



OFFICE

Case Study Number: 6

Overview

- **Location:** Dublin 2 (Urban)
- **Size:** 397 m²
- **Constructed in:** 1990
- **BER Before:** F | **BER After:** B2
- **Energy Savings:** Significant (based on BER)
- **Carbon Savings:** 791 tonnes (embodied carbon from demolition avoided)
- **Display Energy Certificate:** N/A

A deep retrofit improved efficiency and appeal through fabric, glazing, and M&E upgrades.



CHALLENGES

The 10-month phased renovation required planning permission. SEAI grant support was explored but not used due to time constraints. Other disruptions were not reported.

SIMPLE PAYBACK

- **Total project cost:** €1,000,000 (excl. VAT)
- **Professional fees:** €175,000 (excl. VAT)
- **Estimated payback:** N/A
- **Funding Mode:** Private

ADDITIONAL INFORMATION

- Demolition was avoided, saving an estimated 791 tonnes of carbon and supporting circular economy goals.
- Indoor air quality and comfort were significantly improved.
- Post-renovation, 75% of the unit was successfully let, confirming the commercial value of the upgrade.

Energy Upgrade Measures

Fabric Upgrade:

- Façade insulation to improve envelope efficiency
- Glazing upgrade with energy-efficient windows
- Roof structure replaced to enhance building integrity
- Full interior retrofit for spatial and energy efficiency

HVAC Upgrade:

Complete renewal of mechanical systems as part of internal M&E overhaul.