2024

SUSTAINABILITY REPORT

ENCYCLIS


ENCYCLIS

Contents

Section 1.

Our key sustainability achievements in 2024

ENVIRONMENTAL

Planning approval secured for

UK's FIRST

MAJOR CARBON CAPTURE PROGRAMME

for an EfW

5

DISTRICT HEAT NETWORK PROGRAMMES

in operation or development*

OVER 112,552 TONNES

OF IBA RECYCLED

at Wellingborough

NEW PURPOSE BUILT

IBA RECYCLING PLANT

now in development in Ireland

SOCIAL

OVER £900,000

PROVIDED BY COMMUNITY FUNDS AND FUNDRAISING INITIATIVES

to local good causes**

EXCELLENT SAFETY RECORD

across all operational facilities

*We are solely equity owners of the Earls Gate ERF, not operator, which has a live District Heat Network in place

**Based on 1 Euro/£0.84 GBP exchange rate, correct as at 13 May 2025

GOVERNANCE

OVER 99% COMPLIANCE

WITH ALL OPERATIONAL PERMITS

across the portfolio

TRIPLE ISO

CERTIFICATION SECURED

for a second year running for UK facilities

BACKED BY STRONG OPERATIONAL DELIVERY

1,493,454

TONNES OF RESIDUAL WASTE

efficiently processed across the portfolio

1,353,830

MWH OF BASELOAD POWER GENERATED

across the portfolio

Section 2.

Foreword

An introduction from the Chair of the Sustainability Committee

I am delighted to introduce this report, which provides further evidence of Encyclis' increasing maturity in delivering both its operational goals and its ESG commitments, supported by strengthened management controls and oversight.

Sustainability is integral to Encyclis and is embedded across every part of the business. This year's Sustainability Report highlights the efforts of the Encyclis team in driving forward our sustainability ambitions, with a particular focus on decarbonisation.

These ambitions are rigorously tested and endorsed by our Board. Our goals span both the immediate and the long-term. In the short term, we are trialling the use of Hydrogenated Vegetable Oil as a replacement for diesel as a start-up fuel, reducing our Scope 1 emissions.

Looking ahead, we are pioneering Carbon Capture development, a technology which will play a critical role in the delivery of net zero emissions. We have laid the groundwork for our pioneering Carbon Capture programme at Protos ERF, with the programme planned to reach Final Investment Decision in H2 2025 to enable its build-out. Protos Carbon Capture is enabled by both Government funding and private sector investment and will ultimately serve as an exemplar for decarbonising the Energy-from-Waste (EfW) sector as well as wider UK industry.

Some of our ambitions are more complex and long-term, including reducing the volume of plastics in the waste stream. Achieving this requires the engagement of key stakeholders beyond the waste sector. We are working collaboratively with suppliers, academic institutions and trade associations to raise awareness and reduce the amount of plastic entering the waste stream. For the plastics that do, our goal is to encourage early recycling and removal to prevent them from becoming contaminated and requiring treatment in EfW facilities.

This report also documents the significant number of stakeholders with whom the team has engaged throughout 2024, which reflects two key factors. The first is the strategic importance of a number of our programmes. This includes the progress made on carbon capture and district heating, the first ever on-island IBA processing solution in Ireland, and the delivery of essential new regional infrastructure, including the current build of facilities at Protos and Walsall, all drivers of economic and social development.

The second is the increasingly complex regulatory landscape which the company has to navigate, in particular the planned expansion of the Emissions Trading Scheme to include EfW. We have heavily engaged with both the former Conservative and current Labour Governments and regulators, both directly and with key industry groups, to emphasise that the waste hierarchy's integrity must be maintained to avoid landfilling or waste exports, protecting society against both carbon leakage and untenable cost escalation. It is also essential that other policies are considered in parallel, including eradicating combustible and biogenic waste from landfill, maintaining the parity of landfill tax with real rates of inflation, accelerating progress on packaging reforms and improving plastic recycling rates. We will continue to engage with regulators and Government on these important issues.

I am pleased that we have added two new elements to this year's report. These are the way that we present our 'look ahead' for each of the main report themes, and to provide a tracker on latest performance against our measures via the new Encyclis website. You will see that we have provided a far clearer and more detailed 'look ahead' for each of the three main report themes versus last year, whilst the QR codes provided at the start of the report and within each of the sections take you to summaries of performance against key sustainability measures.

I hope you enjoy reading the report and agree with my view that this is a reflection of an increasingly mature and responsible business, one that is clearly evidencing the progress it is making across its key sustainability objectives.

Miriam Greenwood OBE DL
Chair of Sustainability Committee &
Encyclis Board Non-Executive Director

An introduction from the Chief Executive Officer

In a year that further emphasised the urgency of the global climate challenge and the need to promote faster action to decarbonise, Encyclis made great strides in the delivery of its sustainability goals. This shows how Energy-from-Waste businesses like ours provide both a vital societal role and a key delivery vehicle for green infrastructure and clean energy.

This report showcases that we're continuing to play a leading role in the energy transition. Our Protos Energy Recovery Facility, being constructed in Cheshire, is poised to be the first in the UK with full-scale carbon capture capabilities. Alongside extensive work with the Department for Energy Security & Net Zero (DESNZ) to formalise commercial plans for its development throughout 2024, we secured two other essential elements to bring forward its development: resolution to grant planning approval for the project from Cheshire West and Chester Council in September; and the granting of the UK's first environmental permit for carbon capture at an Energy-from-Waste facility in December.

In addition, we continue to significantly ramp up supporting the Circular Economy. We have regularly emphasised that Energy-from-Waste could play a pivotal role in developing scalable heat networks, reducing carbon emissions whilst also providing substantial cost savings to households and businesses. The Government's announcement in October 2024 that a £19m Green Heat Network grant had been put towards a new district heat network in Leicestershire, using waste heat from our Newhurst ERF as its cornerstone, will help to realise its largely untapped potential. It will also show that these benefits can be more swiftly delivered through well co-ordinated effort between policy makers and industry.

In our efforts to minimise any waste from operations, it also gave me great pleasure to open our Incinerator Bottom Ash (IBA) processing facility in Wellingborough in May 2024. Developed in partnership with Day Aggregates, this facility has the ability to take 200,000 tonnes of IBA from across our operational portfolio per year and transforms it into a sustainable aggregate for the construction industry.

Its results reflect the best of the business: the reuse of materials for an important purpose, in turn reducing societal reliance on primary materials; and providing regional investment and skilled employment opportunities.

All of this work highlights the vital role of Energy-from-Waste facilities as critical social infrastructure. Despite this, misinformation on the sector's role and its comparison to other power sources continues to persist. As this report shows, our primary role continues to be the treatment of societal waste left over after recycling, in the most efficient way possible, with power and heat generated as by-products of the process. Comparisons with other sectors often fail to account for our work stopping non-recyclable waste going to landfill in the first place, preventing the harm this causes to the environment and to local communities.

Performing this role brings great responsibility, requiring a clear need to work safely within strictly enforced limits and standards. I am immensely proud of the skill and dedication of our people in their drive to achieve operational excellence, reflected by three further key achievements in 2024: the re-certification of our facilities as Triple ISO certified, the maintenance of an excellent safety record across our portfolio, and continuing to operate below the limits set within our permits.

Looking ahead, this report also shows that we have a clear roadmap to reduce our carbon emissions, including improving plant efficiency and delivering carbon capture across our portfolio. We think we can go further and faster, however, through further effective collaboration between public bodies and companies like ours. This includes the potential for heat network zoning through planning reforms, the creation of a world-leading CCS sector in the UK through a clear plan for wider deployment and further new policies for managing packaging materials, including plastics, to reduce resource use as the first principle of the waste hierarchy. This desire for faster progress continues to underpin our work with key trade bodies and supported our decision to sign up to the UN Global Compact last year.

I'm hugely proud of what we achieved in 2024, reflecting a business that delivers on its sustainability promises whilst continuing to provide a key societal function, a reliable form of power and continued investment across the UK and Ireland. My huge thanks go to all of our team members, stakeholders and suppliers who continue to support us to deliver against our mission and we look forward to continuing this strong progress in 2025.

Owen Michaelson
Chief Executive Officer

Section 3.

About Encyclis: More than energy from waste

We are a leading owner and operator of Energy-from-Waste facilities that safely and sustainably treat residual waste, enabling the recovery of resources that can go back into use.

More than energy from waste:

Our key societal role

Every day, we turn thousands of tonnes of non-recyclable waste into useful resources. We like to call it a ‘bin bag to light bulb’ service.

Our fleet of facilities in the UK and Ireland fulfil an essential public sanitation function by treating the ‘black bag’ waste that remains after waste reduction, reuse and recycling.

Instead of letting this non-recyclable waste go to waste, we process it in a way that generates baseload electricity for the national grid, produces heat that can be harnessed for district heating networks, and recovers the remaining resources, including ash and metals, for reprocessing and recycling.

At Encyclis, we are proud of our important role in society. We work to the highest standards across our business to ensure we are operating efficiently, safely and in full compliance with regulations.

This report ultimately reflects our progress in making this happen in 2024.

More than energy from waste:

Our sustainability objectives

In providing 'more than energy from waste', we are focused on delivering three key environmental objectives beyond our role in treating residual waste and generating baseload electricity.

1. ENSURING RESIDUES FROM THE PROCESS ARE RECYCLED OR REUSED

The ash that results from our waste treatment process is recycled in specialist plants to create aggregate materials for the construction industry. We continue to work toward increasing this rate to 100%.

In addition, metals are recovered from that ash for reuse. Through this, we return valuable resources to the production cycle and avoid the need for mining or extracting new material, which is both energy intensive and harmful to the environment.

2. DELIVERING ENERGY BEYOND ELECTRICITY

We provide a core public hygiene service and generate sustainable baseload electricity to power communities. In addition to this, we are committed to supporting other critical infrastructure through the deployment of district heating for local communities, playing a vital role in further decarbonising both UK homes and industry.

We are actively progressing opportunities to export heat to support the UK's decarbonisation journey.

3. CAPTURING CARBON EMISSIONS THROUGH CARBON CAPTURE AND STORAGE (CCS)

CCS is critical to a sustainable pathway to net zero for the industry. However, technology at sufficient scale is still at an early stage, and uncertainty around carbon pricing and transport networks make the economics unclear.

We are investing in understanding how CCS can work for our facilities. We are at the forefront of delivering CCS, with our Protos plant being financially supported by the UK Government as part of the HyNet cluster.

Protos is just the beginning. Through this process, we will work with wider industry to improve this technology, increasing expertise to support its roll-out to other plants.

More than energy from waste:

Our values

In delivering 'more than energy from waste', we work to five key values across the business.

SAFETY FIRST

A safe, healthy and risk-aware workplace improves the wellbeing of our colleagues, customers, the local communities we serve, and the planet we must protect.

FOCUSED ON CIRCULARITY

We focus on recovering energy and other by-products from waste that would otherwise end up in landfill, supporting the transition to more sustainable energy and a more circular economy.

RESPONSIBLE PARTNERS AND GOOD CITIZENS

We take our responsibilities seriously, whether that is with our partners, suppliers, regulators or local communities. We always aim to achieve the highest standards of compliance and accreditation.

100% AND BEYOND

Every day we strive to do better through a culture of continuous improvement. This drives our work, from high plant availability to maximising recovery from waste, transforming it into energy, ash for aggregates and metals for recycling.

SUCCEEDING TOGETHER

Empowering our people, collaborating with partners and working together as a diverse, inclusive team help us adapt to a fast changing world, while adding value to our enterprise.

Our portfolio

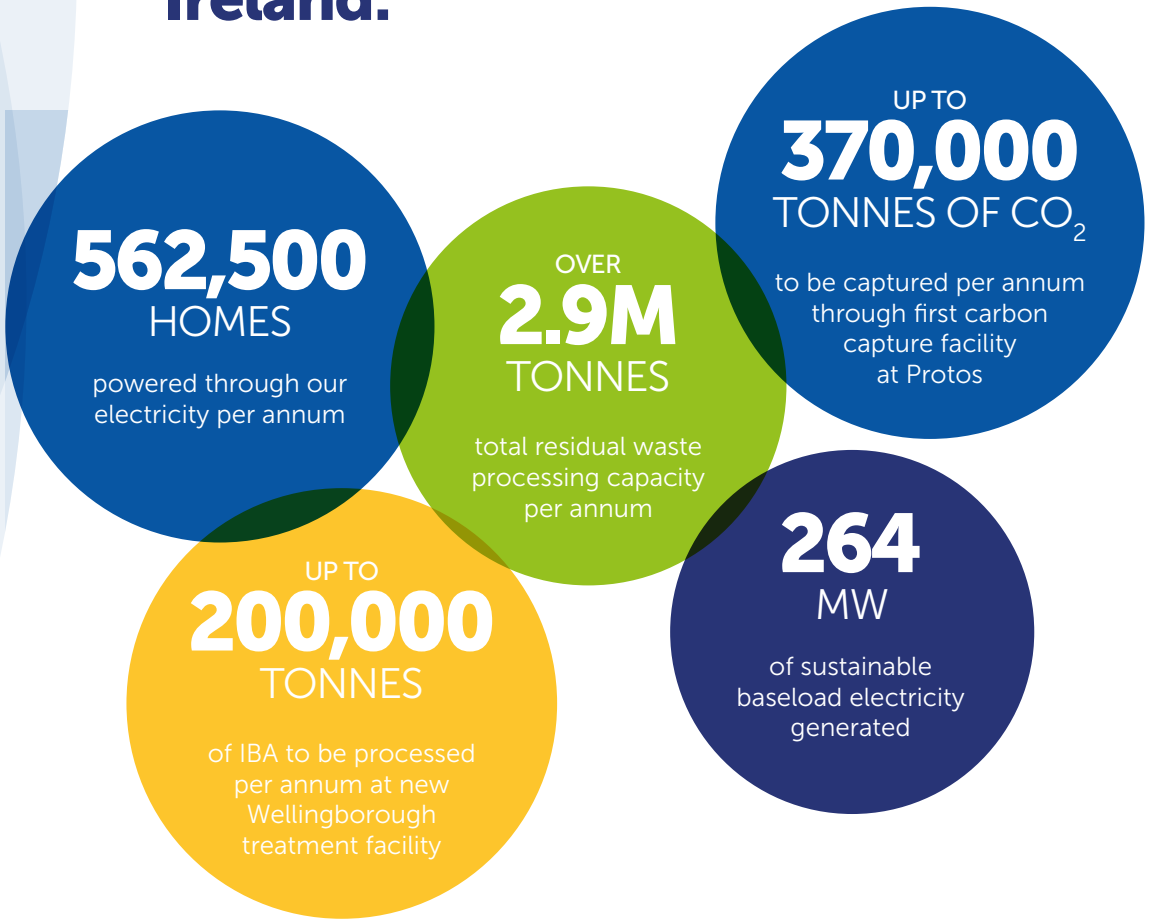
Our energy recovery facilities across the UK and Ireland are some of the most technically advanced and efficient in the world, all classified as R1* standard and managed by a highly skilled workforce. By the end of 2024 we had three operational plants in the UK and one in Ireland, with three more in construction or under development and due to enter service between 2026 and 2028.

