

Cygnum ESG Report

Building a sustainable future through low-carbon timber frame construction, Cygnum's commitment to Environmental, Social, and Governance (ESG) excellence.

MACROOM, CO. CORK

FOUNDED 1997

167 EMPLOYEES

Forward

- ❏ 2025 marked an important milestone for Cygnum. While environmental responsibility, community involvement, and good governance have always been part of how we operate, last year we brought these activities together under a formal ESG framework for the first time.

We established our Sustainability Steering Committee, developed our ESG Strategic Framework, and introduced a structured approach to managing and tracking ESG initiatives across the organisation. These foundations will help ensure sustainability remains part of how we make decisions, run our business, and plan for the future.

As a company operating within the construction industry, we recognise the important role we play in supporting more sustainable building practices. Equally, we understand that our responsibilities extend beyond the environment to include our employees, customers, suppliers, and the communities in which we work.

This report provides an overview of the progress made during 2025 and highlights a number of the environmental, social, and governance initiatives undertaken throughout the year. It also identifies areas where we can continue to improve and build on the work already underway.

While this is our first ESG Report, it marks the beginning of a long-term commitment. We remain focused on continuous improvement and on building a business that creates lasting value for our customers, our people, our communities, and the wider environment.



John Desmond, Managing Director

Cygnum Overview

Company Overview

Founded in 1997, Cygnum Timber Frame is one of Ireland's leading off-site manufacturing companies, specialising in the design and manufacture of high-performance, low-carbon timber frame structures. Based in Macroom, Co. Cork, Cygnum employs 167 people across engineering, design, manufacturing, and site operations.

Established in 2025, Cygnum's Sustainability Steering Committee (SSC) provides leadership and oversight for the organisation's ESG programme. The cross-functional committee is responsible for implementing the ESG Strategic Framework, monitoring progress against ESG goals and targets, and ensuring sustainability considerations are integrated into business decision-making.

The SSC also manages the ESG Project Register, which serves as the central tracking tool for all ESG initiatives. The register links projects to strategic objectives and relevant United Nations Sustainable Development Goals (SDGs), providing clear ownership, accountability, and visibility of progress across the organisation.

Why ESG Matters

ESG is becoming increasingly important across the construction industry, influencing how organisations manage risk, meet stakeholder expectations, and prepare for future regulatory requirements. Clients, employees, investors, and supply chain partners are placing greater emphasis on sustainability, transparency, and responsible business practices.

For Cygnum, ESG provides a framework to reduce environmental impacts, support our people and communities, strengthen governance, and create long-term value. By embedding ESG principles into our operations, we aim to build a more resilient, responsible, and sustainable business.

Environmental: Cygnum's Commitment to Sustainable Construction

Cygnum operates at the forefront of sustainable construction, delivering timber frame solutions that support lower-carbon building practices. Timber naturally stores carbon throughout the life of a building, with the average Cygnum timber frame home storing up to 15 tonnes of carbon.



Reduced Material Waste

Digital modelling and CNC optimisation maximise material utilisation, reduce production offcuts and minimise waste.



Off-Site Precision

Factory-controlled manufacturing delivers greater quality control and shorter construction programmes.



Just-in-Time Logistics

Fewer site deliveries reduce transport emissions and site disruption for communities and contractors.



Improved Energy Performance

Cygnum timber frame systems are designed to deliver high levels of insulation, airtightness, and thermal performance, helping to reduce operational energy demand throughout the life of the building.



Chain of Custody

Cygnum maintains 100% Chain of Custody compliance by sourcing only **FSC®** (*FSC C-013217*) and **PEFC** (*PEFC/17-37-003*) -certified timber, ensuring full traceability and responsible forest management throughout the supply chain.



Timber Reuse & Recycling

100% of timber offcuts and production timber waste are repurposed or recycled, maximising resource efficiency and reducing environmental impact.

Energy Use & Efficiency

Energy consumption within Cygnum's operations primarily relates to electricity used in manufacturing, digital design systems, offices, and transportation activities. During the reporting period, Cygnum implemented a number of initiatives to improve energy efficiency and reduce operational impact.

✓ In 2025 Cygnum consumed 913,255.62kWh.

In 2025 Cygnum generated 114808.9kWh via the solar panel array system.

Cygnum continues to evaluate opportunities for expanded on-site solar photovoltaic (PV) capacity to further reduce grid dependency.

