

Sustainable Design Case Study: The Edge

Sustainable Design Case Study: The Edge Building in Amsterdam

1. Introduction

- **The Edge:** an office building in Amsterdam, completed in 2015, designed by PLP Architecture for developer OVG Real Estate.
- It is widely regarded as one of the most sustainable and smart office buildings in the world.

2. Sustainability Features

- Achieved an exceptionally high BREEAM sustainability rating.
- Solar panels and aquifer thermal energy storage supply renewable and efficient energy.
- Designed to be energy-positive, producing more energy than it consumes.

3. Smart Technology

- A dense network of sensors monitors occupancy, light, temperature and humidity.
- A smartphone app guides staff to desks, parking and climate preferences.
- LED lighting is powered and connected via an Ethernet-based smart system.

4. Workplace Design

- Activity-based working lets employees choose spaces suited to their tasks.
- A large atrium maximises daylight and natural ventilation.
- Data-driven management optimises space use and reduces waste.

5. Significance

- Shows how technology and design can cut energy use dramatically.
- Demonstrates the integration of sustainability, comfort and efficiency.
- Serves as a model for smart, green commercial buildings.