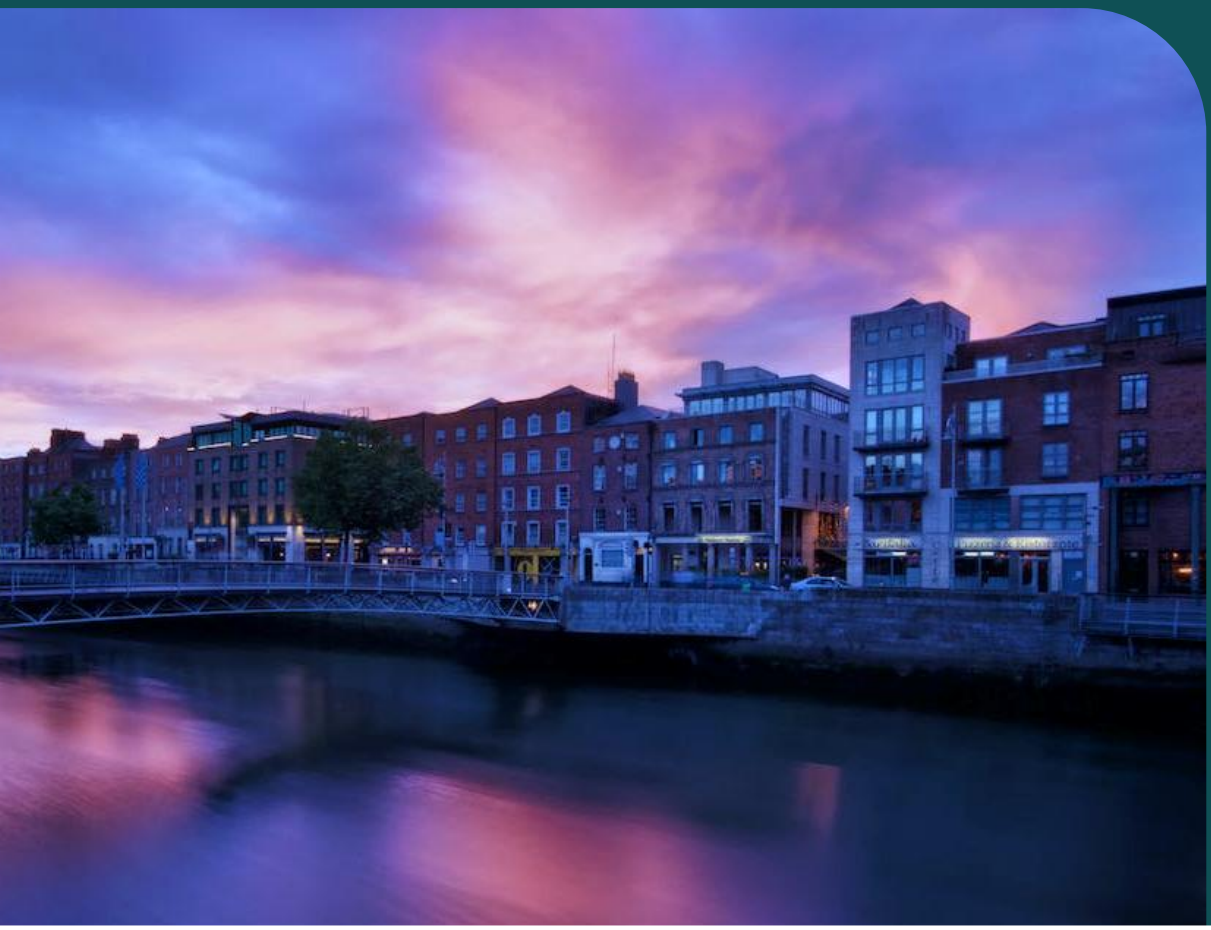
Codema
Dublin's Energy Agency

Sustainability Report

A baseline toward net-zero



Comhairle Cathrach Bhaile Átha Cliath
Dublin City Council

dlr
Comhairle Contae County Council

Comhairle Contae Fhine Gall
Fingal County Council

Comhairle Contae Átha Cliath Theas
South Dublin County Council

Report by Codema – Dublin's Energy Agency, June 2025

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EXECUTIVE SUMMARY

Codema is Dublin's Energy Agency. We are a small organisation founded in 1997 that consists of 37 staff as of June 2025. While our team is small, our impact on the planet is no less relevant than any large corporation. This Sustainability Report establishes the organisation's baseline emissions inventory – the initial yearly emissions quantity that will be used as a reference point for our targets going forward.

The concept of Environmental, Social and Corporate Governance (ESG) is by no means a new initiative. In fact, recent political developments have negated its prominence in the public consciousness.

ESG is nevertheless one of the most important journeys any organisation should take – to meet climate targets, improve staff wellbeing and reach shareholder objectives.

We have calculated our emissions baseline using the standards provided by the Greenhouse Gas Protocol. These emissions are categorised under Scope 1, Scope 2 and Scope 3 emissions. This report expands upon the definition of these categories and shows the steps Codema has taken to measure and report each measure.

Finally, Codema has set a target of reaching net-zero by the year 2040. This is an ambitious goal and the direct steps to get there are still unknown.

However, as a small organisation, we have the advantage of being able to manoeuvre quickly through our sustainability journey.

Codema Team (2025) outside former office in The Loft, Temple Bar

About Codema

Codema

Dublin's Energy Agency

Codema is a non-for-profit Company Limited by Guarantee (CLG), founded in 1997 to work on behalf of our local authority members to enact public good in the areas of energy and climate mitigation.

Codema was incorporated as a Company Limited by Shares (Number 263306) under the Companies Acts 1963 to 1990 on the 19th of March 1997. It was re-registered as a Company Limited by Guarantee on the 20th of September 2020 after the appointment of a new Governance Board that year.

Currently, our local authority members are Dublin City Council, Dún Laoghaire-Rathdown County Council, Fingal County Council and South Dublin County Council. We prioritise our work with these local authority areas.

We support the local authorities in reducing energy consumption, implementing energy-efficiency projects, and promoting sustainable energy sources such as district heating.

Our purpose

We are driven by our vision to positively impact people's lives locally, while addressing the environmental damage caused by climate change at a global scale. We believe we can do this by improving the way we produce and use energy locally, while benefiting the people of Dublin.

Codema's *vision* is for a better quality of life for all citizens through a fair and inclusive transition to a low-carbon society.

Our *mission* is to accelerate Dublin's low-carbon transition through innovative and inclusive local-level energy and climate change research, planning, engagement and project delivery, in order to mitigate the effects of climate change and improve the lives of citizens.

CEO foreword

As the climate crisis accelerates, the need for urgent, credible and sustained climate action has never been clearer. At Codema, we understand our responsibility not just as Dublin's Energy Agency but as a leader in shaping what a fair, resilient and regenerative future can look like.

This report marks a significant milestone in our journey. It reflects our commitment to transparency, to confronting hard truths and to working collaboratively across sectors to deliver real change. For the first time, we have produced a full baseline inventory of our emissions, across Scopes 1, 2 and 3. We're also honest about what it tells us: that while our emissions are modest in absolute terms, the actions we take must be far from modest in ambition.

We have set ourselves a target of net-zero by the year 2040 - 10 years ahead of Ireland's national goal - and this report outlines the first steps toward making that a reality. We also recognise that our current actions alone aren't enough to get us to our final target. That's why we're actively evolving our governance model, embedding sustainability across our operations and developing tools and resources that empower other organisations to do the same.

Donna Gartland
Chief Executive Officer

Our approach is grounded in science, shaped by systems thinking and driven by the belief that climate action must be inclusive, transparent and just. From the way we collaborate with Dublin's Local Authorities to the culture we build inside our own organisation; our values remain constant.

Sustainability is no longer a department - it's a foundational principle. As this report shows, it is now embedded in how we work, how we plan and how we lead.

I'd like to thank our dedicated team, our local authority members and our Board of Directors for their ongoing support. Together, we're building not only a better energy future but a more resilient, regenerative society.

Figure 1 – ***Codema's Reporting Strategy***

ESG reporting

This report is delivered voluntarily to meet the regulatory requirements from the European Union (EU) and the Irish Government which will become mandatory in 2026. A suite of documents was prepared that shared the overall strategic objective of this report.

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This suite of documents was developed separately into Codema's Sustainability Strategy and its Environmental, Social and Governance (ESG) report. All are included in this document (*Figure 1*).

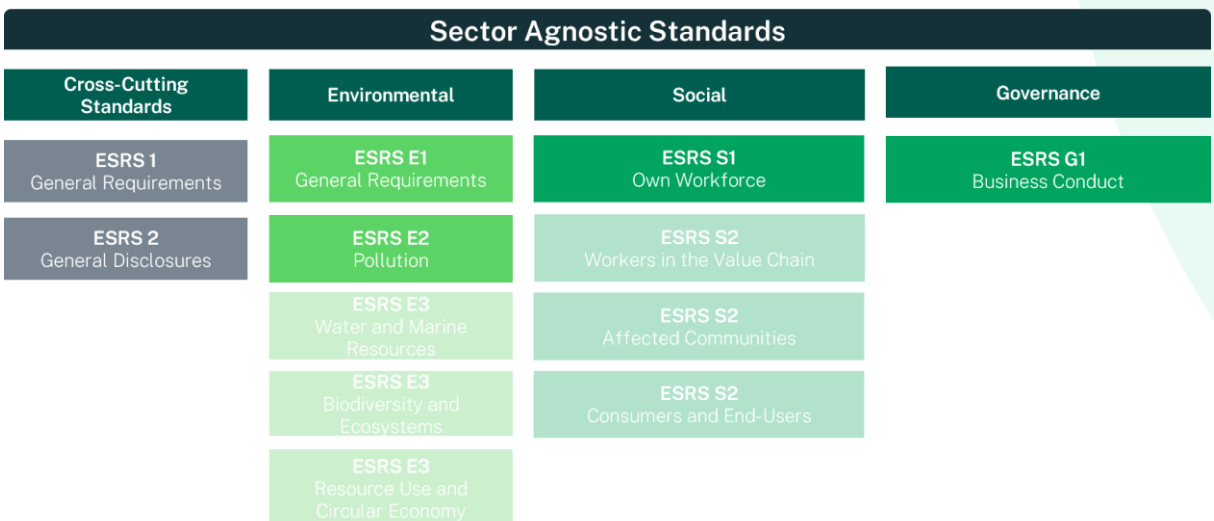
The European Sustainability Reporting Standards (ESRS) provide a framework for companies to report on ESG topics. The sector-agnostic standard is subdivided into Environment, Social, and Governance (*Figure 2*).

For this report and the baseline year 2023, Codema is starting by taking into consideration;

- **ESRS E1: General Requirements:** This standard focuses on climate change and plays a crucial role in guiding sustainability reporting.
- **ESRS E2: Pollution:** This requires companies to disclose detailed information about their pollution-related impacts, risks and management strategies concerning air, water, soil, and substances of concern.
- **ESRS S1: Own Workforce:** This standard requires companies to report on working conditions, equality, and diversity among their employees.
- **ESRS G1: Business Conduct:** This topical standard addresses corporate culture, with factors including political engagement, corruption and bribery, animal welfare, and the protection of whistleblowers.

Guided by a strategic vision to positively impact people's lives, we lead by example in all aspects of our operations, such as promoting sustainable practices. For example, we promote public and active travel (business and commuter) options and partner with eco-friendly suppliers.

Figure 2 – ***ESRS Standards***



[1] European Union (2023), *"Annex 1 to Commission Delegated Regulation (EU) 2023/2772 supplementing Directive 20213/34/EU of the European Parliament and of the Council"*

Our baseline year

Global District Energy Climate Awards November 2023: Tallaght District Heating Scheme

Codema Workshop

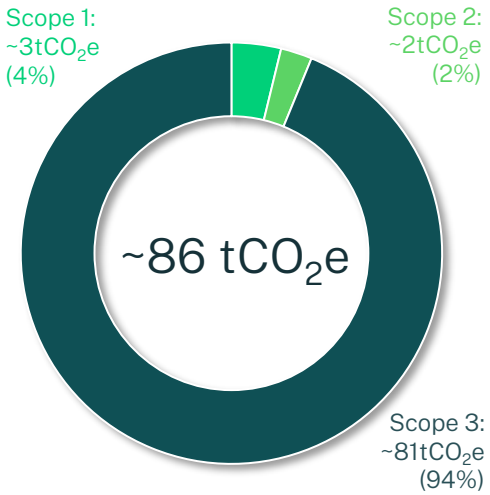


Figure 3 – *Codema's Baseline Emissions Profile (2023)*

In this inaugural Sustainability Report, Codema utilises methodologies established by the Greenhouse Gas (GHG) Protocol[2] to effectively measure and track our emissions in preparation for a net-zero transition.

The disclosure of Codema's emissions comes prior to the arrival of mandated legislation from the Corporate Sustainability Reporting Directive (CSRD) for enterprises big and small to be transparent with their impacts on the planet. Small-to-medium enterprises (SMEs) such as Codema will be required to report on their emissions by 2026 with a possible 'opt-out' until 2028.[3]

By measuring our emissions baseline today, Codema is leading by example and charting a path for other organisations to follow. In 2023, Codema's baseline Scope 1 and Scope 2 emissions totalled approximately 5.4 tonnes of Carbon Dioxide Equivalent (tCO_2e).

Hidden Impact
Our Scope 3 emissions, including purchases, product use, and business travel among other business necessities, totalled more than $81tCO_2e$ in 2023. Scope 3 emissions accounted for 94% of Codema's emissions estimated baseline.

Summary
Overall, Codema's 2023 emissions totalled to $86.32tCO_2e$ (+/- 13.2%) in 2023 (*Figure 3*), with Scope 3 emissions accounting for 94% of Codema's emissions baseline. The uncertainty estimate was made based on parameter and statistical uncertainty only.

Codema is aiming to be a net-zero emissions energy agency by 2040.*

* We acknowledge that the actions listed in this report will not meet the necessary target. However, our journey toward net-zero is underway and future transition and carbon reduction plans will permit further emissions reductions needed to meet a net-zero goal.

[2] World Business Council for Sustainable Development (WBCSD), World Resources Institute (WRI) (2016), *"A Corporate Accounting and Reporting Standard"*
[3] Department of Enterprise, Trade and Employment (2024), *"Preparing your business for the Corporate Sustainability Reporting Directive (CSRD)"* [Accessed 11th March 2024]

INTRODUCTION

The case for action

Climate change is the challenge of a generation, and tackling it comes with a need to develop strategies and targets to aim for a just and equitable net-zero transition.[4]

The report is made up of five sections; This section is the introduction where Codema's business objectives are laid out in relation to our environmental, social and governance impact. As well as this, our alignment with the United Nations Sustainable Development Goals (UN SDGs) is contained within this section.

