Case Study: Leading University – Oil Filled Electric Radiators Replacement

- 14-Week Energy Savings in Student Accommodation
- Location: Two identical student flats, Leading UK University
- Data & meter readings supplied by: Energy Manager
- Tariff used for calculations: 25.5p/kWh (energy only, standing charges excluded)

We ran a 14-week trial at the University of Essex, comparing heating costs in two identical student flats. One flat used 7 traditional oil-filled electric radiators, while the other was fitted with 7 NEOS electric radiators. In the flat with oil radiators, students had full control over their heating, resulting in an energy consumption of 2,920.1 kWh on a 25.5p/kWh tariff, leading to a total energy-only bill of £744.62 over the 14-week period. The flat with the 7 NEOS electric radiators, integrated with the Trust Heating app used 680.7 kWh, saving 2,239.4 kWh and reducing their energy bill to £173.58, a saving of £571.04 (approximately 76.7% reduction in energy use and cost) over the 14 weeks.

What we tested

Flat A: 7 oil-filled electric radiators, thermostats used at students' discretion

Flat B: 7 NEOS electric radiators, run on the Trust proximity heating app

Metered energy use & energy-only cost (14 weeks)

Oil-filled Heater:

Energy used: 2,920.1 kWhEnergy cost: £744.62

NEOS

Energy used: 680.7 kWhEnergy cost: £173.58

Savings (NEOS vs oil-filled)

Energy saved: 2,239.4 kWh

Money saved (energy only): £571.04

• Reduction in energy use and cost: 76.7%