

MAPPING GREENER HEALTHCARE

AN EASY WAY TO SHARE IDEAS AND LEARN FROM OTHERS

Published on *Mapping Greener Healthcare* (<https://map.sustainablehealthcare.org.uk>)

[Home](#) > [Bradford Teaching Hospitals NHS Foundation Trust](#) > Lighting Project

Lighting Project

By: Bradford Teaching Hospitals NHS Foundation Trust

Javascript is required to view this map.

Positive outcome(s) of project:

Additional benefits include an improvement in measured lighting levels and reduced maintenance costs as the new light fittings have a longer life span. An informal post-evaluation survey has shown that staff are happier with the increased levels of lighting. Apart from an improved working environment the project contributes to the achievement of the Trust's sustainable development goals and a reduction in its climate change levy.

Savings per year:

£612 per year (Estimated)

CO2 savings per year:

2.3 tonnes CO2e per year (Estimated)

Description:

The renal service decided to invest the full value of a BJRM Innovation in Renal Medicine Award 2011 prize (£5,000) in a greener healthcare energy saving initiative. Following a site survey of the renal unit, the lighting project was chosen as the most appealing in terms of delivery, risk and savings. The survey revealed that the fluorescent light fittings were of a 'T8' type, whose energy consumption can be up to two times that of a modern 'T5' light fitting. Existing luminaires had started to degrade and could not produce all the expected light from the fluorescent tubes. Following a consultation exercise with renal unit staff, a plan was agreed to install 'T5' light fittings. A total of 85 light fittings were changed in the Renal unit offices and wards.

The project was part of an on-going collaboration between the local Green Nephrology Champion and the Trust Estates department. The feasibility study, survey and business case were carried out by Mr Nsipa Siwale (Energy Manager). Activities included risk assessments, product selection, tendering and project management. Departmental support and funding was provided by Dr John Stoves. To minimise risks and disruption to staff and patients, most of the work was carried out after normal working hours.

Benefits to environmental sustainability

The annual operating hours for lighting in the Renal unit are 3,000 hours. The average energy saving per individual light is 36 kilowatt hours per year. Based on a greenhouse gas conversion factor of 0.58982 kgCO2e/kWh*, the project will save 11.5 tonnes of CO2e over 5 years.

* "All-scopes grid rolling average" emissions factor for electricity consumed (2010), Table 3c, Defra 2012 greenhouse gas conversion factors for company reporting

Reasons for project: The main aim of the project was to reduce carbon emissions. The consultation exercise also revealed the need to improve levels of illumination in the unit, for example in the rooms used by technical staff.

Start date: 17/03/2012

Status: completed

Implementation costs: £5,000

Partner:

The contractor for the project was JA Richardson Ltd, an experienced contractor who has undertaken several jobs successfully at the Trust with an excellent knowledge of the Trust and good Health and safety track record in the execution of similar projects.



Follow-up plan: A solar panel installation project may contribute to a further reduction in future charges.

Contact: Nsipa Siwale, Energy Manager, nsipa.siwale@bthft.nhs.uk

[Green nephrology](#)

The Centre for Sustainable Healthcare is registered in England & Wales as a company limited by guarantee No. 7450026 and as a charity No. 1143189. Registered address: 8 King Edward Street, Oxford, OX1 4HL

Source URL: <https://map.sustainablehealthcare.org.uk/bradford-teaching-hospitals-nhs-foundation-trust/lighting-project>