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SUSTAINABILITY ADVISORS

Construction, Real-Estate & Sustainability support services for **Commercial**

Sustainability through a commercial lens.

WHO WE ARE

Optimal Sustainability Advisors (OSA) was founded in response to the growing environmental and socioeconomic challenges facing Ireland's real estate and construction sectors. We are a client-focused company, placing strong emphasis on close personal involvement in the delivery of all our projects. We maintain an energetic and versatile approach, adapting our methods to the needs of our clients. Our goal is to make our clients' operations as resource efficient as possible to reduce their environmental footprint while at the same time growing their business and maintaining sustainable asset value.

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EXECUTIVE SUMMARY

Modernising existing real estate assets in alignment with EU climate legislation is essential for Real Estate owners. This is particularly critical considering Ireland's ambitious 2030 and 2050 greenhouse gas (GHG) emission reduction targets, across all sectors, including the built environment. Forthcoming changes to the Energy Performance of Buildings Directive (EPBD) transitioning from nearly zero-energy buildings (NZEB) to zero-energy buildings (ZEB) highlight the need for forward-thinking design and sustainability focused refurbishment strategies.

Meeting the growing demand from investors and tenants for environmentally conscious and cost-efficient spaces is essential to securing a tenant and securing stronger rental yields compared to assets with lower BER ratings and limited efforts to reduce GHG emissions. Buildings with sustainable designs not only appeal to eco-conscious occupants but also benefit from reduced operational costs and compliance with evolving environmental regulations, ensuring their long-term value and competitiveness in the market and avoiding stranding assets.

Certifications, Accreditations & Memberships

WHY YOU NEED TO DO IT
THE REGULATORY ENVIRONMENT

Ireland's real-estate industry must align with both national and EU-level sustainability mandates. These include:

Meeting Part L is a legal requirement for planning and building control approval

- Marketability: Buildings that exceed Part L standards are more attractive to tenants and investors.
- Futureproofing: Aligns with Ireland's national climate targets and EU sustainability reporting frameworks (e.g. CSRD, EU Taxonomy).

Key Part l Requirements for Commercial Buildings:

- Nearly Zero Energy Building (NZEB) Standard: All new commercial buildings must meet NZEB requirements, meaning they must have very high energy performance, with a significant portion of energy demand met by on-site or nearby renewable sources.
- Building Fabric Efficiency: Enhanced insulation and airtightness standards for walls, roofs, floors, and windows to reduce heat loss.
- Efficient Building Services: High-efficiency heating, cooling, ventilation, and lighting systems must be installed.
- Renewable Energy Integration: Encouragement to include solar PV, heat pumps, or other renewable technologies to meet part of the building's energy demand.
- Sub-Metering & Controls: Systems must be in place to monitor and control energy use, including sub-metering for major energy-consuming systems.

* Major Renovations: If 25% or more of a building's envelope is being renovated, the entire building must be upgraded to meet cost-optimal energy performance levels.
* If this threshold is met, the entire building (not just the renovated portion) must be upgraded to meet "cost-optimal" energy performance levels, as far as is technically, functionally, and economically feasible.

Cost Optimal

- Refers to the best balance between investment cost and energy savings over the building's lifecycle. This includes:
- Improving insulation and airtightness of the building fabric.
- Upgrading heating, cooling, ventilation, and lighting systems to high-efficiency standards.
- Integrating renewable energy sources (e.g. solar PV, heat pumps) where feasible.
- Ensuring energy monitoring and control systems (e.g. sub-metering) are in place.

Feasibility Clause

- The regulation includes a flexibility clause: if full compliance is not technically or economically viable (e.g. due to structural limitations or disproportionate cost), then partial compliance may be accepted - provided it is justified and documented.

CURRENT MARKET COMMERCIAL OFFICE TRENDS (2025/2026 OUTLOOK)

- High Demand for Energy-Efficient Offices: 54% of occupiers now prioritise energy performance in leasing decisions, for example “A” Rated BER building.
- Retrofitting on the Rise: 71% of surveyors report growing demand for retrofitting older office stock.
- Flight to Quality:Tenants favour modern, well-located, sustainable buildings; older, non-compliant stock risks obsolescence.
- Green Certifications:such as LEED and BREEAM.
- Green Premiums Emerging:Energy-efficient buildings are commanding higher rents and stronger yields.
- ESG-Driven Investment:Investors increasingly favour assets aligned with EU Taxonomy and CSRD reporting standards.

