2012 consultation on changes to the

Building Regulations in Wales

Part L (Conservation of fuel and power)

Consultation Response Form	Your name: Kayna Tre	egay	
•	Organisation (if applica Wales	ble): Environment Agency	
\$-			
(i) Are the views organisation y	expressed on this cons ou represent or your o	sultation an official response fr wn personal views?	om the
Organisational	X Personal Views		
(ii) Are your views or support of a	s expressed on this cor any group? If yes pleas	nsultation in connection with your state name of group:	our membership
Yes No	X		
Name of group			
N/A			
(iii) Please tick the	one box that best desc	cribes your organisation:	
Builders/Developers:	:	Property Management:	
Builder / Main contract	tor:	Housing association (registered social landlord)	
(extensions/repairs/ma	aintenance, etc)	Residential landlord, private sector	
Installer/ special sub-c		Commercial	
Commercial developer House builder		Public sector	

Building occupier: Home owner	Building Control Bodies: Local authority building control
Tenant (residential)	Approved Inspector
Commercial Building	
Energy Sector	Fire and Rescue Authority
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Designers/Engineers/Surveyors:	Specific Interest:
Architect	Competent person scheme operator
Civil/Structural engineer Building services engineer	National representative or trade body
Surveyor	Professional body or institution
	Research/ academic organisation

Manu	ufacturer/ Supply Chain	Other (please specify) Environment Agency Wales – Welsh Government Sponsored Body
(iv)	Please tick the <i>one</i> box which best desc business?	cribes the size of your or your organisation's
	Micro – typically 0 to 9 full-time or equivale	ent employees (incl. sole traders)
	Small – typically 10 to 49 full-time or equiv	alent employees
	Medium – typically 50 to 249 full-time or ed	quivalent employees
	Large – typically 250+ full-time or equivale	nt employees X
	None of the above (please specify)	
(vi)	Are you or your organisation a member	of a competent person scheme?
	Yes No X	
	Name of scheme:	
(vii)	Would you be happy for us to contact y consultation?	ou again in relation to this
	Yes X 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:

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1.	Do you agree with the Government's preference for a $\rm CO_2$ saving of 40% reduction in carbon dioxide emissions compared to Part L 2010.
	No change to 2010
	40% CO ₂ saving
	25% CO ₂ saving
	Something else (please explain below)
	Don't know
	Comments
2.	Do you agree with the proposal for an 'aggregate' approach to CO_2 target setting for new homes in 2015? The CO_2 target for any individual dwelling varies depending on the ease with which the building can achieve the target, with the overall required CO_2 saving achieved when aggregated over the build mix.
	Yes X 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 ₂ saving equivalent to an
	amount of photovoltaic (PV). Please justify your choice.
	Yes No 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?

2012 consultation on changes to the Building Regulations in Wales Part L (Conservation of fuel and power) I 6 Yes No Don't know Comments Do you agree with the changes to the 'backstop' values proposed? Please explain your 8. decision. Don't know Yes No Comments Do you have any other comments on the proposed changes to Approved Document L1A or 9. the domestic National Calculation Methodology? Please make it clear which issue each comment relates to by identifying the relevant paragraph number. Comments The Impact Assessment makes a number of assumptions on fabric/services/ renewables 10. 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. Don't know No Yes Comments Overall, do you think the impact assessment is a fair and reasonable assessment of the 11. potential costs and benefits of the proposed options for new homes? Please justify your view and provide alternative evidence if necessary. No Don't know Yes 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
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 ₂ /m ² /year)

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	Confinents
1	Although we recognise that some buildings may need to be serviced in a particular way for egitimate 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
	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 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
	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

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	lative 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
Natio	nal 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 has a key role in building and site design, layout and construction.
	We believe that planning has a role in reducing energy demand and facilitating the most appropriate low carbon energy technology, as suggested in the question, as long as proposed technologies are located in the most appropriate location. Where possible and appropriate, planning should play a role in promoting the co-location of certain land uses. For example, Combined Heat and Power (CHP) plants should be located close to existing or proposed heat receptors, as is currently encouraged by TAN12 (Design).
	However, planning should not focus solely on 'site wide energy opportunities'. As recognised in paragraph 109 of the consultation document, delivering sustainable development involves wider considerations, including water efficiency, sustainable drainage and waste. We expand on this point in our response to Question 28.

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

We believe that too many future changes to the Code for Sustainable Homes and BREEAM will result in uncertainty and additional expense, as manufacturers of fittings would have to adapt their products more than once in order comply with changing standards. We therefore support Welsh Government's commitment to set a 40% reduction in carbon emissions compared to Part L 2010 now, rather than to introduce an intermediate step of a 25% reduction. This will provide certainty for developers and manufacturers of fittings.

However, it is also important that policy and its implementation needs to be easily reviewed and flexible. For example, new research or the need to adapt to climate change may require changes to sustainable buildings policy at some point in the future. If possible, the potential for future adaptation should be incorporated into changes at this point in time, as we discuss in our answer to Question 29.