Section 2 details Codema as a small enterprise; our company culture and our way of working. This is framed through our five enabling objectives. Several future and ongoing actions have stemmed from these key objectives.

In alignment with Codema's strategic objectives, the environmental section of this report has been developed to disclose a comprehensive estimate of Codema's emissions output for the reporting year 2023.

Section 4 outlines our detailed methodology for benchmarking and use of emissions calculation tools. A justification for the selection of each tool/database is provided. This section gives an overview of the results of the analysis accompanied with graphical representations that flesh out the data collated.

Section 5 presents Codema's emissions targets going forward. These targets will be further fleshed out in future reports as a full Carbon Reduction Plan (CRP), charting how Codema will achieve our near-term and long-term goals of achieving net-zero emissions in line with the CSRD.

Finally, the Appendices in Section 6 lists the foundational emissions inventory of Codema's baseline emissions and further information on current and future company actions to meet our ESG targets.

Climate change is the challenge of a generation, and tackling it comes with the need to develop strategies for a just and equitable net-zero transition.

[4] Intergovernmental Panel on Climate Change (IPCC) (2023), *"Climate Change 2023 Synthesis Report: Summary For Policymakers"* [Accessed: 5th March 2024]

Business objectives aligned with the UN SDGs

Since the introduction of concepts such as the carbon footprint and emissions inventory, quantifying and disclosing corporate emissions has risen in importance among businesses.

Mandatory reporting is on its way. The CSRD has stated that, by 2024, public entities in the scope of European Union (EU) non-financial reporting rules must disclose climate and environmental data. By 2025, other larger companies with more than 250 employees must start reporting. Finally, SMEs such as Codema are listed to begin reporting by 2026. [3]

The area of carbon accounting is a relatively new field. It enables businesses to report their impact to stakeholders. The objective of Codema's Environmental Report is to outline the necessary steps taken to report on the company's emissions and includes pathways to halve emissions by 2030 and effectively neutralise them by 2040.

This report represents real business value, even for a non-for-profit organisation such as Codema. That value comes from the identification of risk associated with value chain emissions, the potential identification of areas of emissions reduction and the enhancement of stakeholder engagement through public reporting.

A comprehensive GHG inventory enables the identification of emissions hotspots that permit reductions in the near-term future. By providing detailed information on emissions to our stakeholders, we are showing leadership in the areas of sustainability reporting and are opening avenues for future collaboration.

This reporting assists in improving Codema's energy efficiency and as a result reduces costs to the company. Reporting in line with the GHG Protocol[1] and ISO-14064-1 [5] shows our stakeholders that we are conscious of both their emissions and our own, becoming fully accountable in delivering low-carbon products and services. Through this plan, Codema is laying the foundation to deliver services with net-zero emissions.

The UN SDGs are seventeen goals for all of society.[6] They allow organisations and non-for-profits to implement projects and policies to improve their business based on more than just financial benefits. The transparent method presented in this report is intended to empower other SMEs in Ireland and throughout the wider EU to fight climate change by shining a light on the common sources of our emissions.

As outlined in our mission statement, Codema aims to achieve equitable low-carbon development for all of Dublin while supporting Ireland's climate objectives. The UN SDGs present a collective vision for the future of life on our planet. Each goal has their own subcategories. The 2023 SDG index ranks Ireland at 17th in the world, showing that while we have had successes, we can still improve.[7] At face value, work at Codema is clearly aligned with eleven of the goals:

SDG 3: Good Health and Well-Being

Codema offers flexible working arrangements, such as our Four Day working week, and an Employee Assistance Programme (EAP) prioritises a healthy work-life balance. Our new Social Committee hosts regular social events to foster a supportive and healthy workplace environment.

SDG 4: Quality Education

Codema ensures continuous learning opportunities for employees through soft skills training programs and a free, on-demand online training hub. Approachable leaders mentor and support their teams. This creates an environment of growth and quality education within the company.

SDG 5: Gender Equality

Codema supports SDG 5 by ensuring equal opportunities, equal access to training programs and mentoring support for all employees, regardless of gender. We also offer paid family leave for all parents and maintain a fair recruitment process to promote gender equality within the company.

SDG 7: Affordable and Clean Energy

Through our work with the Dublin Local Authorities (DLAs), Codema promotes novel modes of clean energy across the county. Our work on the Dublin Region Energy Master Plan (DREM) set out how energy efficiency measures can be achieved and, ultimately, a net-zero transition. Expanding and upgrading Dublin's energy infrastructure will ensure the provision of affordable and clean energy.

Figure 4 – *Codema's Alignment with the UN SDGs*

[5] International Standards Organisation (ISO) (2018), *"ISO 14064-1:2018"* [Accessed: 5th June 2024]
[6] United Nations (2012), *"Transforming Our World: The 2030 Agenda for Sustainable Development A/RES/70/1"* [Accessed: 5th March 2024]
[7] Sustainable Development Report (2023), *"Sustainable Development Report 2023: Implementing the SDG Stimulus"* [Accessed 4th March 2024]

SDG 8: Decent Work and Economic Growth

Decoupling economic growth from emissions is one of the most challenging feats that must be achieved for the sustainable energy transition. Codema's Productivity Policy ensures that we are constantly innovating and improving on workflows and processes, delivering more while using less.

Codema supports decent working conditions for all our staff by ensuring that we are compliant with national and European employment law. We invest in our team by offering training and career development opportunities. We make sure that subcontractors are compliant with employment law and not in violation of any labour laws through robust contractor agreements.

SDG 9: Industry, Innovation and Infrastructure

Reliable, sustainable and resilient infrastructure should support economic development across Dublin and beyond. Codema's work is almost exclusively based on advancing Dublin's infrastructure to meet the needs of a fossil fuel-free future.

SDG 10: Reduced Inequalities

At Codema, we are deeply committed to fostering an inclusive and equitable work environment that embraces Equality, Diversity, and Inclusion (EDI) in all aspects of our operations.

SDG 11: Sustainable Cities and Communities

To aid communities impacted by energy poverty, Codema supports democratic participation. This gives voice to marginalised members of the community. Dublin hosts a promising and exciting position as a city primed to become wholly sustainable by the year 2050. This year, the foundations for the city's Decarbonised Zones (DZs) have been laid and District Heating has taken off as a novel form of heat recovery and distribution.

SDG 12: Responsible Consumption and Production

Every person has a responsibility to the environment. To remain within the planetary boundaries of consumption, we all must make changes in our lifestyles to ensure the ecological ceiling remains untouched. Codema promotes a culture that encourages sustainable living and life that is as harmonious with nature as possible.

SDG 13: Climate Action

From small daily actions to large shifts in national policy, every contribution to tackling the climate crisis is an essential one. This year, Codema made significant advisory and technical contributions to the DLA's Climate Action Plans (CAPs), ensuring the integration of climate change measures into future infrastructure. On an individual basis, we do what we can to mitigate our own carbon footprints.

SOCIAL AND GOVERNANCE

Board structure & composition

Codema's Board of Directors oversees the governance of the company and helps ensure that Codema's vision and mission are achieved. The board members consist of senior representatives from the Dublin Local Authorities, along with representatives from the energy, legal and financial sectors.

The Directors adhere to the Articles of Association, as outlined in Codema's constitution, and a Code of Conduct, which detail the role and responsibilities of the Directors, the ethos of the board, compliance, leadership and transparency.

The Board meets five times a year and the attendance rates are above 90%. The quorum for general meetings is four Directors, of which at least three must be Local Authority Members, present in person or by proxy at the time when the meeting proceeds to business.

The Board is expected to adhere to the highest standards of conduct in the performance of its duties and in line with the ethos of Codema. This ethos of Codema is aligned with its values of:

- Social and environmental justice;
- Fairness and equality;
- Unbiased and trustworthy advice;
- Increasing knowledge & educating with evidence;
- Enacting positive change;
- Continued learning & personal growth;
- Valuing & caring for all stakeholders in our ecosystem;
- Challenging the status quo;
- Community & togetherness; and
- Creating a better quality of life for all.

As outlined in Codema's Code of Conduct, the Board shall be composed of representatives of the four Local Authorities of Dublin, and a number of independent non-executive Directors. Each of the Local Authorities shall have the authority to nominate a Director and each such Local Authority Director shall hold a senior role in a position relevant to the activities of the Company within the Local Authority nominating them.

The other non-executive directors are recruited based on skills requirement, ability to comply with Codema's ethos as outlined above and provide strategic direction to the company. No Director (unless an employee) shall hold office for a period in excess of four years.

A diversity matrix was utilised when setting up the board initially in 2020, which took into consideration the following factors: age, gender, ethnicity, industry experience and functional expertise. As the Board nears its four-year anniversary, we will introduce new and improved criteria to encourage the recruitment of community or citizen representatives, with the aim of enhancing inclusivity.

The Board of Directors do not receive remuneration for their participation on the Board at the moment.

Risk management

The primary role of the Audit and Risk Sub-Committee (ARC) is to ensure the integrity of the financial reporting and audit process and to oversee the maintenance of sound internal control and risk management systems. A risk audit is undertaken by management and presented to the ARC on an annual basis. The assessment will be reviewed and approved by the Board.

At Codema, robust financial controls are fundamental to our commitment to transparency and accountability. Our Financial Procedure Guidelines serve as the cornerstone of these controls, detailing the authorised personnel and comprehensive processes for budgeting, expenditure and financial reporting.

This policy ensures that all financial activities are conducted with integrity, comply with regulatory requirements, and align with our organisational objectives. By adhering to these stringent procedures, we safeguard our assets, prevent fraud and maintain stakeholder confidence in our financial stewardship.

The chair of the ARC oversees the auditing process. In line with best practice, we procured a new auditor in 2023, who provides the following services:

Audit and financial statements

- Preparation of the financial statements for Codema in accordance with accounting standards.
- Carry out statutory audit in accordance with International Auditing Standards.
- Report to management on any internal control weaknesses identified through our management (audit findings) letter and comment where appropriate on any suggested improvements or issues as they are observed.

Taxation

- Preparation for annual corporation tax returns for Codema.
- Advices on taxation payment requirements on a timely basis to meet relevant due dates.

Other services

- Preparation of the annual returns for submission to the Companies Registration Office (together with any other ad hoc company secretarial services that may be required from time-to-time.
- Monthly payroll processing to include employee/Revenue payments and Revenue submissions.

Protected disclosure

The Code of Conduct outlines legal obligations of the Directors. Where individual Board members become aware of any non-compliance by Codema with any legal obligation or any aspect of the Governance Code (as defined below), they should immediately bring this to the attention of the Board with a view to having the matter rectified. Codema shall have regard to the Protected Disclosures Act 2014. The Board ensures that Codema has in place adequate provisions so that employees and individuals otherwise associated with Codema can make disclosures relating to malpractice within Codema in a manner that protects the security of their position within Codema.

By 2026, we aim to enhance diversity representation on the Board, establishing a leadership team that embodies our dedication to social and environmental justice, fairness and equality.

The Governance Code referred to above is the The Charities Governance Code published in November 2018 (as same may be amended, supplemented or updated from time to time). This Code has also adopted certain principles as set out in the Governance Code for Community, Voluntary and Charitable Organisations (the "CVC Code").

Codema is a member of the EU Transparency Register. The Transparency Register is a database listing 'interest representatives' (organisations, associations, groups and self-employed individuals) who carry out activities to influence the EU policy and decision-making process.

Targets

- 50% representation of women on the Board by 2026.
- Include at least one representation from a minority group, community group or citizen representative by 2026.

Planned Actions for 2024/2025

1. Engage with Boardmatch supports. Boardmatch is Ireland's only Irish charity that specialises in charity board recruitment.
2. Conduct a Board Skills Audit to identify gaps.
3. Develop a recruitment process with the aim to attract more diverse pools of candidates and representatives from other communities.

Other Key Metrics

- Number of board meetings per annum
- Number of fraudulent incidences
- Signed audited accounts

Codema Board of Directors

Codema Team (2024)

Our people

Codema currently employs 36 staff who have qualifications and experience in areas such as Engineering, Sustainable Development, Sustainable Infrastructure, Energy Planning and Policy, Architecture, Communications, Public Engagement, Project Management and Financial Administration. These complementing skills allow the team to deliver key services within areas such as Energy Management, Project Implementation, Awareness, Communications and Engagement, Research, Development and Innovation and Management Support.

Codema organises its staff within an organic cell structure that is distinguishable from a traditional organisational structure by its flexibility and emphasis on cross-functional teams. This dynamic approach not only enhances innovation and collaboration but also supports ESG goals by promoting equality opportunity (SDGs 4 & 10), improving employee well-being and job satisfaction (SDG3), and providing opportunities for career advancement (SDGs 4 & 8).

By breaking down traditional hierarchies, the structure reduces inequalities and empowers diverse voices, ensuring that all employees have the opportunity to contribute to the company's sustainable and equitable growth.

The concept is based on Eckart Winsten's cell theory. Winsten's philosophy was that for an organisation to thrive and grow sustainably, it must foster a culture where every 'cell' or employee is nurtured, valued, and empowered to contribute to the bigger picture. The organic structure fosters both strong senses of independence and interdependence and promotes career advancement and growth.

Each cell represents a core Codema function. The cell leads are responsible for the growth of the cell and the successful delivery of its objectives, while also ensuring the work is aligned with Codema's strategy.

Each cell has several sub-cells that represent projects or a specialised area. The sub-cell lead has the responsibility to progress this area or deliver that specific project. The sub-cell lead has ownership and is encouraged to grow and develop the sub-cell, as long as it aligns with Codema's overall strategy. There may be an opportunity for the sub-cell to grow and leave the parent cell to form a core function cell of its own.

The benefits of this organic structure are:

- More inclusive – better lines of communication.
- Staff can work across different functions easily.
- Fits our culture better – less bureaucratic and hierarchical.
- Allows us to quickly respond to change and supports non-routine activity.
- Supports innovative strategy.
- Supports growth at all staff levels.

The recent increase in employee growth within Codema (*Figure 5*) illustrates how our organic organisational structure not only provides employees with a clear vision of potential career advancement and opportunity but also supports the sustainable growth of the company, while ensuring alignment with our strategy and enabling objectives, which are detailed in the next chapter.

Our goal is to sustain Codema's high employee retention by cultivating a supportive and engaging workplace culture and offering opportunities for professional growth and development. Our target is to ensure that the company's employee retention remains strong by keeping the staff turnover rate below 6% annually.

Planned Actions for 2024/2025

1. Review and adjust the organisational structure to ensure it aligns with the company's strategy and supports the team's growth and development.
2. Engage with the team to help understand Codema's Strategy and any upcoming plans for change.
3. Assess the HR and Office Administration resources and capacity to ensure they can effectively support upcoming planned work.