“NICE-TO-HAVE” FEATURES THAT ADD VALUE

- Green Roofs & Biophilic Design:Sedum roofs and indoor planting improve wellbeing and biodiversity.
- EV Charging Infrastructure:Supports tenant sustainability goals and future-proofs the asset.
- Smart Building Systems:Occupancy sensors, air quality monitoring, and digital energy dashboards.
- Wellbeing Certifications:WELL or Fitwel certification enhances tenant satisfaction and retention.
- Flexible & Inclusive Design:Adaptable layouts and accessible features support hybrid work and diverse user needs.
- Community & Social Value Spaces:Shared amenities, local art, or event spaces align with socio-economic impact goals.

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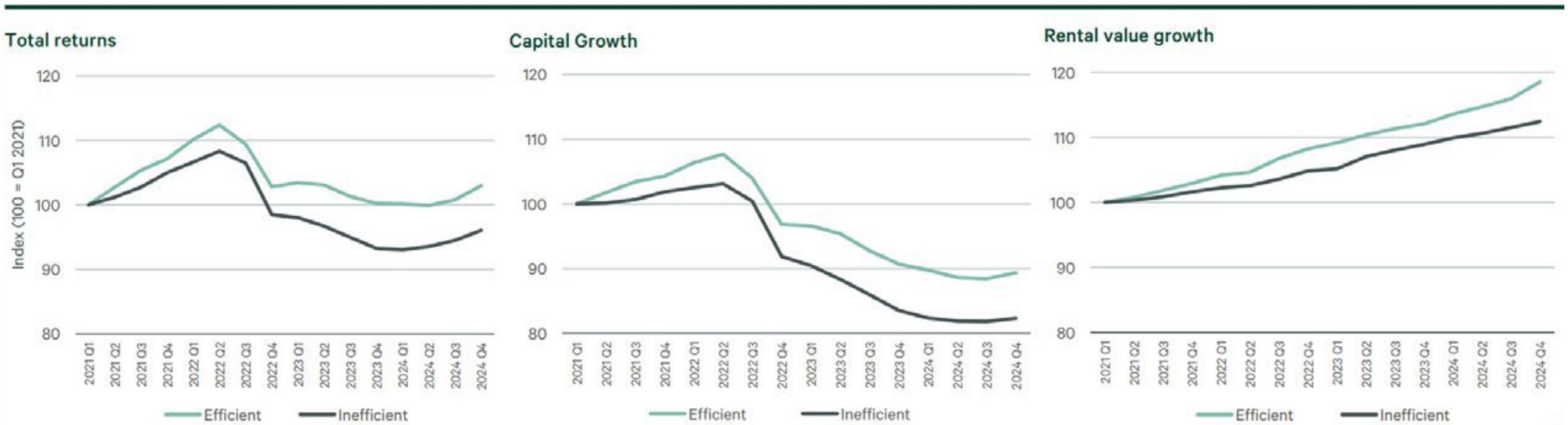
Tenant preferences for newer, higher specification, and more energy efficient office space is reflected in stronger rental growth.



Source: CBRE

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WHAT WE DO

HOW ARE WE DIFFERENT

We view our services as a value-add approach, that protects the value of the asset and enhances the operator's commitment to the environment and the wellbeing of their users.

- Energy audits, using the SI 426 Energy Auditing Scheme (EAS) as mandated by the SEAI. The objective is to establish the buildings energy in use base line.
- EU Taxonomy advise for construction & real estate activities (section 7.0)
  - Incorporating climate mitigation & adaptation principles into the Asset owner's climate action road map.
  - Collaboration with the building stakeholders on aligning their energy reduction strategy with Irelands sectoral 2030 and 2050 GHG reduction targets..
  - BER assessments (commercial)
- A combined project & sustainability management service for the refurbishment, new build of existing and new commercial real estate . In addition, we can manage the execution and procurement of energy efficiency upgrades and advising on available grant assistance.
- Future proofing: ensuring the project design incorporates a level of flexibility to meet the forthcoming changes to the Energy
- Performance Building Directive (EPBD) as it transitions from NZEB to Zero Emission Buildings (ZEB)
- Developing Sustainability KPI's for the in-house facility managers.

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HOW WE DO IT

UNMEASURED RISK IS UNMANAGED RISK

We view our services as a value-add approach, that protects the value of the asset and enhances the operator's commitment to the environment and the wellbeing of their tenants

Determining the initial status of the asset, with an energy audit.

- You can only systematically improve things if you measure them.

Asset improvement plan:

- Using the energy/ asset audit, OSA will create an asset risk register to ascertain what existing plant and equipment can be optimised and what equipment will need to be replaced in line with the operators CAPEX budget.
- The objective is not to replace plant & equipment if it can be optimised to be more energy efficient, the object with an energy audit is to reduce the buildings overall energy intensity, thus reducing the associated GHG emissions.
- OSA will only advise on new plant and equipment if it is necessary and make a strong return in investment business case. *The EU acknowledges that natural gas can play a role in the short- to medium-term as a bridge in the transition from high-emission fossil fuels (like coal and oil) to a fully renewable energy system.

