

Synergy Health plc- Energy Efficiency and Carbon Management

Synergy Health plc is a supplier of contract services to the Healthcare sector including hospital linen and sterilisation services, microbiological laboratories and the sterilisation of single use medical devices. Synergy Health is a global business, operating in the Americas, Europe and the Far East

Synergy's energy efficiency and carbon policy includes all sites, operating in 13 countries in its scope. This ensures the businesses and countries are consistent in their approach to energy efficiency, emissions reduction and the organisation's goal of cost leadership.

The UK business region has completed the first year of CRC compliance in July 2011. The business was joint first in the Performance League Table, with 21 other organisations. Synergy was first in the PLT for healthcare associated organisations. Synergy met all of the requirements for the CRC PLT. Although under CRC carbon emissions reductions were not included in the Early Action Metrics, Synergy took the view that any opportunities to reduce carbon emissions must be taken in all of its operating sites.

Global Carbon Management

Synergy has always monitored and minimised spend on utilities, although prior to the introduction of the CRC scheme there had been no co-ordinated effort to implement best energy efficiency and carbon management practices.

The first action for the Senior Executive Board (SEB) was to approve the formation of a Carbon Reduction Management Group (CRM Group) to undertake this role.

The CRM Group comprises representatives from all the business in the regions and fulfils a number of functions.

- Proposing global targets.
- Identifying energy efficiency and carbon emissions' reduction projects.
- Monitoring and reporting progress against targets throughout the business
- Driving engagement of employees in energy efficiency and carbon reduction both at work and at home
- Ensuring compliance with statutory obligations

Carbon reduction targets are also included in the Company's business plan as well as in the annual objectives of Managers in the business.

Awareness

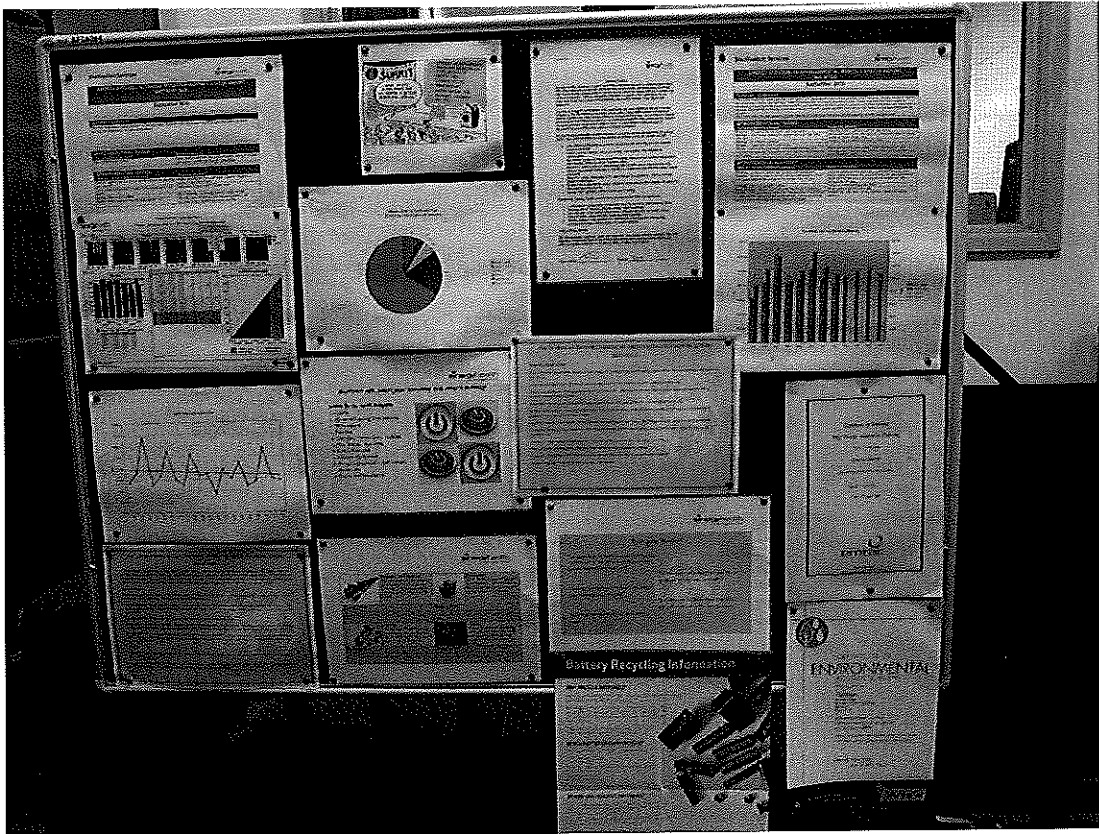
Synergy believes that for energy efficiency and emissions' reductions initiatives to be successful all employees must believe in and support the processes at all levels.

