

October 2012

Submission to the Welsh Government

in response to

Consultation Document Building Regulations in Wales Part L



**cyfeillion
y ddaear
cymru
friends of
the earth
cymru**

Summary

In light of the urgency to mitigate climate change, Friends of the Earth Cymru would like Building Regulations to adopt a zero-carbon standard in the soonest possible timeframe. Such a standard could be a Welsh Passive House standard based on the Welsh Future Homes, Passivhaus or AECB Gold Standard.

Such an approach would drive innovation and enable Wales to gain first-mover advantage, with the potential for Welsh businesses to expand activities into jurisdictions slower to adopt the highest standards.

Friends of the Earth Cymru opposes the removal of Part B of TAN 22 prior to ensuring an equivalent requirement either in planning policy or in Building Regulations. Unscrupulous developers could seize on this opportunity to construct lower-specification developments with little or no regard paid to waste management, water demand, flooding impact and sustainable transport, and with no recourse from the planning system to redress any such failures.

We have an alternative proposal for consequential improvements, which would require dwellings subject to consequential improvements to move to the highest 'potential' level of the Energy Performance Certificate scale for those dwellings not already at the top of the scale for the type of dwelling.

Climate change and the pioneer nation

The consultation document refers to both the Climate Change Act 2008 and the Climate Change Strategy for Wales. While neither of these commits society to anything approaching the urgency that is necessary to tackle the impending climate crisis, we are concerned that the level of ambition shown is insufficient even to help meet the 3% year-on-year Welsh Government reduction target.

For example, the Tyndall Centre considered it essential that all new homes should be “zero-carbon by 2011” in order to meet the 3% year-on-year target¹. The fact that we have not yet met this target is unsurprising because Building Regulations were not devolved until 31 December 2011, and in many respects ambition at the UK Government has been lower than that of the Welsh Government. But since this is the Government’s first opportunity to remedy the situation, it should now act in accordance with the advice provided by the Tyndall Centre. Given that the opportunity to change Building Regulations Part L will come about only from time to time it is all the more vital that full advantage is taken of this occasion to attempt to meet the Government’s 3% emissions reduction target.

Our baseline consideration is that the standard for new homes should be a true “zero-carbon” standard. We know from the Welsh Future Homes project at Ebbw Vale² that a Welsh Passive House zero carbon standard is achievable not at excessive cost and using materials largely sourced from Wales³. The fundamental premise of this approach is to reduce the heating requirement to the point where a traditional heating system is no longer required. If we are to move towards a sustainable Wales with a massive reduction in our current use of fossil fuels, all new properties should be constructed around this basic principle. This would indicate adoption of a Welsh Passive House standard based on the Welsh Future Homes Project, the AECB’s ‘Gold’ Standard, the Passivhaus standard or similar.

Furthermore, the direction of travel in energy efficiency is absolutely clear. Article 9 of the European Directive on the energy performance of buildings⁴ requires that:

- By 1 January 2019, new buildings occupied and owned by public authorities are “nearly zero-energy”
- By 1 January 2021, all new buildings are “nearly zero energy”.

So failure to adopt Building Regulations now that require “nearly zero energy” standards for all buildings will require a further – unnecessary, in our opinion – round of consultation and Regulation at some point before 2019 (2016 is indicated in the consultation document).

We regret that the Welsh Government is minded to provide 12 months’ delay⁵ between publication and implementation of Regulations rather than the customary 6 months. That delay is an additional 6 months in which new housing and non-domestic units will be built that lock-in future householders and occupiers to considerably greater expense as a result of ongoing energy costs. The Welsh Government is, in effect, transferring and magnifying the financial outlay from developers to householders. This seems to be in

¹ Tyndall Centre for Climate Change Research, December 2009, [Towards a 20C future: Emission reduction scenarios for Wales](#)

² BRE, [Welsh future homes project](#)

³ BRE, [Delivering low energy sustainable homes – Welsh Future Homes](#)

⁴ European Commission, 2010, [Directive 2010/31/EU of the European Parliament and of the Council of 19 May 2010 on the energy performance of buildings](#)

⁵ 13 months as stated in the Timetable for introduction of the changes

contravention to the basic tenets of sustainable development, which the Welsh Government acknowledges includes a strong focus on future benefits.

But there are considerable advantages to regulating early for zero energy standards. Wales is a small country with a relatively well-developed sustainable housing sector⁶. Knowledge-sharing and group training can happen much more rapidly and organically in a country of this size than in larger countries. By adopting high performance standards which be valid for the foreseeable future – rather than ones that will need to be modified in a few years' time in any case – Welsh businesses and craftspeople will obtain an early adopter advantage. So in a similar way as Germany now has a very large solar energy industry employing hundreds of thousands of people and exporting worldwide, Wales could develop a body of highly qualified, high-skill entrepreneurs and building professionals who could use their skills not just across the UK (and particularly in England) but all over Europe. As BRE states:

“Thanks to our progressive Government we are leading the UK in low energy building regulations. We have a huge opportunity for **Welsh companies** to be **world leaders in low energy buildings**”⁷.

