

Zero on the agenda?

CAB technical director Dr Justin Furness asks: “Is zero carbon back on the agenda?”

The European Parliament has now given its final approval on the revised Energy Performance of Buildings Directive (EPBD). The new rules are intended to make buildings in the EU smarter and more energy efficient, accelerating the rate of building renovation, saving money and creating jobs in the renovation and construction sector

Buildings are responsible for approximately 40% of energy consumption and 36% of CO2 emissions in the EU. Some 75% of the buildings in Europe are deemed energy inefficient with, depending on the country, between only 0.4-1.2% of the stock renovated each year.

Increased renovation therefore has massive potential to reduce energy consumption and CO2 emissions. More energy efficient and smarter buildings can also provide higher levels of wellbeing for their occupants and improve their health, as well as reduce energy bills and reduce fuel poverty. As the construction industry generates about 9% of Europe’s GDP and accounts for 18 million direct jobs, boosting renovation work and energy retrofits can foster job creation in the sector and increase economic growth in the EU. Based on EU data, construction activities that include renovation work and energy retrofits add almost twice as much value as the construction of new buildings, and SMEs contribute more than 70% of the value added in the EU building sector.

The upfront investment required for the refurbishment of buildings can often be a barrier to achieving longer-term benefits. To help facilitate increased renovation rates, the EPBD is linked with the *Smart Finance for Smart Buildings Initiative*, revised Eurostat guidance for energy performance contracts and the extended European Fund for Strategic Investments.

Following this approval by the European Parliament, the council of ministers will finalise its formal agreement of the revised EPBD in the coming weeks. This endorsement will be followed shortly by the publication of the text in the *Official Journal of the Union*, which will enter into force 20 days after publication. Member states will then have to transpose the new elements of the directive into national law within 20 months. (See the EU’s Q&A on the EPBD for further information.)

So how will this affect us in the UK, given Brexit? Will ‘zero carbon’ re-emerge as a policy concept? The EPBD has strongly influenced the development of revisions to Part L of the building regulations to date. The EPBD has been implemented in the building regulations 2010 in respect of the duty on construction. In general, EU directives require implementation into UK law in order to have effect. This creates the task for the UK government when overseeing Brexit of deciding whether to embark on a process of reviewing acts of parliament and statutory instruments to ascertain whether or not to maintain, replace or repeal each piece of legislation. The Great Repeal Bill is intended to affirm the status of UK legislation passed relating to EU directives, but much of this legislation will need to be amended to take into account the new relationship with the EU, such as the appointment and oversight of new UK regulators in place

of the EU institutions.

A further consideration is that the UK, like the EU, is a party to the UN Framework Convention of Climate Change and is a signatory to the Paris Agreement. The EU as a whole and its 28-member states separately, with the UK



Dr Justin Furness - presenting a technical update to members at the Regional Members' meeting (Leeds, 8th March)

included, have agreed to honour the goals agreed in the Paris Agreement, and to ratify as soon as possible and accelerate a transition towards a low carbon economy. The EPBD should contribute significantly to the EU’s commitments on climate action and energy transition in line with the Paris Agreement objectives, and on that basis, it is likely to be implemented in some form in the UK also, which by several assessments has some of the oldest and least energy efficient houses in Europe. However, the devil will be in the detail and the exact implementation will depend on a number of factors, including presumably the nature of the final deal that the UK strikes with the EU. □

The measures in the revised directive include:

- a path towards a low and zero-emission building stock in the EU by 2050, underpinned by national roadmaps to decarbonise buildings
- encouraging the use of information and communication technology (ICT) and smart technologies to ensure buildings operate efficiently through, for example, greater use of automation and control systems
- introduction of a ‘smart readiness indicator’ which will measure a building’s capacity to use new technologies and electronic systems to adapt to the needs of the consumer, optimise its operation and interaction with the grid
- integration and strengthening of long term building renovation strategies
- mobilisation of public and private financing and investment
- help in combatting energy poverty and reducing the household energy bill by renovating older buildings