Key Energy Initiatives

- Continued investment in automated and CNC-controlled manufacturing systems to improve production efficiency and reduce waste
- Installation of LED lighting across production and office facilities
- Preventative maintenance programmes to optimise machinery efficiency and lifespan
- Enhanced monitoring and tracking of energy usage across operations
- Continued investment in on-site renewable energy generation through the solar PV array, reducing reliance on grid electricity
- Digitalisation and process improvement initiatives to reduce rework and improve operational efficiency

Emissions & Carbon Impact

Cygnum recognises its responsibility to measure, manage, and reduce Greenhouse Gas (GHG) emissions. In 2025, the company partnered with third-level academic institutions to develop an off-site timber frame manufacturing carbon calculator, strengthening future emissions reporting and compliance.

Scope 1 — Direct Emissions

Emissions arise from fuel combustion in company owned vehicles and the transport fleet.

Scope 2 — Indirect Energy Emissions

Emissions associated with purchased electricity used across offices and the manufacturing facility. Preliminary assessments indicate electricity consumption is among the largest sources of operational emissions.

On average, each Cygnum timber frame home stores up to 15 tonnes of carbon within the building structure, delivering long-term climate benefits that extend far beyond the construction phase.



Reduced Site Activity

Off-site manufacturing means fewer workers and machines on-site, lowering direct emissions



Lower Material Waste

Precision cutting reduces the volume of materials manufactured and transported



Fewer Deliveries

Just-in-time logistics consolidate transport runs and reduce vehicle movements



Reduced Rework

Factory quality control minimises defects, reducing the carbon cost of remediation

Waste Management & Environmental Initiatives

Waste Management Approach

Waste reduction and resource efficiency are central to Cygnum's environmental strategy. The company uses digital modelling, advanced planning systems, and precision manufacturing to optimise material usage across all waste streams including timber offcuts, plastics, cardboard, and general construction waste.

- Reuse of timber offcuts wherever feasible
- Donation of surplus timber to local charities and community groups
- Segregation of waste streams at source
- Recycling of timber, cardboard, plastics, and metals
- Collaboration with licensed waste management providers
- Diversion of non-reusable waste from landfill wherever possible

- ❏ Waste reduction and resource efficiency are central to Cygnum's environmental strategy.

Environmental Priorities & Future Goals

Measurable Targets

Setting quantified energy and emissions reduction goals.

Improved Data Reporting

Enhanced waste and environmental data collection and transparency.

Certified Timber Sourcing

Continued **FSC®** (*FSC C-013217*) and **PEFC** (*PEFC/17-37-003*) responsible procurement supporting responsible forestry.

Responsible Plastic Management (RPM)

Continue to work with RPM as a certified engaged member in reducing plastic usage.

Social: Our People

Cygnum is committed to building a safe, inclusive, and engaged workplace that supports employee wellbeing, development, and long-term career progression.

167

Total Employees

Across engineering, design, manufacturing, and site operations

98%

Full-Time

The vast majority of the workforce on full-time contracts

97%

Permanent

Employees on permanent contracts, reflecting long-term commitment

42%

Headcount Growth

Increase in headcount over the past two years

11+

Nationalities

A diverse and multicultural workforce

30%+

Long-Tenure Staff

Employees with more than five years of service



Gender Representation

Women account for 10% of the total workforce and 15.4% of management roles. Improving gender balance across the organisation is a key priority for the years ahead.

Looking Ahead

Cygnum continues to monitor workforce trends to support fair employment practices and inform future people strategies, with a focus on expanding diversity and inclusion across all levels.

Health, Safety, Wellbeing & Development

	Health, Safety & Wellbeing Employee health, safety, and wellbeing remain a core priority. Cygnum maintains health and safety policies aligned with legal and regulatory requirements and carries out regular risk assessments across all operations. An open culture encourages employees to raise concerns and wellbeing needs without hesitation.
	2025 Wellbeing Initiatives • Healthier food options through upgraded vending facilities • Improvements to employee locker room facilities • Enhanced PPE access, layout, and safety signage • Access to employee assistance supports and flexible working arrangements where appropriate
	Training & Development Continuous learning is central to Cygnum's culture and operational success. Employees have access to a broad range of training and development opportunities, supported by managers through regular performance and development discussions.

→	Technical & Operational Skills Role-specific training to maintain manufacturing excellence	→	Compliance & Safety Training Ongoing mandatory training aligned with regulatory requirements
→	Leadership Development Professional growth pathways for managers and emerging leaders	→	Structured Onboarding Strengthened induction processes for a consistent employee experience
→	Ask Bob Developed training suite Ask Bob for all new and existing Production employees		

Community Engagement & Social Impact

Cygnum aims to make a positive contribution to the communities connected to its business. During 2025, the company supported a wide range of charitable, educational, and community initiatives that reflect its commitment to creating positive impact beyond its core operations.

Fundraising & Charity

Raised €500 for charity partner the Crann Centre through a company walking campaign.

Supported Cancer Connect through Christmas fundraising initiative, raising €3,000.

