

Mersey Care NHS Trust

“£80,000 saved over a ten year period”



“We are saving a significant amount in carbon emissions and have achieved noticeable savings in our energy bills due to Gemma’s products. It is one of a number of key measures which has helped us gain the international standard ISO 14001 for the Maghull site in recognition of our efforts to minimising damage to the environment through carbon reduction initiatives such as this.”

Mr Bill Harris-Heffer, Mersey Care’s Deputy Director of Facilities.

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Mersey Care NHS Trust Work With Gemma Lighting to Implement the “NHS Carbon Reduction Strategy”

Summary

- Leading mental health service provider Mersey Care NHS Trust commissioned Gemma Lighting to manufacture and supply high quality LED lighting for the car park at its biggest site.
- The new lights needed to save sufficient energy to comply with the “NHS Carbon Reduction Strategy.”
- The success of the above led onto Gemma Lighting being asked to provide LED lighting solutions for more of the site’s outdoor areas.
- All projects resulted in 42 tonnes of carbon emissions being saved annually.
- Mersey Care also achieved annual savings of; £3,000 in energy costs, £3,000 in maintenance costs and £80,000 in ownership costs over a ten year period when the new installation was compared to the existing light’s costs.

The challenge to reach the “NHS Carbon Reduction Strategy Targets”

Situated in Merseyside, Mersey Care NHS Trust occupies a large site in the Maghull area north of the city, where its management, clerical and administrative teams are based, plus other support services for the adjoining Ashworth Hospital, one of the country’s three high secure specialist psychiatric hospitals in England and Wales.

Originally, the lighting system in the staff car parks consisted of 34 sodium post top lights that consumed an unnecessary amount of energy, using 180 circuit watts each. The lights also gave inadequate visibility in the car park, especially in view of the needs of nursing and support staff arriving and leaving during 24-hour shift patterns during dark nights and mornings. The problem was further exaggerated as the lighting infrastructure was unevenly distributed and of varying age; resulting in a poor spread of light throughout the car park. The health and safety of staff was a paramount driver for the project.

About Gemma Lighting

Gemma Lighting LTD was formed to create an innovative concept for everyday lighting requirements. Drawing on 25 years of experience in LED technology, the team at Gemma Lighting LTD continues to design, develop and manufacture a new generation of environmentally friendly LED lighting suited for their customer’s individual needs.

Mersey Care commissioned Gemma Lighting to create an LED lighting solution that would help them reach the “NHS Carbon Reduction Strategy Targets.” This strategy shows the scale of reduction in carbon required for the NHS to progress towards the Climate Change Act requirements. It recommends key actions for the NHS to become a leading sustainable and low carbon organisation. As well as this key requirement to reach carbon saving targets, Mersey Care wanted lighting at its Maghull site that not only looked good but helped staff find their way safely to their cars at night and was of low maintenance.

Gemma Lighting’s tailored solution to energy saving and safety goals

Taking into account the customer specification and the layout of Mersey Care’s car parks, Gemma provided a detailed lighting plan which demonstrated a considerable improvement in light distribution. An energy saving report was created that proved the new LED lighting scheme would significantly reduce carbon emissions in order to support the NHS’s carbon saving strategy.

Due to their smart appearance and even light distribution the Jaguar LED Globe Lights were recommended. The Jaguar consumes 32 circuit watts and when it was compared to the existing light’s 180 circuit watts it achieved an 80% reduction in energy consumption per unit. With a period of at least 10 years service life, the new lighting system required minimal upkeep – creating further savings in maintenance costs.

Impressive results leading to further projects

The new lighting was installed successfully and immediately staff felt much happier with the lighting in the car park. A member of staff commented: “The car park is lit much clearer at night meaning we can find our cars easily and the new installations look great.”

Mersey Care was very satisfied with their energy saving achievements and the additional benefits of this initial project. This led to Gemma being commissioned by Mersey Care to undertake another project

LED lighting is Gemma Lighting’s only product – giving them a specific knowledge and interest in developing new ideas. Gemma Lighting design and manufacture their LED lights in the UK and can proudly say that they adhere to the high UK standards of manufacturing. Gemma’s area account managers provide full project support for end users, wholesalers and distributors alike.

to achieve further energy savings. Gemma Lighting’s LED lights were installed around a complex arrangement of pathways and hospital buildings on site to replace 80 150W sodium lights. The Jaguar LED globe lights achieved a 1:1 replacement and by using 32W each an 80% reduction in energy consumption. This achieved the same impressive result and further energy savings of 52,000 KWH per annum.

Remarkable reductions in carbon emissions

Most importantly for Mersey Care, 42 tonnes in carbon emissions are being saved annually through Gemma’s installations. This significantly contributes to the NHS carbon saving initiative. As a result of this the total annual energy cost savings for the new installations worked out at £3,000; with a further saving of £3,000 in maintenance fees. The cost of ownership for the LED scheme showed a saving of £80,000 over a ten year period. This resulted in a payback period of two years against the capital expenditure.

Gemma Lighting’s outdoor LED installations are on various sites throughout the UK; contributing to the environmental awareness efforts of various organisations. Gemma Lighting look forward to working with the NHS on further projects to achieve the NHS target of becoming a leading sustainable and low carbon organisation.

Advantages of LED lights

1. More power to light not power to heat = **save on energy bills by up to 90% and reduce carbon emissions.**
2. LED has at least 10 years life = **save on lighting maintenance costs**
3. Zero light overspill = **no light pollution to surrounding areas**
4. Pure white light (close to daylight) = **excellent visual acuity for CCTV**
5. Instant light (100ms switch on time) = **perfect for motion sensors/saving energy when not in use**
6. Impact resistant casing = **safe from vandalism**