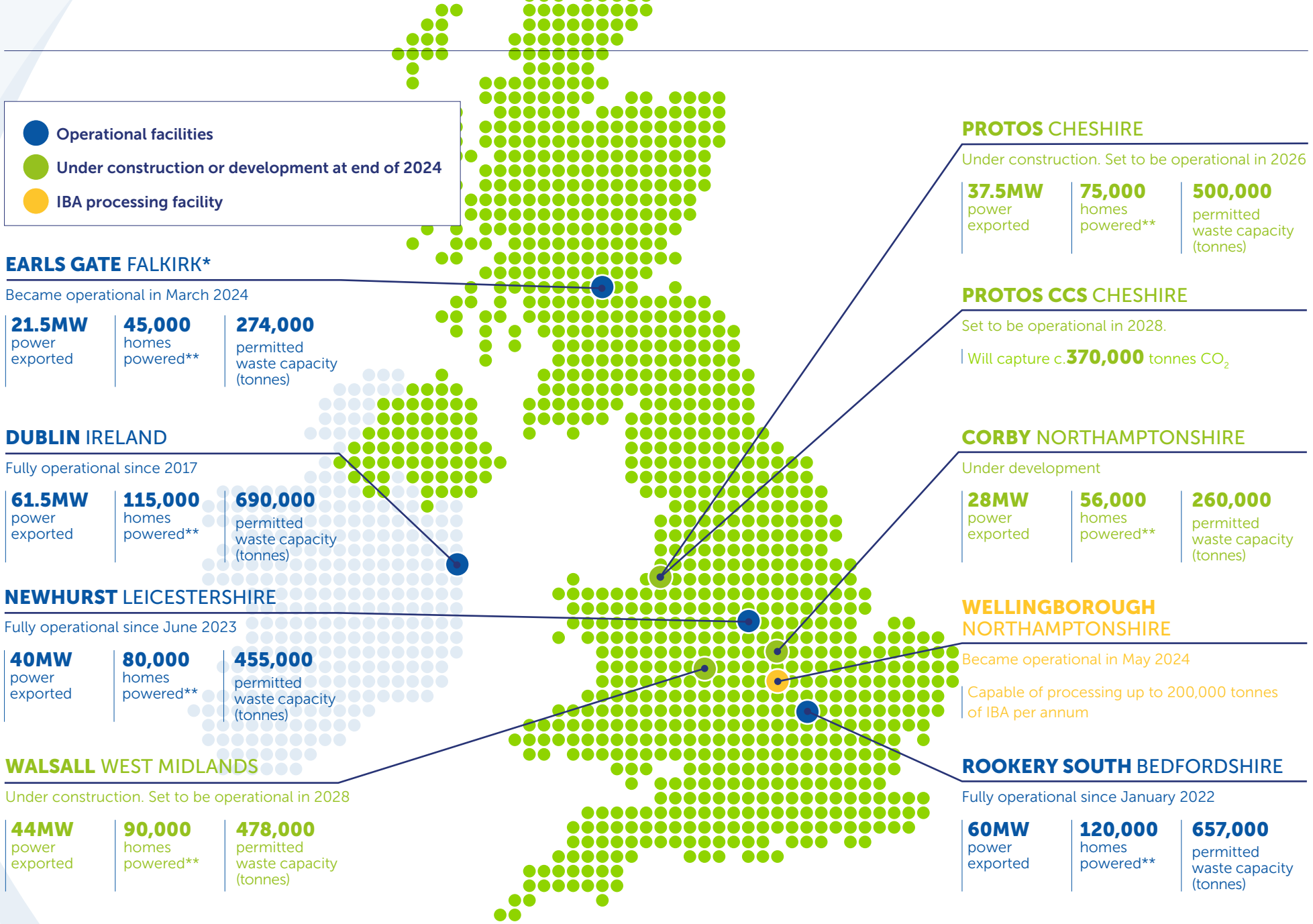
Our commitment to sustainability has also included enhancing our portfolio to directly support decarbonisation and the circular economy. This includes plans for our first carbon capture facility, at Protos in Cheshire, part of HyNet, one of the UK Government's designated Track-1 CCS clusters. In partnership with Day Aggregates, we have also built an Incinerator Bottom Ash (IBA) processing facility in Wellingborough, Northamptonshire, to reprocess residual ash from two of our operational facilities into aggregate for the construction industry which began operating in May 2024.

For details on the ownership of our plants, please refer to Appendix A of this report.

**The R1 status of an Energy from Waste (EfW) facility classifies it as an Energy Recovery Facility rather than as a disposal operation. Article 3 of the Waste Framework Directive (WFD) 2008/98/EC defines 'Recovery' as: 'any operation the principal result of which is waste serving a useful purpose by replacing other materials which would otherwise have been used to fulfil a particular function, or waste being prepared to fulfil that function, in the plant or in the wider economy'.*

Combined, our current and future facilities will be able to deliver significant economic and social benefits to the UK and Ireland:





EARLS GATE FALKIRK*

Became operational in March 2024

21.5MW	45,000	274,000
power exported	homes powered**	permitted waste capacity (tonnes)

DUBLIN IRELAND

Fully operational since 2017

61.5MW	115,000	690,000
power exported	homes powered**	permitted waste capacity (tonnes)

NEWHURST LEICESTERSHIRE

Fully operational since June 2023

40MW	80,000	455,000
power exported	homes powered**	permitted waste capacity (tonnes)

WALSALL WEST MIDLANDS

Under construction. Set to be operational in 2028

44MW	90,000	478,000
power exported	homes powered**	permitted waste capacity (tonnes)

PROTOS CHESHIRE

Under construction. Set to be operational in 2026

37.5MW	75,000	500,000
power exported	homes powered**	permitted waste capacity (tonnes)

PROTOS CCS CHESHIRE

Set to be operational in 2028.

Will capture c.**370,000** tonnes CO_2

CORBY NORTHAMPTONSHIRE

Under development

28MW	56,000	260,000
power exported	homes powered**	permitted waste capacity (tonnes)

WELLINGBOROUGH NORTHAMPTONSHIRE

Became operational in May 2024

Capable of processing up to 200,000 tonnes of IBA per annum

ROOKERY SOUTH BEDFORDSHIRE

Fully operational since January 2022

60MW	120,000	657,000
power exported	homes powered**	permitted waste capacity (tonnes)

**Earls Gate ERF is owned by Encyclis but not operated by the company*

***Homes powered with electricity, calculated using permitted power export per site, based on UK and Irish regulator data on average household electricity usage. All plants are operated by Encyclis, except Earls Gate and Wellingborough.*

The basis of the report

This report and its contents have been prepared on behalf of Encyclis Holdco Limited and all direct and indirect subsidiaries thereof ("Encyclis Group"), with its contents relating to the business and operational activities associated with Encyclis Group.[1]

SCOPE, DATES AND BOUNDARIES

This Sustainability Report relates to the work undertaken in our last financial year, 1 January 2024 to 31 December 2024 for publication in July 2025. This is our second full Sustainability Report and we are committed to publishing future reports on an annual basis. This report and all previous reports can be found on our website at www.encyclis.com.

We have primarily used an operational control approach to our sustainability reporting. The majority of this report therefore covers Encyclis operations taking place at:

- Rookery South Energy Recovery Facility
- Newhurst Energy Recovery Facility
- Dublin Waste-to-Energy facility

We also include references to other joint venture projects, where we are a partner but not the operator, to provide a broader view of our overall impact and commitments. Additionally, some references have also been made to projects still in construction or under development, such as the planned Protos Energy Recovery Facility and adjacent Carbon Capture Facility. For more detail on the ownership of our facilities, please refer to Appendix A of this report.

STRUCTURE AND MATERIALITY

This report reflects how we manage our material sustainability issues, determined by the outcome of our Double Materiality Assessment ("DMA"). This was originally reported in 2023 and has been retained for this year's report, setting the areas of sustainability focus for the business across three principal themes: Environmental, Social and Governance ("ESG"). Our DMA can be found at the end of this section.

REPORTING FRAMEWORKS

As in 2023, our Greenhouse Gas ("GHG") emissions reporting has been prepared in accordance with the requirements of the Greenhouse Gas Protocol reporting standards (Corporate Accounting and Reporting Standard, 2004; Corporate Value Chain Accounting and Reporting Standard, 2011). This assessment of GHG emissions is compliant with the Greenhouse Gas Protocol, a globally recognised standard jointly developed by the World Resources Institute and the World Business Council for Sustainable Development. The Greenhouse Gas Protocol provides comprehensive, standardised frameworks for quantifying and managing GHG emissions across private and public sector operations, value chains, and mitigation efforts.

Prior to publication, this report underwent a comprehensive three-stage internal review and approval process starting with the Executive Leadership Team (ELT), followed by the Sustainability Committee, with final approval by the Encyclis Board.

ASSURANCE

All of our GHG accounting is conducted by IMS Consulting, an independently owned and operated consulting and verification services company that specialises in carbon management, reporting and disclosure services.

IMS' subsequent Inventory Report, detailed within the Environmental section, provides information about the greenhouse gas emissions of Encyclis Group for the defined measurement period of 1 January 2024 to 31 December 2024 and is based on historical information. This information is stated in accordance with the requirements of International Standard ISO 14064-1 2018 and the requirements of The GHG Protocol Corporate Accounting and Reporting Standard.

IMS conducted its review to a reasonable level of assurance for Scope 1 and 2 emissions, and a limited level of assurance for Scope 3. IMS found no evidence to indicate that the data or information provided to them was not fairly stated.

1 Reference to the 'Company' or to 'Encyclis' means, as the content may require, all or some of the Encyclis Group entities. Encyclis Group assumes no responsibility to any other party in respect of, or arising out of, or in connection with this document and/or its contents or reliance thereon.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HyFlex

Double materiality assessment for Encyclis

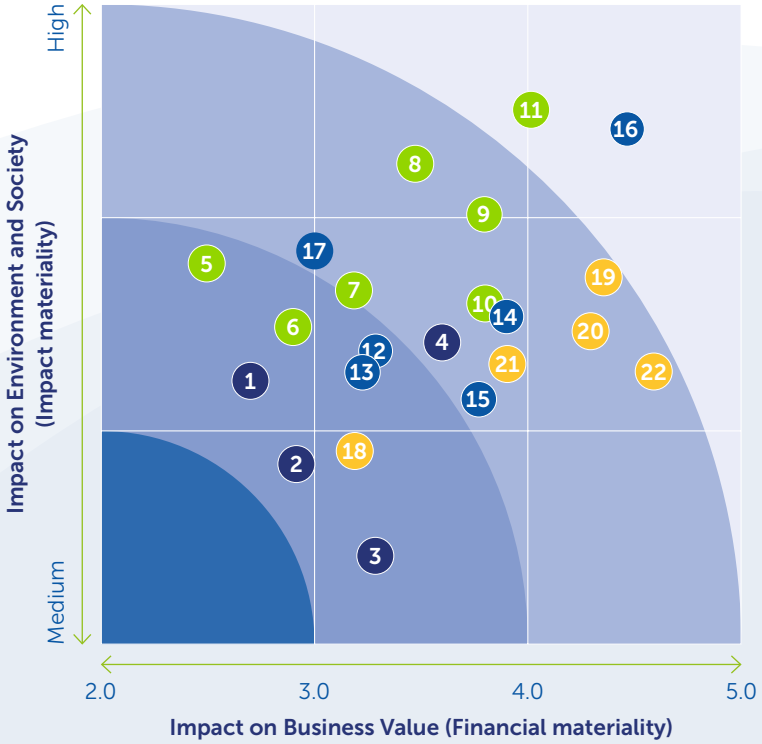
The basis of this report remains a demonstration of a clear understanding of the material sustainability issues that influence our business and how our operations affect local communities and the environment.