Other Key Metrics

- Female/Male employee ratio
- Increased representation of minority groups

Our enabling objectives

At the forefront of our commitment to advancing the SDGs and fostering a thriving, equitable future for all, Codema has strategically integrated five key enabling objectives to drive sustainable growth and positive impact.

1. We prioritise the promotion of **learning and development** to foster continuous personal and professional growth, ensuring our team remains innovative and adaptive (SDGs 3, 4, 5, 8,10).
2. Supporting **staff wellbeing** is paramount, as we recognize that a healthy, balanced workforce is essential for sustained productivity and high morale (SDGs 3, 5, 8, 10).
3. By **nurturing a diverse and inclusive culture**, we harness the strength of varied perspectives and experiences, driving creativity and collaboration (SDGs 3, 5, 8, 10).
4. Our dedication to **rewarding productivity** ensures that excellence and hard work are consistently recognized and valued (SDGs 3 8, 10).
5. Lastly, through **purposeful recruitment**, we aim to attract and retain talent aligned with our vision and values, creating a cohesive and forward-thinking team committed to making a difference (SDGs 4, 5, 8, 10).

1. Promoting learning & development

Objective

Support career development and growth opportunities.

Our commitment to promote learning and development is aligned with several Sustainable Development Goals, fostering a holistic approach to growth and empowerment.

- By providing continuous performance assessments and identifying individual needs and supports to help our staff enhance and develop their career and achieve their career goals, we contribute to SDG 3, ensuring good health and well-being through targeted interventions that enhance job satisfaction.
- Our focus on quality education (SDG 4) is exemplified through comprehensive training opportunities and career development paths that equip our employees with the skills and knowledge necessary for their roles.
- Through mentoring and support for all our staff, we actively advance gender equality (SDG 5), creating pathways for all employees to succeed regardless of gender.
- This objective also aligns with SDG 8 by promoting decent work and economic growth, ensuring that our workforce is skilled, motivated, and productive.
- By offering equitable access to development opportunities, we address SDG 10, reducing inequalities and fostering an inclusive environment where every team member can thrive.

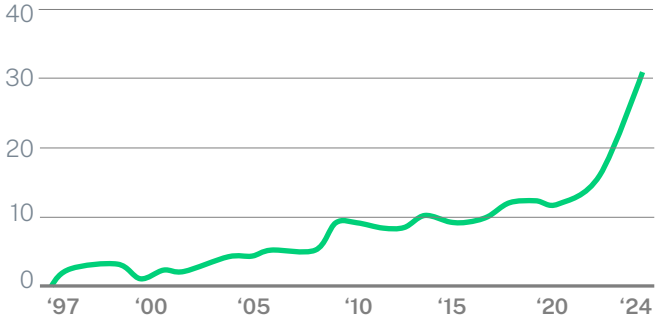


Figure 5 – *Staff Count 1997 - 2024*

Learning & Development Actions 2023

Mentoring & Support

- Regular one-to-one and cell meetings: The cell leads organise regular cell meetings and one-to-one meetings with their team to provide mentorship and support. This approach enhances employee development, engagement, and helps employees be cognizant of how they contribute to the overall success of the company.
- Cross cell Meetings: Cross-team collaboration meetings are vital for sharing ideas, fostering peer learning, encouraging contributions from everyone, and strengthening teamwork by incorporating fun activities to create an innovative and collaborative work environment.
- Weekly company meetings: Staff are invited to present and share their knowledge on topics or progress on a project at the weekly team meeting. This peer-to-peer and bottom-up sharing of ideas encourages knowledge sharing and support among colleagues, promoting continuous learning and mutual growth. This approach values diverse perspectives and innovation, empowering all levels of the workforce.
- Ask Me Anything initiative: Provides for open-door access to the CEO, where one day a month is allocated for any staff member to engage with the CEO. This further reinforces the culture of learning and development by ensuring accessibility and open communication between employees and leadership, breaking down hierarchical barriers and creating a transparent, supportive atmosphere where everyone feels valued and heard.
- These different mentoring approaches enhance employee development, engagement, and organisational cohesion.

Mentoring & Support

- Mid-Year HR check-in using a 4 X 4 method helps support all staff to ensure that they are on track achieving their goals and address any issues or training needs.
- 360 reviews provide a comprehensive feedback mechanism that involves gathering performance evaluations from a range of colleagues. This approach ensures a fair and objective evaluation by incorporating diverse perspectives, reducing bias, and presenting a well-rounded view of an employee's performance. Identifying blind spots and growth opportunities becomes more feasible as employees receive constructive insights from various sources, helping them to recognize and address areas for improvement.
- End of Year Role Review: Takes place in November or December each year and includes a review of the year and more importantly sets goals for the following year.

Internships
Hosting internships introduces new thinking and ideas to the company while providing new graduates with opportunities to apply their learnings to real-world applications and develop new skills.

Networking Opportunities
Participating in various steering committees, associations, and European and national projects creates valuable networking opportunities and facilitates learning from other experts and peers across Europe.

Tailored Soft Skills Training Programme
A soft skills training program is developed each year, tailored to the specific needs of employees. This offers numerous benefits, significantly enhancing both individual and organisational performance. By addressing relevant areas such as communication, teamwork, problem-solving, etc., employees become more adept at navigating workplace challenges and collaborating effectively.

This personalised approach ensures that the training is directly applicable to their roles, leading to immediate improvements in job performance and job satisfaction. Additionally, it fosters a positive work environment and increases employee retention, ultimately contributing to the overall success and productivity of the organisation.

Codema Learning Hub
Our training platform is provided in partnership with DCM and gives our employees access to a library of training courses, all of which are available for instant access.

- 30+ on-demand courses
- 100's bitesize courses
- Wellness Hub
- Equality, Diversity & Inclusion program
- Discounts on certified and in-training session
- A dedicated DCM membership manager who can assist our employees with accessing courses

Goal
To cultivate a culture of continuous learning and development within the company, ensuring that all employees are set up for success and have access to relevant training resources for growth opportunities.

Target
By 2025, aim to achieve a 60% employee participation rate in one or more training courses, as measured through participation rates and by feedback surveys.

Planned actions for 2024/2025
1. Survey staff to establish a 2024 baseline to identify specific areas for improvement and develop targeted strategies to enhance participation
2. Organise Belbin Surveys which help identify individual team members' strengths and roles, enhancing team dynamics and improving collaboration and productivity.
3. Regular 121 and cell meetings:
4. Cross-cell Meetings
5. Weekly company meetings
6. Ask Me Anything initiative
7. Mid-Year HR check-in
8. 360 reviews
9. End of Year Role Review:
10. Internship
11. Networking opportunities
12. Tailored soft skills training programme
13. Codema Learning hub

Other key metrics
- No. of HR Mid-Year Check-ins completed
- No. of End of Year Role Reviews
- No. of Internships hosted
- No. of in-house training courses organised

2. Support staff wellbeing
Objective
Our team is our most valuable asset, and we have a duty of care.

Our commitment to promote learning and development is aligned with several Sustainable Development Goals, fostering a holistic approach to growth and empowerment.

- Through flexible and blended working arrangements, we advance SDG 3 by promoting good health and well-being, allowing employees to maintain a work-life balance that reduces stress and enhances mental health. Our robust health and safety protocols ensure a safe working environment, further supporting this goal. The employee assistance program is a cornerstone of our support strategy, providing confidential counselling and resources to address personal and professional challenges, thereby fostering a supportive and resilient workforce.

- By actively supporting our social committee, we nurture a sense of community and inclusion, contributing to SDG 5 by fostering gender equality and ensuring everyone feels valued and heard.

- Codema provides a company pension scheme where Codema match funds up to 5% of our employees' salary thereby supporting SDG 8 by creating a decent work environment where staff can avail of tax relief at source and helps the financial wellbeing of our team while also providing retirement security.

- These initiatives align with SDG 10 by ensuring all employees have equitable access to support and resources, thus reducing inequalities within our organisation.

Codema Senior Management (2024)

2023 Actions

Employee Engagement

We believe that an engaged workforce is essential for achieving our organisational goals and maintaining a positive work culture. Our initiatives include regular feedback mechanisms, professional development opportunities, and recognition programs designed to value and support our employees. By fostering open communication and encouraging active participation in decision-making processes, we ensure that our team feels valued and invested in our collective success.

- Weekly team meetings – opportunities for peer learning.
- HR check-ins in the middle of the year to ensure staff are on track and helps prioritise career progression.
- Pulse surveys
- HR Newsletters

Codema's Social Committee

The purpose of the Staff Social Committee is to organise social and recreational events for the staff members, with events such as activities / team building events, hikes, lunches, coffee mornings, charity events, etc.

Staff Employee Assistance Programme

Codema staff have access to 24/7 mental wellbeing support. This service is available to all employees, their partner or spouse and any dependents over the age of 16 years who are still living at home. The service provides free confidential mental health consultations with Laya healthcare.

Flexible and Blended Working

Codema provides flexibility that enhances both personal and professional lives. Whether it's through our hybrid working model, which allows employees to spend two days in the office and work remotely for the rest of the week, or our four-day workweek option with Fridays off once productivity conditions are met. We also provide the opportunity for staff to request remote working from abroad for a period of 4 weeks and requests for a longer period of time will be considered on a case-by-case basis.

Financial Wellbeing

Life assurance

Health is one of our most valuable assets. However, unforeseen critical illnesses or untimely death can significantly impact not only our well-being but also our financial stability. We understand the profound effects that a serious illness can have on our employees and their families. That's why we are proud to maintain a comprehensive Critical Illness Protection Benefit, which provides a payment in case an employee is unable to work due to long-term illness. After a 13 weeks period, the employee may be eligible to receive 75% of their monthly salary, reduced by any critical illness welfare payment provided by the Department of Social Protection.

Critical illness protection insurance

In addition to our Critical Illness Protection, we offer a Death in Service Benefit to further safeguard your family's future. This benefit provides a lump-sum payment to a nominated beneficiary in the unfortunate event of an employee while employed with Codema. This payment can help loved ones of employees manage financial obligations, such as mortgage payments, educational expenses, and other daily living costs, providing a vital safety net during an incredibly difficult time.

Pension Contributions

Codema provides a company pension scheme where Codema match-funds up to 5% of our employees' salary, thereby supporting SDG 8 by creating a decent work environment where staff can avail of tax relief at source, helps the financial wellbeing of our team and provides retirement security. We offer sustainable pension options that divest from fossil fuels, which is crucial for securing a stable financial future while mitigating climate change, aligning long-term economic interests with environmental responsibility.

Ensure policies are up-to-date

The Health and Safety Act sets legal obligations for us to maintain a hazard-free environment. This act not only ensures compliance with the law but also ensures that employees can go about their daily tasks without undue risk to their health or well-being.

The wellbeing of our staff is not just a matter of physical health but also encompasses emotional and mental health. We understand that a healthy work-life balance is crucial for our employees' happiness and productivity.

That is why we encourage employees to take advantage of initiatives, such as flexible work arrangements and our employee assistance program.

We have several policies in place to support good health and safety practices:

- Safety Statement - specifies how health and safety is managed within the business.
- Accidents and First Aids – set out procedures for reporting any accidents or near misses. Thank you to Claire and Eoin who are Codema's First Aiders.
- Right to Disconnect – outlines your right to disconnect from work and refrain from engaging in work-related electronic communications, such as emails, telephone calls or other messages, outside normal working hours.
- Optical Examination Policy – Codema covers the cost of 1 eye examination per year.

Goal

To enhance employee well-being by fostering a supportive and healthy work environment through wellbeing initiatives, mental health supports and work-life balance policies.

Target

By 2025, aim to achieve an 80% employee satisfaction rate, as measured by feedback surveys.

Planned actions for 2024/2025

1. Survey staff to establish a 2024 employee satisfaction baseline to identify specific areas for improvement and develop targeted strategies to enhance well-being and employee engagement.
2. Weekly team meetings
3. HR check-ins
4. Employee satisfaction surveys
5. Reintroduce the HR newsletters quarterly
6. Research Award and Recognition programmes and events and nominate Codema under suitable categories
7. Review EAP and other benefits to ensure benefits are aligned with staff preferences
8. Social Committee Events
9. Keep policies up to date

Other Key Metrics

- Number of social committee events
- Number of HR newsletters
- Number of surveys
- Number of awards nominated for
- Number of awards won

Codema Winner of ESG Business and Finance Awards 2023 for Employee Experience

3. Nurture a diverse and inclusive culture

Objective

A diverse and Inclusive Culture leads to more creative ideas and innovative problem solving.

Our commitment to nurturing a diverse and inclusive culture is central to our organisational ethos and aligns with several key Sustainable Development Goals. We aim to foster a workplace where every individual can thrive, contributing to a more equitable and inclusive world.

- Paid family leave policies underscore our support for all employees, helping to balance work and family responsibilities, which aligns with SDG 3 by promoting good health and wellbeing.
- By maintaining up-to-date policies on grievance, bullying and harassment, and equity, diversity, and inclusion (EDI), we ensure an inclusive and accessible workplace, directly contributing to SDG 5 by promoting gender equality and SDG 10 by reducing inequalities.
- Our vibrant array of social and cultural activities fosters a sense of belonging and community, celebrating the diverse backgrounds of our team members and driving social cohesion. These initiatives support SDG 8 by promoting decent work and economic growth, as a diverse and inclusive workforce is more innovative, engaged, and productive.

2023 Actions

Codema's social committee

The purpose of the Staff Social Committee is to organise inclusive social and recreational events for the staff members with events such as activities/team building events, hikes, lunches, coffee mornings, charity events etc.

Family leave policy

The aim of the Family Leave policy is to help employees balance the competing needs of work and family by allowing them to take time off from work with paid leave to care for their baby or newly adopted children. The leave is available to all employees, regardless of gender and aims to promote gender equality both at home and in the workplace.

Codema provides up to 12 weeks of paid family leave to employees following the birth of an employee's child or the placement of a child with an employee in connection with adoption up to the age of 1. The purpose of paid Family Leave is to enable the employee to care for and bond with a new baby or a newly adopted child.

Flexible and blended working

A flexible and blended working culture supports a diverse and inclusive workforce by enabling employees with caring responsibilities to balance their home and work commitments. This approach promotes gender equality, as it allows both men and women to share caregiving duties more equitably, leading to greater participation and retention of diverse talent in the workplace.

Ensure policies are up-to-date

We have several policies in place to nurture a diverse and inclusive culture:

- Grievance
- Bullying and Harassment
- Equity, Diversity and Inclusion (EDI)

Our EDI policy is informed by the Employment Equality Acts 1998-2011 (as amended) and the Equal Status Acts 2000-2012 (as amended), which strictly prohibit direct and indirect discrimination, sexual harassment, harassment, and victimization based on nine specified equality grounds: gender, family status, civil status, sexual orientation, age, disability, religion, ethnicity, and membership of the Traveller community.

