



RETAIL

Case Study Number: 2

Overview

- **Location:** Kilkenny (Rural)
- **Size:** 1,060 m²
- **Constructed in:** 2005
- **BER Before:** N/A | **BER After:** N/A
- **Energy Savings:** 262,574 kWh (Estimated)
- **Carbon Savings:** 95 tonnes CO₂ annually
- **Display Energy Certificate:** N/A

Targeted refrigeration and HVAC upgrades reduced energy use, improved thermal efficiency, and cut carbon emissions in a large-format retail building.



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:** €344,742.48
- **Estimated payback:** ~ 7 years
- **Funding Mode:** Private + SEAI Grant (Better Energy Community – 30%)

ADDITIONAL INFORMATION

- Advanced refrigeration system reduced energy consumption.
- The upgrades delivered a carbon saving of 95 tonnes CO₂ annually and improved energy reliability.

Energy Upgrade Measures

Refrigeration System Optimisation:

Comprehensive upgrade of eight refrigeration systems to improve efficiency and performance. The refrigeration and HVAC improvements significantly enhanced operational efficiency.

HVAC Upgrade:

- Installation of a new heat pump system for efficient space heating.
- Deployment of a hot water heat recovery system to capture and reuse waste heat.

The heat recovery system supports sustainability goals by reducing waste heat and carbon emissions.