Our Double Materiality Assessment (DMA) continues to provide the starting point for this demonstration. Originally published in 2023 and retained for the 2024 reporting period, it focuses on sustainability topics that are material to our business in two respects:

1. The impacts of the company's activities on the environment and society; and

2. Sustainability issues that could impact on the performance of the company.

It established 22 material topics that should be reported against:



IMPACT ON ENVIRONMENT AND SOCIETY

1. Climate change adaptation
2. Transport congestion
3. Odour control
4. Emissions and air quality

ENVIRONMENT

5. Biodiversity and habitat protection
6. Efficient water use
7. Energy efficiency in business activities
8. Recovering Energy-from-Waste
9. Recovery and disposal of APCr (output)
10. Recovery and disposal of IBA (output)
11. GHG emissions

HUMAN CAPITAL

12. Diversity and equality of opportunity
13. Living wage
14. Career development and training
15. Community relations and education
16. Health and safety in the workplace
17. Modern Slavery

BUSINESS MODEL AND INNOVATION

18. Availability of raw materials
19. Regulatory compliance and policy development
20. Good governance and business ethics
21. Risk management
22. Business model resilience and financial performance

Reporting against these topics has once again been split into three headline themes within this report: **ENVIRONMENTAL, SOCIAL** and **GOVERNANCE.** Progress against each of these topics can be found within this report as follows:

ISSUE	DESCRIPTION	SECTION	PAGE
IMPACT ON ENVIRONMENT AND SOCIETY			
Climate change adaptation	Although the precise impacts of climate change are unpredictable, we aim to ensure that we are resilient and that our operations and supply chains are robustly procured.	ENVIRONMENTAL	42
Transport congestion	Vehicle movements are optimised to reduce impacts to communities by specifying the timing and routing of deliveries.	ENVIRONMENTAL	22
Odour control	Odour is controlled so that it does not negatively impact our communities.	GOVERNANCE	76
Emissions and air quality	Our facilities operate to the highest environmental standards, determined by our operating permits, so that we act as a good neighbour in the areas where we work.	GOVERNANCE	76
ENVIRONMENT			
Biodiversity and habitat protection	Biodiversity is essential for health, food security, disease control and livelihoods. Our aim is to protect and enhance biodiversity and habitat protection.	ENVIRONMENTAL	44
Efficient water use	We seek to reduce our consumption of water where possible.	ENVIRONMENTAL	43
Energy efficiency in business activities	During the processing of non-recyclable waste, some electricity and heat is consumed. It is key that energy efficiency is maximised to mitigate environmental impacts as well as reduce costs.	ENVIRONMENTAL	22
Recovering Energy-from-Waste	Our facilities help to produce baseload electricity. We can also help our local communities reduce their carbon emissions, through the provision of heat to service nearby homes and businesses.	ENVIRONMENTAL	9
Recovery and disposal of IBA APCr (outputs)	We seek to ensure that we are not reliant on landfill for the management of these residues.	ENVIRONMENTAL	38
GHG emissions	Climate change is one of the most serious issues facing our world today. We aim to reduce our emissions to support the path to net zero.	ENVIRONMENTAL	20

ISSUE	DESCRIPTION	SECTION	PAGE
HUMAN CAPITAL			
Diversity and equality of opportunity	We believe a diverse and inclusive workforce results in better performance for our organisation.	SOCIAL	54
Living wage	We recognise the importance of providing employees with a real living wage.	SOCIAL	52
Career development and training	Skilled, motivated employees are essential to the sustainability and reliability of our services. We provide high quality employment and champion local jobs when possible.	SOCIAL	52
Community relations and education	Having the support and trust of the local community is very important to us. We are an engaged neighbour and make efforts to maintain strong relationships with our local communities.	SOCIAL	58
Health and safety in the workplace	We continually develop and improve our occupational health and safety performance by providing a clear objectives framework, as well as fostering a culture of safety-first approaches.	SOCIAL	48
Modern Slavery	Our priority is to prevent modern slavery throughout our organisation and supply chain.	GOVERNANCE	79
BUSINESS MODEL AND INNOVATION			
Availability of raw materials	We rely on several materials which are essential to the operation of our facilities and monitor the supply chain to ensure procurement resilience.	GOVERNANCE	74
Regulatory compliance and policy development	We ensure that our operations comply with all permits and permissions.	GOVERNANCE	76
Good governance and business ethics	We have developed a structure and management processes to enable our sustainability commitments and responsibilities to be monitored and delivered.	GOVERNANCE	64
Risk management	We identify, assess, and manage risks and opportunities throughout our business.	GOVERNANCE	73
Business model resilience and financial performance	We ensure that the Company is able to deliver its strategy of creating long term sustainable value for all of our stakeholders.	GOVERNANCE	73

Key sustainability achievements in 2024

We made significant progress against our key Sustainability objectives in 2024. This timeline provides a snapshot of key achievements, explained in further detail within the Environmental, Social and Governance sections that follow.

FEBRUARY

Mayor of the West Midlands, Andy Street, visits Walsall ERF development

Dublin Waste-to-Energy welcomes Minister of State for Public Procurement, eGovernment and Circular economy, Ossian Smyth, for site tour

MARCH

Landfill Tax increase announced

Dublin reaches a key milestone: the successful treatment of its four millionth tonne of residual waste

APRIL

Statement of Principles signed with DESNZ to formalise commercial plans for the development of Protos CCS

MAY

Wellingborough IBA facility officially opened by Gen Kitchen MP

Interim 'on island' solution for Dublin IBA begins, signalling significant carbon reductions

Earls Gate ERF completes commissioning and enters operation

Encyclis formally signs up to the UN Global Compact

JUNE

Work starts on Dublin IBA processing plant

150 EfW experts from Europe-wide Prewin Network visit Newhurst ERF

Italy's Ambassador to the UK, Inigo Lambertini, visits Protos ERF

JULY

6 students from the BPP 'ESG in Law Award' summer vacation scheme complete summer placement at Encyclis

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AUGUST

DESNZ ETS team visit Rookery South as part of continued engagement

SEPTEMBER

HVO trial commences at Newhurst ERF

Cheshire West and Chester Council's planning committee unanimously resolved to grant approval for the Protos carbon capture project

OCTOBER

£21.7bn committed by the UK Government to Track 1 CCS projects (including Protos)

Government's Green Heat Network Fund provides £19m to enable commercial design and construction of a heat network in Leicestershire, using Newhurst ERF as its cornerstone

NOVEMBER

Community consultation begins for Rookery South carbon capture project

Handover of Walsall to Kanadevia Inova for construction, ahead of original schedule

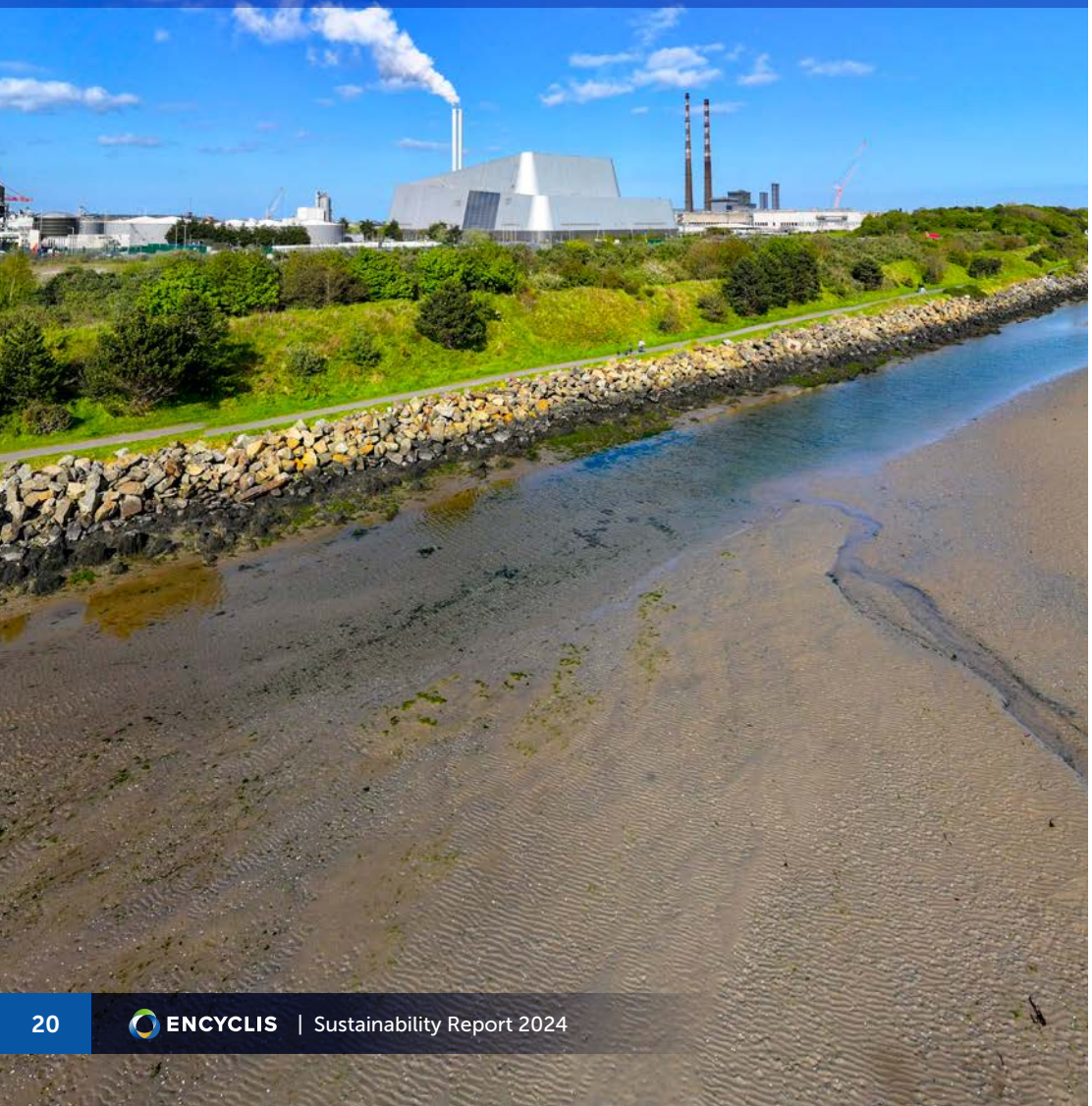
DECEMBER

Christmas charity initiative at Rookery South, providing donations to IMPAKT Housing & Support in Bedfordshire

Protos CCS granted UK's first environmental permit for carbon capture at an Energy-from-Waste facility

Encyclis DE&I Committee launched and first strategy approved

Section 4.
Environmental



4.1
Decarbonisation and operational efficiency

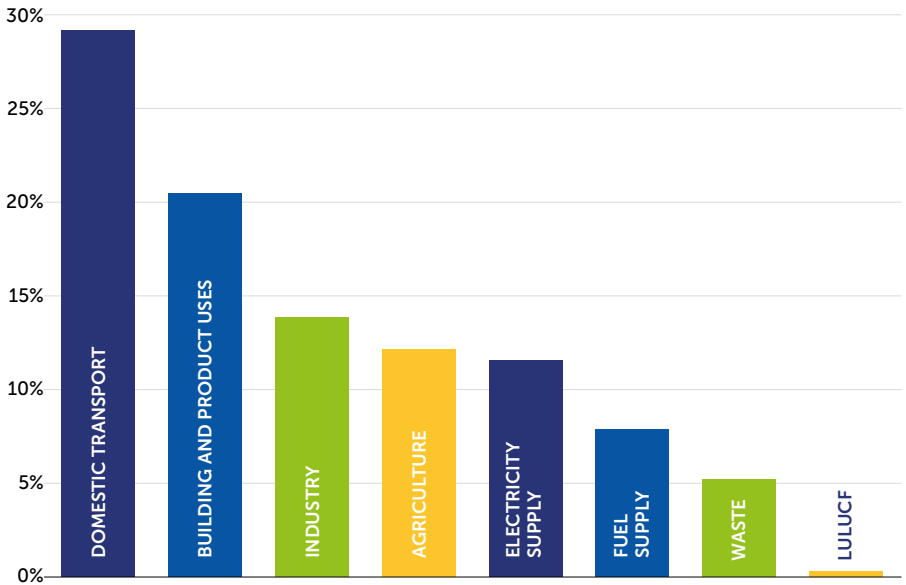
The presence of man-made Greenhouse Gases (GHG) in the atmosphere remains the primary cause of climate change and we have a key responsibility to help tackle it.

MINIMISING THE GREENHOUSE GAS EMISSIONS WE PRODUCE

Sending waste to landfill generates the highest amount of methane and carbon dioxide equivalent emissions in the waste hierarchy, as well as smaller quantities of other gases. Our work in diverting residual waste to treatment, rather than landfill, has been a factor in greenhouse gas emissions from the waste sector in 2023 being 72% lower than in 1990.[2]

Based on the latest Government data release, this means that the Waste sector is now responsible for just over 5% of UK GHG emissions (with methane accounting for around 90% of these). By comparison, 29% of GHG emissions came from domestic transport, 20% from buildings and product uses, slightly less than 14% from industry and over 10% from both Agriculture and the Electricity supply, as shown in the following graph.[3]

TERRITORIAL UK GREENHOUSE GAS EMISSIONS BY TES SECTOR, 2023 (%)



Source: Table 1,2, Final UK greenhouse gas emissions statistics 1990-2023 Excel data tables
Note: LULUCF is land use, land use change and forestry

Whilst the direction of travel is positive, the UK Government is committed to driving further progress in the sector. This desire has underpinned the proposed expansion of the UK's Emissions Trading Scheme (ETS) to cover emissions from Energy-from-Waste. In its currently drafted form, this will require EfWs to monitor their carbon emissions from fossil based waste streams, and to purchase and surrender carbon allowances commensurate with these emissions on an annual basis. Further detail on the proposed expansion of the ETS can be found within the GOVERNANCE section on page 67.

Accounting for this and our values and objectives, we are focused on delivering progress in three key areas to minimise our GHG emissions:

- Delivering carbon capture adjacent to our facilities to offset future emissions;
- Building all of our facilities to R1-standard to maximise their efficiency in practice; and
- Pursuing fuel switching for start-up of operations to reduce our direct emissions outside of carbon capture.

