

# **RETAIL** Case Study Number: 1

## **Overview**

- Location: Athlone (Rural)
- Size: 3,700 m<sup>2</sup>
- Constructed in: 2004
- BER Before: N/A | BER After: N/A
- Energy Savings: 140,349 kWh (~ 17%)
- Carbon Savings: N/A
- Display Energy Certificate: N/A

This light retrofit focused on integrating renewables and improving airflow in a largeformat retail unit to reduce energy use and carbon emissions.



### **CHALLENGES**

Details on specific challenges or disruptions during implementation were not recorded, but the project was completed within 12 months without reported delays.

### **SIMPLE PAYBACK**

- Total project cost: €137,725
- Estimated payback: ~ 6 years
- Funding Mode: Private + SEAI Better Energy Community Grant (30%)

### **ADDITIONAL INFORMATION**

- Operational CO<sub>2</sub> emissions were reduced by 33 tonnes annually.
- The project also contributed to improved indoor comfort for customers and staff.

## **Energy Upgrade Measures**

#### **Renewable Energy Integration:**

100 kW photovoltaic (PV) array installed to generate on-site renewable electricity.

#### HVAC Upgrade:

Destratification fans installed to enhance internal airflow and reduce heating demand.

The energy upgrades demonstrates how targeted interventions, such as renewable integration and ventilation enhancements, can deliver measurable energy savings and improve internal comfort.