

## Input to revision of EPBD

# We need legal framework to leverage use of data

Sean Kelly, Ireland South MEP, has been appointed EPP Rapporteur for the European Parliament's revision of the Energy Performance of Buildings Directive (EPBD), a key component of the EU "Renovation Wave" and the European Green Deal. The Directive seeks to modernise EU buildings, to make them fit for a greener and more digital society, while creating thousands of sustainable careers across Europe. On foot of this prestigious appointment, he has penned a special article for *Building Services Engineering*.

**The EU is** currently undergoing an ambitious systemic change in how we produce, consume and store energy. It is clear that addressing sustainability challenges and climate change will be pivotal to the future growth of our economies, as the cost of inaction now will be far exceeded by the costs involved with adaptation, never mind the social and political instability this would create.

Sean Kelly, Ireland South MEP and EPP Rapporteur for the European Parliament's revision of the Energy Performance of Buildings Directive (EPBD).

We cannot achieve our Green Deal targets without a massive expansion of renewable energy. In this regard, the Commission has proposed the "Fit for 55" Package (see page 46), the largest single batch of legislation to tackle climate change proposed by any government, anywhere. It is designed to update EU laws to meet the new 2030 emissions reduction target of 55% below 1990 levels.

By their very nature, wind and solar are intermittent. Therefore, we must plan to replace our fossil-fuel based back-up system with battery storage and demand-response, as well as utilising the energy storage capabilities of green hydrogen.

When we think about addressing climate change we invariably think about the energy and food systems. This is perhaps unsurprising considering their high-profile impact. However, sometimes we don't fully understand the effect our living and working spaces also have. In fact, buildings are indispensable for reaching the EU's carbon neutrality, energy efficiency and renewable energy objectives.

They are responsible for 36% of greenhouse gas emissions and 40% of energy consumption in the EU. Yet, in today's Europe, 75% of buildings are not energy efficient as many of the buildings now in use were built before the current requirements were in place.

The Energy Performance of Buildings Directive (EPBD) is the main EU-level legal instrument for decarbonising member states' building stock. Since its adoption, the EPBD has been closely connected with the EU climate targets and has been aligned to reflect their progressive evolution.

### Coherence essential

Buildings will play a key role in whether we reach climate neutrality or not, and it is not just the EPBD that will determine the success of this at EU level. The Energy Efficiency Directive, Renewable Energy Directive, Alternative Fuels Infrastructure Directive and the Energy Taxation Directive all have aspects effecting buildings, and they must be coherent with one another. Essentially, they must function in a legislative ecosystem in which buildings are at the nexus of almost all EU climate policy.

In December, the European Parliament overwhelmingly voted to pass my *Implementation Report on the EPBD*. I worked with stakeholders and other political groups to write the report that gave an assessment of the current EPBD, as well as detailing a set of recommendations and guidance for the revision of the Directive. The main conclusion was that the "Long Term Renovation Strategies" (LTRS) taken in aggregate will not be enough to achieve 2050 climate-neutrality ... even with full compliance.

I have since been appointed to represent the Parliament's biggest political group, EPP, in negotiations for the Commission's new EPBD proposal, which focuses on the worst-performing buildings, prioritises the most cost-effective renovations, and helps fight energy poverty.

The main measure is to introduce minimum energy performance standards (MEPS), complemented by stronger energy performance certificates, the introduction of building renovation passports and a definition of deep renovation. This also includes strengthened requirements for recharging infrastructure for electric vehicles in buildings.

I have been encouraged to see that the national building renovation plans – which replace the LTRS in the 2018 EPBD – have been designed to be more operational, including an assessment of plans by the Commission as part of the NECP process. This was the core ask in my report.

Construction is a complex activity that requires close coordination of many professional and craftspeople, and relies on the use of a wide range of appropriate construction techniques and materials. The review of the EPBD needs to consider the interaction with other sustainable construction policies and material neutrality in order to efficiently decarbonise European buildings.

There is a real worry that industry will struggle to deliver the ambitious targets in the EPBD. The enormity of the task must not be understated and we cannot accomplish it without skilled workers. There should be a clear link

between national plans and adequate initiatives to promote skills and education in the construction and energy efficiency sectors. These will be secure, long-lasting and well-paying jobs.