All of this requires a thorough understanding of where our emissions come from in the first place. We assure this through regulated monitoring systems to ensure uniform reporting and emissions verification.

2 Taken from 2023 UK Greenhouse Gas Emissions, Final Figures (February 2025)
3 Data taken from 2023 UK Greenhouse Gas Emissions, Final Figures (February 2025)

DEFINING OUR EMISSIONS AND ASSURING DATA QUALITY

We have calculated the GHG emissions of our operational portfolio for 2024 across Scopes 1, 2 and 3 in line with GHG Protocol Methodology, forming a robust basis to assess and tackle emissions across our portfolio. Our operational emissions have once again been calculated by IMS, an independently owned and operated consulting and verification services company specialising in carbon management, reporting and disclosure.

The emissions summary across our operational portfolio reflects the consolidation of emissions data according to the Greenhouse Gas Protocol reporting standards, principally the Corporate Accounting and Reporting Standard (2004), and the Corporate Value Chain Accounting and Reporting Standard (2011).

Assuring high quality data is of critical importance. For Scope 1 emissions (94.5% of our GHG inventory), we have advanced, continuous GHG emission monitoring systems in the stacks of all of our plants to measure and record CO_2 and N_2O emissions to a high level of accuracy and confidence. For Scope 3 emissions (5.5% of our GHG inventory), we use primary data wherever possible to improve the accuracy of our GHG inventory measurement. This includes closely tracking raw materials used, alongside monitoring and recording all transport movements in and out of our facilities through our advanced weighbridge monitoring system which enables us to track vehicle movements, load and vehicle types and points of origin/destination. Where primary data is not available, we apply best practice approach for dealing with hierarchy of data quality and apply as appropriate a hybrid or average approach to avoid under reporting.

Scope	Description
SCOPE 1	Direct emissions from operations. Over 94% of our emissions are Scope 1, of which over 99% are due to CO_2 being released during the combustion of waste, as measured by our Continuous Emissions Monitoring Systems (CEMS).
SCOPE 2	Indirect emissions from the use of purchased electricity, steam, heating, and cooling. Our Scope 2 emissions remain very low as we use the energy produced by our operations to power our facilities, rather than relying on third party sources, and during planned and unplanned outages, we procure renewable electricity. This means that all of our Scope 2 emissions are from contracted energy sources for our leasehold London Head Office.
SCOPE 3	Indirect emissions in the value chain, further divided into upstream and downstream emissions. The GHG Protocol defines 15 categories of scope 3 emissions. As in 2023, eight have been included as these sources are identified as material or relevant to our current reporting objectives. **UPSTREAM** • Goods & Services: embedded emissions in purchased goods and services • Energy Supply: embedded emissions in the purchase of fuels and energy in other activity categories • Transport Upstream: emissions related to the transport of goods upstream of the production process or any transport purchased by the company • Waste: emissions related to the disposal and processing of waste generated in operations • Business Travel: emissions related to transportation of employees for business related activities • Capital Goods: emissions from the production of long-lived tangible assets (like buildings, machinery, or equipment) purchased or acquired by the reporting company • Employee Commuting: emissions from the transportation of employees between their homes and workplaces. **DOWNSTREAM** • Transport Downstream: emissions related to the transport of goods downstream of the production process not paid for by the company.

OUR EMISSIONS PROFILE IN 2024

Our Greenhouse Gas inventory covers the footprint of our three core operational facilities at Dublin, Newhurst and Rookery South, as well as our London headquarters. The Operational Control approach under the GHG protocol is the most commonly used globally, as it represents the emissions from operations over which the reporting entity has full authority to introduce and implement operating policies.

As our Newhurst facility was only commissioned and handed over to us on 24 May 2023, this meant that 2024 was its first full year of operation. This was the principal contributory factor in a slight rise in overall emissions in 2024 to **806,843 tCO_2e** (2023: 744,607 tCO_2e).

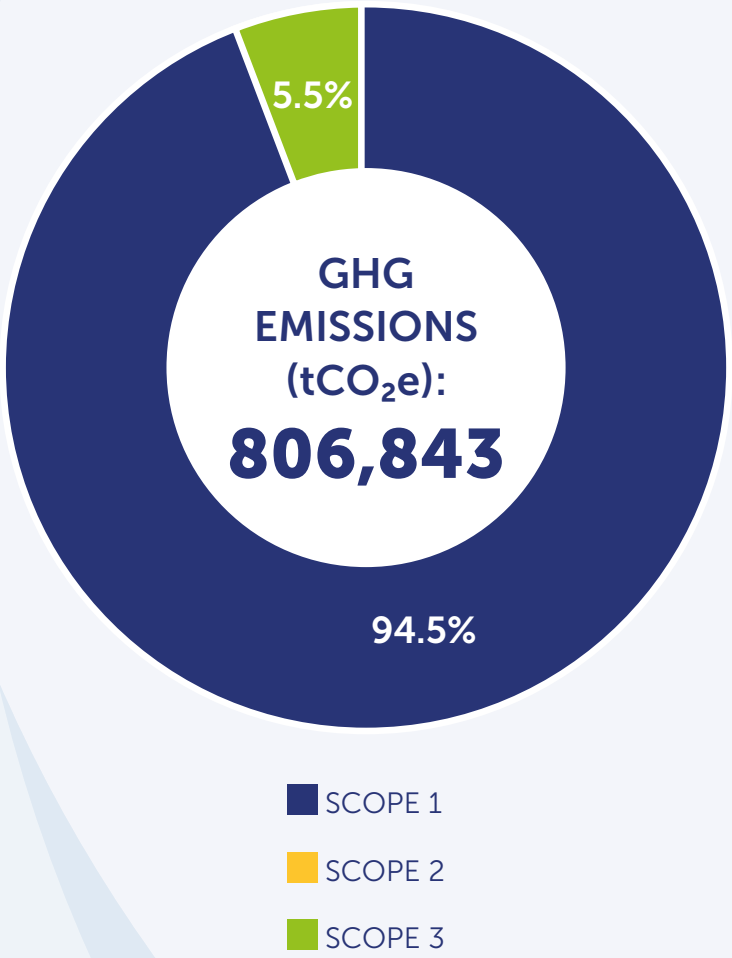
In time, the introduction of carbon capture and storage technology within facilities adjacent to our ERFs will dramatically reduce our future emissions profile. This is explained in further detail from page 28.

Two crucial initiatives were introduced in 2024 which we believe will reduce our emissions in 2025. The introduction of HVO as start-up fuel to replace diesel at Newhurst ERF, alongside the introduction of the first IBA recycling solution on the island of Ireland, are showcased in further detail within case studies on pages 26 and 40.

Encyclis GHG Emissions (Dublin, Newhurst, Rookery South and Corporate London HQ*)					Dublin	Newhurst	Rookery South
	2023 (baseline)		2024		2024		
Emissions Category	GHG Emissions (tCO_2e)	Percentage split by Scope (%)	GHG Emissions (tCO_2e)	Percentage split by Scope (%)	GHG Emissions (tCO_2e)		
Scope 1 (excluding biogenic CO_2)	699,542	94.0%	762,159	94.5%	293,511	178,607	290,040
Scope 2	5	<0.1%	8	<0.1%	0	0	0
Scope 3	45,060	6.0%	44,676	5.5%	14,530	6,759	23,187
Total emissions (tCO_2e)	**744,607**	**100%**	**806,843**	**100%**	**308,042**	**185,366**	**313,227**

** GHG emissions from London HQ are negligible compared to our operational sites. Scope 2: 8 tCO_2e, Scope 3: 199 tCO_2e. Total: 207 tCO_2e*

Note: Following the GHG accounting and reporting protocol, totals exclude emissions from Biogenic CO_2.



THE SOURCE OF OUR SCOPE 1 EMISSIONS

Our **Scope 1** emissions, direct emissions from operations controlled by Encyclis, represent 94.5% of the company's total emissions. As demonstrated by the table below, 99% of our Scope 1 emissions are Process emissions. These represent the release of greenhouse gases from our waste treatment processes.

Tackling process emissions is therefore our overriding priority in making a real step change in our carbon emissions and has underpinned our decision to be at the forefront of efforts to invest in the installation of carbon capture and storage (CCS) technology, acting as an industry leader for the remainder of the Energy-from-Waste sector.

OUR SCOPE 1 EMISSIONS ALSO CONSIST OF:

- **STATIONARY COMBUSTION**
  Emissions resulting from combustion of fuels in stationary sources
- **FUGITIVE EMISSIONS**
  Emissions resulting from the leakage of refrigerants or the direct release of greenhouse gases
- **MOBILE COMBUSTION**
  Emissions resulting from the combustion of fuels in company owned or controlled mobile combustion sources

OUR FULL SCOPE 1 BREAKDOWN FOR 2024 IS AS FOLLOWS:

ACTIVITY GROUP	EMISSIONS (tCO_2e)
Stationary Combustion	5,711
Process Emissions	756,087
Fugitive Emissions	17
Mobile Combustion	343

OUR SCOPE 2 AND SCOPE 3 EMISSIONS IN DETAIL

Our **Scope 2** emissions remain negligible across the portfolio when the methods for their calculation are accounted for.

Under the GHG Protocol, there are two distinct methods for Scope 2 accounting, each with a list of appropriate emission factors:

- A location-based method reflects the average emissions intensity of grids on which energy consumption occurs (using mostly grid-average emission factor data); and
- A market-based method reflects emissions from electricity that companies have purposefully chosen (or their lack of choice).

We again completed 'dual reporting' (both location-based and market-based emissions reporting) which the GHG Protocol endorses as best practice, and the table on p.23 shows our market based Scope 2 emissions.

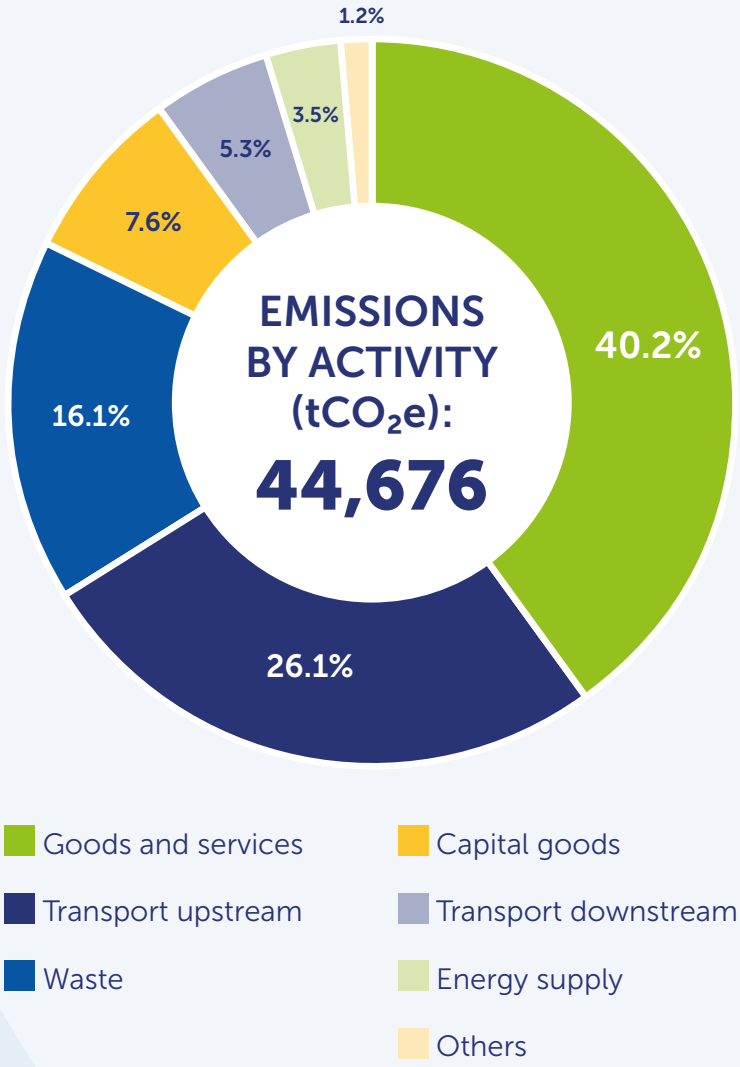
With our continued procurement of 100% renewable energy at our three core operational sites, our only Scope 2 footprint comes from our Corporate HQ in London. Energy procurement falls under the control of the building's landlord, with the lease for our office not specifying the type of electricity imported; the UK market average has therefore been used for Scope 2, with **8 tCO_2e** (2023: 5 tCO_2e) recorded in 2024.

With our 2023 baseline year providing us with a greater understanding of our **Scope 3** emissions, we were able to slightly reduce these in 2024 to **44,676 tCO_2e** (2023: 45,060 tCO_2e).

Most of our **Scope 3** emissions are associated with purchased goods and services (within which essential pollution control materials such as activated carbon, lime, sodium hydroxide, and ammonia represent the main GHG output). Other significant categories for us include emissions associated with inbound transport of waste and outbound transport of waste products, including Waste Generated in Operations such as incinerator bottom ash (IBA) and air pollution control residues (APCr), so we have focused our efforts on reducing these emissions where possible.

This included reducing downstream transport emissions for IBA from our Dublin Waste-to-Energy plant, following its treatment on the island of Ireland for the first time (see page 40) rather than being shipped to mainland Europe. The final shipment left in May 2024, meaning our emissions associated with shipping IBA were 152.8T/ CO_2e compared to 511.10 tCO_2e in 2023. There are still **Scope 3** emissions associated with the downstream transportation of IBA, but these are now limited to domestic transportation only.