Given this plaudit, we are disheartened to see that “It is our intention that Wales should move to zero carbon, subject to review in 2015/16 at the latest by 2020”. Under the Directive, “by 2020” is the latest possible date by which “nearly zero carbon” developments are permissible. The Government’s approach seems to be to adopt the legal requirements by the latest possible date and therefore lacks the drive which accorded it such high status in earlier years.

We are disappointed at the Government’s apparent reluctance to consider further reductions in air leakage “until sufficient confidence in the solutions exists”. Fully functioning solutions *do* exist and have been in operation for many years across Europe and beyond. One of the best means of stimulating research and development – and boosting the potential for jobs in a new growth sector – is by regulating to require new approaches. In this case, such regulation would be a win-win-win. Better carbon performance of buildings, the development of a mechanical ventilation industry in Wales along with its associated value chain, and training and development for building professionals to exploit opportunities that are bound to become commonplace across Europe over the coming years. The only apparent loss would be the up-front financial outlay for the developer, but reduced ongoing energy costs for the occupier.

Friends of the Earth Cymru therefore urges the Welsh Government to adopt energy standards equal to the Welsh Future Homes, Passivhaus or equivalent as the minimum for all new buildings, and for the new standard to be implemented no later than 6 months after publication.

⁶ Two of the only companies in the UK to make the triple-glazed units demanded by Passivhaus standards are Thomas Joinery, Crymch, Pembrokeshire: www.thomasjoinery.co.uk and Custom Precision Joinery in Buckley, Flintshire: <http://www.cpjoinery.co.uk/PassivhausWindows.aspx>

Coed Cymru’s Tŷ Unnos scheme has demonstrated the high potential for timber-framed housing to meet exceptional environmental and insulation standards: <http://www.coedcymru.org.uk/tyunnos.html>

Dragonboard is based in Mold, Flintshire, and makes airtight construction materials suitable for Passivhaus standards: www.dragonboard.co.uk

Contact the Sustainable Building Association (based in Llandysul) for further details: <http://www.aecb.net/>

⁷ BRE, [Delivering low energy sustainable homes – Welsh Future Homes](#)

Proposal to remove Part B of TAN 22

Friends of the Earth Cymru opposes the removal of Part B of TAN 22 prior to ensuring an equivalent requirement either in planning policy or in Building Regulations. Most of the policy areas concerned are critically important to the sustainability of communities and developments. The danger of removing them in the absence of protection elsewhere would be that unscrupulous developers could seize on the policy vacuum as an opportunity to construct lower-specification developments with little or no regard paid to waste management, water demand, flooding impact and sustainable transport, and with no recourse from the planning system to redress any such failures.

An additional unintended consequence would be to reduce the support for sustainable construction materials. For example, the Code for Sustainable Homes offers higher credits for the use of materials with a high proportion of recycled material, low climate change impacts etc⁸. Given the increased cost generally incurred with using higher-specification materials, why would developers preferentially use these more sustainable products in the absence of policy guidance or other incentives to do so?

Existing buildings

Friends of the Earth Cymru supports the Government's intention to include all existing dwellings in the requirement for consequential improvements. However we consider that all three of these obligations should be met in homes where they are applicable, rather than what appears to be the suggestion that any one of them need be met in order for planning permission to be grantable:

“Where the building already meets **one or more** of these criteria, there will be no need to make further improvements to the existing building”.

The minimum specified level of loft insulation should be no less than 270mm (the current recommendation of the Energy Saving Trust).

An alternative mechanism – and our preferred option – would be to require dwellings subject to consequential improvements to move to the highest ‘potential’ level of the Energy Performance Certificate scale for those dwellings not already at the top of the scale for the type of dwelling. This would free the owner to meet that standard in means most appropriate to the particular dwelling, and would tie in improvements to the housing market. This would also have the important psychological effect of apprising owners of the marketability gains of improved energy efficiency.

Energy Performance Certificates are available at very low cost (as low as £34) so this should not present a major financial impediment to owners. The Energy Performance of Buildings Directive is clear that any improvements should be “technically, functionally and economically feasible”, and EPCs cover only those modifications that are technically feasible⁹. That would leave the owner to demonstrate that it would be functionally and/or economically unfeasible in order to be relieved of this requirement.

⁸ BRE, [Environmental Profiles](#)

⁹ European Commission, DIRECTIVE 2010/31/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 19 May 2010 on the energy performance of buildings (recast) <http://www.energy.eu/directives/2010-31-EU.pdf>, Article 11