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Bureau Veritas urges commercial buildings to adopt smart grid technology to support increased EV charging capabilities

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With electrified vehicles totalling 18.5% of all new cars registered in 2021 and that figure only set to increase, as a leading renewables specialist, Bureau Veritas is urging local authorities, commercial property owners and facilities managers to adopt smart grid technology, to ensure control of electricity during peak demand.

Smart grid systems utilise photovoltaic panels (solar power) and battery energy storage (BESS) to provide bi-directional electricity, to enable a building to both produce and consume energy. This reduces reliance on the grid and avoids costly time-of-use tariffs during peak demand. When using power from the grid, utility companies charge greater tariffs during times of the day where more energy is used; the cost is then lower at 'off-peak' times, such as overnight.

Bureau Veritas' advice follows the recent Government announcement of a new Energy Security Bill, to deliver on its commitment to create a sustainable and homegrown energy system in the UK by utilising wind and solar capabilities to reduce the country's dependency on and exposure to volatile global gas prices.

Alisdair McDonald, Principal Consultant – Electrical, Bureau Veritas, said: "At Bureau Veritas, we welcome the idea of a sustainable and homegrown energy system, which focuses on secure and clean renewable energy use, to reduce the country's reliance on international oil and gas. Smart grids will form a significant part of this as they enable both buildings and homes to produce their own energy, store it and then use it when solar power is running low.

“By storing renewable energy, commercial property owners can use surplus energy during peak demand on its own power system – powering lighting, sockets and EV charging points. This becomes even more vital considering the long-term boom in electric vehicle sales, as the country aims to remove petrol and diesel cars from UK sale by 2030.”

In 2021, the Government also announced that all new homes and buildings in England must have electric vehicle charging points installed as standard. The regulations, which come into force this year, include supermarkets, workplaces and buildings undergoing major renovations, which – together with new homes – could result in up to 145,000 additional charge points each year over the next decade.

Alisdair continues: “With EV charging points soon to be mandatory in all new commercial premises, this results in a much higher reliance on electricity throughout all times of the day. In addition, without smart grid systems in place, this increased dependency required to power EV charge points may put significant pressure on the grid.

“Therefore, with more and more buildings being designed with future sustainability in mind and meeting the needs of a net-zero future, a move to smart grid systems must be an intrinsic part of a business’ sustainability strategy. Despite the clear opportunity here, there remains a knowledge gap and building, facility, and energy managers could benefit from the support of an independent, third-party compliance specialist. Bureau Veritas can support firms with pre-feasibility and feasibility studies to assess the solar capabilities of your premises, as well as assessing how much energy each cycle will produce.”

Register for Bureau Veritas’ EV Charging webinars here