

Insurance Company Puts Safety First: NFU Mutual Partners With Ineco Energy to Install Rooftop Solar on its HQ

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Leading rural insurer NFU Mutual has taken a significant step forward in its mission to achieve net zero operation by 2050 with the successful installation of a solar PV (photovoltaic) installation at its headquarters in Stratford-upon-Avon.

Designed and installed by Warwickshire-based renewable energy specialist, <u>Ineco Energy</u>, the 249.20 kWp rooftop system is comprised of 560 bi-facial solar panels and will generate almost 200,000 kWh of clean, renewable energy each year. This will power around 20% of the building's annual electricity needs at an equivalent rate of 5p per kWh, delivering a favourable financial return for NFU Mutual while also reducing carbon emissions by around 45 tonnes each year.

Since 2021, NFU Mutual has completed a series of energy improvement initiatives across its owned office sites, from upgrading heating and cooling systems to the installation of 36 electric car charging points. In 2023, it delivered a 33% reduction in carbon emissions across its occupied premises, compared to a 2019 base year.

Building on the success of these initiatives, NFU Mutual began to explore the potential of solar PV systems to meet its operational needs sustainably and safely. PV systems offer numerous advantages for commercial buildings, including significant energy cost savings, a reduced carbon footprint, and enhanced energy security. However, like any form of energy generation, it is essential to understand and mitigate any associated risks to ensure the long-term success and safety of the installation.



In 2023, the insurance and solar industries collaborated to publish a joint code of practice with a focus on commercial rooftop mounted systems, entitled 'RC62: recommendations for fire safety with PV panel installations'. As a contributor to the code, Ineco Energy's in-depth knowledge of solar system safety and installation best practice made it the ideal partner to help NFU Mutual's to realise its vision for greener, safer buildings.

Planning is essential for successful project delivery and Ineco's mantra of "measure twice, cut once" was key to delivering a seamless service for NFU Mutual. Grid and planning permission were sought from the relevant authorities while an independent structural assessment was commissioned as part of a comprehensive survey with detailed designs undertaken, specifying best-in-class products to mitigate potential project risks.

To enhance the safety of both people and property, SolarEdge DC-optimised inverters and Power Optimisers were selected. The SolarEdge system provides several embedded safety features, including SafeDC™ and arc fault detection and interruption, to reduce the risk of electrocution and fires. The system is complemented by a SolarEdge Firefighter Gateway which will automatically turn off the PV system if the building's fire alarm is triggered to provide safe roof access to firefighters.

Bi-facial, dual glass modules from JA Solar were installed to provide enhanced performance, safety and longevity. These were mounted on a Van der Valk Valkpro+ L10 flat roof mounting system with elevated blocks to raise the system above the pebbled roof.

The project team at Ineco Energy delivered the rooftop installation safely, to quality, on time and on budget. However, this is just the start of the partnership as the solar PV system has a 30+ year lifespan. To ensure its continued safety and performance, Ineco Energy will monitor and maintain the system under contract throughout its lifetime.

Ed Bannister, Facilities and ESG Manager at NFU Mutual, comments: "At NFU Mutual, we take the environmental impact of our operations very seriously. Buildings are significant contributors to carbon emissions, accounting for approximately 40% in the UK. Therefore, ensuring energy efficiency across the built environment is crucial for reaching our net-zero target."

"We have been fortunate to benefit from Ineco's extensive experience in designing and building safe, reliable solar installations. The performance of the solar system at our head office has exceeded our expectations, and we are already exploring opportunities to install additional projects in the near future."

Angus Rose, Director at Ineco Energy, says: "It has been a pleasure to partner with the team at NFU Mutual. As insurance providers and their stakeholders increasingly turn to solar PV for significant energy cost savings and carbon reduction benefits, we are proud to demonstrate that solar is a safe, sustainable and financially sound investment."