Optimisation Delivery

- The agreed energy reduction plan will be competitively tendered to include associated builders works. Once costs have been agreed with the operator, the timing of the project and working in a live environment will be carefully programmed to minimise disruption to the building and tenants.

Quality Assurance & Data disclosure

- Review the new energy efficient upgrade works, to ensure they meet the designed performance specifications and are effective and enable reliable energy KPI reporting.
- Climate action roadmap impact.
- 2030 & 2050 carbon risk investment strategy developed.

**Permitted use of Gas with Conditions; buildings can continue to use gas for heating, hot water, and cooking if systems are energy-efficient (e.g., condensing boilers) New installations may need to meet specific emissions thresholds or be designed to switch to renewable gases in the future.*

HIGHMARK
OFFICE BUILDING

LANDLORD & TENANT ENERGY MONITORING

Extensive sub-metering of all systems throughout the landlord and tenant areas will record all energy use in real time to allow review of energy spikes and water consumption.

This real time information will be available and stored on the building management system front end. This data will facilitate accurate GHG reporting if required by the tenant.

BUILDING MANAGEMENT SYSTEM (BMS)

The state-of-the-art BMS provided has remote access to address in real time any system failures. Remote access to the building's heating and cooling time schedules is another feature to allow the quick adjustment of run times in the event of extreme weather.

- Proposed lighting power density has been estimated as 5 W/m² throughout the building.

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LIFE CYCLE COST ANALYSIS (LCA) SCOPE 3 EMISSIONS

CIRCULÉIRE

A detailed assessment of the building's materials and their sustainable credentials was undertaken as part of a sustainable procumbent strategy by the Landlord.

This assessment helped to reduce the embodied carbon emissions through careful material specification and procurement. Manufactures that were able to provide Environmental Product Declarations (EPD's) were preferred during this specification process.

This assessment informed both the design and construction team with the information needed to reduce environmental impacts compared to a business-as-usual design.

WATER CONSERVATION

Water www.europeanwaterlabel.eu

Water consumption that is >35% less compared to the LEED Baseline performance. All water fixtures and equipment comply with best practice LEED requirements, however, the landlord requested further water conversation which complies with European Water Label standard.

EV CAR CHARGING

Charging facilities for electric cars.

SCOPE 1 & 2 EMISSIONS

The buildings energy in use (EIU) has been designed to 95.6 kWh / m² GIA and is aligned with Nearly Zero Emissions Buildings (NZEB) in terms of Energy, Carbon and Renewables targets. Comparable commercial office space in Dublin city has as EIU on average of 160 kWh / m² GIA. This positions the Highmark on the correct side of EU's decarbonisation and energy reduction pathways out to 2037.

This building does not use fossil fuel powered equipment and will be powered by 100% renewable electricity. In a time of high & volatile energy prices, a low energy in use building will save on utility costs, is better for the environment and the user.

The building design has been future proofed to include on site renewables such roof mounted photovoltaic panels for landlord and tenant areas. This will further enhance the building's energy performance.

BER A2 NZEB

The Highmark building is LEED Gold certified for Shell and Core

SMART TECHNOLOGY

IOT Internet of Things

The Highmark office has been designed as a Smart Building with all systems linked via IOT technology.

This open protocol technology will facilitates, real time smart monitoring of the mechanical & electrical systems providing optimal visibility on ongoing energy performance.

The building's heating, cooling, and ventilation systems automatically adjust intelligently to occupancy levels in each zone. This has the positive effect of providing better occupier comfort and contributes to a healthier environment, and assists with keeping energy use as low as possible.

- The LED lighting has high energy efficiency with intelligent controls. The lighting system will be controlled via PIR occupancy sensors and open plan perimeter zones having daylight diming control. The lighting system will adjust automatically based on natural daylight availability.
- Demand controlled ventilation will be utilised based on CO_2 sensors. Airflow rates will be variable based on air quality levels which will significantly reduce energy consumption compared to a traditional constant volume system.

"OSA where appointed by Spear Street Capital as sustainability advisors for the Highmark office redevelopment in Dublin.

Using their real estate and sustainability expertise, OSA focused on monitoring and capturing building performance data after completion as part of the design process. This approach supports low energy and water use, proactive tenant engagement, and accurate greenhouse gas reporting.