Training sessions have been arranged for directors, site managers and maintenance personnel so that they can provide guidance within their operational units. These initial sessions have been followed by educational sessions at operational meetings, including managers new to Synergy.

It is recognised that communication will be key in order to maintain the early momentum. Newsletters, magazines, the Company intranet – including internal social media vehicles – and site notice boards are being used to keep everyone informed of progress.

Unit managers also receive weekly utility consumption data with which to create energy consumption reduction action plans. They also report their environmental project progress and utility consumption on a monthly basis, displaying graphs of these data on site notice boards.

The Healthcare Solutions business have worked particularly hard on employee engagement and communication: running very successful switch off campaigns and maintaining momentum through their energy champions.



Typical Site Noticeboard showing monthly reports, utility use and other Environmental Information.

Measurement

All UK sites covered by the CRC scheme were equipped with Automatic metering systems.

The Company has also invested in equipment to detect air leaks; data loggers so that we can monitor and quantify savings; and a thermal imaging camera to check building insulation as well as detect problems in distribution boards, steam traps and motors before they cause production issues.

Initial work focused on determining where energy was consumed in order to identify the easiest opportunities for improvement. Projects are focused on the best emissions and consumption driven returns.

Lighting

Lighting was identified as a major area for improvement since some sites operate 24 hours a day and most have large operational and warehouse areas. Lighting surveys were conducted

to identify lights routinely left on, areas with too much lighting or that had the potential for changes to the lights themselves.

The Applied Sterilisation Technologies (AST) division achieved an estimated reduction in lighting costs of 33% (equating to over 150 tonnes CO₂e) in the first year using a combination of approaches.

- Installation of motion sensors.
- Rewiring to allow low occupancy areas to be turned off.
- Removal of some fluorescent lights (particularly in offices with four tubes per lighting unit).
- Replacement of 250W Hi Bay lights with 70W fluorescent tubes.

The latter action also had the added benefit of improving the light quality in the warehouses.

Plant and Controls

The Linen business has traditionally led the way in energy management within the group. They have installed new compressors with variable speed drives and are trialling inverters on the air handling units in their clean rooms.

This is a UK wide project which will save several hundred tonnes of CO₂ per annum once completed; prompting variable speed drives to be installed in other parts of the process, including the water and boiler feed pumps.

Activity in China has provided knowledge of lighting and heating control optimisation, and the success of Voltage Optimisation at the site in Thailand, which has reduced the AHU energy consumption by 25%, has prompted a feasibility study for the rest of the group, starting in the UK.

New Facilities

The Hospital Sterilisation Services business is a fast growing part of Synergy, and as such the main focus has been to ensure that new units that are installed are designed using the most efficient equipment and correctly sized for anticipated duties.

Factors such as boiler sizing; boiler heat recovery to heat incoming water; correct compressor sizing, lighting controls, and the correct amount of processing equipment, as well ergonomic layout design to reduce wasted energy and ensuring correct lighting levels are considered

Transport

The company also owns or leases a number of vehicles for delivery from off-site facilities to hospitals and these are being reviewed to reduce the mileage and fuel consumption of the whole fleet. New vehicles are also being specified with Eco start capabilities.

A Good Start

Following an audit of sites within the businesses and the submission of an information pack Synergy has been awarded the Carbon Trust Standard, 2010, to cover sites where we are responsible for the utility provision.

The first year targets set by the CRM Group were exceeded on both a relative and absolute basis. Synergy was joint 1st in the CRC PLT.

Synergy will continue to investigate the potential to reduce energy consumption through the use of existing and new technologies, and successes attained by one site, business or country will be used to reduce consumption throughout.