

# T2 @ Dublin Airport Authority | Ireland

## Driving Energy Efficiency and Improving Energy Awareness

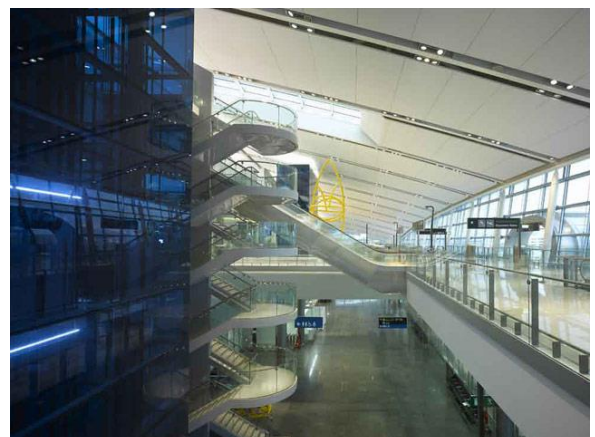
### PROJECT SUMMARY

Applications:	Cylon Active Energy Manager   Green Screen
Number/Type of Building	Terminal 2 Building at Dublin Airport
Size:	100,000 m <sup>2</sup>   1,077,000 sq. ft.
Number of Meters	250 meters connected
Energy Savings	11% reduction in electricity consumption in 2012
Use	Energy Management   Public Energy Awareness

### PROJECT OVERVIEW

Headquartered at Dublin Airport, Dublin Airport Authority's (DAA) principal activities include airport management and development, domestic and international airport retail management, and airport investment.

Terminal 2, opened in November 2010, is a 100,000 m<sup>2</sup> (1,077,000 sq. ft.) terminal and pier (pier E) which provides 19 air bridges for aircraft and is capable of handling 15 million passengers annually and is now home to airlines such as Aer Lingus, Etihad Airways, Emirates Airlines and all of the transatlantic carriers operating from the airport.



*"Cylon Active Energy Manager assisted the Asset Care Team in T2 target and validate energy saving initiatives resulting in 11% reduction in electricity consumption in 2012."* Neil Moran | Dublin Airport Authority

### CYLON ACTIVE ENERGY SOLUTION

A total of 250 of the 450 installed meter utility points within T2 are currently connected to the Cylon Active Energy Manager and monitor areas such as;

- Heating, Ventilation and Air Conditioning
- Lighting
- Aircraft Ground Power Units
- Airline Lounges
- Retail Units
- IT Rooms
- Lifts & Escalators
- Water Consumption
- Gas Consumption
- Combined Heat & Power Plant



Among the energy saving measures implemented by the Asset Care Team on site and validated by them using the Active Energy Manager SaaS were:-

- Operating Escalators and Travelators in energy saving mode
- Free Cooling – Maximising use of fresh air by enthalpy control
- Demand Ventilation Control for areas with extreme occupancy variations
- Utilising passive and smoke vents for night cooling
- Implementing demand led control on fan coil units
- Reviewing and optimising building temperature setpoints
- Maximising natural light harvesting through lux level control
- Upgrading of high energy lamps to energy efficient alternatives such as LED & Induction type
- Maximising the use of occupancy controlled lighting sensors
- Optimising the run on time of baggage conveyor systems
- Integrating lighting control with baggage carousel runtimes

Green Screens, customised via an Application Program Interface (API) were installed in the departure lounge areas of T2 providing information on what measures the DAA is taking to reduce energy consumption, details on the energy saving achieved at T2, and offering tips to passengers on what steps they can take to save energy.

### SOLUTION BENEFITS

**Energy Awareness:** The Cylon Active Energy Green Screen displayed within the terminal building to encourage positive behavioural change to energy management amongst occupants and travellers through the building that can produce additional savings in energy consumption of up to 10%.

**Project Tracking:** The Cylon Active Energy Manager can also be used to track the performance of energy saving measures across the terminal building, ensuring the return on investment can be accurately determined for the various energy reduction technologies deployed.

**Tenant Cost Validation;** The Cylon Active Energy Manager allows the onsite Asset Care Team to centrally monitor the energy consumed throughout the building via the user friendly and intuitive interface, and validate and substantiate energy costs for each tenant.