OUR SCOPE 3 EMISSIONS IN 2024



Case Study 1

Replacing diesel with Hydrogenated Vegetable Oil (HVO) as start-up fuel at Newhurst ERF

In a UK industry first, our Newhurst ERF in Leicestershire used hydrogenated vegetable oil (HVO) as part of its start-up process in September. This directly replaced diesel in the Energy-from-Waste start up process to significantly reduce our stationary combustion emissions.

The achievement is the result of a 12-month research and development programme, led by Encyclis' principal engineer Shaun Tolley in collaboration with the Germany-based manufacturer of Newhurst ERF's burners, Saacke.

Made from certified renewable and sustainable waste, HVO is a fossil-free paraffinic diesel, meaning it can be used as a direct replacement for mineral diesel in industrial applications. This has two clear sustainability benefits: it helps to reduce net CO_2 greenhouse gas emissions by up to 95%, whilst supporting the circular economy through the reuse of materials.

In the case of Newhurst ERF, the switch to HVO versus conventional diesel saved over 300 tonnes of CO_2 emissions compared to using diesel throughout the year, whilst powering an identical start-up operation as before. The difference is driven by the stark contrast in the emissions intensity of the fuels: diesel emits 2.51 kg CO_2 per litre, while HVO emits just 0.0356 kg CO_2 per litre.

Metric	Value
Emission Factor – Diesel	**2.51 kg CO_2/litre**
Emission Factor – HVO	**0.0356 kg CO_2/litre**
Actual CO_2 Emissions in 2024 • from Diesel Use • from HVO Use	**492.67 tonnes** 488.23 tonnes 4.44 tonnes
Emissions if All Fuel Had Been Diesel	**801.14 tonnes**
Emissions Avoided by Using HVO	**308.47 tonnes**

Detailed testing at Saacke's Bremen facility covered a range of operational scenarios to determine the specific combustion properties of HVO and the technical modifications necessary to make the switch away from diesel. Following an initial delivery of 40,000 litres of HVO, the plant started up successfully in September. In practice, this means that this HVO is now fuelling the plant's auxiliary burners, plant vehicles and emergency generator, in turn reducing carbon emissions from Newhurst ERF.

Once longer-term performance testing is completed, we plan to expand the use of HVO to replace diesel across the rest of our fleet of energy recovery facilities. Subject to the outcome of the ongoing trial, the scheme will be expanded to Rookery South ERF.

This work, alongside the recycling of by-products from the treatment process documented elsewhere in this report, underpins Newhurst ERF's status as one of the industry's most sustainable facilities. This encouraged 150 sector delegates from the from Europe-wide Prewin Network to visit it in June, focusing on both its contribution to the circular economy as well as delivering operational excellence in practice.

Helps to reduce stationary combustion emissions by up to **95%**

AT A GLANCE

Location	Near Shepshed, Leicestershire
R&D partner	Saacke
Fuel used for start-up	HVO, made from certified renewable and sustainable waste
Date of initial pilot	September 2024
Stationary emission reduction versus diesel	95%
Plan for remainder of portfolio	To be expanded to Rookery South ERF, subject to ongoing testing

CERTAS:
SUPPORTING ENCYCLIS' HVO JOURNEY

Encyclis is delighted to partner with Certas Energy as our exclusive HVO supplier. Certas is the UK's leading independent fuel distributor, committed to driving the transition to cleaner energy. Its premium HVO, a drop-in biofuel derived from renewable resources, enables Encyclis to achieve up to 90% carbon emissions reductions from their diesel engines.

As a progressive energy transition business, Certas Energy has placed sustainability at the core of its growth strategy through investing in a diverse portfolio of low-carbon solutions, including air source heat pumps, solar panel, battery and EV charging under its 'Evolo' brand.

Encyclis' objectives resonate deeply with Certas' own commitment to halve its carbon emissions by 2030. Its well established ESG committee has oversight of the programme to achieve this, with 238 of its own vehicle fleet now running on HVO; this has resulted in an 11,311 tonne CO_2e reduction and a 35% emissions improvement compared to standard diesel. It has also rolled out SAFED (Safe and Fuel Efficiency) training to its drivers, yielding a 25% increase in fleet fuel efficiency and further demonstrating its commitment to sustainable practices.

We are at the forefront of implementing Carbon Capture

The UK's Climate Change Committee's Progress Report in July 2024 noted that the UK must accelerate the delivery of Greenhouse Gas Removals (GGRs) to stay on track to achieve net zero.[4] This approach encompasses the development of Carbon Capture and Storage (CCS) facilities to sit alongside EfW plants, recognised as the only credible route to decarbonise treatment of residual waste. CCS on EfW in the UK could capture up to 20MtCO_2 per year and help underpin the development of CCS infrastructure.[5]

We are proud to be working with Government in developing the UK's first of a kind commercial-scale carbon capture facility at Protos ERF in Cheshire, providing a clear reference point for the rest of the Energy-from-Waste sector to learn from. Our Protos Carbon Capture programme is planned to reach Final Investment Decision (FID) in H2 2025, representing a landmark moment for the EfW industry.

We also spent 2024 developing our Carbon Capture plans across the rest of our portfolio, clearly demonstrating our commitment to decarbonisation as well as providing a further economic impetus to regional economies.

SCAN THE QR CODE TO SEE HOW CARBON CAPTURE TECHNOLOGY WORKS IN PRACTICE

THE IMPORTANCE OF CARBON CAPTURE FOR DECARBONISATION AND THE UK ECONOMY

Carbon Capture's implementation across the Energy-from-Waste sector ultimately provides three key benefits to the UK.

BENEFIT	DESCRIPTION
GHG REDUCTION	The introduction of CCS will decarbonise EfW treatment of residual waste, supporting the sector to continue its essential sanitation role into the long-term. The ongoing operation of Energy-from-Waste also cuts the damaging methane emissions that result from sending residual waste to landfill.
DELIVERY OF GREENHOUSE GAS REMOVALS (GGRs)	ERM, the world's largest specialist sustainability consultancy, produced a report in November 2024 that CCS in the UK has the potential to generate up to 20Mt per year of Greenhouse Gas Removals (GGRs). GGRs are an essential tool for 'hard to abate' industries and EfW with CCS can deliver these at scale.[6]
A FURTHER SOURCE OF INVESTMENT AND JOBS	A range of new skills will be needed in the design and roll-out of carbon capture technology, creating new training and job opportunities in an expanding sector. In addition, carbon capture can help protect existing jobs in sectors and industries with carbon emissions that would be hard to abate by any other means. Both aspects are essential in the UK's bid to become a global leader in clean energy and net zero innovation, creating the opportunity to export skills, technology and expertise to other parts of the world. ERM also calculated that the UK's future CCS sector represents £19bn of investment by 2050, possessing the potential to generate over 14,000 green jobs and unlock nearly £40bn in Gross Value Added (GVA).[7]

4 Climate Change Committee, "Progress in reducing emissions 2024 Report to Parliament", 2024, available here: https://www.theccc.org.uk/publication/progress-in-reducing-emissions-2024-report-to-parliament/

5 https://www.erm.com/globalassets/insights/efw-with-ccs-a-key-pillar-for-net-zero-in-the-uk-151124.pdf (p.10)

6 In the natural carbon cycle, plants remove and store CO_2 from the atmosphere through the process of photosynthesis. Approximately 50% of residual waste in the UK will have come from biological sources originally, including wood, biowaste and food. This means that when we incinerate biogenic residual waste at one of our ERFs, biogenic CO_2 is released back into the atmosphere as it would have been in the natural carbon cycle. As this carbon would have been released anyway, the biogenic CO_2 that we emit does not contribute to our total GHG emissions, in accordance with the GHG accounting and reporting protocol.

7 https://www.erm.com/globalassets/insights/efw-with-ccs-a-key-pillar-for-net-zero-in-the-uk-151124.pdf (p. 3)

To help facilitate the transition of unabated gas and other combustion power plants, including ERFs, to a lower carbon solution, the UK Government has proposed the expansion of the scope of carbon capture readiness requirements (CCR) for installations in England. Under the "decarbonisation readiness requirements" (DR requirements), the Government's proposal expands upon the existing CCR rules and will, from implementation on 28 February 2026, require all in-scope new build and substantially refurbishing combustion power plants in England to demonstrate a credible path to decarbonise within the plant's lifetime through either conversion to hydrogen-firing or CCS retrofit.

APPLYING CARBON CAPTURE TECHNOLOGY ACROSS OUR PORTFOLIO

In order to reach net zero emissions, CCS technology will need to capture at least 50% of the CO_2 emitted across our portfolio. This is due to the average composition of the residual waste that we process being 50% biogenic (e.g. biowaste, paper and cardboard) and 50% anthropogenic (fossil based, e.g. plastics).[8]

Our programme to integrate carbon capture technology has begun with our planned CCS facility at Protos ERF in Cheshire, further details for which can be found within the case study on page 30.

Whilst the case study reflects the key planning, engineering and funding work that we undertook in 2024, our work at Protos has also supported our developing relationship with UK Government, in particular the Department for Energy Security & Net Zero (DESNZ), to accelerate the development and deployment of CCS. On 4 October 2024, we were delighted to attend the visit of Prime Minister Sir Keir Starmer MP, Chancellor of the Exchequer, Rachel Reeves MP and Secretary of State for Energy and Climate Change, Ed Miliband MP, to the Encirc glass factory in the HyNet cluster to confirm their multi-year investment in the programme. The Prime Minister's address to delegates on the day confirms its importance to the UK Government:

> We're reigniting our industrial heartlands by investing in the industry of the future... today's announcement will give industry the certainty it needs - committing to 25 years of funding in this groundbreaking technology - to help deliver jobs, kickstart growth, and repair this country once and for all.
>
> **Prime Minister Sir Keir Starmer, 4 October 2024**

8 Not all biogenic material can or should be recycled due to a combination of contamination, material composition, and infrastructure limitations. For example, tissues and paper towels are typically contaminated and unsuitable for recycling; pizza boxes with grease stains often fall into the same category. Items like coffee cups and laminated cartons are made from mixed materials (biogenic fibres lined with plastic or foil), which are difficult to separate for recycling. Additionally, human behaviour—such as incorrect sorting—can contribute to recyclables being diverted to Energy-from-Waste (EfW) facilities. This is a normal and often necessary outcome within current waste management systems.

Pursuant to the GHG accounting and reporting protocol within the Corporate Accounting and Reporting Standard (2004) and the Corporate Value Chain Accounting and Reporting Standard (2011), our total reported GHG emissions exclude emissions from biogenic CO_2.

Work at Protos has acted as a catalyst of our carbon capture plans across the rest of the Encyclis portfolio, beginning with Rookery South ERF, our largest facility. This took the form of two parallel workstreams in 2024.

The first was securing planning consent for a carbon capture pilot programme in support of the development of the Protos programme. The pilot plant, supplied and managed in partnership with specialist global contractor Kanadevia Inova, samples around 1% of flue gases from Rookery South ERF and produces data on process performance before releasing the CO_2 back into the facility's core system.

As a pilot programme, it has two principal aims:

- The results of the temporary installation will be accounted for in the final design of the full-scale carbon capture deployment at Protos ERF.
- The installation of the pilot plant in 2025 will also help showcase the technology to key stakeholders and funders who are supporting the Protos ERF carbon capture project.

The second was preparation work for a permanent carbon capture facility next to the existing Rookery South ERF. This has involved the development of an initial masterplan, pre-application discussions with Central Bedfordshire Council as the Local Planning Authority and running a full public consultation exercise between 4 November and 2 December, including two in-person events at Rookery South's dedicated visitor centre.

Following supportive and constructive public feedback, we are now working up a full planning application, accompanied by a full Environmental Statement, to Central Bedfordshire Council in the Summer of 2025, with determination anticipated in late 2025.

We remain committed to installing carbon capture technology at Newhurst ERF, subject to a gas distribution and storage network being made available for that purpose. We are also actively considering whether our Dublin Waste-to-Energy facility could incorporate a CCS development, given the availability of land and proximity to storage facilities in the Irish Sea. Any development in Dublin however will require an Irish or EU revenue support mechanism to make CCS commercially viable which we will continue to advocate for as a member of the CCSA, the lead European association accelerating the commercial deployment of CCS.

Case Study 2

The UK's first major carbon capture facility at an Energy-from-Waste plant at Protos

We made huge progress in 2024 in bringing forward the UK's first major carbon capture facility at an Energy-from-Waste plant at Protos in Cheshire – a Government-sponsored facility that will capture c.370,000 tonnes of CO_2 per year to remove up to 95% of emissions from Protos ERF.

Whilst 2023 was a year of planning and design work, 2024 has been a year of commercial progress through two key workstreams. The first was our work with UK Government's Department for Energy Security & Net Zero (DESNZ) to formalise commercial plans for the facility, signposted by a 'Statement of Principles' being signed in April to act as a guide for its development. This was followed by October's announcement that the Government has committed a 25-year funding programme, worth £21.7bn, to Track 1 CCS projects across the UK including Protos forming part of the UK's ambition to store 20 to 30 million tonnes of CO_2 per year by 2030 by using carbon capture and storage technology.

The other key workstream was securing the necessary regulatory approvals to enable its construction and operation. In September, Cheshire West and Chester Council's planning committee unanimously resolved to grant approval for the Protos carbon capture project, followed in December by the Environment Agency granting the facility the UK's first ever environmental permit for carbon capture at an Energy-from-Waste facility.

The facility forms part of HyNet, a low-carbon cluster which will implement carbon capture and storage and low carbon hydrogen infrastructure at large scale, enabling industry to decarbonise. HyNet's offshore transport and storage capacity for the first phase of its network is 4.5Mt per annum of CO_2, enabled through projects connecting to a repurposed Carbon Dioxide Spur Pipeline (led by Eni). CO_2 will be subsequently transported and injected for permanent storage in the depleted gas fields of Liverpool Bay. Eni submitted a planning application in March 2025 for its spur pipeline, with a decision expected later this year.