### Investment required

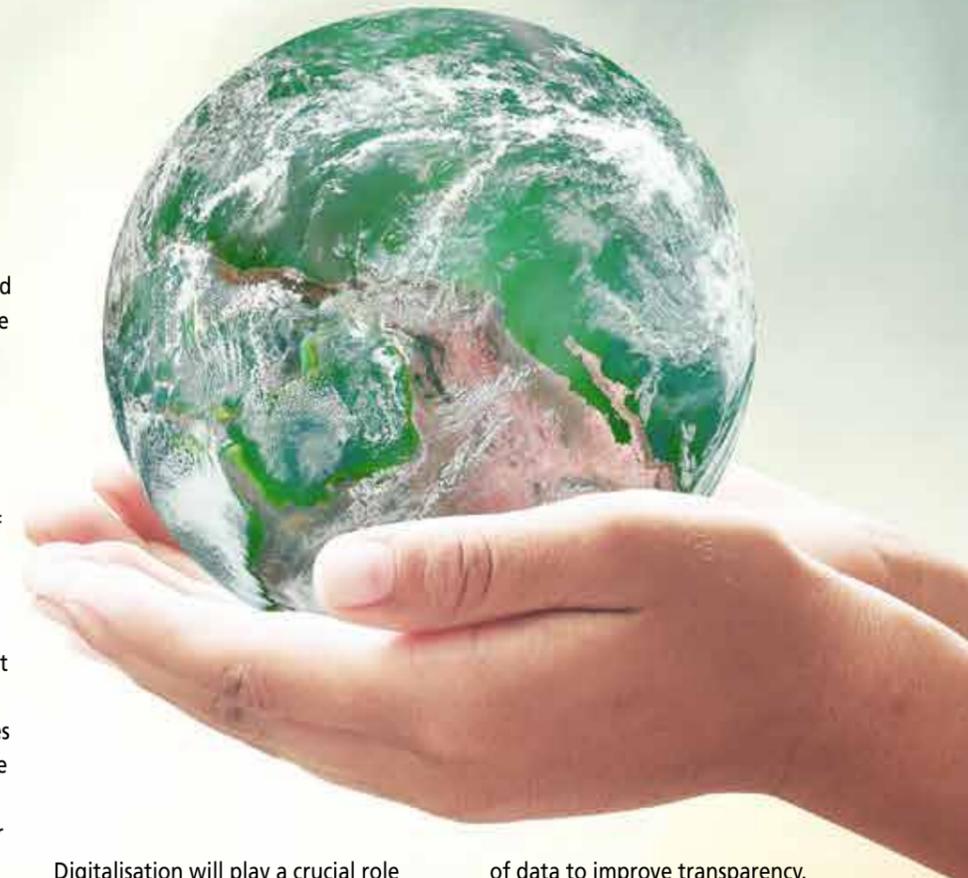
Member states must invest in capacity building, technical assistance and on upskilling and reskilling policies to realise the twin transition of a green and digital transition. This should be combined with an EU skills initiative that enables intermediaries such as installers, architects and contractors to advise, prescribe or install relevant solutions for energy efficiency programmes and a decarbonised building stock.

technologies and foster a data-centric approach, encouraging the use and deployment of emergent technologies, such as smart meters and smart chargers.

Data-driven technologies open up new ways to ensure buildings are sustainable, ecological and consistently user-friendly throughout their entire life-cycle, from the design phase through to construction and right up until the operational use of the building.

### Legal framework required

It is evident that we need further digitalisation, but the core aspect of the revised EPBD will be how data will be transferred and maintained. It will be pivotal to create a clear and fair legal framework to leverage the use



Digitalisation will play a crucial role in the transformation of the whole building value chain, not just the buildings themselves. We will see this in particular in the monitoring of all building systems, with direct feedback to occupants, municipalities and power grids.

The EPBD should serve to further promote smart and flexible building

of data to improve transparency, develop benchmarks and guide policy decisions, in addition to improving actual energy consumption.

Without addressing the built environment, we will not reach our climate targets. Investing in skilled workers and unleashing the potential data-driven technologies will be the keys to our success. ■