Donated to World Vision community projects through volunteer engagement and supplier fundraising exceeding €10,000.

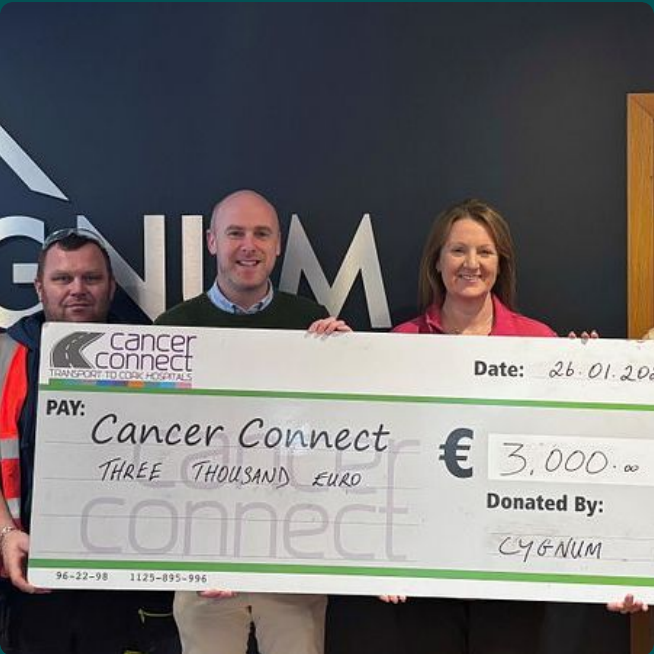
Ireland's DIY SOS

Partnered with DIY SOS: The Big Build Ireland, television programme, supporting three projects during 2025, delivering meaningful home improvements for families in need across the country.

Local Groups

We supported our local Men’s Shed by donating timber materials for use in their projects. We also welcomed members to Cygnum for a factory tour, giving them an opportunity to see our manufacturing process and learn more about the work we do.

Designed and manufactured bespoke wheelchair accessible raised planter beds and plants to charity partner Abode - Doorway to Life.



Fundraising & Charity



Ireland's DIY SOS



Local Groups

Supporting Local Communities

During 2025, Cygnum continued to invest in the communities surrounding its operations with a special focus on supporting local sports clubs, schools and educational initiatives. This support promotes participation, wellbeing, inclusion and opportunities for children and young people.



€21,000+

Sports Sponsorship in 2025

Local Sports Clubs

In 2025, Cygnum became the primary sponsor of the Muskerry RFC Senior Team and continued it's support as primary sponsor of Cill na Martra GAA. Cygnum also supported Dripsey GAA, Éire Óg, Canovee GAA, Kilmurry GAA and Limerick Harriers.



€13,000+

Educational Sponsorship in 2025

Local Schools & Education

Early supporter of early learning and child development in Cork through the ParentChild+ programme, St Mary's Secondary School, MTU & UCC architecture students, and the Irish Institute of Music and Song. Cygnum also donated handmade bespoke picnic benches to St. Joseph's primary school.



Cygnum's total charitable donations and sponsorships in 2025 exceeded €58,000.00

Governance: Structure, Ethics & Compliance

Strong governance underpins Cygnum's approach to responsible and sustainable business operations. In 2025, the company significantly strengthened its governance structures to support ESG integration, accountability, and long-term business resilience.

Sustainability Steering Committee (SSC)

The SSC is a cross-functional group representing senior management and key business functions including HR, Quality, Procurement, Design, and Sales. It reports directly to senior leadership and is responsible for:

- Embedding ESG into business strategy and operations
- Developing and implementing ESG initiatives and reporting
- Managing ESG-related risks and opportunities
- Supporting compliance and stakeholder engagement

Ethics, Values & Policies

Cygnum promotes a culture of integrity, transparency, and accountability. The governance framework is supported by a suite of internal policies embedded into onboarding, training, and daily operations.

Anti-Bribery & Corruption

Human Rights & Anti-Slavery

Equal Opportunities

Protected Disclosures

1

EFRAG VSME Alignment

Governance processes aligned with evolving European sustainability reporting guidance

2

QMS Improvements

Ongoing Quality Management System enhancements and weekly non-conformance reviews

3

Certifications Renewed

FSC® (FSC C-013217), PEFC (PEFC/17-37-003) and NSAI certifications maintained and renewed during 2025

4

Cybersecurity Strengthened

External IT specialists appointed; mandatory training, enhanced access controls, and improved monitoring implemented

❶ Each ESG initiative is linked to a defined objective, assigned ownership and timelines, governance and approval processes, commercial and operational impact, and relevant United Nations Sustainable Development Goals (SDGs).