Social Committee Event: Axes were thrown

Goal
To build and nurture a diverse and inclusive company culture by implementing strategic initiatives that promote equity and representation across all levels of the organisation.

Target
By 2025, aim to achieve a 70% employee satisfaction rate regarding inclusivity, as measured by annual surveys.

Planned actions for 2024/2025
1. Survey staff to establish a 2024 employee satisfaction baseline to identify specific areas for improvement and develop targeted strategies to nurture a diverse and inclusive culture
2. Collaborate with TUD and/or other local colleges in order to develop partnerships and create internship programs that actively support and provide opportunities for underrepresented groups
3. Social Committee Events
4. Keep policies up to date
5. EDI training

Other key metrics
- Percentage of staff who attended social committee events
- Number of male staff availing of family leave
- Number of female staff availing of family leave
- Ratio of female/male employees

4. Reward productivity

Objective
We believe performance should be based on outputs rather than hours spent at a desk.

Our "reward productivity" initiative is a key component of our strategy to align with several Sustainable Development Goals, fostering an environment where productivity is measured based on outputs rather than how long an employee spends at their desk.

- By offering flexible and blended working arrangements, we promote SDG 3 by enhancing employees' health and well-being, enabling them to work in ways that suit their personal and professional lives. Our four-day week initiative is a significant element of our approach, providing time off that helps prevent burnout and maintain high levels of productivity and morale.
- These practices also support SDG 8 by promoting decent work and economic growth, ensuring that our workforce remains motivated and efficient.

- Furthermore, by equitably offering these rewards and benefits, we contribute to SDG 10, reducing inequalities and ensuring that all employees have access to the same opportunities and recognition.

2023 Actions
Flexible and blended working
Flexible and blended working supports the idea that performance is based on outputs, regardless of whether employees work in the office or at an alternative location. Their contributions are valued equally, fostering an environment that prioritises results, while trusting staff to take ownership and responsibility for their work in a way that suits their needs.

Four-day week case study
For over 25 years, Codema has implemented new innovative solutions in climate mitigation to improve our environment and the lives of the people of Dublin. We also pride ourselves on making decisions and helping others make decisions based on objective and robust scientific evidence. We decided to apply these same strategic principles not only to our initiatives but also to the way we operate- so we decided, why not also apply these same strategic principles not just to what we do, but to how we do it?

Evidence provided by multiple studies of four-day week trials from countries across the world all show positive results in terms of both increased productivity and increased employee wellbeing. This means we can continue to deliver a high-quality service, while also increasing the happiness and work-life balance of our staff.

Codema initially trialled the four-day working week for six months in 2021 as part of an international research project. The project was carried out with support from Four Day Week Ireland and research bodies UCD and Boston College.

Results

The success of the 4 Day week is monitored in the following ways:

- Tracking staff wellbeing through regular, anonymous surveys.
- Tracking number and quality of outputs and monitoring if deadlines and milestones are being met.
- Tracking feedback from clients.

Research conducted during the trial provided the evidence to support the success of the 4DW in improving staff wellbeing within Codema. This comes from analysis of both internal survey responses and the official 4DW research undertaken by UCD and shows:

- A clear improvement in staff wellbeing - 66.7% felt that it had much improved, while the remaining 33.3% said it had slightly improved.

- All staff felt that the 4DW had either been very successful (75%) or successful (25%).

The analysis also recorded improvements in:

- Work ability
- Job, time & life satisfaction
- Sleep time
- Frequency & duration of exercise
- Work-life balance

And decreases in:

- Burnout
- Sleep problems
- Overtime worked

In relation to the other three success factors (deadlines, outputs & feedback), the following results were tracked internally by Codema for 2022:

- 215 outputs reviewed, with no major impact recorded.

- Any deadlines missed were mainly due to factors outside of our control.

- 10 outputs were identified where the 4DW was a potential contributory factor but in general, the 4DW didn't have an impact.

- All outputs were either classified as "Good" or "Excellent" and we have not received any negative feedback from our clients to date.

It was concluded that adjusting the working week to Monday to Thursday for all staff would help improve these KPIs even further.

Goal

Our goal is to enhance productivity by implementing flexible and blended working arrangements and offering initiatives that promote a thriving and happy workforce.

Target

By the end of 2025, we aim to achieve an on-time delivery rate of over 90% for our key projects to validate that a 4-day work week is both feasible and effective in maintaining productivity and meeting deadlines.

Planned actions for 2024/2025

1. Annual Review of 4DW impact on delivering outputs on time and to a high standard.
2. Review EAP and other benefits to ensure benefits are aligned with staff preferences.
3. Keep policies up to date.

Other key metrics

- Number of staff availing of working abroad
- Total number of outputs delivered
- Number of attendees at Social committee events

5. Purposeful recruitment

Objective

We ensure a fair and consistent recruitment process, attract those with the right skills who share our values.

Our "purposeful recruitment" objective is integral to our strategy of aligning with key Sustainable Development Goals, ensuring that our recruitment processes are fair, inclusive, and designed to attract top talent.

Through these initiatives, we underline our dedication to building a skilled, motivated and diverse workforce, driving sustainable growth and success.

- Our recruitment process ensures that we recruit with foresight, aligning talent acquisition with our long-term goals and values. This approach not only enhances organisational efficiency but also supports SDG 4 by recognizing and nurturing the potential of our employees through continuous learning and development opportunities from the outset.

- Ensuring a positive interview and onboarding experience reflects our commitment to SDG 8, as we strive to create decent work conditions and facilitate smooth transitions for new hires, supporting their immediate engagement.

- By implementing fair and transparent procedures, we directly support SDG4 and SDG 10, reducing inequalities and promoting equitable access to employment opportunities.

2023 Actions

Proactive internship planning

College internship recruitment fairs help Codema to proactively manage its workforce planning by engaging with a diverse pool of emerging talent early in their careers.

This direct interaction allows the company to identify and attract high-potential candidates who can be nurtured through internships, fostering a pipeline of future employees. Additionally, participation in these fairs broadens the company's outreach, enhancing its visibility and brand among students and academic institutions.

By building relationships with colleges and potential interns and gaining insights into their skills and aspirations, Codema not only supports the development of young professionals but also strategically positions itself to meet future staffing needs with well-prepared and motivated talent.

Maintain fair recruitment procedures

Maintaining a fair recruitment procedure involves several key practices to ensure an equitable and unbiased process. By involving multiple evaluators in the application review, Codema mitigates individual biases and enhances objectivity.

Proactively addressing unconscious bias through training and awareness helps create a more inclusive evaluation process. Additionally, crafting job specifications with inclusive language and clearly defined criteria attracts a broader and more diverse pool of candidates.

These efforts collectively support a fair recruitment process that values diversity and promotes equal opportunity for all applicants.

Ensure a positive onboarding experience

Ensuring a positive onboarding experience involves a multifaceted approach to support new hires effectively. Offering mentoring support provides new employees with guidance and a point of contact for questions, fostering a sense of belonging and confidence. Utilising a HR tool streamlines the collection of necessary data, making the onboarding process more efficient and organised.

Providing a comprehensive handbook equips new hires with essential information about company policies and procedures. Additionally, scheduling one-to-one meetings and hosting social events help new employees settle-in, build relationships with their colleagues, and integrate seamlessly into the company culture.

Goal

Our goal is to implement a purposeful recruitment strategy that ensures a fair and unbiased hiring process, attracting top talent that not only meets the skill requirements but also brings a “cultural-add” to the company, i.e. enhancing and expanding the existing workplace culture.

Target

By the end of 2025, we aim to conduct a comprehensive review of our hiring process to determine the percentage of applications from underrepresented or minority groups. Based on this analysis, we will develop and implement targeted improvements to our recruitment strategy, with the goal of increasing the representation of minority applicants by 15% by 2030.

Planned actions for 2024/2025

1. Collaborate with TUD and/or other local colleges in order to develop partnerships and create internship programs that actively support and provide opportunities for underrepresented groups;
2. Conduct a comprehensive review of our hiring process to determine the percentage of applications from underrepresented groups;
3. Update Recruitment Policy

Other key metrics

- Number of internships
- Number of EDI in recruitment training courses
- Number of participants

“I spent a 3-month internship at Codema as part of my Master’s in Energy Engineering back in France. Working on the Tallaght District Heating Scheme, I modelled the system and analysed the technical, environmental and economic benefits.

On-site, I also contributed to several presentation tours through coordination and asking participants questions. Working with the other teams (or ‘cells’) of Codema, I supported them with data treatment and energy reviews of buildings.

My introduction to Codema was perfect – presenting about myself to the staff made me feel freer to come up with ideas, ask to be integrated into other projects and collaborate with others. For instance, I, without apprehension, proposed to share my work experiences in France through a group presentation to the tech team.

The Codema organisation and way of working are inspiring and, in my opinion, align with the energy transition – Taking care of the planet means taking care of people’s well-being (and vice versa!).

Apart from developing new skills by working abroad (adaptability, speaking, working methods etc.), my objective was also to develop an open-mindedness towards everyone's characteristics and discover new cultures. The people of Codema are friendly, inclusive and multicultural and contributed to my objective, thanks to the richness of relationships inside and outside of work, without hierarchical barriers..

A big thank you for everything!”

Martin Lacroix
Energy Engineering
Intern 2024

ENVIRONMENTAL

Carbon accounting

Codema is responsible for emissions produced by its core cells (*Figure 6*). Codema intends to account for 100% of its GHG emissions for which it has full financial and operational control. With no subsidiaries, the organisational boundaries that Codema is responsible for are quite clear, as it is with most SMEs.

The system of accounting and reporting developed in this report is intended to be used far into the future. Once organisational and operational boundaries have been set, a system must be put in place to track GHG emissions over time. Codema's Board of Directors are out of scope for this inventory.

To quantify GHG emissions under the categories of Scope 1, Scope 2 and Scope 3, a bespoke methodology was developed in-house. This methodology was developed using a combination of benchmarks and tools freely available to the public.

Codema's Sustainability Report 2023 uses the accounting methodologies formed by the GHG Protocol.[2] The Protocol is a widely used standardised framework for the identification and subsequent reduction of GHG emissions produced by an organisation.

Not included in the baseline emissions profile for 2023 are the personal emissions for staff (*Figure 7*); however, remote working contributes to our Scope 3 emissions. This report will go on to describe several methods as to how data was collected for each subcategory with varying degrees of accuracy.

Scope 1 Emissions: Direct emissions produced from the on-site combustion of fuels and office heating emissions.

Scope 2 Emissions: Indirect emissions from the generation of electricity used by Codema.

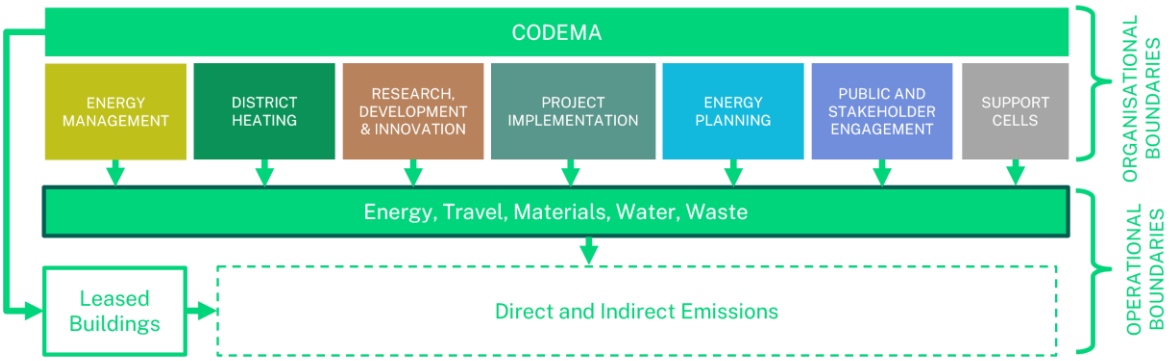
Scope 3 Emissions: All other indirect emissions that result from business processes, which include business travel, business purchases, water and waste.

In general, the emissions of a source can be derived through the acquisition of an emissions factor. This emissions factor is multiplied by activity data to give a tonnage of total emissions. If this emissions result is not represented in tCO_2e, then an appropriate Global Warming Potential (GWP) factor is applied to the total emissions.

The sources for these factors include the UK's Department of Energy and Net Zero (DESNZ), the Sustainable Energy Authority of Ireland (SEAI), the Environmental Protection Agency (EPA) and the Normative Carbon Accounting Engine.

The subcategories shown in *Figure 7* describe how Codema has identified different emission sources using information from the GHG Protocol.

Figure 6 – *Inventory Operational and Organisational Boundaries*



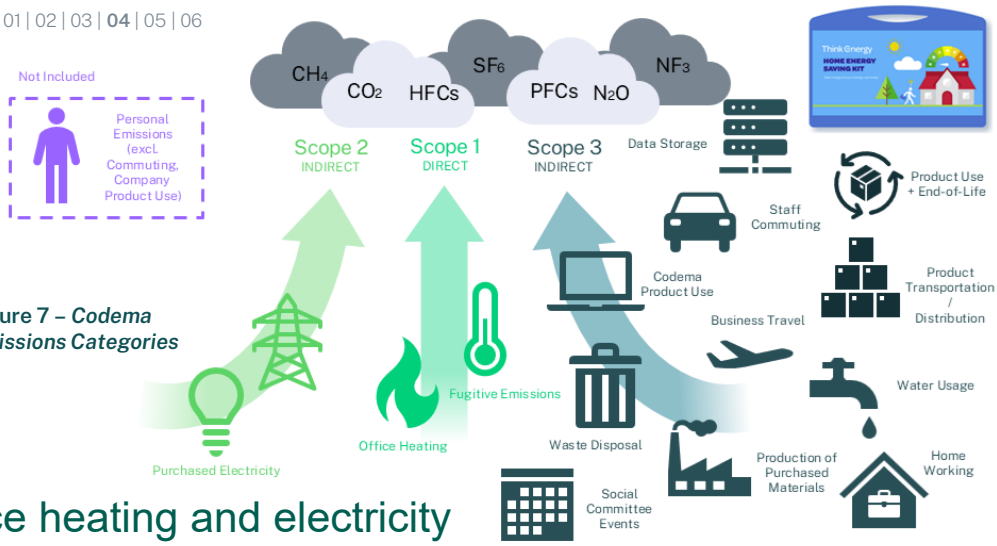


Figure 7 – *Codema Emissions Categories*

Office heating and electricity

Scope 1 emissions are any emissions produced directly by a corporate entity such as office heating, refrigerant leaks and mobile combustion (owned vehicle emissions). Office heating for a business falls under the category of stationary combustion. From reviewing company energy bills over the past three years, the following data in *Figure 8* was gathered:

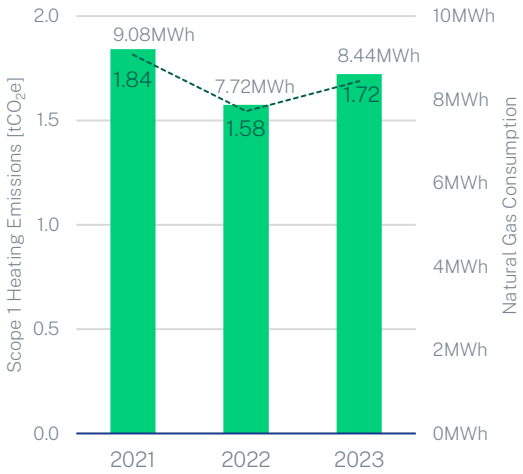


Figure 8 – *Scope 1: Head Office Heating*

Codema's head office uses central gas heating. 32 people work as part of a hybrid model in this 181m^2 space. Using SEAI conversion factors, emissions from office heating in 2023 amounted to 1.72 tCO_2e. This marked a 9.1% increase compared to 2022 and a 6.9% decrease compared to 2021. [8]

As of writing, Codema owns zero company vehicles. No mobile combustion emissions contribute to the overall footprint under the Scope 1 category. In 2023, office heating was the primary source of Scope 1 emissions for Codema. However, fugitive emissions from refrigeration make another contribution this total.