This progress has encouraged a number of key European stakeholders to visit the facility for themselves. In June, Italy's Ambassador to the UK, Inigo Lambertini, visited the site alongside a delegation of economic, environment and energy advisors from the European Union and the Italian Embassy.

Our focus in 2025 will be to reach Final Investment Decision (FID) stage. The Protos scheme also provides Encyclis with a key reference point in rolling out carbon capture technology across the remainder of its Energy-from-Waste portfolio.

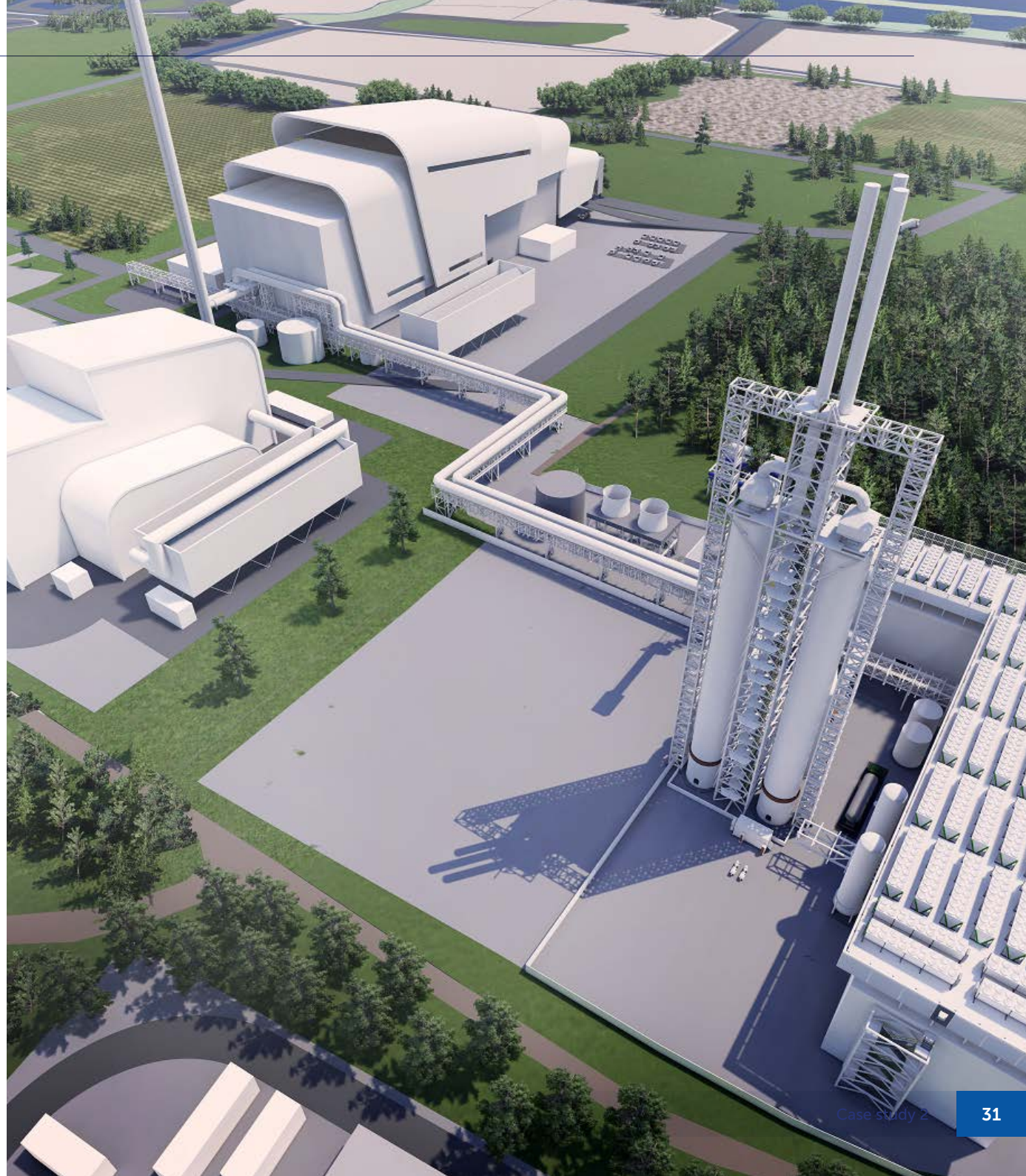
up to

95%

of carbon emissions from the ERF will be captured

AT A GLANCE

Location	Near Ellesmere Port, Cheshire
Capacity	c.370,000 tonnes of CO_2 to be captured, distributed and stored annually
Wider programme	Forms part of HyNet low carbon cluster
Public funding in place	Confirmed as part of UK Government's Track 1 CCS projects
Consents in place	Reserved matters planning consent secured; environmental permit granted
Build programme	Three year build programme following Final Investment Decision (expected H2 2025)
Focus of Encyclis' wider carbon capture programme	Securing planning consent for Rookery South ERF's facility, following planning application submission in 2025



4.2
Actively supporting the Circular Economy

Our commitment to supporting the circular economy is underpinned by two principal strategic activities: supporting the emergence of district heating across the UK and Ireland with our waste heat providing an anchor heat load, and recovering metals and ash from the UK's non-recyclable waste to reduce the use of primary materials.

SUPPORTING DISTRICT HEATING TO DECARBONISE THIRD PARTY BUILDINGS AND OPERATIONS

Harnessing waste heat from our Energy-from-Waste facilities to supply local heat networks can decarbonise nearby local communities, in turn helping both UK and Irish governments with their low carbon heating ambitions and directly supporting the circular economy.

The UK Government's ambition for district heating is demonstrated by the Energy Act (2023) which provides the powers for heat network zoning to be implemented in England in geographical areas where heat networks are expected to be the lowest-cost solution to decarbonise heat. In the Climate Change Committee's net zero scenario, 20% of the UK's heat market will be delivered via heat networks by 2050.[9] Similarly, the Irish Government has laid out its ambitions in its 2023 Climate Action Plan, stating that district heating could supply up to 2.7TWhr by 2030 (approximately 10% of Ireland's heating needs).[10]

Whilst our Earls Gate EfW facility began to deliver 33MW of heat to neighbouring industries in Grangemouth during 2024, our principal focus during the year was in working with experienced District Heat Network developers and operators to accelerate the development of three new networks across the UK, using the waste heat from our current and future ERFs.

9 https://www.gov.uk/government/publications/uk-heat-networks-market-overview/uk-heat-networks-market-overview-accessible-webpage
10 https://www.gov.ie/en/department-of-climate-energy-and-the-environment/publications/climate-action-plan-2023/

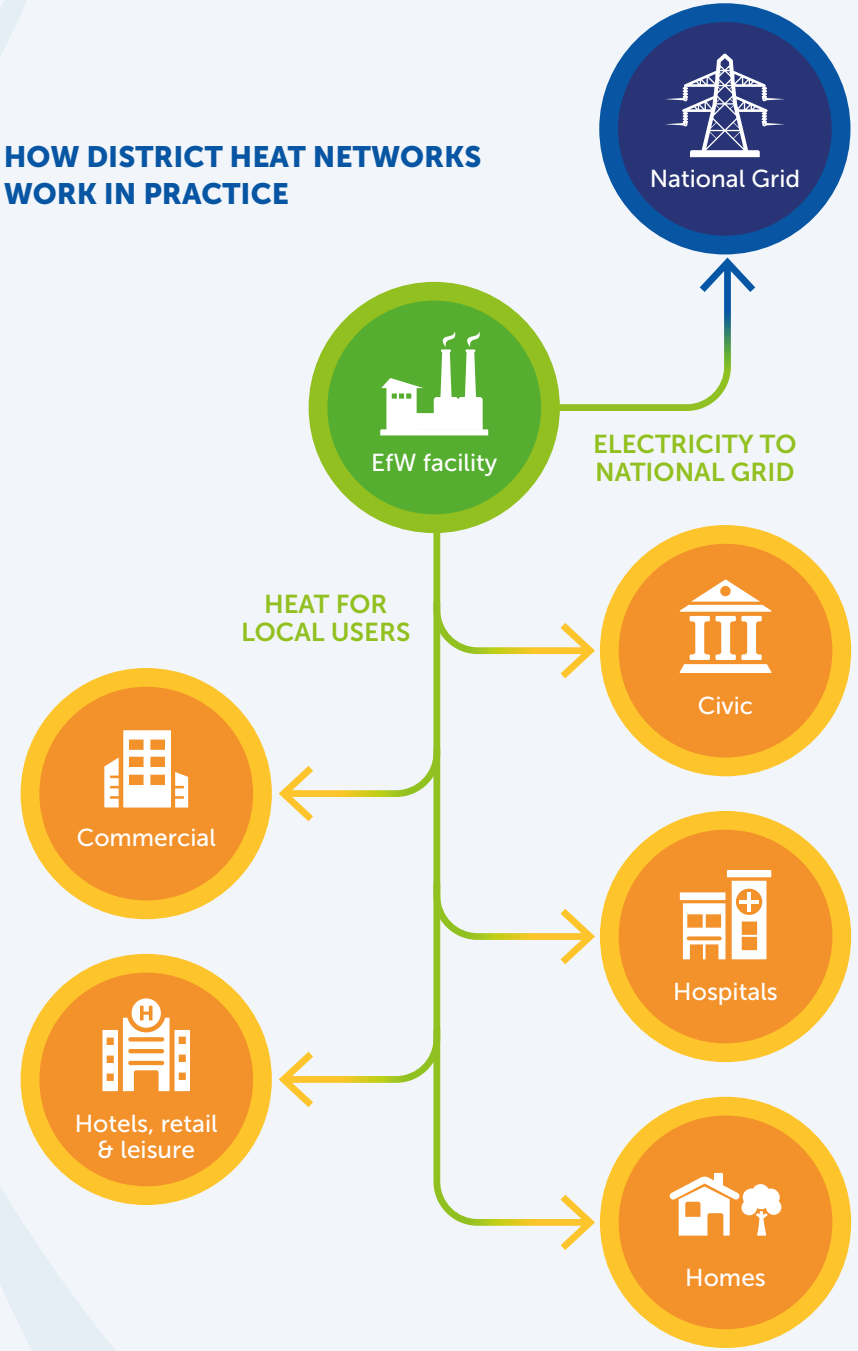
OUR ROLE IN DISTRICT HEAT NETWORKS

Waste heat generated by our facilities can be captured and distributed as an anchor heat load through below-ground, thermally efficient district heating networks to local homes and businesses - reducing its cost to offtakers and significantly improving its viability for heat network operators. Through supplying a range of customers with low carbon heating and hot water, the networks in turn displace gas-powered boilers, significantly reducing their carbon emissions as a result.

Heat networks can be various sizes and serve various combinations of building types. They can also be extended over time, and new heat demands and heat sources can be added to the network.

The networks themselves are straightforward to use. Heat can be brought into any building through a heat exchanger which, for a residential connection, is about the same size as a small gas boiler. All the same heating controls are available and to the end-user the central heating and hot water system works in the same way as a domestic gas-fired central heating system, without the need for any combustion to take place inside any buildings.

HOW DISTRICT HEAT NETWORKS WORK IN PRACTICE



WORKING IN PARTNERSHIP TO ACCELERATE THE DEVELOPMENT OF NEW DISTRICT HEAT NETWORKS

Successfully developing and operating district heating systems relies on strong partnerships between energy providers, local and central Government and other stakeholders, evidenced by our development work on four new networks.

NEWHURST

Our flagship future District Heat Network programme is at Newhurst ERF, where up to 18MW of waste heat will be captured through a below-ground, thermally efficient district heating network to local homes and businesses into a brand new network for North West Leicestershire.

This requires working with an experienced operator to build and run the network. Vital Energi ("Vital") has been selected as our heat network partner on this basis, given it has built and is operating some of the UK's largest district heat networks including in Manchester, Leeds and Glasgow.

Construction of the network is due to start in late 2025, with completion due by the end of 2027. Further information on this programme is provided in the case study on page 36.

ROOKERY SOUTH

Vital has secured £16.9m of Green Heat Network Funding from the UK Government for district heating development at Rookery South, taking advantage of the ERF's flue gas treatment system being designed from the outset to allow the possibility of extension and enabling the plant to offer steam or heat to future offtakers.

Vital plan to construct the infrastructure which includes heat recovery equipment plus a resilience energy centre which will take heat from the ERF and convert it into useable low temperature hot water prior to distribution via the network. Its planned network will be future-proofed for easy expansion to serve a number of nearby planned developments, with the potential to deliver circa 30MW of heat to up to 12,000 homes and commercial buildings.

With a detailed initial design now in place, both ourselves and Vital used 2024 to promote the network with potential nearby offtakers, prior to working up a planning application for the energy centre and pipeline for submission to Central Bedfordshire Council as the Local Planning Authority in the first half of 2025.

DUBLIN WASTE-TO-ENERGY

The Dublin District Heating Project (DDHP) is set to bring sustainable and modern heating solutions to the city, aiming to reduce carbon emissions significantly and support Ireland's climate goals. Whilst Dublin City Council is leading the development of the heat network, our Dublin Waste-to-Energy facility has been equipped with heat exchangers ready for integration with district heating as it develops. Once completed, the project will be the largest sustainable district heating system in Ireland, providing a range of environmental benefits and supplementing climate targets.

The first phase of the DDHP focuses on capturing excess heat from our facility to provide energy-efficient heating for buildings and water systems across the Poolbeg, Ringsend, and Docklands areas. In 2024, COWI, a global engineering consultancy, was appointed by RPS Group to help deliver this landmark district heating project, working closely with Dublin City Council on the design and planning stages. This work will continue into 2025.

