

University of Cambridge, Sidgwick Site

case study



“Building managers and end users feedback has been positive with other potential areas for energy savings being suggested for further investigation.”

Adam Fjaerem - Building Energy Manager, University of Cambridge

About University of Cambridge

With more than 18,000 students, 11,000 staff, 31 Colleges and 150 Departments, Faculties, Schools and other institutions, it is one of the world's oldest universities and leading academic centres.

The University has a number of sites across the city of Cambridge. The site of this case study was the Sidgwick Site which is the home of the Faculty of Philosophy, Department of Applied Economics, Faculty of Music and many others.

The challenge

Adam Fjaerem, Building Energy Manager, was first made aware of Mitsubishi's Jet Towel Smart Hand Dryer after one of the Estate Management surveyors had specified them for use in the concert hall public toilets because of their low operational noise which was very important during recitals.

After further investigation, and with support from Intelligent Hand Dryers, Adam calculated the energy savings that could be captured by replacing a number of the older, less efficient, but still operational dryers in a number of buildings across the Sidgwick site with these Mitsubishi models.

Old hand dryers: Mixture of brands and performance

- o Average rated power 2000W
- o Average dry time: 36 seconds

The solution

Extremely energy efficient, low noise and fast drying. Comes with a long-life brushless motor.

Model: Mitsubishi Jet Towel Smart

Dry time range: 11 - 18 seconds
(dependent upon setting)

Rated power: 410W - 980W
(dependent upon setting)



The energy savings were greater still after utilising the option of turning the heating element off. As multiple units were installed at the same time this reduced the labour costs per unit which further improved the Simple Payback of the project.

Therefore, a trial was run to replace 64 units across eight buildings on the Sidgwick site to capture the energy savings, provide consistency and uniformity across the site and highlight that all options to achieve carbon reductions are a priority throughout the University.

The results

Annual energy savings: 21,974 kWh

Annual cost savings: £2,850

Annual carbon savings: 6,200Kg/CO_{2e}

Simple payback period: approx. 6.4 years

“...they were prompt with the work and in and out with minimal mess and fuss.”

Jamie Brittain - Sidgwick and West Cambridge Sites Facilities Manager

A small number of hand dryers that were removed were donated to Emmanuel House Support Centre for the homeless to prevent unnecessary waste and help a charity reduce costs.

