

Smart energy trial results show huge savings at military barracks

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A smart technology trial by [VIVO Defence Services](#), in partnership with Equans, has resulted in a 44 per cent reduction in energy use in a Single Living Accommodation (SLA) barrack block on a military base.

The trial was undertaken on the 30-bedroom SLA block at HMS Collingwood and the data was compared to an equivalent SLA block without the technology installed. Heating in many SLA blocks can be inefficient and difficult to manage, due to their age, as there is no remote control in place for their boiler systems.

This means temperatures can often only be adjusted by a specialist engineer and can lead to occupants opening windows to regulate heat – meaning the energy is simply being wasted.

During the trial, a suite of smart technologies was used that are designed to optimise heating performance, cut energy use and reduce carbon output.

This included a Smart Thermostat, allowing occupants to adjust their room temperature, and Window Contact Sensors, which automatically turn off heating when a window is opened via Smart Thermostatic Radiator Valves (TRV).

The learnings from the trial, together with those from a similar one undertaken at RAF Leeming in 2024, will now be used to develop a roll-out strategy for the MOD estate.

Commodore Toby Jefferson, Deputy Director of Infrastructure at the Royal Navy, said: “This successful innovation trial forms part of a longer-term programme of activity to work closely with our industry partner to improve the Navy’s energy resilience, whilst maintaining the living environment for our people.”

Dr Paul Roberts, VIVO's Director of Energy and Sustainability, added: "We are pleased that this trial has shown the significant energy savings and reduction of carbon emissions that can be achieved by using smart technology in Single Living Accommodation.

"Much of this type of accommodation is old and has lacked investment for a number of years and using smart technology in this way can really help the MOD save money and reach its Net Zero targets."

Mark Warburton, DIO's Sustainability Customer Delivery Manager, said: "The results of the smart technology trial at HMS Collingwood are extremely encouraging and contribute to Government net zero targets. We will support VIVO to roll-out this highly innovative approach at any sites that opt to invest in this new technology to reduce their energy consumption."

Aymeric Lasselin, Managing Director of Equans Digital in the UK & Ireland, added: "We're proud to have worked with VIVO on this trial, which has delivered a fully connected smart heating solution that's simple to use, cost-effective, and delivers measurable carbon savings from day one. This is a great example of how our technology is helping the public sector reduce energy use in hard-to-treat buildings – unlocking smarter estates for the future."

VIVO is also currently carrying out a pilot project refurbishing a 45-year-old RAF barracks at RAF St Mawgan, in Cornwall, called Baker Block, to meet government energy targets and to show how retrofitting can achieve this at a cheaper cost than replacing the building.