As Codema does not own any company vehicles, no mobile combustion emissions contribute to the overall footprint under the Scope 1 category. In 2023, office heating was the primary source of Scope 1 emissions for Codema. Fugitive emissions from refrigeration made another contribution to this total. The small source of emissions from refrigerant leakages has a high associated GWP. [9]

Using EPA guidance, the overall fugitive emissions from refrigeration and fire suppression systems leakages in the Codema office was estimated to be 1.56tCO_2e. Scope 1 emissions accounted for just 4% of Codema's overall emissions inventory.

Scope 1 emissions = 3.28tCO_2e

Scope 2 emissions consider any indirect emissions that are the result of the production of electricity for business use. Codema monitors energy use in the office through an online portal. Due to a scaling factor error in our energy monitor, electricity use was estimated using a bottom-up approach by estimating the usage from our appliances. The total electricity used was converted into a GHG quantity using conversion factors from the SEAI.

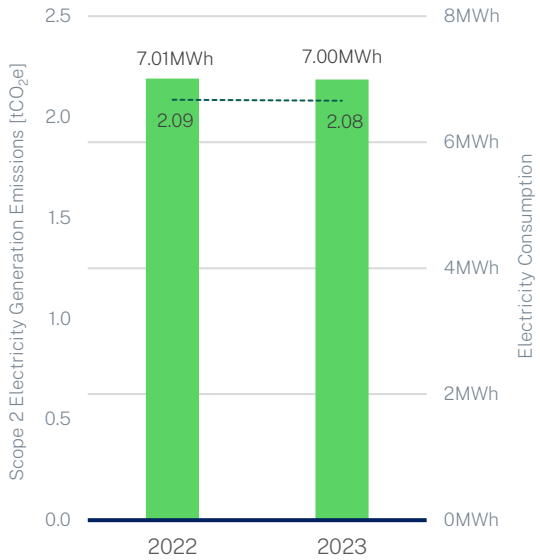


Figure 9 – *Scope 2: Head Office Electricity Generation*

Despite an increase in staff from new hires, Codema has reduced its electricity consumption by a small margin (0.23%) in 2023. Further reductions are necessary.

Using a conversion factor for Codema's electricity generation in 2023, the total Scope 2 emissions amount to 2.1 tCO_2e. An additional 0.21tCO_2e was attributed to Scope 3 emissions resulting from the transmission and distribution of the Total Final Consumption (TFC).

Scope 2 emissions = 2.08tCO_2e

[8] Sustainable Energy Authority of Ireland (SEAI) (2024), *"SEAI Conversion and Emissions Factors"* [Accessed 11th March 2024]
[9] United States Environmental Protection Agency (EPA) (2023), *"Direct Fugitive Emissions from Refrigeration, Air Conditioning, Fire Suppression, and Industrial Gases"* [Accessed 11th March 2024]

Business travel

Scope 3 emissions are produced outside the boundaries of an entity's operations. Yet they are essential to a business's functionality. Identifying and minimising Scope 3 emissions will be the most challenging facet of our journey to net-zero. Codema's Scope 3 emissions include:

- Business Travel
- Product Creation (The Home Energy Saving Kit)
- Value Chain Emissions
- Staff Commuting and Home Working
- Water and Waste

Scope 3 Category 6: Business Travel considers the emissions through travel for business purposes. Not to be confused with commuter emissions, this category is likely to be one of the larger emitters for many businesses. In some instances, modern modes of online communication have reduced the necessity for business travel. However, travel is still a necessity for events, workshops and EU consortium meetings. Mitigating the need for business flights and offsetting travel emissions will be a key objective for Codema going forward.

Air travel can be one of the most significant emission sources for a growing business. Codema collated information on its 36 business flights to six EU countries in 2023. The method of calculating air travel requires several considerations and possesses its own unique form of calculation. As a result, several publicly-available emissions calculators were assessed. The assessment considered data availability, accuracy and the vested interests of the designers of each calculator.

There are varying methods and calculation tools available to measure the GHG emissions of company business trips. For international travel, a summary of the Greenview Hotel Foot Printing tool [11] was used in combination with the Atmosfair online calculator [12] to calculate Codema's emissions baseline for business travel. The comprehensive nature of the tools' calculation methods were considered in the calculator assessments.

The Greenview tool allows companies to measure their emissions generated from hotel stays based on the Cornell Hotel Sustainability Benchmarking Index (CHSB) 2023. [13] The index allows for the estimation of the carbon footprint for hotel stays across the EU.

Atmosfair calculates total flight emissions based on the airport destinations from data collected exclusively through independent scientific study. Data from airlines that would be prone to biases is not taken. The result of this mode of calculation is a larger emissions profile relative to other online calculators. The Atmosfair Airline Index (AAI) is a method based on 32 million flights and has been verified by the German Federal Environmental Agency.

Emissions from international travel in 2023 totalled to 10.57 tCO_2e. Three per cent of these emissions were attributed to hotel stays, while the remaining 97% of emissions came from flights. Flight emissions alone account for 11.9% of Codema's estimated total 2023 emissions.

Additionally, Codema subsidises all business travel for its staff. Data on travel using other modes of transport based on 166 business trips was gathered from company expenses. The total emissions were estimated using GHG reporting conversion factors from the Department of Energy Security and Net Zero (DESNZ) in the United Kingdom (UK). [14]

Type	Distance (km)	Emissions (tCO_2e)
Private Vehicle Mileage	3,352	0.62
Bus Travel	627	0.04
Rail Travel	2,349	0.09
Ferry Travel	242	<0.01

Where data was unavailable, an assumed travel distance of 10km was inputted for some journeys. The use of other forms of travel resulted in ~0.76tCO_2e of GHG emissions.

Objectives for future reporting and emissions reduction:

- Focus on reducing the number of flights necessary for business.
- Embed processes to gather more detail on trip distances, durations and travel modes for more accurate calculation.
- Avoid connecting flights – direct flights have a reduced impact.
- Encourage sustainable modes of business travel for short trips (active travel, eco-friendly taxis, public transport, etc.) through policy.

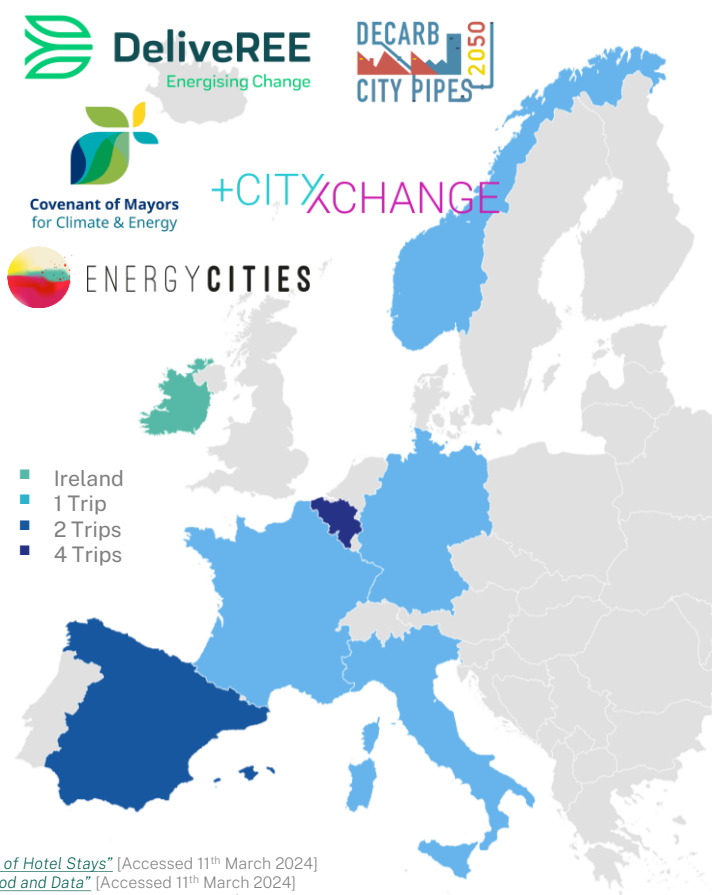


Figure 10 – *Codema International Travel Map and Attended Events*

[11] Greenview (2023), *"Sustainability & Business Travel: Calculating the Carbon Footprint of Hotel Stays"* [Accessed 11th March 2024]
[12] Atmosfair (2016), *"Atmosfair Flight Emissions Calculator: Documentation of the Method and Data"* [Accessed 11th March 2024]
[13] Ricaurte, E., Rehmaashini, J., *"Hotel Sustainability Benchmarking Index 2023: Carbon, Energy and Water"* [Accessed 7th March 2024]
[14] Department of Energy Security and Net Zero (DESNZ), *"2023 Government Greenhouse Gas Conversion Factors for Company Reporting: Methodology Paper"* [Accessed 11th March]

The Home Energy Saving Kit

Codema is proud to have provided the Home Energy Saving Kit (HESK) for communities throughout Ireland through the public library network, sustainable energy communities, local development companies and other organisations.

The kit includes five tools; the thermal leak detector, fridge freezer thermometer, temperature and humidity meter, plug-in energy monitor and radiator key. Also included is a suite of support materials including a manual, workbook, survey and promotional leaflet.

Distribution of the HESK began in 2016. Since then, over 200 libraries in Ireland are in possession of a kit, free to borrow by the public for the improvement of their home's energy efficiency. Two hundred new HESKs were developed in 2023, and with that order comes a quantifiable amount of embodied carbon.

To retrieve this amount, Product Carbon Footprints (PCFs) must be acquired or modelled for each of the items within the kit and the casing itself. These footprints can then be collated into an Environmental Product Declaration (EPD). The availability, accuracy and confidentiality of EPDs of each individual tool within the kit varies, and so an internal analysis will take place.

To estimate the embodied carbon of a single kit, a list of contents was developed. A Life Cycle Assessment (LCA) of the full product must be conducted to gather accurate data on the elements of the value chain. Inbound and outbound transportation and distribution services are required for any business such as Codema to provide deliverables. Our other deliverables come in the form of digital documents and physical brochures and workbooks.

The emissions product of these considerations will be accurately implemented in Codema's 2024 Sustainability Report. For this year, it was assumed that nearly 23tCO_2e was emitted from the production, transportation and distribution of the HESKs. Our future objective is to ensure that the embodied carbon of the HESK is less than the potential carbon savings. A more detailed analysis of the HESK may show an increase or decrease in this initial assumption.

Figure 12 – ***The Home Energy Saving Kit***

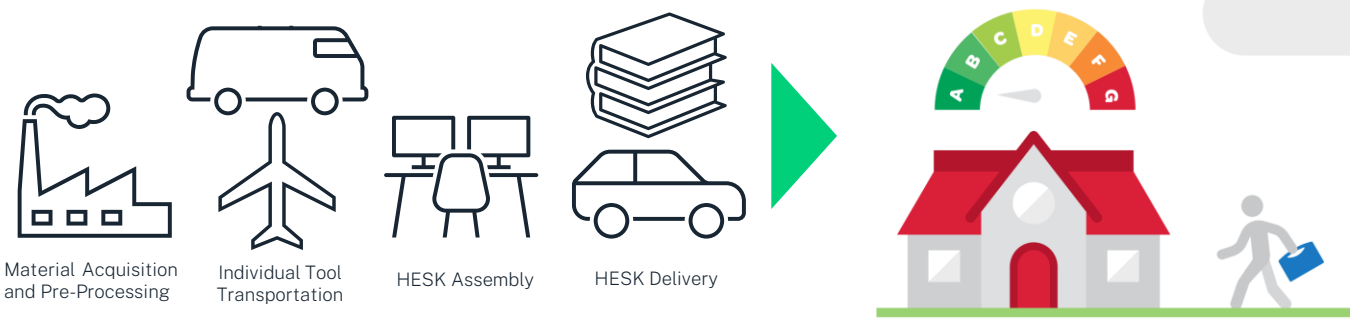


Figure 11 – ***Home Energy Saving Kit Conceptual Life Cycle Assessment***

Value chain emissions

As has been identified in our analysis of the HESK, emissions from the value chain make up a significant hidden proportion of a GHG inventory. The following Scope 3 categories lack sufficient data for accurate reporting as of the analysis in September 2024 so as a result, spend-based data (€) was used:

- Scope 3 Category 1: Purchased Goods and Services
- Scope 3 Category 2: Capital Goods
- Scope 3 Category 4: Upstream Transportation and Distribution
- Scope 3 Category 9: Downstream Transportation and Distribution
- Scope 3 Category 11: Use of Sold Products
- Scope 3 Category 12: End-of-Life Treatment of Sold Products

Based on general assumptions and the knowledge that Scope 3 emissions for an SME such as Codema can often consist of >90% of a business's profile, estimates were generated. Codema's purchases were separated into consumable goods and capital goods. [15]

Estimating the emissions from our value chain purchases posed a difficult challenge, as few purchases come with an associated PCF in 2023. For our second reporting year, Codema will conduct a hybrid accounting approach for capital and purchased goods, combining activity-based data where applicable and generating spend-based data where data gaps occur.

To reach net zero, companies must engage with their value chain to encourage them to do the same. For future iterations of our products, Codema will engage its suppliers to minimise environmental impact and maximise the circularity of its products.

As every business expense for consumable goods goes towards this category of emissions, a spend-based estimate was created. Without a global abundance of EPDs for every product, creating this estimate was a challenge. For calculation purposes, assumptions were made in the creation of our emissions inventory.

In addition to consumables, capital goods include the purchase of tools and products that assist in creating our deliverables. Approximately 20 - 30 different product purchases were identified under this category, but few products had an adequate EPD to populate the inventory.

