Q10

## New non-domestic buildings

12. Do you agree with the proposal for 2013 for non-domestic buildings to explicitly regulate energy efficiency separately from low carbon technologies through the assessment of primary energy consumption (PEC)? Does PEC seem like a reasonable basis for standard setting?

Yes ☐      No ☒      Don't know ☐

Comments

For the reasons given in our comments on Q9, we think the introduction of the PEC creates burdens on designers and builders, without commensurate benefit.

13. Which package of fabric and services should be selected: 7% or 10%? Please give reasons for your choice.

7% ☐

10% ☒

Don't know ☐

Comments

We prefer the 10% option which achieves 11% CO2 reduction without renewables (table 3.3 in the Consultation Document). It is important to maximise the savings through the use of appropriate building fabric, and to minimise the reliance on energy supply (whether renewable or not), so that the building remains energy-efficient, comfortable and habitable in the event of the energy supply system under-performing due to e.g. failure, disruption or lack of maintenance.

14. Do you foresee any particular issues for certain categories of building to meet the TPEC or TER?

Yes ☐      No ☐      Don't know ☒

Comments

Not qualified to comment

15. Which approach should be utilized to incorporate the contribution of low carbon technologies into the setting of the Target Emission Rate (TER), for non domestic buildings?

Fixed carbon reduction (in kg.CO<sub>2</sub>/m<sup>2</sup>/year) ☐

Percentage of roof area of PV ☐

Other ☐

Don't know ☒

Please give reasons for your choice

16. The proposals explain the Government's preference for a 20% aggregate improvement in CO<sub>2</sub> performance standards for new non-domestic buildings from October 2013. Which option do you prefer and why?

No change ☐

Target A: 10% aggregate improvement (1% PV) ☐

Target B: 11% aggregate improvement (No PV) ☒

Target C: 20% aggregate improvement (5% PV) ☐

Don't know ☐

Please give reasons for your choice

17. Do the proposed 2013 notional buildings as set out in the changes to the National Calculation Methodology seem like a reasonable basis for standards setting? Please provide comments on the method used to develop the notional buildings and particular elements of one or more of the notional buildings, if relevant.

Yes ☒ No ☐ Don't know ☐

Comments

18. Do you think that a further recipe should be created for buildings under 250m<sup>2</sup> and aligned with the proposed domestic recipe? Are there particular reasons why smaller buildings find

☒ ☐ ☐

compliance with the non-domestic recipes difficult? Please justify your views.

Yes                  No                  Don't know

Comments

Small non-dwellings are likely to be domestic in character and form of construction.

19. Although we recognise that some buildings may need to be serviced in a particular way for legitimate functional or environmental reasons, should Part L incentivise a lower carbon servicing strategy (as with the current Energy Performance Certificate methodology), by basing the notional building on mixed-mode ventilation?

Yes ☐      No ☐      Don't know ☒

Comments

No comment

20. Do you have any other comments on the proposed changes to Approved Document L2A or the non-domestic National Calculation Methodology? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

The comments we made in answer to Q9 and Q12 apply equally to the unilateral introduction of the BPEC criterion.

21. The Impact Assessment makes a number of assumptions on the costs of fabric/services/renewables, new build rates, etc for new non-domestic buildings. Do you think these assumptions are fair and reasonable? Please justify your views.

Yes ☐      No ☐      Don't know ☒

Comments

No comment

22. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for new non-domestic buildings?

Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

Comments

No comment

## Cumulative impact of policies

23. Overall, do you think the assessment of the impact on development is broadly fair and reasonable? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

Comments

No comment

## National Planning Policy Review

24. What role should planning play in facilitating higher carbon standards? Should it focus on facilitating site wide energy opportunities that will be needed as we move towards zero or near zero carbon buildings?

Views

Planning should play no role. Building Regulations alone should determine the appropriate standards for energy efficiency in buildings. Please keep administrative procedures and hurdles to a

25. What are the implications from future (and regular) changes to the Code for Sustainable Homes and BREEAM on the implementation of the policy?

