



# Barnet Hospital: Hydrogen Powered Tower Lights

**In agreement with Brian Pratt, Director of Capital Projects NHS, Bouygues Energies and Services (E&S), an Equans company, and the Royal Free London (RFL) are trialling hydrogen-powered tower lights at Barnet Hospital.**

## The Challenge

Bouygues E&S, an Equans company, and the Royal Free London are capitalising on this opportunity to highlight the benefits of using hydrogen-powered tower lights to reduce carbon emissions across the Healthcare sector.

Rather than running on small diesel generators, these hydrogen-powered lights offer a sustainable temporary lighting solution to areas where the Hospital would have struggled to light due to cabling infrastructure issues. This solution helps our client the RFL to achieve their pledge to create a greener NHS by reducing their fuel consumption and improving local air quality. In addition to supporting sustainable solutions, BYES are also committed to supporting the local community and their environment by eliminating the risk of fuel and noise pollution.

## Solution

After trialling the Hydrogen-powered tower lights at Barnet Hospital, it is clear the environmental and social benefits outweigh the slight monthly increase to run them, which will eventually balance out as Hydrogen costs drop and diesel prices surge. Hydrogen powered lights are not only carbon free, very quiet and a cleaner source of energy, but also offer no risk of fuel spillage.

Operationally, the battery life and lighting sufficiency of the hydrogen-powered lights were excellent and rated 9/10 by the site team and 10/10 for overnight use battery life. The elimination of the risk of fuel spillage facilitates better resource-efficiency by reducing the amount of operational checks and the supplier service engineer only has to replace the hydrogen tank when required.

The built environment is one of the biggest contributors to the worlds CO2 emissions. Therefore, changing our behaviours and delivering sustainable solutions to diesel and petrol power is paramount in the fight against climate change. We are aligned with the RFL in becoming early adopters of new innovation and technology to help the NHS achieve net zero by 2040.

## Client Benefit

- Lighting in hard to reach areas
- Reduce CO2 emissions on site by removing diesel generator
- Reduction of noise pollution - Ideal for night work in residential areas and enclosed spaces
- Safe to use in enclosed areas
- Special low-impact lighting similar to lunar light

## Key Facts.

- Risk of fuel spillage reduced to zero
- Zero co2 site emissions
- Noise pollution reduced to zero



“Innovative solutions such as this from our PFI partners are much welcomed. Bouygues E&S understand fully the need to be a greener and cost effective NHS and the provision of this successful and innovative trial has demonstrated this. We look forward to expanding this trial further in the very near future.”

**Brian Pratt, Director of Capitol Projects NHS.**

“This has been a great opportunity to assist in contributing to carbon offsetting in a healthcare setting and demonstrates closely working with our partners to help deliver this.”

**Neil Woodburn, Metier Healthcare Director.**

“It’s exciting to see that through the Bouygues group, Bouygues E&S can propose solutions to help our clients work towards net zero carbon.”

**Simon Hayman, Regional Director BYES.**

