SAV SYSTEMS

Low Carbon Energy Solutions
for Building Services

WESTFIELDS DEVELOPMENT - CASE STUDY

LoadTracker combined heat and power (CHP)

The Project

A new build project for Dunedin Canmore Housing Association's consisting of a multi- use property containing 192 aordable homes and 8 business units to regenerate a rundown area of Edinburgh.

The Challenge

To provide a system that would reduce CO_2 emissions by a minimum of 20%. With limited space constraints and high load demands equipment sizing was a major consideration for this project.

Summary of Site Demand

Annual electricity demand	**868,000 kWh**
Electricity price	**11.0 p/kWh**
Gas consumption	**1,545,000 kWh**
Gas price	**4.0 p/kWh**

The Solution

Supplied and installed four 15kWe/ 30kWth LoadTracker CHP units able to supplying 74% of site heating and hot water demand and 54% of electrical demand.

Features

- Modular Unit Design for flexibility of install.
- LoadTracker automatically modulates electrical output, which minimizes unnecessary grid electricity consumption.
- Noise levels of 49db comparable to low level office noise.
- Long service intervals (8,000 hours or 2 years).

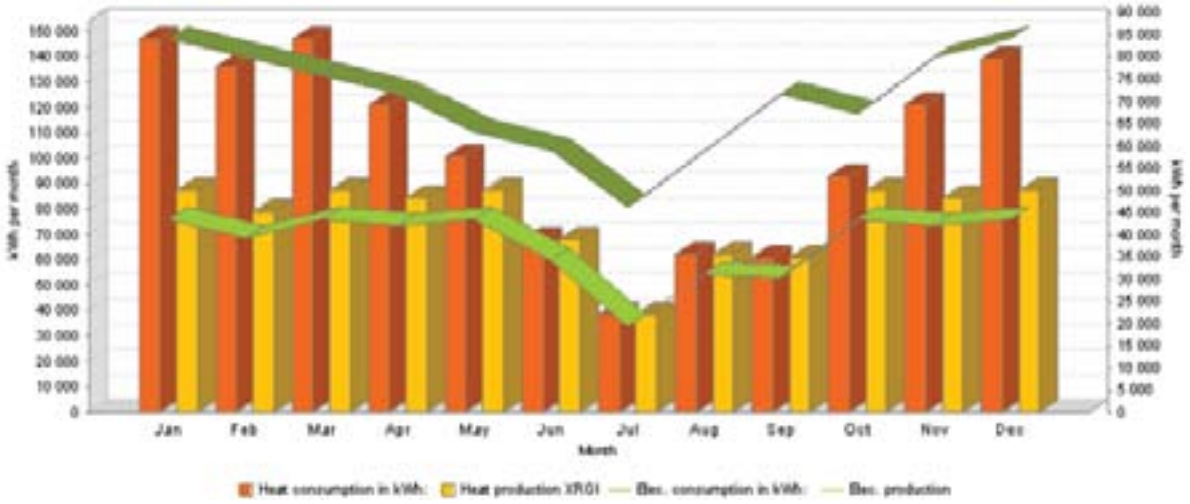
Benefits

- Consumption & Production
- Carbon Footprint Savings
- Cost Savings

LoadTracker CHP

WESTFIELDS DEVELOPMENT - CASE STUDY

Consumption & Production

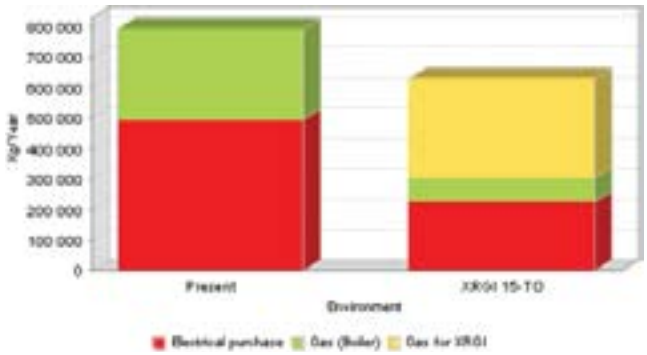


Carbon Footprint Savings

161 tonnes of CO_2 emissions could be reduced by installing a CHP system relative to a conventional mains supply/ gas boiler system.

CO_2 (conv)	792,754 kg CO_2 pa
CO_2(CHP)	**631,182 kg CO_2 pa**
Net reduction	161,571 kg CO_2 pa

This is an equivalent **20%** reduction of CO_2 emissions.

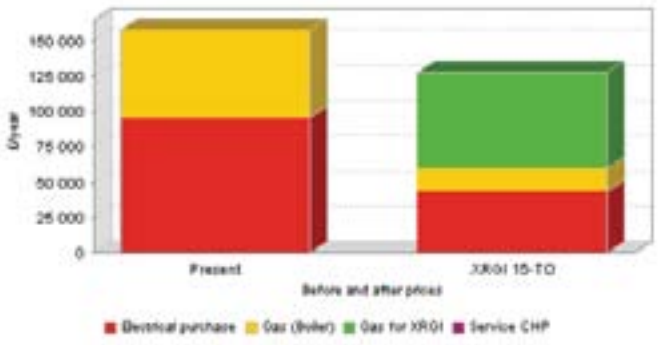


Cost Savings

The use of LoadTracker CHP would result in annual savings of **£29,965** relative to a conventional mains supply/ boiler system.

	Conv.	CHP
Electricity	£95,480	**£43,697**
Gas (Boiler)	£61,800	**£16,117**
Gas (CHP)	0	**£67,501**
Total	£157,280	**£127,315**

This is equivalent to saving **19%** on energy bills



For further information contact:
SAV Systems, Scandia House, Boundary Road, Woking, Surrey GU21 5BX
Tel: +44 (0)1483 771910 Web: www.sav-systems.com E-mail: info@sav-systems.com