

EMS Case Study

South London and Maudsley NHS Trust Champion Environmental Best Practice

Blackmores

SLaM is the provider of the most extensive portfolio of mental health services in the United Kingdom, and is a world leader in research, working in partnership with the Institute of Psychiatry, King's College London.

With over 4,800 employees, located at four main hospital sites; Bethlem Hospital, Lambeth Hospital, Maudsley Hospital and Ladywell Hospital (Lewisham Hospital). In addition, inpatient services are provided at Guy's and St Thomas' Hospitals and they also have over 100 community sites.



The Trust's energy spend is some £2.8m per annum. It generates over 843 tonnes CO₂ from waste each year and employees claim over 900,000 miles per year in vehicle travel re-imburement. This equates to a measurable carbon footprint of around 28,700 tonnes of carbon each year.

As a large public sector organisation, they fully appreciated that the Trust had a key role in leading the necessary change.

They recognised that sustainable reductions in carbon emissions will free up scarce financial resources which can be re-invested to support both further carbon reduction measures and improvements in health care.

Taking the lead.....

SLaM was selected in 2008, amidst strong competition, to take part in an ambitious Carbon Management Plan. SLaM had partnered with the Carbon Trust on this programme in order to realise substantial carbon and cost savings.

This Carbon Management Plan commits SLaM to a target of reducing CO₂ by 30% by 2013/14 and underpins potential financial savings to the organisation of around £0.9 million.

The plan is intended to be a 'living' document, which is regularly monitored, and reviewed quarterly by the Board for the duration of the programme. The CMP sets out a clear and systematic policy approach and programme for the Trust. The plan breaks down further the key measures, and identifies those responsibilities, key deliverables and timescales.

Graham Richards, Head of Estates was tasked with heading up this ambitious project, which resulted in various proactive initiatives to reduce waste and cost.

Just a few of SLaM's environmental projects.....

- SLaM will soon be introducing voltage reduction technology on its three main hospital sites. The voltage in all sockets will be lowered which will reduce electrical consumption by 10%. This means the Trust will reduce its CO2 production by 500 tonnes per year and will save £83,000 every year in electricity bills.
- Installation of LED lighting at all sites which has saved 70% in lighting costs.
- The Trust has installed building management systems on its three main hospital sites so heating can be controlled centrally. This means that timers can be controlled to ensure heating is not left on at night. The heaters are also linked to the outside air temperature which is much more energy efficient.
- The three main hospital sites all have sub-meters. This means the energy being used in each building can be monitored. If a particular building is showing high usage then estates and facilities staff can visit to find out why e.g. appliances may be being left on unnecessarily.
- In the next few months the Trust will be installing a Ground Source Heat Pump at its Bethlem Royal Hospital site. A field on the site will have water pipes installed two metres underground which will extract heat out of the earth. This heated water will feed into three of the hospital's buildings. This will save the Trust £67,000 per year in gas costs and will reduce CO2 production by 126 tonnes per year.
- A biomass boiler is also being installed at Bethlem Royal Hospital. This is a carbon neutral way of producing heat and will feed into several buildings on the hospital site. This boiler will save the Trust £80,000 per year and will reduce CO2 production by 390 tonnes per year.

Graham Richards felt that it was essential to have a robust framework to manage these initiatives to ensure that they were being delivered. This meant the creation of policies, procedures and templates so that there was consistency across the Trust.

The Trust didn't want to just tick the boxes; they knew that they needed a systematic approach to achieve continuous improvement. Their strategy includes targets for the next 40 years. So a quick fix solution would not be enough. Therefore, implementing an Environmental Management System compliant to ISO 14001 and BS EN 16001 was the preferred option.

With over 100 'Environmental Champions' ready and waiting, SLaM chose Blackmores to support the coordination of activities to implement an Environmental Management System. Blackmores team of consultants carried out a Gap Analysis to highlight the strengths and weaknesses of the current operations, and developed a project plan to address the requirements needed to support their environmental/carbon strategy.

Over a period of seven months the EMS was created. Various reviews were undertaken to understand the trusts legal and regulatory requirements, and as a result an environmental legal register was produced. An important part of the project was getting key players commitment, and to help them to understand the Trusts environmental issues and initiatives in detail. The environmental champions were then empowered to take responsibility for specific aspects of the EMS. Once the EMS policies and procedures were completed and authorised, the next stage was a crucial stage - Communicating the EMS.

Blackmores and SLaM felt that although the EMS could be made available via word and excel documents on the Trusts server/intranet. There was concern that this approach would not be as effective as if the EMS was a 'live' system which the trust could link KPI's to actual energy/waste data, and also provide tools to collate data for CRC reporting and performance management.

Pioneering innovative solutions for the NHS.....

At the same time, Blackmores found that many other trusts were looking for a similar solution, so taking this on board, Blackmores partnered with a world leading Integrated Management Systems Software Company, integrum.

As pioneers of environmental best practice, SLaM and Blackmores have now launched a groundbreaking new NHS EMS which SLaM are currently piloting.

The NHS EMS has now been customised by Blackmores to provide the solutions for NHS Trusts:-

- **Environmental aspects/impacts analysis & planning**
- **Environmental legal registers**
- **Incident management and intuitive corrective action reporting**
- **Audit planning, scheduling and reporting**
- **Performance management – KPI's/Environmental targets**
- **Document control**
- **E-learning system - Training and competency management**
- **Customisable management reports**
- **Emergency preparedness and response**
- **Supplier and contractor management**
- **Carbon Reduction Commitment reporting**
- **Integration features with ISO 9001 (Quality) and OHSAS 18001 (Health & Safety)**

The online EMS not only provides an easy to use vehicle for managing the reduction of waste, carbon and costs, it also acts as a catalyst for breeding environment best practice through an e-learning facility.

The e-learning modules that have been created by Blackmores, enable SLaM to reach out to almost 5,000 staff at the click of a button. The Communications Team at SLaM are now equipped with the facility to monitor who has received awareness training on Environmental Best Practice and when it has taken place. E-learning via the integrum system has also been customised for users and managers who need a more in depth understanding about associated legislation and their environmental responsibilities.

Once the NHS EMS had been implemented, the next stage was to demonstrate its effectiveness. An Internal Audit Programme is managed by Blackmores experienced auditors to demonstrate compliance and performance management of the EMS to the board and also external assessors. Most importantly, to demonstrate accountability a commitment to the environment SLaM are in the fortunate position of quantifying the reduction of energy, carbon and waste and how this equates to cost savings.

Achieving high environmental standards.....

The icing on the cake, is getting recognition for their efforts though certification to ISO 14001 (International Environmental standard) and also BS EN 16001 (British Energy Management Standard). SLaM achieved certification in December 2010, and were the first NHS Trust in the UK to achieve the BS EN 16001. This together with achieving ISO 14001 and the Carbon Trust Standard, SLaM were then in the fortunate position of quantifying the reduction of energy, carbon and waste and how this equates to cost savings. In February 2011, SLaM had identified savings of £1,000,000 compared to the 2008/2009 figures on energy alone, thus demonstrating significant financial savings.