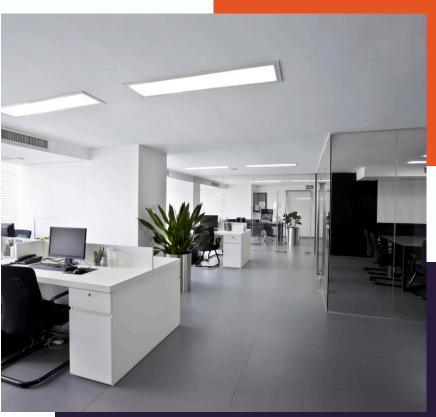


OFFICE Case Study Number: 8

Overview

- Location: Dublin 24 (Urban)
- Size: N/A
- Constructed in: c. 1990
- BER Before: C3 | BER After: A3
- Energy Savings: 1,800 kw/m²/yr 91% reduction in energy cost
- Carbon Savings: 92% operational CO2
- Display Energy Certificate: N/A

An ESG-focused deep renovation saving energy and carbon by over 90% through upgrades to envelope, HVAC, lighting, and renewables.



ENACT

CHALLENGES

Planning permission was required for solar PV and bike parking infrastructure. Other disruptions were not recorded.

SIMPLE PAYBACK

- Total project cost: €1,273,696 (ex VAT, build only)
- Professional fees: €97,520 (ex VAT)
- Estimated payback: ~34 years
- Funding Mode: Private + SEAI Community Energy Grant (2022)

ADDITIONAL INFORMATION

- The retrofit aligned with corporate ESG goals, achieving high building performance and air quality standards (WELL & CIBSE Guide A).
- Added mobility infrastructure such as EV charges, bike parking and shower facilities supports sustainable transport choices.

Energy Upgrade Measures

Fabric Upgrade:

Roof and wall insulation enhanced with Blowerproof membrane and rigid board; airtight windows and doors installed.

HVAC Upgrade:

Air source heat pumps and a hybrid ventilation system using low-embodied-carbon materials.

Lighting Upgrade:

LED luminaires with daylight and occupancy sensors.

Renewable Energy Integration:

30 kWp solar PV array for on-site renewable electricity.