

National Green Theatres Programme Case Study

‘Last out, turn it out’ – Turning off electronic devices in NHS Greater Glasgow & Clyde

July 2024

About

Dr Mark Tait, Anaesthetic Specialty Trainee 5 (ST5) and Dr Helen Grant, Anaesthetic ST5 share work undertaken by a team of trainees at Glasgow Royal Infirmary to reduce energy use by raising staff awareness of turning off electronic devices and lights not in use.



Background

Glasgow’s hosting of the 26th United Nations (UN) Climate Change Conference (COP26) in November 2021 was the catalyst for this project.

In NHS England alone, healthcare accounts for approximately 5% of the country’s national greenhouse gas emissions, with 10% coming from building energy.

There are many simple actions that can be taken locally to contribute to change.

The Anaesthetic Association of Great Britain and Ireland (AAGBI) support the 5R approach: reduce, re-use, recycle, rethink and research. One step recommends turning off electronic equipment that isn't being used and another encouraged audits on energy usage.

With the above in mind, the small team at Glasgow Royal Infirmary set out to review how many lights and computer screens were being inappropriately left on when not in use across the general theatre corridor.

As shown in the chart opposite, the baseline audit found that 81.3% of lights and 55.1% of computers were left turned on in theatres that were not being used in-hours. Out-of-hours, 54.9% of lights within empty theatres remained turned on as well as 57.4% of computers.

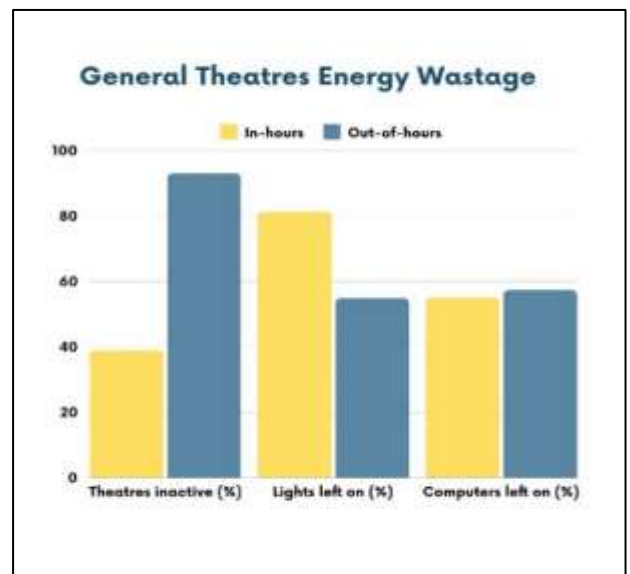


Figure 1 – Glasgow Royal Infirmary General Theatres’ energy wastage baseline audit

Proposed Change

The proposed change was simple: switch off equipment and lights when they are not in use. This was launched as the 'Last out, turn it out' campaign.

Challenges

Awareness was identified as the main challenge when implementing the change. The team held face-to-face meetings with theatre, nursing and domestic management to get senior buy-in to support the project and raise awareness across multiple teams.

Outcome / Results

After running the awareness campaign, Last out, turn it out, the team re-audited the same theatre corridors and found a sustained improvement. There was a 70 percentage point reduction in lights being left on during hours (81% to only 11%) and a 30 percentage point reduction out-of-hours (55% to 25%). This decrease is outlined in the graphic below:

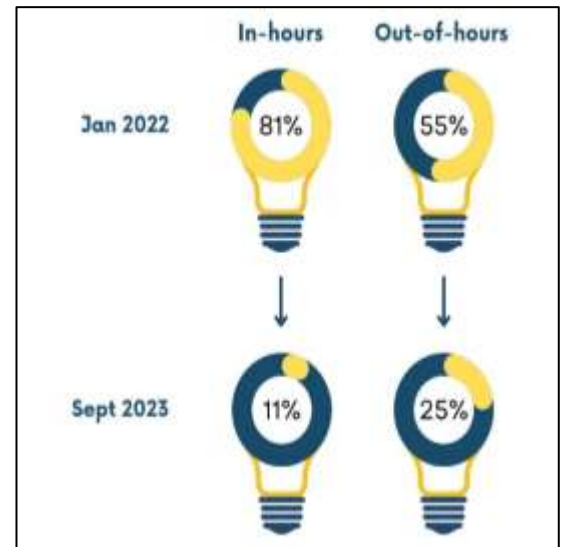


Figure 2 – Glasgow Royal Infirmary General Theatres' energy wastage January 2022 v September 2023

Learning

Leaving electrical equipment on inappropriately increases the carbon footprint of healthcare facilities and the NHS. This study highlights how individuals can take charge to reduce their burden on the environment and the importance of both auditing your workplace environment and raising awareness of issues that others may not have considered.

Next Steps

Many modern hospitals now use passive infrared (PIR) technology to activate lights when motion is detected.

The next steps, building on the success of this project, is to work with engineering and finance colleagues to install these systems, where possible, as lighting systems are replaced.

Further Information

If you have any questions about this case study or want to find out more, please [visit our website](#) or contact the National Green Theatres Programme by emailing cfsdgreentheatres@gjnh.scot.nhs.uk