

Pilot project aiming to reduce energy use on MOD estate

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A pilot project to refurbish a 45-year-old RAF barrack block at St Mawgan, Cornwall, to meet government energy targets has been launched by the Defence Infrastructure Organisation (DIO) and its contractor [VIVO Defence Services](#).

The project is the first of its type for UK military Single Living Accommodation (SLA) and aims to show how retrofitting accommodation blocks with carbon reducing technology is a cheaper and alternative way of meeting MOD net zero commitments.

Buildings of its age would not typically meet Government energy targets, but DIO asked VIVO Defence Services to run a pilot to determine if refurbishing the building could make it compliant.

Baker Block is a brick built two-storey SLA building consisting of cavity walls and a pitched roof. The improvements will involve overlaying the existing building with external insulation cladding, adding triple glazed windows, a new roof and an air source heat pump system. Smart metering will also be built in so energy use can be controlled depending on the need in real time, allowing heating and lighting systems to be turned on or off instantly depending on the data. The refit will convert the block into 26 single use rooms with en-suites, as well as providing enhanced kitchens areas and welfare spaces. If successful, the pilot project could be used as a blueprint to enhance and refurbish other MOD buildings.

The work on Baker Block follows the introduction of new Building Performance Standards (BPS) in 2021 stating new or refurbished buildings should have an overall energy use intensity (EUI) of no more than 35 kWh/m², compared to the previous 150 kWh/m² target. This will help the MOD on its continuing journey to support the government's ambition to achieve net zero by 2050. Baker Block is scheduled for completion

next year and is expected to provide an EUI of 33.2 kWh/m².

Once completed the building will undergo rigorous tests to determine whether it is achieving the projected energy savings. This will then in turn help to identify if refurbishment projects of this nature realise and offer the best cost solution to improving estate infrastructure.

Gary Hawkey, Project Lead for DIO Regional Delivery South West, said: “We’re really pleased to be working on this project, which will both improve conditions for the service personnel living in the accommodation and improve energy efficiency. Retrofitting is fantastic option as it can reduce the length of the project and the amount of disruption on site.”

Wing Commander Barry Robinson, from the Royal Air Force’s Air Infra Sustain & Regional Delivery section at HQ Air Command, said: “The RAF are proud to collaborate with the Defence Infrastructure Organisation and VIVO Defence Services on these pilot projects.

“Retrofitting these buildings represents a significant step towards helping the MOD achieve its net zero carbon emissions targets. Additionally, it sets a precedent for how we approach infrastructure projects across the estate in the future. Beyond contributing to sustainability goals, these efforts will deliver long-term value for money and enhance the quality of life for our personnel living on the base”.

Amanda Hill, Operations Director at VIVO Defence Services, added: “We are very excited to carry out this project at RAF St Mawgan. It is one of several ongoing projects we at VIVO are completing across the military-built estate to help the MOD cut energy use costs effectively as part of its net zero aims, whilst also improving the lived experience of personnel living on the base.”