



Fit for 55

European climate change laws

Commercial property must 'get fit' for energy transition

Commercial building owners are set to get a *Fit for 55* wake-up call when EU regulations to mitigate climate change are enforced, starting in late 2022. Here *Phil Kane, Eaton's Country Manager for Ireland*, explains how they can anticipate the changes, reduce their buildings' energy costs, and ease grid congestion.

Good intentions can be tough to translate into practical action but that's what the commercial property sector must do now, if Europe is to meet its carbon net zero targets.

Developers and building owners – not to mention building services engineers and other system designers – must soon comply with new or updated regulations to curb carbon emissions, mostly emanating from the EU's *Fit for 55* legislative programme. Viewing this as an opportunity, rather than a burden, will mean they find gains to be made.

An immediately attractive outcome is the potential for swift, definitive, reductions in energy costs which can be realised by developing a sustainable commercial building power strategy to support on-site renewable generation, energy storage and the like.

Maintaining the value of buildings by preparing them for a future beyond fossil fuels is another attraction, especially for property portfolio owners. Many commercial building owners have already bumped up against the issue of how electric vehicle charging may boost power demand and are already investigating potential solutions.

It's clear why the concept of energy transition is gaining traction, with legislation and regulation – both within and outside the EU – poised to accelerate the process. Leading the way are two important new developments: the introduction of the European Green Deal in 2019, and the *Fit for 55* legislative package published in 2021.

Mind the deadlines

The Green Deal commits EU member states to climate neutrality by 2050, and *Fit for 55* lends weight to this because it will bring the EU's climate and energy legislation in line with the target of a 55% reduction in carbon emissions (compared with 1990 levels) by 2030.

A critical aspect of Green Deal and *Fit for 55* for developers and commercial building owners is the pressing nature of the deadlines, particularly the 2030 target which is just eight years away. Buildings account for approximately 40% of the EU's total energy consumption, so much of the reduction mandated under *Fit for 55* will need to come from buildings.

For the commercial buildings sector, the four directives and regulations to watch closely are the Energy Performance of Buildings Directive (EPBD), the Energy Efficiency Directive (EED), the Renewable Energy Directive (RED), and the Alternative Fuels Infrastructure Regulation (AFIR).

Some of these directives may be familiar because they already exist, but they will be revised or recast as part of the *Fit for 55* process, so building owners and developers need to look out for what are likely to be substantive changes.

The AFIR, which until recently was known as AFID (the Alternative Fuels Infrastructure Directive), is a prime

example. The change of status means it will be directly applicable in member states and its terms will affect "publicly accessible" EV chargers, quite probably including those on private land, though the definition of "publicly accessible" has yet to be confirmed.

Must act now

Regulatory timescales are important both in planning new builds and also scheduling renovations. In our own experience as power management experts, regulation raises questions.

About *Fit for 55*, clients ask us how quickly fossil-fuelled heating will become a thing of the past, how ventilation and air-conditioning systems will be affected, and how much power they will need to support the ever-growing number of smart applications that are increasingly part and parcel of 21st century living.

Installing electric vehicle charging infrastructure has come much more sharply into focus. It's no longer a question of "whether or not" to install EV chargers but more a matter of how many chargers will be needed, how quickly, and where will the power come from.

A strategic approach is vital, and we believe it is better to start the energy transition journey now, rather than wait for new regulations to come into effect, not least because there are immediate advantages. A simple start – storing low-cost energy for use when prices peak – is a sure way to save money and, by spreading load, it eases grid congestion.

Energy storage technology is well proven, and it can be installed in most commercial properties, but its value in the energy transition – particularly to help ease grid congestion – is only now being fully realised.

Sector-coupling

The root of the equation that makes energy storage so valuable in helping commercial buildings get fit for the energy



Phil Kane, Eaton's Country Manager for Ireland

transition is "sector coupling" ... making the most efficient use of energy, particularly renewable energy, by coupling consumption with production. The resultant smoothing of demand peaks and troughs also helps balance the grid.

In a commercial building, sector coupling is likely to mean combining energy storage with on-site generation, and EV charging infrastructure. This helps store energy, as well as consume it, and presents the building owner with the opportunity to levy vehicle charging fees.

This type of strategy can provide buildings with a certain degree of self-sufficiency, making it possible to reduce the amount of energy purchased from the grid, store low-cost energy for use when prices are higher, and – of course – comply with many of the regulations that are likely to emanate from the *Fit for 55*.

Building owners should always check local regulations to ensure compliance, bearing in mind that European countries outside the EU, including Norway, Switzerland and the UK, are developing their own regulations to combat climate change. Legislation and regulations are part of complex policy initiatives, so there will be differences in interpretation.

Above all else, however, there is another reason to opt for an early approach to energy transition, and it's this: every building that is well-prepared brings carbon net zero closer. ■



“ **Leading the way are two important developments: the introduction of the European Green Deal in 2019, and the Fit for 55 legislative package published in 2021.** ”