



HOSPITALITY

Case Study Number: 22

Overview

- **Location:** Temple Bar, Dublin 2 (Urban)
- **Size:** Not specified (142 Bedrooms + Restaurant, Bar, Sports Club)
- **Constructed in:** Not specified
- **BER Before:** N/A | **BER After:** N/A
- **Energy Savings:** 1.6 GWh annually
- **Carbon Savings:** 231 tonnes CO₂ annually
- **Display Energy Certificate:** N/A

A medium retrofit added advanced HVAC and controls to cut energy use and boost comfort in a live city-centre hotel.



CHALLENGES

Complex works took place while the hotel remained operational, requiring phased room closures, coordination with Dublin City Council for crane access and road permits, and strict safety planning in a heritage setting.

SIMPLE PAYBACK

- **Total project cost:** €1,600,000
- **Estimated payback:** ~5 years
- **Funding Mode:** Private + SEAI Community Energy Grant (€400,000)

ADDITIONAL INFORMATION

- The renovation achieved annual savings of 1.6 GWh and 231 tonnes of CO₂ while maintaining uninterrupted hotel operation.
- Upgrades enhanced thermal comfort and air quality for guests and staff, supporting ESG goals in a high-use facility.

Energy Upgrade Measures

HVAC Upgrade:

- Hybrid VRF systems installed in all guest rooms
- Air Handling Units (AHUs) upgraded with EC motors and heat recovery wheels
- Heat pump re-cooler technology integrated for enhanced energy-efficient control

Energy Management Systems:

- Zoned CO₂-sensor ventilation for demand-based airflow
- Likely integrated into Building Management System (BMS)