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 process to enable achievement of minimum standards should be as straightforward as possible. However, assessment should still be required to ensure that buildings are achieving minimum standards.

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 Planning Authorities should consider and address issues such as energy efficiency, carbon reduction and water management in their Local Development Plans (LDPs) in partnership with neighbouring LPAs. Higher local standards should be set where: opportunities arise (for example, making use of CHP potential); and where there is need (for example, in water stressed areas). This could be within or between LPA areas. This may mean that some LPAs set higher standards than others, as issues and opportunities will vary from place to place. However, LPAs need to base local standards on the same level of information and similar methodologies. This would result in a consistency of approach.

...continued

Question 31 seeks views on applying higher standards to strategic sites. As we set out in our response to that question, we support this. However, we believe that the application of higher standards need not be limited to strategic sites. Higher standards could also apply to the whole of a LPA, where there is evidence to support such an approach.

Similarly, development pressures in one part of a catchment can have significant implications for development opportunities elsewhere, and this may not be within the LPA area. LPAs therefore need to consider issues at the wider than local scale when setting standards. In the case of proposed development not in accordance with the LPA's statutory Development Plan, developers will need to clearly demonstrate that their proposal does not have any unintended consequences for other future development within or outside the LPA area, socially, environmentally and economically.

Recommendation: All LPAs should use the same baseline information as each other as evidence for their LDPs. This will help to ensure standards are set in response to the best available information.

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

Negative Implications

The removal of Part B of the policy expecting buildings to be certified against the Code/ BREEAM will have the following negative implications:

a) Potential for a reduction in standards: We believe that there is a risk that some standards currently required through the Code for Sustainable Homes (the Code) and BREEAM, but not included in Part L of the Building Regulations, will be lowered. This is because the Code covers more than just fuel and power. For example, the Code Level 3 currently requires a predicted average household water consumption of 105 litres/ person/ day (Annex B, Category 2, page 31). Building Regulations Part G (Sanitation, Hot Water Safety and Water Efficiency), which developers will revert to, sets an equivalent standard of 125 litres/ person/ day (Requirement G2 and Regulation 36).

The removal from planning policy of the requirements in the Code will result in lower standards for water efficiency. This will lead to water use in houses increasing.

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Pumping, heating and treating water uses energy. Water related activities contribute to 6% of the UK's annual carbon emissions. The significant proportion of this (~5%) energy is associated with water consumption as a result of heating hot water in the home (source: Quantifying the energy and carbon effects of water saving. Environment Agency and Energy Saving Trust, April). Therefore, water efficiency will support a low carbon agenda. It will be more costly to retrofit homes with water efficient devices in the future, than to maintain higher standards today. Therefore, policy should ensure water efficiency measures should be incorporated into building design today, in order to save money in the future and in order to avoid increased future carbon emissions.

b) Potential loss of the role of planning in sustainable building design and layout: We disagree with line 155 (page 49) of the Regulatory Impact Assessment which states, "The policy is not expected to have any impact on water quality or quantity, biodiversity, waste management, noise pollution or the appearance of the landscape". We believe that removing the requirement for BREEAM and Code compliance could result in both LPAs and developers failing to consider 'wider aspects' of sustainable building design and layout, such as water efficiency, appropriate drainage (including the potential for sustainable drainage systems (SuDS)), maximisation of natural heat and light and the design of waste disposal measures. These aspects could affect the design, layout and orientation of buildings.

Paragraph 2.9.1 of TAN12 (Design) acknowledges that planning and Building Regulations have separate, but complementary roles. We agree with this. If wider sustainability issues are not considered at the planning stage. it is unlikely that developers will be willing to consider them at building regulations stage, once planning permission has been granted. As a result, future users of a site may have increased bills. For example, heating bills may be increased if buildings are not orientated to take advantage of passive solar gain (i.e. buildings being orientated in a way that maximises the heat of the sun) regardless of the standard of fittings in a home. So even if someone buying a house saves money initially as a result of sustainable design being omitted, the lifetime running costs of the home may amount to more than this saving.

Recommendation: Welsh Government could delay the removal of the requirement to comply with the Code and BREEAM until the issues contained in the Code and BREEAM are fully encompassed within other parts of the building regulations at or above existing standards. For example, Part G on Sanitation, Hot Water Safety and Water Efficiency would need to be updated to maintain the standard of water efficiency currently set out in the Code. ...cont. Recommendation: Welsh Government could strengthen the requirement of Design and Access Statements (DAS) (currently contained in Appendix 3, paragraph 3.2 of TAN12 (Design)) to further incorporate sustainable buildings issues. The DAS could be required to demonstrate more fully how the applicant has considered drainage, resource efficiency and carbon reduction in layout, design and materials of the scheme. In order for this to address the potential reduction in standards which we refer to above, specific standards for sustainable buildings would need to be set in the requirements for the DAS.

Recommendation: We believe that it would be useful if Welsh Government produced a comparison chart outlining which sustainable buildings issues are required in the Code and BREEAM, which issues are already picked up by existing building regulations and which are 'left over'. This would allow Welsh Government to see if removing the requirement to comply with the Code and BREEAM will have any unintended consequences that need to be resolved quickly or delivered by new legislation.

