WAREHOUSE

Case Study Number: 14

Overview

- **Location: Mullingar (Rural)**
- **Size:** 43,400 m²
- **Constructed in:** 1998
- **BER Before:** N/A | **BER After:** N/A
- **Energy Savings:** 730,238 kWh (Estimated)
- **Carbon Savings:** 448 tonnes CO_2 annually
- **Display Energy Certificate:** N/A

A deep renovation delivered major carbon and energy savings through heating system upgrades and large-scale solar PV integration in a rural logistics centre.

CHALLENGES

- No specific challenges or disruptions were reported.
- Project was completed within 12 months. Planning and approval details were not specified.

SIMPLE PAYBACK

- **Total project cost:** €2,092,770
- **Estimated payback:** ~6 years
- **Funding Mode:** Private + SEAI Better Energy Community Grant (€627,831)

ADDITIONAL INFORMATION

- The retrofit achieved an estimated 448 tonnes of CO_2 reduction annually and significantly reduced reliance on grid electricity.
- The project supports strong ESG alignment and operational efficiency for a high-energy-use logistics facility.

Energy Upgrade Measures

HVAC Upgrade:
Gas boiler replaced with a Variable Refrigerant Volume (VRV) system to enable efficient, zoned heating and cooling.

Renewable Energy Integration:
1,200 kW solar PV system installed to supply substantial on-site renewable electricity.

Significant emissions savings from large-scale solar PV and efficient heating