OSA ensured the project met EU Taxonomy section 7.2 for renovating existing buildings by significantly contributing to one key environmental goal and doing no harm to the others.

With OSA's input, Spear Street Capital is confident the project meets ESG standards and the sustainability expectations of today's tenants."

REAGAN DOROW

Associate
Spear Street Capital

VELASCO
OFFICE DEVELOPMENT

The Velasco Office development exemplifies modern office design, integrating sustainability, technology, and human-centric features to deliver a high-performance workplace. With its striking architectural presence, efficient systems, and focus on wellbeing, the building sets a benchmark for future office developments in Dublin.

PROJECT OVERVIEW

The Clanwilliam Place project involved the demolition of an existing office block and the construction of a new, state-of-the-art office building featuring both Shell & Core and Category A fit-out spaces. Strategically located in Dublin, the development is now recognized as one of the city's landmark office buildings, offering a modern, sustainable, and highly efficient working environment.

BUILDING SPECIFICATIONS

Grade: A Office Space
Certification: LEED Gold (Shell & Core)
BER Rating: A3
Gross Internal Area: 51,000 sq. ft. across 8 floors

DESIGN & STRUCTURAL FEATURES

Occupancy designed for one person per 8 sq.m

Energy-efficient systems:
Lighting: 12 W per sq.m
Small Power: 25 W per sq.m
Miscellaneous Small Power: 20 W per sq.m
Mechanical Plant: 35 W per sq.m

Façade system:
Distinctive two-story-high external columns with a unitized double-skin system, enhancing the building's architectural character and performance.

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NATURAL DAYLIGHT & WELLBEING

The design prioritizes occupant health and productivity through generous glazing and carefully considered façade orientation, maximizing natural daylight and reducing reliance on artificial lighting. Interiors are bright and open, aligning with biophilic design principles to create a strong connection to the outdoors.

BUILDING ACCESSIBILITY

- Step-free access throughout external and internal circulation spaces.
- Accessible WCs on each floor.
- Lower ground floor includes accessible WC, shower, and changing facilities adjacent to cycle storage.

VELASCO SMART TECHNOLOGY

- The building is equipped with an advanced Smart Building Management System (BMS), offering:
- Extensive sub-metering for precise monitoring of heating and cooling performance per square meter.
- Proactive management enabling early detection of inefficiencies, predictive maintenance, and optimized HVAC operation for energy savings and occupant comfort.
- Energy management benefits that support informed operational decisions, reduce waste, and improve long-term cost efficiency.
- Alignment with EU climate goals and ESG principles, demonstrating a commitment to reduced carbon emissions and environmental responsibility.

BRIAN CUNNINGHAM
DIRECTOR

Brian is a seasoned professional with over 3 decades of experience in the built environment. Brian brings a wealth of knowledge, strategic insight, and a deep commitment to shaping a greener, more resilient hospitality sector. Outside the boardroom, Brian is driven by a passion for endurance sports. His greatest joy comes from time spent with his children and doting on his granddaughters, who keep him young at heart and inspired.

MEMBERSHIPS

- Associate member of the Charted Institute of Builders
- Member of the Institute of Project Management Ireland
- Member of ESG Ireland
- Member of the Irish Green Building Council
- Member of the Urban Land Institute
- Member of the Passive House Association Ireland
- Approved CRREM EU service provider
- Director GCS Hotel Property Ltd.

EDUCATION

Global Real Estate Sustainability Benchmarking (GRESB) Advanced Program Manager
March 2019, Amsterdam

LEED AP
April 2020

Certified Responsible Invest Advisor
Responsible Investment Institute, 2021

PMI strategic Project Management Diploma (Level B)
National College of Ireland, 2015

Degree in Construction Technology with Merit
Technological University Dublin, Bolton Street, 1993

Apprenticeship and trade qualifications Carpentry and Joinery
Vauxhall College, London, September 1985

Optimal Sustainability Advisors brings a wealth of experience in delivering successful upgrades to existing office spaces, ensuring alignment with market demands and tenant expectations. Our approach leverages the principles of Sustainability as a Service (SSAS), providing tailored solutions that maximize environmental performance while achieving financial viability.

With proven expertise in managing GRESB-rated real estate portfolios, we understand the critical role of ESG metrics in driving value for our clients. We focus on delivering upgrades that support energy efficiency, wellbeing certifications, and operational cost savings, all while enhancing tenant appeal and retention.

Our track record demonstrates an unwavering commitment to helping clients achieve their sustainability goals, positioning assets as competitive, future-proof investments. Whether through light-touch refurbishments or medium-level upgrades, we ensure a balanced approach to delivering sustainable, high-specification spaces that meet and exceed ESG benchmarks.

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