Views

Again, Building Regulations should be the mechanism, and should be sufficient.

26. Are the costs of assessment and certification now disproportionate to the costs and benefits of achieving a minimum sustainable buildings standard level?

Yes ☐ No ☐ Don't know ☒

Comments

No comment

27. What should be the role of local planning authorities in setting local standards above and beyond Building Regulations? How can we ensure there is a level playing field of standards across Wales?

Views

As in our answer to Q24, energy efficiency in buildings should be a matter for Building Regulations alone.

28. What do you see as the positive/negative impacts of removing Part B of the policy expecting buildings to be certified against Code/BREEAM?

Views

No comment

29. Is there a better, alternative, way to rewards and secure sustainable buildings (above the regulatory minimum) other than using national planning policy? What opportunities are there for future changes to Building Regulations?

Views

No comment

30. To what extent are duplication of standard and approval systems an issue? Would the removal of the PfSB policy assist in reducing duplication?

Views

No comment

31. What opportunities are there for higher standards to be delivered on strategic sites identified as part of the Local Development Plan?

Views

No comment

## Existing buildings

32. Do you agree with the proposal to raise performance standards for domestic replacement windows? Please explain your answer.

Yes ☐ No ☐ Don't know ☒

Comments

The question asks if we agree with the proposal to raise standards, but the Consultation Document proposes no change in standards! It is therefore inconsistent with the content of the Consultation Document. WER B and 1.4 should be introduced but there should be a target of A & 1.2. Windows are available that achieve B or 1.4 and many installations achieve WERs of B & A.

No new technology is required, as the products offering this performance (and better) are readily available. Having no change to window performance values goes against the stated ambition of the Welsh Government to have the tightest approach to building standards, Section 2.3 Para 26 of the document: ***“Current analysis indicates some potential to further raise performance standards for extensions and replacement windows and potential improvements in controlled services like non-domestic lighting”.***

We do not wish to see any divergence in standards and implementation dates in the requirements for England and Wales. Such differing requirements would increase the number of glass and window product specifications, resulting in extra cost to the

33. Do you agree with the proposal to raise performance standards for domestic extensions? Please explain your answer.

Yes ☒ No ☐ Don't know ☐

Comments

The standards required for extensions should be the same as for new build, to simplify the supply chain.

34. Do you agree with the proposal to raise performance standards for non-domestic extensions? Please explain your answer.

Yes ☒ No ☐ Don't know ☐

## Comments

The standards required for extensions should be the same as for new build, to simplify the supply chain.

35. Do you agree that the exemption for conservatories or porches should be removed where an individual room heat or air conditioning unit is installed? How effective would this change be in limiting energy use/emissions, or are there other ways by which energy performance might be improved where conservatories or porches are installed?

Yes ☒ No ☐ Don't know ☐

## Comments

This is likely to achieve energy savings. Part L would be improved if the technical guidance included a definition of a conservatory. In earlier versions of Part L a perfectly satisfactory definition was included, and should be included.

36. Do you agree with the proposal to require consequential improvements upon extensions or increases in habitable space in existing homes below 1000m<sup>2</sup>? Please explain your view.

Yes ☒ No ☐ Don't know ☐

## Comments

The Energy Performance of Buildings Directive requires this. We do however feel that the consequential improvements should not be limited to the single option of loft, cavity and cylinder insulation (see answer to Q37 below).



37. The consultation explains that the regulatory requirement for consequential improvements upon domestic extensions or increases in habitable space would be limited to a list of measures comprising a minimum standard of loft insulation, hot water cylinder insulation and the installation of cavity wall insulation.

Do you agree with this list of measures? ☐

Should this list be different (please explain below)? ☒

Another approach (please explain below) ☐

Don't know ☐

Comments

For non-domestic buildings, Part L already offers a range of consequential improvement options; the same principle should apply to dwellings. Replacement windows & glazing and secondary glazing should be included in the list of options.

38. What effect do you think the requirements for consequential improvements may have on the demand for repair, maintenance and improvement activity? Please use evidence to explain your answer.