Positive impact

We believe that a positive outcome of removing Part B of the policy expecting buildings to be certified against the Code/BREEAM is the ability to move towards a fittings based approach, or 'elemental recipe' as it is referred to on page 149 of the consultation. We support this. We believe this will be simpler and more effective for developers to understand.

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

Alternative ways to reward and secure sustainable buildings

We believe that future changes to the Building Regulations should be combined with other methods of rewarding and securing sustainable buildings, for example, via voluntary approaches.

For example, the Scottish Government has published non-compulsory sustainability guidance to be incorporated into future revision of building regulations. In their reforms Scotland have introduced a 'Silver' standard of performance, and 'Gold' standard of performance. This replicates the good and best practice levels written into the AECB (Association for Environment Conscious Building) standards and the WRAP guidance on non-domestic water efficiency. These fittings based approaches have a range of benefits compared to the current per capita approach.

...continued

Recommendation: Lessons learnt from the Scottish approach may be applicable in Wales.

In partnership with the Energy Saving Trust (EST) we have identified significant benefits from increasing water efficiency in new buildings. We believe that this could be effectively developed into voluntary sustainability guidance, followed by changes to Part G of the devolved building regulations which covers water efficiency.

We also refer you to our comments made in response to the Welsh Government's recent consultation on the Housing Bill White Paper (WG15346). We summarise three of our key relevant recommendations below. Please see our full response to Welsh Government dated 15 August 2012 for more details and evidence.

- 1. Changes to the Welsh Housing Quality Standard: Changes to the Welsh Housing Quality Standard (WHQS) would be an effective way to improve the sustainability of buildings. We advise that water efficiency, flood resilience and Water Sensitive Urban Design (WSUD) should be incorporated into the WHQS or any other new standard for accommodation.
- 2. Proposed Duty to Co-operate (Housing Associations): The Welsh Government's proposed Duty to Co-operate for housing associations should include a duty to co-operate on producing standards, sustainable procurement and sharing best practice on WSUD. It should also require housing associations to co-operate with water companies on producing standards for WSUD.

Recommendation: Welsh Government implement these suggestions as part of their wider work on sustainable buildings.

Opportunities for future changes to Building Regulations

It is likely that issues such as water shortages, summer overheating and flooding are likely to get more severe as the climate changes in the future. It is therefore important to build in the potential for future adaptation to the effects of climate change into Building Regulations. This should be done once, in order to reduce uncertainty for developers and manufacturers. For example, ventilation windows or ducts should be located higher up on buildings, so that any potential flood water does not reach them.

Recommendation: Standards set by current and future changes to Building Regulations should incorporate the potential for future adaptation to climate change.

...continued

We welcome the fittings-based 'elemental recipe' approach that Welsh Government has taken for this review of the Part L of the Building Regulations. If Part G of the Building Regulations (Sanitation, Hot Water Safety and Water Efficiency) is to be reviewed, we would welcome a similar approach being taken for the water efficiency elements.

Recommendation: A fittings based water efficiency standard should be incorporated into any review of Part G of the Building Regulations.

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

As we discussed in our response to Question 28, we do not consider that all the standards required via the Code and those required via planning policy to be duplicates, because they cover different aspects. Standards and approval systems should be mutually supportive.

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

Views

As we discussed in our response to Question 27, higher standards should be delivered where opportunities arise and/ or where there is need. We agree with the suggestion that there should be an emphasis on masterplanning for strategic sites through the LDP (as set out in paragraph 108 of the consultation). However, since it is unrealistic to believe that all sites will be delivered through this route, there may be local issues (such as water shortages) that necessitate higher standards across a whole LPA area. Therefore, policy should not rely solely on higher standards for strategic sites. The majority of developments in Wales are likely to be small scale and many may not be allocated in the LDP. Therefore, it is important that sustainable buildings issues can still be dealt with at the planning application stage, not just through site allocations in the LDP. Paragraph 4.11.8 of Planning Policy Wales (PPW) encourages setting higher standards for strategic sites, but this could be extended to cover other sites where there is need.

Recommendation: We recommend the retention of the paragraph 4.11.5 of PPW or, at least, the principles contained within it. We recommend that the policy also encourage the setting of higher standards for non-strategic sites where there is need or opportunity.

Existing buildings

32.	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 ² ? 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
	Comments
	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.
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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.
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.
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
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
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

39. Do you agree with the proposal to introduce consequential improvements upon extensions or increases in habitable space in non-domestic buildings under 1000m²? 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

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

77.	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 ¹ 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

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

51b. What are the arguments for and against this approach?	
Comments	
 Additional views and suggestions for addressing compliance and performance issue new non domestic buildings would be welcome. 	s in
Comments	
53. Is the newly formatted ADL1B easier to understand and use?	8
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

Responses to consultations may be made public – on the internet or	
in a report If you would not for	1
in a report. If you would prefer your response to be kept confidential,	
please tick here:	

56.