Its development is sponsored by growing national support. In October 2024, the then-Government approved the General Scheme of the Heat (Networks and Miscellaneous Provisions) Bill 2024, the first standalone heat bill in the State's history. Included in the main provisions of the bill is the establishment of a Heat Network Authority, which the Government says "will provide a centralised approach to the strategic development of the district heating sector on a national basis".

WALSALL

Our fourth District Heat Network in development is linked to the ongoing build of our new Walsall ERF in Bloxwich, which is due to enter operation in 2028.

With this facility also being designed from the outset to enable the plant to offer steam or heat to future offtakers, we selected SSE Heat Networks (part of SSE Distributed Energy) to work with us to invest in, develop, build and operate a new heat network that will provide the ability for nearby commercial offtakers to significantly reduce their Scope 1 carbon emissions. SSE Heat Networks already has over a decade of heat and cooling network experience, operating 18 heat/cooling networks across the UK for a range of customers including universities, hospitals, and industrial clients.

Heat recovered from the Walsall ERF could provide up to 20MW of low-carbon heat for supply to a new network. SSE plans to develop and own an Energy Centre, alongside a network of insulated pipework that will link it to buildings across Walsall in supplying low-carbon heat to public and private buildings and facilities.

With Walsall Council setting a clear target for the Borough to achieve net zero by 2041, our work with SSE focused on two main activities:

- Working up an initial design, including determining the optimum location for the Energy Centre; alongside
- Promoting the scheme with potential off-taking customers, including Walsall Manor Hospital, alongside key stakeholders including Walsall Council and the West Midlands Combined Authority.

SSE plans to apply for Green Heat Network Fund in late 2025 to secure commercialisation and construction grant funding support for the project, alongside continued engagement with potential offtakers and undertaking pre-planning discussions with Walsall Council. Subject to planning and a positive funding decision, alongside the completion of Walsall ERF's construction, the network is projected to begin operating in 2028.

Case Study 3

Acting as the cornerstone for a new District Heat Network in Leicestershire

Working alongside leading low carbon solution business Vital Energi ("Vital"), the anchor waste heat load from Newhurst ERF will be captured through a below-ground, thermally efficient district heating network to local homes, businesses and public institutions.

Using waste heat from the Newhurst ERF can help significantly decarbonise nearby buildings that require a move away from gas, but only if an experienced operator is prepared to build and run the network. Vital was selected as our network heat partner due to their experience in building and operating some of the UK's largest district heat networks including in Manchester, Leeds and Glasgow. Vital will provide an end-to-end heat network service in Leicestershire, from concept and design through to installation and long-term asset management.

Vital completed extensive feasibility works in 2024 for a new heat network that could supply nearby sites including Loughborough University's principal campus close to the eastern side of Junction 23 of the M1. This work formed the basis of an application into the Government's Green Heat Network fund to accelerate its development and eventual delivery; £19 million of funding was confirmed in October for this purpose.

Subject to the receipt of planning consent from Charnwood Borough Council, Vital will begin construction of the network in late 2025 with completion estimated by the end of 2027.

As one of the potential heat offtakers, Loughborough University intends to be at the forefront of the fight to combat climate change – with a clear commitment to reduce its greenhouse gas (GHG) Scope 1 & 2 emissions to net zero by 2035 and Scope 3 emissions by 2045. Subject to the University entering an off-take agreement with Vital, the new Heat Network would provide heat to Loughborough's campus for 90% of the time – with the potential to deliver a 53% reduction in the University's Scope 1 GHG emissions in base case form.

This has the potential to expand our existing relationship with the University, with whom we have worked in both 2023 and 2024 to demonstrate a clear path between their undergraduate programmes and potential future careers within the Encyclis business. This included hosting a number of tours of our facility for Chemical Engineering students in 2023 and 2024, in readiness for the potential development of both Research & Development opportunities and graduate secondments in future years.

In a similar manner to Protos setting the tone for our wider carbon capture ambitions across the portfolio, our work at Newhurst ERF is informing our District Heating development work elsewhere. A review of our portfolio identified both Walsall and Rookery South as offering the nearest opportunities and with heat network partners now selected in SSE and Vital respectively, we intend to accelerate our progress in 2025.

£19m

Green Heat Network funding secured in 2024

AT A GLANCE

Location	Near Shepshed, Leicestershire
Development partner	Vital Energi
Quantum of heat	18MW
Funding source for network	Funded through both Vital Energi and use of £19m of Green Heat Network funding
Focus of work in 2025	Securing heat offtakers; build of network towards end of 2025
Development programme across the rest of portfolio	Taking forward programmes at Walsall (with SSE) and Rookery South (with Vital Energi)

RECOVERING MATERIALS FOR REUSE

Our other key circular economy programme is to recover as much as possible from the waste treatment process within our facilities in order to reduce the reliance on primary aggregates, particularly in construction.

Treating residual waste produces two residues: Incinerator Bottom Ash (IBA) and Air Pollution Control residues (APCr). IBA is our largest source of residual material, and is composed of the ash formed after the combustion of residual waste. It also contains metals that can be extracted for reprocessing and recycling. APCr is produced from cleaning the flue gases following the combustion process.

Recovering as much as possible from the treatment process involves three key activities:

- Recovering all available metals from IBA residues;
- Turning the remaining IBA residues (including concrete, ceramic, glass and brick remnants) into aggregates for use in construction; and
- Transforming APCr residues into a secondary aggregate known as Manufactured LimeStone (M-LS), which can be utilised to manufacture concrete blocks.

By providing a new future for this waste, we provide valuable metals and minerals for recycling – translating to the replacement of primary raw materials, while eliminating the GHG emissions associated with extraction.

TREATING IBA RESIDUES

As for 2023, IBA from both Rookery South ERF and from Newhurst ERF in 2024 was fully processed and completely recycled. The key difference was that by the end of 2024, all IBA residues from both facilities were treated at our in-house IBA recycling facility in Wellingborough, developed in partnership with Day Aggregates.

The facility, opened by Wellingbrough MP Gen Kitchen, became fully operational in May 2024 with the capacity to process around 200,000 tonnes of IBA per year from our core operational ERFs in the UK. Centred around an aggregate processing plant, the new facility uses the most up-to-date processing equipment to recover ferrous and non-ferrous metals.

Following metal recovery, remaining IBA is blended with a type-one aggregate to create Day Aggregates' EcoBlend® range of products. This recycled aggregate blend serves as a load bearing sub-base and back fill for roads, paths, driveways, car parks and structural bases, reinforcing a commitment to sustainable construction. This is in direct response to all new roads constructed in the UK needing to incorporate up to 30% of recycled aggregate base to improve environmental performance.

112,552 tonnes of IBA was received and recycled by the new facility in 2024; we expect this to be significantly exceeded in 2025 as the facility completes its first full calendar year of operation.

Around 15% of this overall tonnage was recovered in the form of metals for recycling; these include:

- Iron (Fe): Found in the ferrous fraction of the ash;
- Aluminium (Al): Recovered from the slag and ash; and
- Copper (Cu): Present in the non-ferrous fraction and can be selectively recovered.

> I'm delighted to formally open this facility, which represents a significant investment into our region. I'm passionate about the potential of this area as a hub for business, due to its central location, transport links and strong industrial track record. It's also important that we ensure commercial activity is sustainable and this aggregate manufacturing facility is an excellent example of that, taking a residual material that would previously have been discarded and turning it into a useful material that supports local construction. It's vital that we promote a more circular economy in this way.
>
> **Gen Kitchen MP at the opening of our dedicated IBA recycling facility, May 2024**

We also made significant strides in 2024 in establishing a way forward for all IBA residues from Dublin Waste-to-Energy facility to be recycled in Ireland for the first time, rather than exported elsewhere. Details of this pioneering work on the island of Ireland can be found on page 40.

TRANSFORMING APCr RESIDUES

We have continued to work with O.C.O Technology in 2024 to transform all APCr residues from Newhurst ERF into an environmentally friendly aggregate known as M-LS via the use of Accelerated Carbonation Technology (ACT). ACT treats APCr with carbon dioxide to enable its permanent capture at a higher level than the treatment and manufacturing process – producing a carbon negative aggregate known as Manufactured LimeStone (M-LS), which can be utilised to produce concrete blocks. 9,022 tonnes of APCr was taken from the Newhurst ERF in 2025 for this purpose.

APCr from Rookery South is currently treated chemically prior to recovery processing at a permitted facility. Longer-term, we will look to establish a similar partnership to what is in place for Newhurst ERF.

Our APCr from Dublin continues to be processed by NOAH at the facility in Langoya, Norway. The recovered material has achieved end of waste status and is beneficially used in land stabilisation.

IBA and APCr as % of waste processed in 2024

120,000

tonnes of IBA to be recycled on-island once operational

Case Study 4

Constructing the Republic of Ireland's first IBA processing facility

We announced a partnership with Beauparc in 2024 to build Ireland's first processing plant for bottom ash (IBA) from our Dublin Waste-to-Energy (DWtE) facility, a move that represents a significant environmental step forward.

Located at the Knockharley waste management complex on the outskirts of Dublin, the purpose-built plant will annually process up to 120,000 tonnes of ash that remains after the combustion of residual waste at the DWtE facility in Poolbeg. This will enable the extraction of ferrous and non-ferrous metals for recycling and unlocks the potential to produce secondary aggregates for local construction, thereby reducing the reliance on the mining of primary resources.

Construction work began in June 2024 and with commissioning now underway, completion is expected this year ahead of coming into service. It will support around 150 jobs during its build-out and employ 15 people in full-time roles once fully operational.

While aggregates derived from bottom ash are not currently approved for use in Ireland (unlike in the UK and a number of European countries) both we and Beauparc are hopeful that this restriction may be reviewed. Encyclis and Beauparc are currently discussing the relevant regulations with the Government and the Environmental Protection Agency (EPA), with the aim of helping to maximise the utilisation of existing resources for the circular economy.

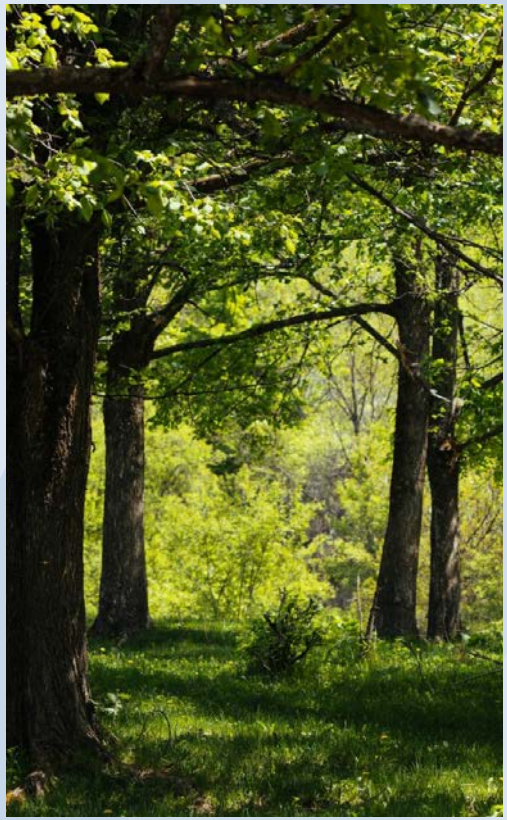
To cover the period during construction, we also established an interim agreement with Irish waste management company Panda (part of the Beauparc group) to manage the bottom ash from the DWtE facility. From May, Panda's Slane facility began to accept IBA from Dublin with a permit in place to process up to 120,000 tonnes of material per annum prior to the permanent facility coming on-stream.

These developments came forward in a milestone year for our Dublin facility, with the successful treatment of its four millionth tonne of residual waste being recorded in March. Our work in promoting the recycling of IBA will ultimately help sustain the facility into its second decade and beyond.

AT A GLANCE

Location	Knockharley, Dublin
Development partner	Beauparc
Circular economy contribution	Stops IBA residues being exported; recycled IBA can be used as secondary aggregate for construction projects
Planned plant capacity	Up to 120,000 tonnes of IBA to be recycled per annum
Target operational date	Late 2025
Employment outcomes	Supports 150 jobs during construction, whilst providing 15 full-time jobs once operational

4.3 Climate change and nature recovery



CLIMATE CHANGE ADAPTATION

The World Meteorological Organization (WMO) confirmed in January 2025 that 2024 was the warmest year on record, based on six international datasets.[11] A changing climate means that extreme weather incidents are becoming more common and more severe. This could have a direct impact on our business, on our supply chains, and on our consumers and markets.

In 2024, we focused on developing and completing climate change risk assessments for all of our operational facilities, preparing the company for extreme weather events to prevent operational interruptions, improve operational resilience and enhance business continuity.

In response to increasing global temperatures, our regulator in England, the Environment Agency (EA), updated its guidance around climate change adaptation in 2024 to ensure that climate impacts are considered as part of our management system.

- For permits issued by the EA on or after 1 April 2023, climate change adaptation planning needs to be integrated into the management system.
- For permits issued by the EA before April 2023, the management system should have already consider climate impacts; there is now an additional requirement to complete climate change adaptation risk assessments for these facilities.

Following the Environmental Agency's requirements for Permitted facilities to integrate Climate Change Adaptation planning within Management Systems, our Sustainability Committee issued a clear instruction for Climate Change Risk Assessments to be developed and introduced for each facility.

Using the EA's template and guidance, each facility has reviewed their preparedness for the impact of climate change and the impact on their operations, incorporating key considerations such as:

- higher average temperatures
- more heat waves
- rising sea levels
- changes in rainfall patterns and intensity
- more storms.