Increase demand ☐

Reduce demand ☐

No effect ☐

Don't know ☒

Comments

This situation has not existed before – however, it will probably increase the consequential activity but reduce the building of extensions.

39. Do you agree with the proposal to introduce consequential improvements upon extensions or increases in habitable space in non-domestic buildings under 1000m<sup>2</sup>? Please explain your view.

Yes ☒ No ☐ Don't know ☐

Comments

The recast Energy Performance of Buildings Directive requires CI. Conservatories should not be classed as extensions and should not trigger a CI.

40. The consultation proposes that for non-domestic buildings, any measure from list which is used to generate Green Deal assessments, the list in SBEM used to generate Energy Performance Certificate recommendations and the existing list of typical consequential improvement measures from Approved Document L2B should be eligible to be a consequential improvement. Do you agree?

Yes

☒

No

☐

Prefer a different list (please specify)

☐

Don't know

☐

Comments

No comment

41. Do you agree that there should not be major problems in extending the requirement for consequential improvements for the building control process? If you do foresee issues, what are they and how might these be addressed?

Yes ☐ No ☒ Don't know ☐

Comments

Extending the requirements for CI will lead to increased Red Tape and bureaucracy and ultimately cost to the consumer.

42. Do you have any other comments on the proposed changes to Approved Document L1B? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

No comment

43. Do you have any other comments on the proposed changes to Approved Document L2B? Please make it clear which issue each comment relates to by identifying the relevant paragraph number.

Comments

The Welsh regulations should be consistent with those for England to avoid having a different range of product specifications.

44. Do you think that the Impact Assessment is a fair and reasonable assessment of the potential costs and benefits of raising the performance standards for replacement domestic windows and domestic/non-domestic extensions? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

Comments

Windows and glazing are not included in the IA, so we cannot comment

45. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for consequential improvements in existing homes? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

Comments

Windows and glazing not included in the IA, so we cannot comment.

46. Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for consequential improvements in existing non-domestic buildings? Please justify your view and provide alternative evidence if necessary.

Yes ☐ No ☐ Don't know ☒

Comments

Windows and glazing are not included in the IA, so we cannot comment.

## Compliance and Performance

47. For new dwellings, Welsh Government is proposing to develop a compliance checklist. Do you think such a checklist would be used sufficiently to warrant its development?

Yes ☐ No ☐ Don't know ☒

Comments

No comment

48. If such a checklist was developed, what should it cover?

Comments

Windows and glazing have a major impact on the energy performance of dwellings and should therefore be included.

49. If the checklist was taken forward, who should be involved in its development?

Comments

The Flat Glass Manufacturers' Group of British Glass would welcome the chance to be consulted on this.

50. Would any other approach be likely to prove more effective instead (such as a PAS<sup>20</sup> type approach).

Yes ☐ No ☐ Don't know ☒

Comments

No comment

51a. Would it be preferable for buildings of a domestic nature to be able to achieve compliance through applying the recipe in AD L1A, in acknowledgement of the domestic nature of such buildings, rather than demonstrating compliance with AD L2A?

Yes ☒ No ☐ Don't know ☐

Comments

See comment in 51b

51b. What are the arguments for and against this approach?

Comments

<sup>20</sup> A PAS is a Publicly Available Specification, and the PAS would set out a quality assurance approach.

Some small domestic-style non dwellings might require air conditioning, so the dwelling fabric standards might not be appropriate.

52. Additional views and suggestions for addressing compliance and performance issues in new non domestic buildings would be welcome.

Comments

No comment

53. Is the newly formatted ADL1B easier to understand and use?

Yes ☒ No ☐ Don't know ☐

Comments

No comment

54. Are there any further amendments to the newly formatted ADL1B that you would recommend? If so, please provide details.

Yes ☐ No ☐ Don't know ☒

Comments

No comment

55. How do the consultation proposals impact on the work of Local Authorities and Approved Inspectors? Please give positive and negative impacts.

Comments

No comment

56. We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

We want to see a Fabric First approach – improve the building then add on all the other enhancements as appropriate.