
First NHS Trust is awarded international CEMARS carbon standard

"Imperial College Healthcare NHS Trust has a long history of investing in energy efficiency initiatives and we are extremely proud that this has been vindicated by CEMARS certification through rigorous audit of our emissions data, long-term carbon management strategy and detailed implementation plan"

Vikas Ahuja, Energy Adviser, Imperial College Healthcare NHS Trust

The Challenge

Imperial College Healthcare NHS Trust is one of the largest NHS Trusts in England and in partnership with Imperial College London is one of the UK's five academic health science centres. The Trust has five hospitals; Charing Cross, Hammersmith, Queen Charlotte's & Chelsea, St Mary's and Western Eye.

The Trust expects to lead the way for other NHS organisations in its response to climate change. Captured by the CRC Energy Efficiency Scheme the Trust worked to gain certification to the CEMARS standard to qualify for the Early Action Metric and demonstrate compliance with the international standard ISO 14064-1¹.

The Results

Over a three year period the Trust has demonstrated an absolute reduction of more than 2,000 tCO₂e or 3 percent². Over the same period a relative reduction against turnover has shown a 9 percent² reduction in emissions.

These reductions have been achieved as a result of seven years of project implementation in the area of energy efficiency. Activities have included upgrading lighting, installing variable speed drives on ventilation plants and Building Management System improvements.

The Focus Going Forward

The long term objectives for carbon reduction across the Trust, in line with the Climate Change Act and NHS Sustainable Development, are to target a 64 percent reduction by 2030 and an 80 percent reduction by 2050 against a 1990 baseline. The Trust has made a commitment of absolute reduction of its emissions by 25 percent over the next five years compared to the 2009-10 baseline. This equates to a reduction of over 16,000 tonnes of carbon dioxide equivalent. The Trust is working towards a Carbon Management Plan to achieve these savings and key reduction projects include;

- Voltage optimisation
- Lighting upgrades
- Building Management System upgrade
- Steam to medium temperature hot water conversion
- Exploring the feasibility of solar pv, wind and biomass
- Improved data quality to ensure accurate figures

¹ ISO 14064-1: the international standard for the quantification and reporting of greenhouse gas emissions

² Reductions calculated against a 2007-08 baseline.

Q & A with Vikas Ahuja, Energy Adviser

Why did Imperial College Healthcare NHS Trust choose the CEMARS standard?

“There were two reasons – it provided best value for money compared with equivalent standards, which is really helpful in current climate, and because the Trust will have to apply for renewal in 15 months meant that carbon management, and more importantly, reduction remained top of the agenda.”

How has working through CEMARS helped Imperial College Healthcare NHS Trust?

“Working through CEMARS has given us a very clear understanding of where our carbon emissions are coming from and hence the priority areas to focus on. For example one thing that came out of our initial certification was that we need to have much better data around refrigerant holdings and top-ups.”

What are the key priorities for your energy policy and the carbon reduction agenda?

“Carbon performance is as important as financial performance. Regular monitoring, targeting and reporting to stakeholders is vital. Energy use will continue to be the major source of emissions and the more we can focus on reducing it, the better.”

What savings have been recognised by Imperial College Healthcare NHS Trust in line with the reduction of emissions?

“In the first six months of this year, the energy consumption for the Trust is 10 percent lower than the same period last year. This equates to 7.2 percent reduction in carbon emissions compared with last year.”

How will you reinvest the savings made to date in energy reduction?

“The Trust spent close to £2.9 million in energy efficiency initiatives last year. The savings attained through these projects are helping us repay the interest-free loan that we had secured from Salix. Buoyed by the success of these measures last year, the Trust has secured another loan of £3 million to invest in energy efficiency projects this year.”

What advice do you have for other organisations working to measure their carbon footprint and make a reduction in emissions?

“You can’t manage what you can’t measure. The time and effort on establishing the emissions baseline will be very well-spent because it will open your eyes to areas where considerable energy/money is wasted at the moment.”

CEMARS (Certified Emissions Measurement And Reduction Scheme) recognises organisations for credible carbon measurement, management and reduction. An organisation must measure their carbon emissions across Scope 1, 2 and 3 as well as develop a detailed reduction plan with targets and key initiatives outlined. An organisation has five years from the base year to demonstrate either an absolute or relative reduction in carbon emissions. Organisations affected by the CRC Energy Efficiency Scheme can also use CEMARS to demonstrate carbon reductions achieved over the last three years for the Early Action Metric. CEMARS is the only standard in the UK accredited to ISO 14065, the recognised international standard for greenhouse gas validation and verification bodies.