CASE STUDY

"IT WAS INFORMATIVE AND EDUCATIONAL WORKING WITH GRID EDGE ON THIS CUTTING EDGE ENERGY DIGITALISATION PROJECT.

THE GRID EDGE TEAM ARE VERY SUPPORTIVE AND OUR INVESTMENT PAID FOR ITSELF WITHIN THE YEAR."

STEVE BAGGS, ENERGY MANAGER
KENT COUNTY COUNCIL

"WE'RE USING TECH AND INNOVATION TO REDUCE COSTS AND CARBON & WE'RE VERY HAPPY TO USE THE EDGE2X PLATFORM.

GRID EDGE HAS BEEN A GREAT PARTNER IN HELPING US ACCELERATE PROGRESS ON OUR JOURNEY TO NET ZERO."

SUSAN CAREY, KENT COUNTY COUNCIL
MEMBER FOR ENVIRONMENT

THE BACKGROUND

Kent County Council is working with Grid Edge to help create a resilient and smart energy system. The council is deploying innovative technology Edge2X to its building's climate control systems, using predictive AI and machine learning to save carbon and costs,

The Council is applying this cost-effective action to reduce emissions from its buildings. Kent County Council has committed to ambitious targets to reduce greenhouse gas emissions to net-zero by 2030

THE CHALLENGE

- Invicta House heating and cooling strategy was based on generalised inferences leading to inefficient energy use
- Energy consumption was not being optimised to time-of-use pricing or targeted saving strategies
- No visibility of the carbon intensity of electricity

THE ACTION

- Grid Edge integrated Solar Power generation data with the building's energy profile
- A digital, predictive model for the building was created
- Edge2X system identified:

1. HVAC plant was running to a sub-optimal strategy
2. Inefficient out-of-hours consumption

THE RESULTS

The Council's Estates Team can now;

- Deploy targeted energy strategies for the day ahead
- Manage the energy demand of its building to times when solar is peaking

New HVAC strategy

- Preintervention daily HVAC duty was in excess of 1000kWh
- Post-intervention the daily HVAC duty reduced to 550kWh
- Changes created a c.60% energy saving
- Annualised cost saving of c.£30k