For example, six Dell S2421HS Monitors had an estimated carbon footprint of 476 $kgCO_2e$ +/- 96 $kgCO_2e$ each. The emissions produced from the electricity used by this product would fall under Codema's Scope 2 so removing the 'Use' portion of this product results in an EPD of 2.15tCO_2e for 6 monitors. [16] And that is just a single purchase!

Data usage is a hidden impact that is rarely considered in the field of sustainability reporting. Codema's data has its own impact, albeit small. Our website had users from over 10 countries in 2023 (*Figure 13*). Most of our visitors looked for information on the HESK. With an estimated 40,000 users in 2023, the emissions per user were measured using the Website Carbon Calculator. [17]

The calculator rates websites on a scale of A - F. Codema's website carbon rating was above the global average (Rated D), however, approximately 0.52g of CO_2 is produced for every visit, meaning it is countable! In 2023, 0.02tCO_2e was produced from running our website.

Codema's website had over 40,000 users in 2023. Approximately 75% of those were Desktop users.

Regarding data, Codema primarily uses the Google suite of services for a myriad of reasons from correspondence and meetings to reports and analysis. The total location-based carbon footprint of 2023 from Google's report was an estimated 0.16tCO_2e. *Figure 14* shows a breakdown of that value for the final 6 months of 2023.

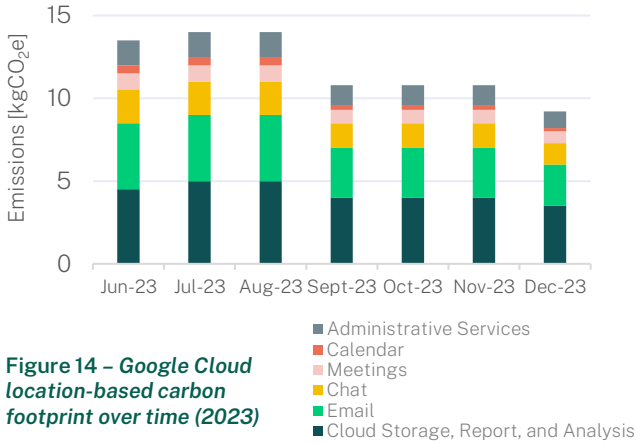


Figure 14 – *Google Cloud location-based carbon footprint over time (2023)*

Google's tools for business are not the only ones at our disposal and not the only ones that produce emissions, but other sites have not been included here. On a grand scale, these figures for data use are drops in the ocean of GHG emissions, but they are quantifiable. And what you can measure, you can manage.

Objectives for future reporting:

- Collaborate with other organisations to comprehensively develop methods to quantify value chain emissions.
- Identify other sources of emissions from using services (e.g. Microsoft Office).
- Embed policies within Codema to reduce our Scope 3 emissions.
- Find out how Codema can improve our website's carbon rating and reduce our emissions load from cloud storage.
- Envision our value chain emissions inventory for 2050.

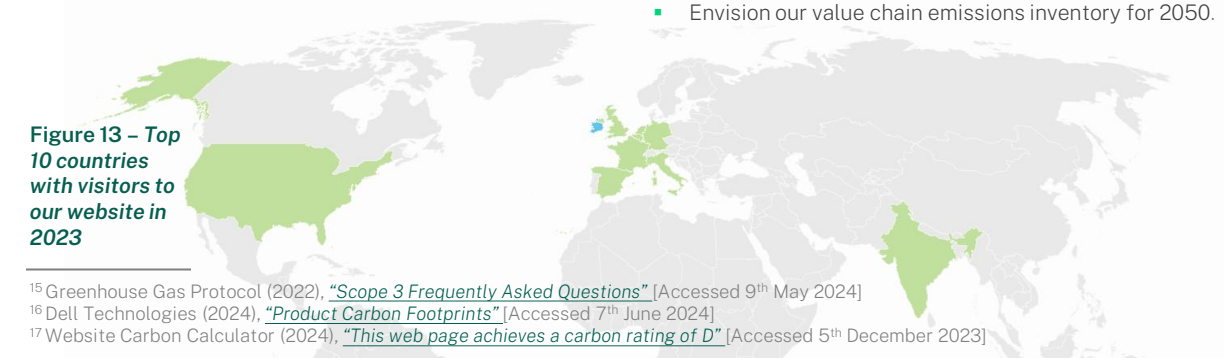


Figure 13 – *Top 10 countries with visitors to our website in 2023*

[15] Greenhouse Gas Protocol (2022), *"Scope 3 Frequently Asked Questions"* [Accessed 9th May 2024]
[16] Dell Technologies (2024), *"Product Carbon Footprints"* [Accessed 7th June 2024]
[17] Website Carbon Calculator (2024), *"This web page achieves a carbon rating of D"* [Accessed 5th December 2023]

Staff commuting and home working

Under the consideration of *Scope 3 emissions Category 7*, a Staff Commuter Survey was distributed to generate an estimate of emissions produced by staff on their weekly commute to the Codema office. Selecting the distance-based method, which involves collecting employee commuting patterns, the emissions produced by car, bus, and rail travel were estimated.

Emissions factors were estimated using existing documentation and reports from the UK DESNZ.[15] Below are the emissions conversion factors per passenger per kilometre travelled:

	$kgCO_2e/km$
Private Vehicle (Car)	0.17819
Bus	0.10215
Rail Travel (Commuter/DART)	0.03546
Rai Travel (Intercity)	0.00446

Sustainable modes of travel such as cycling, walking or using Luas [18] transportation produced effectively zero operating emissions and were removed from the estimation. In addition to a 4-day work week, Codema operates on a hybrid working model with a flexible combination working in our office in Temple Bar, Dublin 2 and working remotely.

Unless otherwise agreed, staff are required to come to the office on at least two of the four working days per week. Fifty-six per cent of respondents utilise a mode of travel that produced zero emissions.

56% of respondents utilise a mode of travel that produced zero emissions.

Figure 15 gives an overview of respondent commuting origins. Of the respondents, no staff commuted to work using a private vehicle and 56% (13 staff members) used a mode of travel that produced zero emissions (See Figure 20). Roughly nine out of 10 staff came to the office for two days per week (Figure 21), the majority of which were commuting from within County Dublin.

The average emissions per commute amounted to just over $1.4kgCO_2e$. To reduce our emissions even further in this area, Codema will continue to implement our Cycle-to-Work scheme and promote sustainable modes of travel.

In 2023, the average emissions produced by commuting per employee per year was $0.098tCO_2e$ with an average one-way journey travel time of 48 minutes. As 23 of Codema's 32 employees responded to the Commuter Survey, this value was subsequently extrapolated to estimate our total commuting emissions.

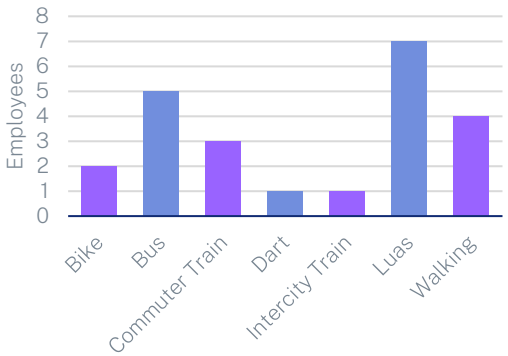


Figure 15 – *Codema Staff Modes of Travel*

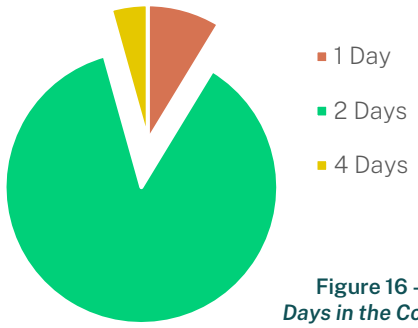


Figure 16 – *Number of Days in the Codema Head Office per Employee*

Considering all employees, Codema's Scope 3 emissions from employee commuting were estimated to be 3.14 tCO_2e in 2023.

Additionally, remote working contributes to our Scope 3 emissions under *Category 3; Fuel- and Energy-Related Activities Not Included in Scope 1 or Scope 2*. An assumed office attendance of 65% per day gave a total number of home working days by all employees last year (3,743). From there, emissions factors for the time spent remote working can be calculated using factors provided by the DESNZ.

Codema's Scope 3 emissions from remote working were estimated to be $10tCO_2e$ in 2023.

Objectives for future reporting:

- Continue our low-carbon intensive commuting habits.
- Achieve a >90% response rate for the company Commuter Survey in 2024 to gather more accurate data.
- Develop a standardised methodology for the estimation of transport emissions that can be implemented across multiple types of businesses with a focus on national emissions factors.
- Expand influence on our client organisations to encourage nationwide sustainable commuting.

[18] (Assumed that the Luas used 100% renewable energy for calculation) The Irish Times (2017), *"Luas Cross City comes with Environmental Benefits"* [Accessed January 2024]

Water and waste

Waste and wastewater are a natural product of business operations. Codema is not exempt from these processes. In 2023, Codema accurately monitored our waste production and, using the methodology outlined, estimated our water usage.

Category 5 of Scope 3 emissions considers any waste generated in the operations of a business. Calculation of waste emissions using the waste-type method involves the differentiation of waste streams.

In 2023, Codema collected data on its waste on a weekly basis, allowing for the accurate calculation of emissions. Waste amounted to 7.82 kg per employee in 2023, with a total of 250 kg produced over the course of the year. That is a lot of rubbish! By monitoring our waste, Codema can identify where reductions can be made in our waste production.

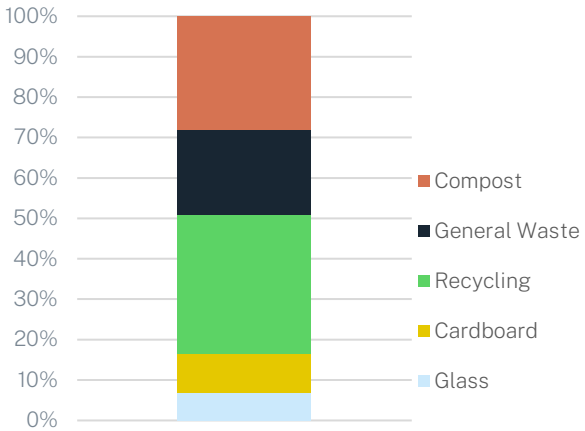


Figure 17 – *Codema Waste Consumption 2023*

The Irish Government's Climate Toolkit 4 Business [19] considers waste contributed to the green, black and brown bins. Below are our figures:

Black Bin	53.30kg
Green Bin	111.23kg
Brown Bin	70.53kg

An additional 0.01tCO_2e was added to the total waste emissions for the consideration of glass waste disposal which made up 6.7% (16.78kg) of the total. Codema's Scope 3 emissions from waste were 5.36tCO_2e in 2023 using DESNZ conversion factors.

Through a set of assumptions based on the occupancy of the Codema office during 2023, the overall water usage in the office was estimated. The estimate was based on the assumptions of the occupancy rate generated from the commuter survey.

Codema used an estimated 108,000 litres (or 108m^3) of water in 2023. Using the average data method, our emissions from the supply and treatment of water were estimated to be 0.04tCO_2e.

Objectives for future reporting:

- Continue to monitor the Codema waste output and identify areas of waste reduction.
- Avail of publicly-available online courses to enable staff to reduce our usage and waste.
- Install water meters in company facilities to accurately measure our usage.
- Maintain our accurate measurement of our waste emissions going forward.
- Reduce waste produced at Codema by 10% in 2025.

Scope 3 Emissions = 80.96tCO_2e

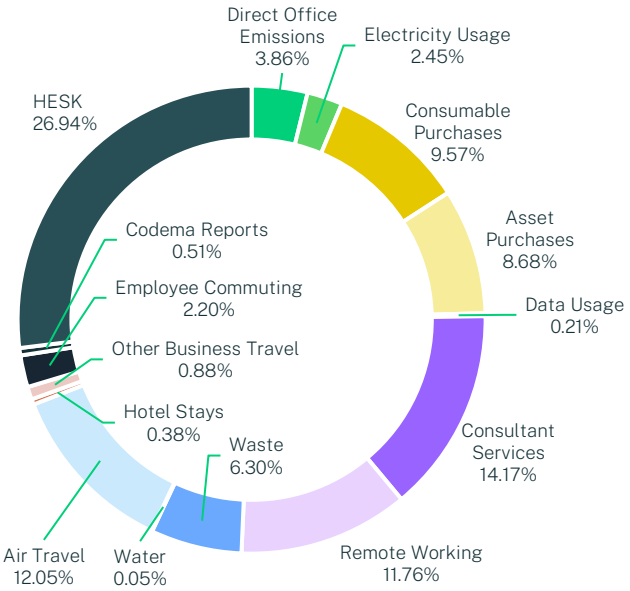


Figure 18 – *Codema Greenhouse Gas Emissions Profile 2023*

Figure 18 reveals what Codema attributes its emissions profile. Our largest emissions source derives from the creation and distribution of the Home Energy Saving Kit (HESK).

Secondly, purchases for consultant services amounts to 14.17% of our 2023 emissions profile. Other large sources include asset purchases (such as laptops and monitors), remote working emissions, and air travel. This report will go on to outline how Codema will reduce its emissions in these areas.

Each category will have its own modes and strategies for reduction. The next page gives a detailed breakdown as to the origins of the selected emissions factors and the relevant spend-based and activity-based metrics. The product of these emissions factors and activity data gives the total emission.

Next in this report, Codema outlines actions and policies that it will undertake to achieve the necessary reductions in emissions towards net-zero. From our analysis, Codema's total Scope 1, 2 and 3 emissions amounted to 86.32 tonnes of carbon dioxide in 2023 as well as the estimated uncertainty of the inventory analysis (+/-13.2%).

