

CASE STUDY

"GRID EDGE IS USED TO DYNAMICALLY MONITOR AND MANAGE THE ENERGY LOAD WITHIN OUR BUILDINGS. THE SYSTEM ALLOWS THE TEAM TO PLAN THE ENERGY STRATEGY DAY BY DAY, IN RESPONSE TO FORECASTS OF TEMPERATURE AND FOOTFALL."
ROSEANNAH PLAYLE - ENVIRONMENT MANAGER, BULLRING ESTATE

THE BACKGROUND

Hammerson, owners of the Bullring shopping centre and Grand Central in Birmingham, have been working with Grid Edge to apply predictive Artificial Intelligence and machine learning to the buildings' climate control systems.

Hammerson needs to meet net positive carbon emissions, water demand, resource use and socio-economic impacts by 2030. Grid Edge is helping to predict, optimise and control their energy profile.



THE RESULTS

Hammerson can now:

- Deploy micro-targeted zone-by-zone energy strategies for the day ahead
- Receive high-accuracy temperature and occupancy forecasts
- Shift demand to when energy is cheapest and lowest carbon intensity, whilst still hitting their comfort, wellbeing and air quality targets
- £20k saved solely from optimisation of the electrical cooling loads
- 15-20% energy savings overall

THE CHALLENGE

- Bullring's heating and cooling strategy was based on generalised inferences from weather reports, leading to inefficient energy use
- Energy consumption was not being optimised to time-of-use pricing
- No visibility of the carbon intensity of electricity

THE ACTION

- Initial test and trial period with Grid Edge at the Bullring
- A digital, predictive model for the building's energy and environmental profile was created
- After initial success, Grid Edge 'Edge2X' is rolled-out to Grand Central

