



OFFICE

Case Study Number: 4

Overview

- **Location:** Dublin 12 (Urban)
- **Size:** 2,430 m²
- **Constructed in:** 2005
- **BER Before:** D1 | **BER After:** B2
- **Energy Savings:** €102,360 annually
- **Carbon Savings:** N/A
- **Display Energy Certificate:** N/A

A deep retrofit modernised a vacant office with HVAC, lighting, and renewable upgrades to enable re-letting.



CHALLENGES

No major disruptions occurred, as the building was vacant during works. Planning permission was not required; however, a Disability Access Certificate (DAC) was needed and obtained.

SIMPLE PAYBACK

- **Total project cost:** €872,985
- **Energy upgrade cost:** €414,260
- **Estimated payback:** ~ 4 years
- **Funding Mode:** Private + SEAI Grant (Better Energy Community)

ADDITIONAL INFORMATION

- The renovation enabled reuse of a vacant property, cutting energy costs and boosting comfort through advanced HVAC and controls.
- Sustainable transport infrastructure was included with pre-wiring for future EV charging.

Energy Upgrade Measures

Fabric Upgrade:

Interior fit-out with ceiling tiles and wall panels to enhance acoustic and thermal comfort.

HVAC Upgrade:

New AHU, Air-to-Water Hydrobox, and heat recovery ventilation with zoning and airflow controls.

Lighting Upgrade:

Full LED upgrade, including emergency lighting.

Renewable Energy:

Installation of photovoltaic (PV) panels for on-site power generation.

Energy Management:

Upgraded zoning and control systems for M&E.