



Case Study

Co-ordinated Energy Bureau, Regional Prime Contract South West Infrastructure

Client:
Defence Infrastructure Organisation (DIO)

Contract type:
Regional Prime Contract

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To assist in meeting energy and carbon reduction targets and making cost savings, we appointed an energy management team to undertake the Energy Management Initiative (EMI) in 2007 to 2009. EMI delivered energy savings of 10% across ten Royal Navy sites and was followed by the Strategic Energy Management Programme (SEMP).

Part of SEMP, the Co-ordinated Energy Bureau remotely monitors consumption data from electricity, gas and oil meters. Through innovative software, the data is used to build consumption profiles to identify savings. Sites are also provided with early warning of issues that can take months to discover, wasting energy and money.

Our energy specialists use this data to formulate strategies to maximise energy savings. The success of the SEMP has been due to co-operation between all parties, agreeing innovation for strategy changes and capital investment opportunities bespoke to individual sites. This collaborative approach has engendered site buy-in, ensuring energy saving is at the fore.

The bureau has been instrumental on numerous

projects, not only benefiting the environment but also providing DIO with cost savings. Works have included loft insulation, lighting replacement, voltage regulation and combined heat and power (CHP) units.

At CTCRM Lymington, SEMP has delivered considerable savings as a result of optimisation of time schedules and temperature settings. Figures show a saving of over £52,000 in 12 months. In addition, the installation of a micro-CHP module is saving £3,000 per month, and the installation of voltage optimisation equipment has resulted in a saving on electricity of 4%. This success is testament to the co-operation between the customer, DIO and Babcock.

The customer's view

"I am delighted with progress that the joint Energy Strategy has made at RNAS Culdrose. It has been a really good example of team working between the Royal Navy and a variety of contractors drawn together under the leadership of Defence Estates and Debut. For many years we have been frustrated by the lack of resources for spend to save initiatives for energy efficiency. By working with Debut (Babcock) and their team of highly talented energy specialists, we have been able to attract funding by having robust business cases that clearly demonstrate payback in realistic timescales. These investments will provide year on year savings for both financial and carbon budgets."

J J Ovens, Commander, Royal Navy, RNAS Culdrose.



Main image: SEMP savings that have been achieved for the Royal Navy.

Above: Energy Bureau, Royal Navy and estate management focal points working together to optimise energy usage.

Summary of Core Activities:

- Strategic Energy Management Programme (SEMP)
- Co-ordinated Energy Bureau
- Combined savings achieved by EMI and SEMP have exceeded 33,000,000 kWh which equates to 11,900 tonnes of CO₂, equivalent to a £2M cost avoidance
- SEMP is now the MoD model for energy management and is replicated at Abbey Wood