

Case Study for Burner Management Units at Cardiff & Vale University Health Board



Bwrdd Iechyd Prifysgol
Caerdydd a'r Fro
Cardiff and Vale
University Health Board



The Green Consultancy Inc. Limited were engaged by Cardiff & Vale University Health Board (CVUHB) to advise on how they could reduce the gas consumption at their hospitals.

At numerous other NHS Trusts in England, GCI have installed Burner Management Units and made a significant reduction in gas consumption.

CVUHB impressed with these savings decided to trial the units to see if similar savings could be made at their properties.



This technology is designed to alter the firing pattern of the boiler to improve their energy efficiency, without impairing the performance of the boilers.

The BMU's used are the only BMU's in the UK which are certified by the Building Research Establishment (BRE).

The BRE conclusion after testing the units over a number of months, the BMU demonstrated savings on a test rig to in excess of 16% of gas consumption at low loads and high economy savings factors.

The actual savings are dependent on the nature of the load, the size of the system, heat emitters and boiler in relation to the load, the type of system that the boiler is serving and the type of boiler the BMU is fitted.

An impressive feature of the BMU's is its ability to monitor it's own performance. This information can then be accessed on line using a PC, laptop, tablet or smart phone.

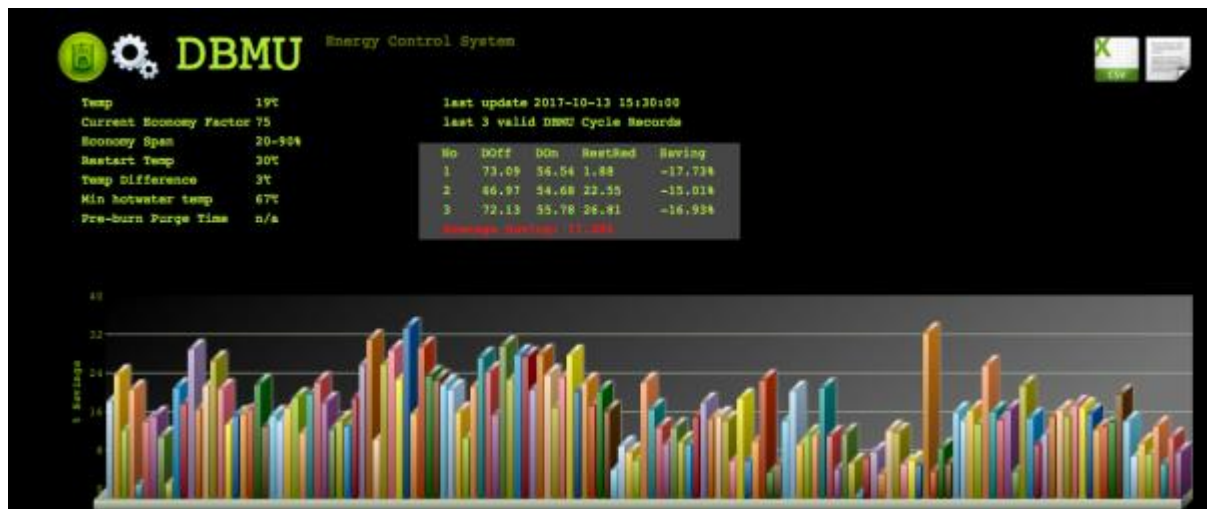
University Hospital of Wales

The University Hospital of Wales is made up of numerous buildings with many plant rooms, so there were many plant rooms and boilers to choose from.

It was decided that a trial installation of the units on 5 boilers were to be done in the main boiler room, Brecknock House, and Pembroke House.

The installation of the 5 BMU's had an estimated return on investment of just 8.3 months!

Below is a recent screen print of the monitoring on the units with the savings made to date.



As you can see, the savings the units have made thus far is actually 17.38%. This means the forecasted return on investment will be around 7.6 months.

Fitzroy Hutchinson Energy Manager at CVUHB said this about the Burner Management Units installed.

“Following on from the success of the initial trial at the hospital we decided to roll out a large installation of the Burner Management Units due to the excellent savings the units make.

To date we have now installed 50 units across the Health Board and expect them to make a significant reduction in the gas we consume over the heating season, without impacting on patient care”.