

# The Discovery Mill

## Energy Management through people

### Case-study

Lessons from 10 years' working with Heathrow, 2007-2016



Key components to help make the process *Friction Free*:

- 1 Strategy** & Energy Reviews are about taking the time to understand where you are and help establish your local strategy and catalyst for action.
- 2 Training** & workshops provide the skills, capability and mind-sets for champions and significant energy users to drive continual improvement. Training is accredited through ESTA.
- 3 Apps & Toolkits** provide passive support and quick management systems to make the process as easy as possible for everyday champions to deliver at scale.
- 4 Hands on support** provides specialist / technical skills, as required, for example for energy audits, behaviour change campaigns, project support, ISO 50001 energy management systems, etc.

People solutions are often the quickest and most cost effective way to deliver energy savings and sustainability at scale

The Discovery Mill and our team have been successful pioneers of energy & sustainability management through people for many years across different industry sectors.

Working in partnership with our clients often involves a combination of strategic, technical & behavioural joined-up thinking, with hands-on or more passive support as required.

Success is often down to the everyday champions involved. This is based on the understanding that:

- > People are key to delivering better buildings and sustainability improvements aligned with business needs.
- > Collaborative approaches enable people to better connect up technical and behaviour solutions and deliver best results.
- > Making the process as friction-free as possible makes it desirable, focused, integrated and continual, but most importantly owned by the people involved. .



“This approach set us up to achieve more than 30% reduction in energy costs in our terminal building over a four year period”

Alun Ottley, as T1 Maintenance Facilities Manager, Heathrow Airport, 2011

Proud to help mill the hard work out of energy management

[www.thediscoverymill.co.uk](http://www.thediscoverymill.co.uk)

“The Discovery Mill is an excellent company which is really good at turning a requirement into a practical and deliverable solution – that is one of their key strengths. They work with all our retailers on how to meet our energy and sustainability requirements. They do a great job.” Martin Rayner, as Head of Commercial Delivery, Heathrow Airport, 2015



WINNER 2014

Most Innovative energy efficiency project of the year, Heathrow Airport & the Discovery Mill

## HEATHROW CASE-STUDY Part 1: Airport Operations 2007 to 2010

**Requirement:** To save energy, reduce CO<sub>2</sub> emissions and cut costs. The airport had achieved some great successes but it needed to do more.

### Key challenges:

- Utility budgets (were) held centrally.
- No dedicated energy projects capital budget in place.
- Some past energy projects weren't achieving the savings forecast.
- Limited involvement of people across the airport in energy improvements.

### The Big Idea:

- Engage, empower, connect and support a network of everyday champions across the airport.
- An energy savings tracker to credit results to people and teams.

### Motivators & Results:

1. 'Win Win' requirement – co-benefits also required for better customer service or easier maintenance.
2. Network for 30 - 100 champions, with investment in training, events and treasure hunt sweeps.
3. 1000+ actions on the tracker, each one credited to champions.
4. 15% average savings delivered across the airport in 3 years; 30+% in the best buildings; worth multi £m of savings for the airport.

### Key lessons:

- Plans need to be developed & owned by the local teams involved.
- Training for energy leadership skills to facilitate continual improvement.
- Management systems are needed to ensure savings are sustained. The airport now has ISO 50001.
- The process should be as friction-free as possible for biggest results.

## HEATHROW TERMINAL 2 Retail Fit-out & Operations 2012 to 2016

**Requirement:** Bring together 186 separate new retail spaces and 46 retailers, within Terminal 2, to be an exemplar in sustainability practice.

### Key challenges:

- Planning covenants required fit-outs to demonstrate excellent levels of energy performance.
- Past areas have struggled to translate design intent into operational practice.
- T2 retail units to be at least 10% more efficient than equivalent T5 units.

### The Big Idea:

- Be collaborative, join up design, operational and behavioural practices.
- Post-occupancy monitoring to assess performance and identify the opportunities.

### Motivators & Results:

1. Heathrow project managers are key-connectors, working with retailer teams.
2. Lead & learn workshops connecting up designers and users (e.g. chefs).
3. 24% average design energy savings compared to T5 unit baselines, saving over £500k a year.
4. Restaurants' energy performance now correlates with numbers of customers and covers.

### Key lessons:

- Design energy targets provide the platform for joined-up thinking.
- On-demand philosophy facilitates better operational behaviours.
- Use of daily diaries highlights further opportunities to save energy.
- Equipment fire-up schedules provide a managed approach to stretching performance longer-term.

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