[19] Government of Ireland (2022), *"Climate Toolkit 4 Business"* [Accessed 7th March 2024]

SCOPE 1, 2 AND 3 EMISSIONS SUM TO **86.32tCO$_2$e** IN 2023

WE WILL NEED TO REDUCE OUR TOTAL EMISSIONS BY **5.1tCO$_2$e** EACH YEAR

BY **2040**, CODEMA WILL BE A NET-ZERO EMISSIONS BUSINESS

Greenhouse Gas Emissions Inventory 2023

Codema
2023 GHG EMISSIONS INVENTORY
For the year ended 31st December 2023

	tCO$_2$e
Scope 1	
Fugitive Emissions	1.56
Mobile Combustion (Vehicles)	N/A
Process Emissions	N/A
Stationary Combustion (Office)	1.72
Scope 2	
Electricity Generation (Location-based)	2.08
Scope 3	
Purchased Goods and Services	
- Consultant Services	12.05
- Consumable Goods	24.32
- Data Usage	
◦ Google Cloud	0.16
◦ Website Usage	0.02
Capital Goods	3.44
Fuel- and Energy-Related Activities Not Included in Scope 1 or Scope 2	10.21
Upstream Transportation and Distribution	3.94
Waste Generated in Operations	
- Waste	5.36
- Water	0.04
Business Travel	
- Air Travel	10.25
- Hotel Stays	0.32
- Other Business Travel	0.75
Employee Commuting	3.14
Upstream Leased Assets	N/A
Downstream Transportation and Distribution Estimate	4.01
Processing of Sold Products	N/A
Use of Sold Products Estimate	2.00
End-of-Life Treatment of Sold Products Estimate	0.96
Downstream Leased Assets	N/A
Franchises	N/A
Investments	N/A
Total	86.32

All emissions quantities are rounded to two decimal places

TARGET SETTING

Our trajectory

Using a method developed by the Science-Based Targets initiative (SBTi), Codema aims to become net-zero by the year 2040 from the baseline year of 2023. This means that by the year 2040, Codema's core business activities do not contribute any additional GHG emissions, on balance. Net-zero is a state in which the amount of GHGs emitted into the atmosphere is counterbalanced by removing an equivalent amount of greenhouse gases. Codema will reduce its baseline emissions by 90% and neutralise the remaining emissions through carefully selected carbon removals beyond its value chain.

Our net-zero journey will require a multi-pronged approach to addressing the various sources of emissions identified in this report. Our mitigation strategy uses a combination of Codema's existing knowledge in sustainable energy planning and the recommendations from the SBTi. The strategy will tackle our Scope 1, 2 and 3 emissions, charting a pathway to net-zero by the year 2040.

A study of some 1,290 organisations by Boston Consulting Group (BCG) found that companies have a 30% to 40% average error in their emissions measurements.[20] Our targets have been illustrated in *Figure 19*.

The design philosophy for this GHG inventory was to identify as many sources of emissions as possible and target areas for prioritisation, following guidance primarily from the GHG Protocol. Codema has developed scenarios to reduce emissions by 50% to carbon neutrality by 2030 and transition to net-zero by 2040 by reducing 90% - 95% of our emissions. This target is science-based; it aligns with meeting the goals of the Paris Agreement to limit global warming to less than 2°C above pre-industrial levels and pursue a 1.5°C target.

Like our inventory, this target will require more detail in the coming years. Although it may be difficult to imagine today, the ultimate goal of our strategy is to become a net-zero business by the year 2040.

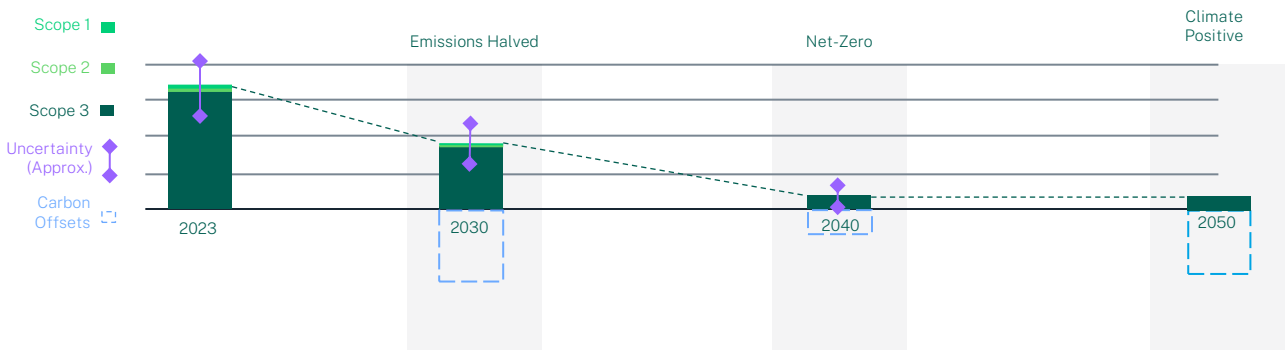


Figure 19 – *Codema 2023 Greenhouse Gas Emissions Mitigation Goals Timeline*

[20] Boston Consulting Group (BCG) Gamma (2017), *"Use AI to Measure Emissions Exhaustively, Accurately, and Frequently"* [Accessed 11th March 2024]

Emissions reduction opportunities

When quantifying our emissions, we must not let a lack of accuracy impede action. The following list of actions will enable us to realise a net-zero future. Specific, Measurable, Achievable, Relevant, Time-Bound (SMART) Goals will be used to achieve our emissions reduction targets. These opportunities may change and adapt over time as more realistic aspirations are realised. Codema will raise its ambition to achieve more with new goals and discontinue old ideas from now up to the year 2050.

These actions and policies have been identified to begin the implementation of carbon reduction measures within Codema. In this report, the terms 'action' and 'policy' are used independently. Each action/policy has an associated level of priority:

Staff Engagement
Collaboration
Energy Saving
Improved Reporting
Cost Saving
Priority

- Requirement: Significant effort should be made to take this action. These actions are very consequential for Codema's emissions.
- Strongly Encouraged: Codema should aim to achieve this action but there is a limit on how much effort can be implemented.
- Encouraged: These are recommendations to explore new opportunities depending on how consequential they become.

Action	Lead	Measure	Deadline	Relevance
Heat the Codema office by renewable sources (heat pump) or move Codema to an office with renewable heating. • (2.12% Reduction)	CEO	Heating gas usage	June 2025	
Conduct an inspection of refrigerants and fire suppression to ensure no leakages. • (1.73% Reduction)	Energy Manager	Refrigerant leakage	Spring 2026	
Take 'early win' actions on efficiency/cost saving measures (LED Lighting, Renewable Electricity Sourcing, Heat Maintenance). • (0.30% Reduction)	All staff	Electricity consumption 2024	Summer 2025	
Engage with The Old Storehouse and other lessors on switching Codema's energy bills to a 100% renewable supplier or move office. • (2.50% Reduction)	CEO	Electricity consumption 2024	Winter 2024	
Install a water meter to measure and reduce Codema's water usage. •	Office Manager	Water consumption	Spring 2025	
Redesign the HESK to be a more sustainable product by retrofitting existing HESKs to provide more information on use/reuse/disposal. • (2.00% Reduction)	Energy and Climate Awareness Officer	HESK embodied carbon	Autumn 2025	
Reduce restaurant-related emissions by 10%. • (0.16% Reduction)	Social Committee	Scope 3 emissions	Spring 2026	
Reduce paper/packaging-related emissions by 20%. • (0.64% Reduction)	All staff	Scope 3 emissions	Spring 2026	
Reduce plastic-related emissions by 20%. • (2.05% Reduction)	All staff	Scope 3 emissions	Spring 2027	
Reduce food purchase-related emissions by 10%. • (0.08% Reduction)	All staff	Scope 3 emissions	Spring 2026	
Reduce books/movies/related items-related emissions by 10%. • (0.31% Reduction)	All Staff	Scope 3 emissions	Spring 2025	
Reduce consultancy-related emissions by 10%. • (1.25% Reduction)	All Staff	Scope 3 emissions	Spring 2026	
Survey all consultants on their renewable energy usage. • (1.25% Reduction)	Sustainability Manager	Surveys sent	Summer 2025	
Survey financial advice providers on their renewable energy usage. • (0.18% Reduction)	HR Manager	Surveys sent	Summer 2025	
Purchase only second-hand computers/machinery. • (0.83% Reduction)	Office Manager	Machinery stock	Summer 2025	
Optimise data usage and website energy consumption. • (0.04% Reduction)	Sustainability Manager	Scope 3 emissions	Winter 2024	
Survey all staff on what heating/electricity systems they use. • (1.24% Reduction)	Sustainability Manager	Survey respondents	Winter 2024	
Reassess the supply chains and production process of the HESK and Codema's physical reports through conducting LCAs and EPDs with third-party validation. • (2.00% Reduction)	Sustainability Manager	HESK embodied carbon	Spring 2026	
Maintain Codema's low carbon output of private vehicle usage by supporting staff and promoting innovative travel solutions (Eco-taxis, Active Travel, Cycle2Work etc.). •	Office manager, Sustainability manager	Travel emissions	Winter 2024	
Prepare further objectives to support the United Nations Sustainable Development Goals. •	Sustainability manager	SDG goals	Spring 2026	

Action	Lead	Measure	Deadline	Relevance
Reduce the number of flights taken by Codema staff by 20%. ● (2.53% Reduction)	All staff	Flights	Spring 2026	
Continue to monitor waste streams and reduce waste by 20%. ● (1.32% Reduction)	Office manager	Waste	Spring 2026	
Conduct a materiality assessment to chart Codema's goals. ●	Sustainability manager	SDG goals	Winter 2025	
Employ a '*power-off*' policy whereby laptops are configured to power-off after a certain amount of time and devices are switched off when idle. ● (0.02% Reduction)	Sustainability manager	Electricity consumption 2024	Summer 2025	
Implement a low-GHG purchasing policy. ●	Office manager	Scope 3 emissions	Autumn 2025	
Encourage Codema's suppliers to engage their tier 1 suppliers and procure low-GHG intensive capital goods. ●	Cell leads	Scope 3 emissions	Autumn 2025	
Prepare a full plan for Codema to halve emissions and meet its net-zero target. ●	Sustainability manager	Scope 3 emissions	Spring 2026	
Appoint a small number of key staff in Codema to be a 'Green Team' with a designated leader. ●	Sustainability manager	Staff members	Winter 2025	
Improve reporting and analysis methods. ● (6.18% Reduction)	CEO	Scope 3 emissions	Winter 2025	
Pursue partnerships for measuring and minimising Codema's emissions profile. ●	Cell leads	Partnerships	Spring 2030	
Meet net-zero emissions target by 2040 (90% reduction + carefully selected carbon removals). ●	All Staff	Emissions 2040	Spring 2041	
Host a tree-planting social committee event. ●	Social Committee	Emissions 2024	Spring 2026	
Engage in community-based climate action projects. ●	Public Engagement manager	Projects	Spring 2030	
Investigate options for offsetting alternatives (peatland rewetting, seagrass initiatives, solar panels, real-time carbon offsetting). ● (10.00% Reduction)	Sustainability manager	Offsetting measures	Spring 2041	
Engage in biodiversity initiatives. ●	Social Committee	Initiatives	Spring 2031	
Develop a skill share platform for sustainable actions for employees. ●	Office manager	Skills	Summer 2025	
Create 'a library of things' the Codema office (tools, books, swap shop). ●	Communications and Marketing manager	Library members	Spring 2025	
Provide energy audits for employees' homes. ● (5.00% Reduction)	Project Implementation Lead	Audits	Spring 2027	
Reduce our online data usage (i.e. less email attachments, less intensive online computing using Artificial Intelligence). ●	Sustainability manager	Scope 3 emissions	Winter 2024	

Stock Image

Social and Governance opportunities

Action	Lead	Measure	Deadline	Relevance
Regular one-to-one and cell meetings.	Cell Leads, CEO	Meetings	Ongoing	
Cross-cell meetings.	Cell Leads	Meetings		
Weekly company meetings.	CEO	Meetings		
Ask Me Anything initiative.	CEO	Meetings		
Mid-year HR check-in.	HR Lead	Check-ins		
360 reviews.	HR Lead	Reviews		
End of Year Role Review.	Cell Leads, HR Lead	Reviews		
Host internships.	HR Lead	Meetings		
Facilitate networking opportunities through conferences and workshops.	Cell Leads	Events		
A soft skills training programme.	HR Lead	Programmes		
Codema Learner Hub.	HR Lead	-		
Weekly team meetings.	HR, CEO	-		
Ad hoc HR Check-ins.	HR Lead	Check-ins		
Pulse Surveys.	HR Lead	Respondents		
HR Newsletters.	HR, Office Manager	Newsletters		
Organise 2 main events and regular events during the year.	Social Committee	Social Events		
Employee Assistance Programme.	HR Lead	-		
Maintain Flexible & Blended Working Policy.	HR Lead	-		
Life Assurance and Critical Illness.	HR Lead	-		
Ensure all policies are up to date.	HR Lead	-		
Update Family Leave Policy.	HR Lead	-		
Update Productivity Policy.	HR Lead	-		
Minutes of Board meetings.	Board Directors, CEO	Minutes		
Minutes of ARC subcommittee meetings.	CEO, ARC Chair	Minutes		
Yearly Financial Statements.	CEO, Accountant(s)	Annual Reports		
Engage with Boardmatch supports & Conduct a Board Skills Audit.	CEO	Audits	Summer 2025	
Develop a plan for reaching greater diversity on the Board.	CEO	Board Members	Summer 2025	
Review organisational structure to ensure it is fit for purpose.	CEO, HR Lead	-	Autumn 2024	
Engage with the team to help understand Codema's Strategy.	CEO, HR Lead	-	Autumn 2024	
Assess the HR and Office Administration resources.	CEO, HR Lead	Resources	Autumn 2024	
End of year staff survey.	HR, Office Manager	Respondents	Winter 2024	
Research Award and Recognition programmes and events.	Cell Leads	Awards	Ongoing	
Re-introduce the HR Newsletter for quarterly distribution.	HR, Office Manager	Newsletters	Winter 2024	
Review EAP and other Benefits.	HR Lead, CEO	-	Autumn 2024	
Review resource and skill requirements and plan for hiring needs.	HR, CEO, COO	Skill Requirements	Spring 2025	
Introduce the use and benefits of Belbin reports.	HR, Office Manager	Belbin Reports	Spring 2025	
Provide transparency in promotions and support for development	HR Lead, CEO	-	Spring 2025	
Training in leadership, mentoring, performance management, and diversity in the workplace.	HR Lead	Trained Staff	Spring 2025	
Develop a plan for reaching greater community rep. on the Board.	CEO	Board Members	Summer 2025	
Complete Wellbeing Certification.	HR, Office Manager	Certificates	Summer 2025	
Engage with Wellmark.	HR, Office Manager	-	Summer 2025	
Implement Wellbeing Programme.	HR, Office Manager	-	Autumn 2025	
Develop a new policy that supports staff through grief, menopause, illness etc.	HR Lead	-	Autumn 2025	
Conduct a comprehensive review of our hiring process.	HR Lead	-	Winter 2025	
Research option to set up an internship employment programme for minority groups/underrepresented communities.	HR Lead	-	Winter 2025	
Conduct employee satisfaction survey.	HR Lead	Respondents	Winter 2025	

APPENDICES

Detailed Greenhouse Gas Emissions Baseline Inventory 2023

Codema
SCOPE 1: STATIONARY COMBUSTION (OFFICE)

Bill Start Date	Bill End Date	Energy (kWh) [A]	2023 tCO_2e
23/11/2022	26/01/2023	3,947	0.81
27/01/2023	23/03/2023	2,217	0.45
24/03/2023	29/05/2023	1,129	0.23
30/05/2023	24/07/2023	0	< 0.01
25/07/2023	22/09/2023	12	< 0.01
23/09/2023	17/11/2023	1,137	0.23
Total		8,442	1.72

SCOPE 1: FUGITIVE EMISSIONS

Subcategory	
Fire Suppression Leakages	< 0.01
Refrigerant Leakages [B]	1.56
Total	1.56

SCOPE 2: ELECTRICITY GENERATION (LOCATION-BASED)

Subcategory	Energy (kWh) [C, D]	
Kitchen Appliances	2,947	0.88
Televisions, Laptops, Cameras, Monitors	3,886	1.15
Lighting	150	0.04
Phones Charging	29	<0.01
Total	7,013	2.08

A. Natural Gas in 2022 = 204gCO_2/kWh Net Calorific Value (NCV)
B. The leakage of Freon (HFC-134a) has a Global Warming Potential of 1,300tCO_2e
C. Electricity consumption calculated from estimated use of office appliances.
D. Electricity Generation in Ireland 2022 (Scope 2 Only) = 297gCO_2/kWh

Detailed Greenhouse Gas Emissions Baseline Inventory 2023

Codema

SCOPE 3 CATEGORY 1: PURCHASED GOODS AND SERVICES	2023 tCO_2e
Subcategory	
Consultant Services	12.05
Consumable Goods	8.14
Data Usage	0.18
Total	20.37

SCOPE 3 CATEGORY 2: CAPITAL GOODS

Subcategory	
Asset Purchases	7.38
HESK Equipment	16.38
Total	23.76

SCOPE 3 CATEGORY 3: FUEL- AND ENERGY-RELATED ACTIVITIES NOT INCLUDED IN SCOPE 1 OR SCOPE 2

Subcategory	
Home Working	10.00
Electricity Transmission and Distribution Losses [E]	0.21
Total	10.21

SCOPE 3 CATEGORY 4: UPSTREAM TRANSPORTATION AND DISTRIBUTION

Subcategory	
Deliveries	3.94
Total	3.94

SCOPE 3 CATEGORY 5: WASTE GENERATED IN OPERATIONS

	Weight (kg) [F]	
	251.85	5.36
Total	251.85	5.36

E. Final Electricity Consumption including Transmission and Distribution Conversion Factor in 2022 (Scope 2 and Scope 3) = 332gCO_2/kWh. The difference in emission between gross electricity production and total final consumption is considered under Scope 3 Category 3.
F. The total weight of waste includes compost, recycling, glass, cardboard and general waste. An emissions factor of 0.02128tCO_2e/kg was applied to all waste produced in 2023.

Detailed Greenhouse Gas Emissions Baseline Inventory 2023

Codema SCOPE 3 CATEGORY 6: BUSINESS TRAVEL [G]	2023 tCO_2e
Subcategory	
Flights	10.25
Accommodation	0.32
Private Vehicle	0.62
Bus	0.03
Rail	0.09
Ferry	<0.01
Total	11.32

SCOPE 3 CATEGORY 7: EMPLOYEE COMMUTING

Subcategory	
Private Vehicle	0.00
Bus	1.87
Rail	1.27
Total	3.14

SCOPE 3 CATEGORY 9: DOWNSTREAM TRANSPORTATION AND DISTRIBUTION

Subcategory	
HESK Deliveries	2.00
HESK User Travel	2.00
Codema Report Deliveries	0.01
Total	4.01

SCOPE 3 CATEGORY 11: USE OF SOLD PRODUCTS

Subcategory	
HESK and Codema Reports	2.00
Total	2.00

SCOPE 3 CATEGORY 12: END-OF-LIFE TREATMENT

Subcategory	
HESK Decommission [H]	0.53
Codema Reports [I]	0.43
Total	0.96

G. Multiple conversion factors were implemented in this calculation.
H. Assumed 10 HESKs are disposed of per annum (2.5kg each)
I. Assumed 20kg of paper reports per annum recycled.

Emissions Data Sources for Baseline Inventory 2023

The table below provides detailed information on the sources and conversion factors used by Codema to develop our emissions inventory. Most of the emissions conversion factors were taken from the GHG conversions provided by Normative, the Environmental Protection Agency, the Department of Energy Security and Net Zero in the UK and the Sustainable Energy Authority of Ireland. Links to each individual source are provided along with the relevant year for the data.

Emissions Category	Data Source(s)	Conversion Factor(s)	Unit	Year
Scope 1				
Fugitive Emissions				
- Refrigerant Leakages	EPA, DESNZ	HFC-134 A GWP	1,300 $kgCO_2e$	2023
- Fire Suppression Leakages	EPA, DESNZ	CO_2 GWP	1 $kgCO_2e$	2023
Mobile Combustion (Vehicles)	N/A			
Process Emissions	N/A			
Stationary Combustion (Office)	SEAI	Natural Gas (NCV)	204 gCO_2/kWh	2022
Scope 2				
Electricity Generation (Location-based)	SEAI	Electricity Generation	297.4 gCO2/kWh	2022
Scope 3				
Business Travel	Atmosfair, Greenview	Flight + Hotel Emissions	Multiple	2023
Capital Goods				
- Office Equipment	Normative.io	Spend-based	Multiple	2023
- HESK Equipment	Normative.io	Spend-based	Multiple	2023
Downstream Leased Assets		N/A		
Downstream Transportation and Distribution	DESNZ	Multiple Factors	$kgCO_2e$/passenger.km	2023
Employee Commuting	DESNZ	Multiple Factors	$kgCO_2e$/passenger.km	2023
End-of-Life Treatment of Sold Products	DESNZ	Multiple Factors		
Fuel- and Energy- Related Activities				
- Home Working	DESNZ	Emissions per FTE/Hour	0.33 kgCO2e/FTE/hr	2023
- Electricity Transmission and Distribution Losses	SEAI	Electricity Consumption	332gCO_2/kWh	2022
Investments	N/A			
Purchased Goods and Services				
- Consultant Services	Normative.io	Spend-based	Multiple	2023
- Consumable Goods	Normative.io	Spend-based	Multiple	2023
- Data Usage				
◦ Cloud Storage	Google Carbon Report			2023
◦ Website Usage	Website Carbon	Emissions per View		2023
Processing of Sold Products	N/A			
Upstream Transportation and Distribution	Normative.io	Spend-based	Multiple	-
Upstream Leased Assets	N/A			
Use of Sold Products	Estimate	-	-	-
Waste Generated in Operations				
Water	DESNZ	Treatment + Wastewater	0.378$kgCO_2e/m^3$	2023
Waste	DESNZ	Waste Production	21.28$kgCO_2e$/kg	2023

06. **APPENDICES**
(CONTINUED)

Greenhouse Gas Emissions Inventory 2023 Uncertainty Assessment

Codema UNCERTAINTY ASSESSMENT For the year ended 31st December 2023	2023 tCO_2e	+/- %	Certainty ranking
Scope 1			
Fugitive Emissions	1.56	+/- 11.2%	Good
Mobile Combustion (Vehicles)	N/A		
Process Emissions	N/A		
Stationary Combustion (Office)	1.72	+/- 11.2%	Good
Scope 2			
Electricity Generation (Location-based)	2.08	+/-51.0%	Poor
Scope 3			
Purchased Goods and Services			
-Consultant Services	12.05	+/-50.2%	Poor
-Consumable Goods	24.32	+/-50.2%	Poor
-Data Usage			
◦ Google Cloud	0.16	+/-30.0%	Fair
◦ Website Usage	0.02	+/-51.0%	Poor
Capital Goods	3.44	+/-50.2%	Poor
Fuel- and Energy-Related Activities Not Included in Scope 1 or Scope 2	10.21	+/-58.3%	Poor
Upstream Transportation and Distribution	3.94	+/-50.2%	Poor
Waste Generated in Operations			
- Waste	5.36	+/-30.0%	Fair
- Water	0.04	+/-31.6%	Poor
Business Travel			
-Air Travel	10.25	+/-30.0%	Fair
-Hotel Stays	0.32	+/-30.0%	Fair
-Other Business Travel	0.75	+/-31.6%	Poor
Employee Commuting	3.14	+/-36.1%	Poor
Upstream Leased Assets	N/A		
Downstream Transportation and Distribution Estimate	4.01	+/-51.0%	Poor
Processing of Sold Products	N/A		
Use of Sold Products Estimate	2.00	+/-70.7%	Poor
End-of-Life Treatment of Sold Products Estimate	0.96	+/-58.3%	Poor
Downstream Leased Assets	N/A		
Franchises	N/A		
Investments	N/A		
Aggregated Uncertainty	86.32	+/- 13.2%	Good

Abbreviations

AAI	Atmosfair Airline Index
BCG	Boston Consulting Group
CAP	Climate Action Plan
CEO	Central Executive Officer
CH_4	Methane
CHSB	Cornell Hotel Sustainability Benchmarking Index
CO_2	Carbon Dioxide
CRP	Carbon Reduction Plan
CSRD	Corporate Sustainability Reporting Directive
CVC	Community, Voluntary and Charitable organisations
DH	District Heating
DLAs	Dublin Local Authorities
DREM	Dublin Region Energy Master Plan
DZ	Decarbonising Zone
EPC	Energy Performance Contracting
EPD	Environmental Product Declaration
ESG	Environmental, Social and Corporate Governance
EU	European Union
GHG	Greenhouse Gas Protocol
HFC	Hydrofluorocarbons
IPCC	Intergovernmental Panel on Climate Change
LCA	Life Cycle Assessment
NCV	Net Calorific Value
PCF	Product Carbon Footprint
RDI	Research, Development and Innovation
SMART	Specific, Measured,
SEAI	Sustainable Energy Authority of Ireland
SME	Small-to-Medium Enterprise
TFC	Total Final Consumption
UK	United Kingdom
UN SDGs	United Nations Sustainable Development Goals
WBCSD	World Business Council for Sustainable Development
WRI	World Resources Institute

Glossary

Diversity (in the workplace)
Diversity in the workplace refers to a wide range of employee differences within an organisation. These differences can encompass race, ethnicity, gender, age, sexual orientation, disability, socioeconomic status, religion, cultural background, and other unique attributes. Workplace diversity also includes employees' varied perspectives, experiences, skills, and ideas.

Inclusive Workplace
An inclusive workplace is where all employees feel respected, valued, and supported, regardless of their diverse backgrounds and identities. In such a setting, practices and policies are designed to actively encourage participation and ensure equal access to opportunities, resources, and advancement. Inclusivity involves recognising and embracing differences in race, ethnicity, gender, sexual orientation, disability, age, socioeconomic status, religion, and other personal characteristics. It also means fostering a culture of open communication, mutual respect, and equity, where diverse perspectives are sought and integrated into decision-making processes.

Underrepresented/Minority Groups
Underrepresented or Minority groups refer to populations within a society that are differentiated from the majority based on distinct characteristics such as race, ethnicity, nationality, religion, gender identity, sexual orientation, disability, or socioeconomic status. These groups may experience systemic barriers or disadvantages in accessing opportunities, resources, and representation. The concept of intersectionality recognises that individuals may belong to multiple minority groups simultaneously, which can compound their experiences of discrimination and marginalisation.

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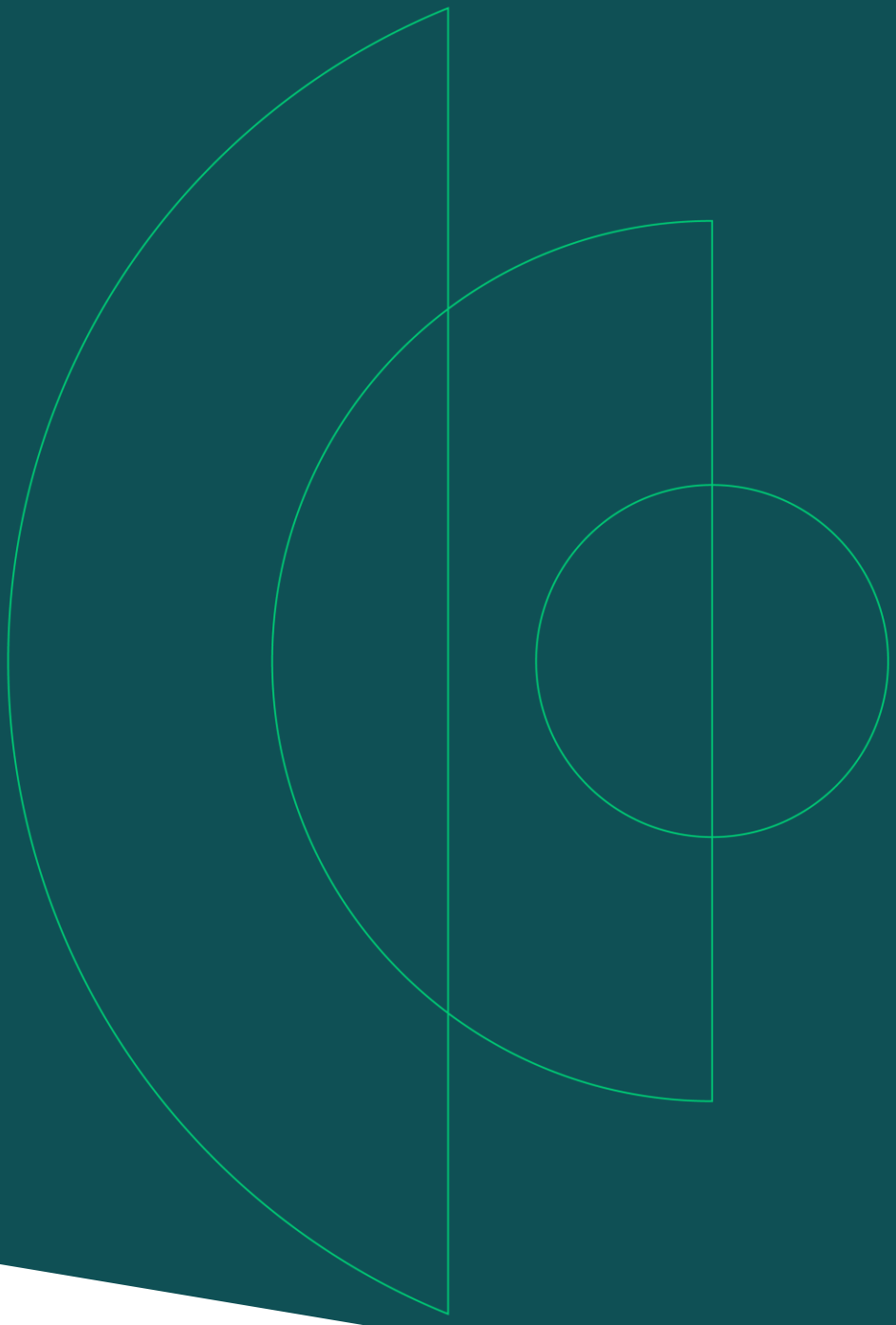

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