This has led to the response to key findings being included within operational documentation. At Rookery South ERF for example, flooding was identified as an issue to prepare for, leading to a related update of the facility's Emergency Response Plan.

Looking ahead:

- All plans will be annually reviewed to ensure their accuracy and relevance.
- We also have a long-term plan for the development of our Integrated Management System where Climate Change Adaptation will be included.

11 https://wmo.int/news/media-centre/wmo-confirms-2024-warmest-year-record-about-155degc-above-pre-industrial-level

MINIMISING WATER USAGE

Energy-from-Waste facilities consume water, which is supplied to sites by the assigned water company for that area. Most of the town water supplied into our facilities is transformed into steam to power the turbine that generates electricity. Our clear aim is to minimise water consumption across the portfolio, through both the design of our facilities and our continual approach to operations.

All of our core Energy-from-Waste facilities have been designed to achieve zero discharge of water within processes where the water can be reused. For example, any water discharged from a process such as boiler blowdown will be collected in a tank for reuse in the bottom ash extractor.

We have further bolstered this approach with specific scheme installations at each of our operational facilities:

FACILITY	WATER EFFICIENCY INSTALLATION
Rookery South	In 2024, we implemented a 'Reverse Osmosis' programme to produce demineralised water for operations. Our operations have previously rejected approximately 4m^3 per hour of unsuitable water, requiring removal from site through process consumption or water tanker removal. Our programme of utilising this rejected water involved installing equipment to set up a recovery reverse osmosis system to improve its quality, prior to recirculating it to the plant's town water supply system. The benefits of doing this are: • Reduced towns water usage for site; alongside • Reduced strain on site water balance, negating the need for water tanker removal. Between the system being commissioned in May 2024 and the end of 2024, we have reused over 4000 m^3 of water, saving significantly on town's water usage and improving the site's water balance. If this water were to be removed from site by water tanker, we would have needed approximately 200 tankers; our work has thus diverted a significant environmental and financial cost. This is in addition to our rainwater harvesting system, with collected rainwater being used to irrigate the facility's living wall.
Newhurst	Rainwater from the roof at Newhurst is collected for use as grey water (wastewater from non-toilet plumbing systems) for toilet flushing.
Dublin	Grey water from a nearby waste water treatment plant is collected and used, along with rain water, to ensure the plant is as water efficient as possible.

This work led to a slight overall reduction in water consumption across our portfolio in 2024 on a like-for-like basis in comparison with 2023, as shown in the table below.

FACILITY	2023 WATER USAGE	2024 WATER USAGE	CHANGE
Dublin	252,382 m^3	239,481 m^3	-5.11%
Rookery South	73,882 m^3	71,240 m^3	-3.57%
Newhurst	2,383 m^3* (monthly average)	3,024 m^3 (monthly average)	+26.89%

Notes:

1. *Our Dublin facility is responsible for a large proportion of our total water use. This is due to the use of a site-specific flue gas treatment that includes a scrubber, in line with the operational requirements of the facility.*
2. **Newhurst ERF's water supply reflects a full year of operations in 2024, whereas it was only operational for 7 months (May – December) in 2023.*

We will continue to develop our approaches to waste water recycling and minimising towns water usage across all three operational facilities, and to design in effective water harvesting in all of our future Energy-from-Waste facilities.

ENCOURAGING BIODIVERSITY AND NATURE RECOVERY

Biodiversity is essential for health, food security, disease control, and livelihoods. It also offers protection from environmental and ecological disasters.

Our biodiversity work has historically focused on:

- Minimising pollution during construction and operations, in compliance with Environment Agency requirements and our Environmental Policy Statement; alongside
- Supporting habitats close to our facilities, best represented by our work with the Forest of Marston Vale Community Forest Trust to support new tree-planting and rewilding in the area surrounding Rookery South ERF, in addition to the maintenance of an-site green wall and brown roof (as showcased in last year's Sustainability Report).

We supplemented this work in 2024 through taking part in two key Biodiversity-related PhD studies. The first, by Will Bugg at the University of Exeter, was entitled:

"Investigating how businesses understand their impacts on biodiversity, how they assess the associated risks and opportunities, and how resilience thinking can inform recommendations for improvement."

Through this study, Will conducted semi-structured interviews with sustainability teams within businesses to discover how they are approaching their interactions and relationship with biodiversity. In comparison to the impacts, opportunities and risks associated to climate, biodiversity presents new challenges, challenges which are intrinsically complex due to the non-fungible and multifaceted nature of biodiversity. Will's study explores opportunities in the context of socio-ecological resilience, discussing with corporate entities how they can adopt resilient processes that work for both biodiversity and their business operations.

Our interview explored how we are navigating our relationships with both climate and biodiversity, the employment of resilient techniques in our process of turning waste into energy, before discussing how Encyclis can take its efforts further.

It is hoped that the outcome of this study will add to the discourse that looks to understand how the economy can continue to grow, while also ensuring the impacts placed on the natural world are reversed. The research will then look to explore new solutions to how businesses can improve the resilience of the nature that they rely on to operate.

The second, by Patrick Oko Quaye who is undertaking a Management PhD at the same university, focused on the following:

"Business managers are key organisational actors whose decisions and actions shape corporate approaches to biodiversity and sustainability at large. Yet, there is still much to understand about how they interpret and respond to the challenges and opportunities in this space. This study applied a sensemaking approach to examine how managers navigate complex environmental and social cues, overcome barriers, and drive informed decision-making."

We provided direct insights from our operations to Patrick, offering a firsthand look at how sustainability, including biodiversity considerations, is integrated into our processes. One of his key findings following his site tour of Rookery South ERF highlights our key societal role:

> "Waste-to-energy systems are far more than just incineration; they play a vital role in advancing environmental and societal benefits. It was particularly fascinating to learn that Rookery South, part of Encyclis, was constructed entirely within a former pit—transforming a previously dump site into a facility with meaningful environmental and social impact."
>
> **Patrick Oko Quaye, PhD researcher at the University of Exeter**


Key Benefits
District heating systems deliver heat in a more efficient manner in comparison to individual boilers.
Reduces demand for primary raw materials by recovering ash and metals.
Contributes towards renewable and greenhouse gas emission reduction targets.
Here are just some of the key benefits of generating energy from waste.
Environmental
Energy
Resource efficient
Economic and local community benefits
Avoids emissions which would be produced from biodegradable waste if it was landfilled.
Reduces dependence on fossil fuels, decreases energy imports and contributes to security of supply.
Provides a solution for residual waste while generating renewable energy
Complements intermittent renewable energy sources such as wind and solar
Provides cost effective waste treatment solutions for households and businesses.
Diverts waste from landfill reducing greenhouse gas emissions.
Contributes to a limited use of land resources by diverting waste from landfill
Potential to decarbonise the gas network by producing hydrogen to inject into the grid.
H2
Waste-to-Energy (or energy-from-waste) facilities provide a safe, technologically advanced means of waste disposal that reduces greenhouse gases, generates clean energy and recycles metal.
Waste-to-Energy (WtE) is widely recognized as a technology that can help mitigate climate change. This is because the waste combusted at a WTE facility doesn't generate methane, as it would at a landfill. The metals that would have been sent to the landfill are recovered for recycling instead of being disposed of and the electricity generated offsets the greenhouse gases that would otherwise have been generated from coal and natural gas plants. WtE facilities are the only form of energy generation that actually reduces greenhouse gases.
Additionally, the energy produced at Waste-to-Energy facilities is reliable baseload power, meaning that it is generated 24 hours a day, seven days a week. That provides the opportunity to not only sell electricity onto the grid, but also provide steam delivered to houses, public buildings and industry.

4.4
Looking ahead: Our Environmental programme for 2025 and beyond

Our overarching Environmental goal remains unchanged: to reduce the greenhouse gas (GHG) emissions from our facilities as much as possible, support the waste hierarchy, and ensure that the waste processed at our plants is not wasted.

In 2025, the recycling of IBA, APCr and metals into secondary aggregates will continue to be an area of focus as Wellingborough enters its second year of operation. We will also continue to advance our carbon capture initiatives at Protos and Rookery, and work with our heat network partners to secure anchor offtakers for the heat generated by our plants. We remain mindful of the increasing risks posed by climate change and will continue to collaborate closely with regulators to carry out robust climate risk assessments and build long-term business resilience.

By taking a proactive, forward-looking approach, we aim to navigate potential climate or geopolitical disruptions effectively, maintain commercial stability, and continue being a responsible neighbour in the communities where we operate.

MINIMISING THE GREENHOUSE GAS EMISSIONS WE PRODUCE

IMPLEMENTING GHG EMISSIONS REDUCTION

- Continue the HVO trial at Newhurst ERF to understand emissions performance and operational impact, prior to application elsewhere in the portfolio
- GHG site inventories to be discussed with plant managers for comprehension of emissions sources and to plan improvements
- Sustainability team will action a deep dive into Scope 1 and Scope 3 emissions and will start to explore viable reduction opportunities
- Continued operation of all facilities to R1 standard, alongside build of both Protos ERF and Walsall ERF to R1 standard
- Explore opportunity to work in partnership with University College London to support research into fossil based plastic waste and interventions to achieve better environmental outcomes.

AT THE FOREFRONT OF IMPLEMENTING CARBON CAPTURE

DELIVERING OUR CARBON CAPTURE FACILITY AT PROTOS

- Reaching FID on Protos ERF's carbon capture facility in 2025, allowing early stage ground work to begin on-site by the end of the year to support operations to begin in 2028
- Investigate the opportunity to sell Greenhouse Gas Removals on the voluntary and compliance carbon markets.

DEVELOPING CARBON CAPTURE PLANS ACROSS THE REMAINDER OF OUR OPERATIONAL PORTFOLIO

- Submission of full planning application for proposed Carbon Capture Facility at Rookery South ERF by Summer 2025, ahead of likely determination by the end of 2025
- Operation of a carbon capture pilot plant at Rookery South ERF, in partnership with specialist global contractor Kanadevia Inova, sampling flue gases and producing data on process performance.

ANCHORING DISTRICT HEAT NETWORKS TO DECARBONISE THIRD PARTY OPERATIONS

ACCELERATING THE DELIVERY OF THE DISTRICT HEAT NETWORKS THAT WE'RE A CRITICAL PART OF

- Work with Vital Energi to secure anchor offtaker for new Loughborough Heat Network, using money from the Green Heat Network fund to use the waste heat from Newhurst ERF
- Continue discussions, alongside Vital Energi, with potential anchor offtakers close to Rookery South ERF as part of a new heat network for Bedfordshire
- Alongside SSE, develop plans for a potential District Heat Network for Walsall ahead of a Green Heat Network Fund application in the Autumn.

SCAN THE QR CODE TO VIEW ENVIRONMENTAL DATA TABLES

SUPPORTING THE CIRCULAR ECONOMY BY RECOVERING MATERIALS FOR REUSE

IBA, APCR AND METALS RECYCLING

- Continue to send all IBA from our UK operational plants to our dedicated IBA recycling facility in Wellingborough, with a processing capacity of c.200,000 tonnes of IBA per annum, to recover metals and secondary aggregates
- Commissioning and completion of Ireland's first IBA processing plant at Knockharley, with a processing capacity of up to 120,000 tonnes per annum.

CLIMATE CHANGE ADAPTATION

RESPONDING TO THE RESULTS OF CLIMATE CHANGE RISK ASSESSMENTS

- Carry out EA Climate Change Adaptation risk assessments at our operational sites for the second year in a row and continue to implement improvements where needed
- Support EQT as our principal shareholder with their climate change risk assessment as part of creating a proactive action plan across their entire portfolio.

ENCOURAGING BIODIVERSITY AND NATURE RECOVERY

BIODIVERSITY AND HABITAT PROTECTION ACROSS THE PORTFOLIO

- Continue to work with The University of Exeter on business impact on nature and biodiversity to inform their research
- Develop a framework for future nature site audits with McKinsey and Biomimicry, prior to trialling at one of our operational sites.

Section 5.
Social

5.1
Maintaining our ‘Safety First’ culture

Ensuring a safety first approach across all of our operations will always be our core value for our business. We want everyone who comes to work at our facilities, employees, contractors and visitors, to arrive at work safely, to work safely and to go home safely at the end of each shift or working day.

Safety First is demonstrated as being our key value by the leadership commitment that includes a quarterly Health, Safety and Environmental Committee that reviews performance and contributes to the strategic direction of the company so that it remains our number one value. In addition, there is a monthly management review of Health, Safety and Environmental data from the EcoOnline reporting platform that is undertaken by Senior Management and our Executive Leadership Team. Processes and forums are also in place in all of our facilities, ensuring that all observations and near misses are reviewed and feedback provided to those reporting the initial incident on EcoOnline.

Following the launch of both our 'Safety First' charter and six 'Safety Rules' in 2023, we focused on their application in 2024 through:

- The charter and rules being an integral part of all new starter and contractor inductions;
- Staff 1:1s and Personal Development Reviews (PDRs);
- Additional training events on specific risk areas;
- Undertaking monthly themed toolbox talks across all operational facilities that enhance the Safety First Rules and take lessons from observations and events from previous months to achieve continual improvement; and
- Acting on safety monitoring data within EcoOnline.

The success of this approach in 2024 is ultimately underpinned through our health, safety and environmental data. Fewer Health & Safety incidents per hours worked were reported in 2024 than in 2023, as the following section reflects.

ENCYCLIS' SIX CORPORATE SAFETY FIRST RULES

People and Plant Interface

Energy Systems

Dropped Objects

Working at Height

Confined Spaces

Lifting and Suspended Loads

HEALTH, SAFETY & COMPLIANCE PERFORMANCE IN OUR FACILITIES IN 2024

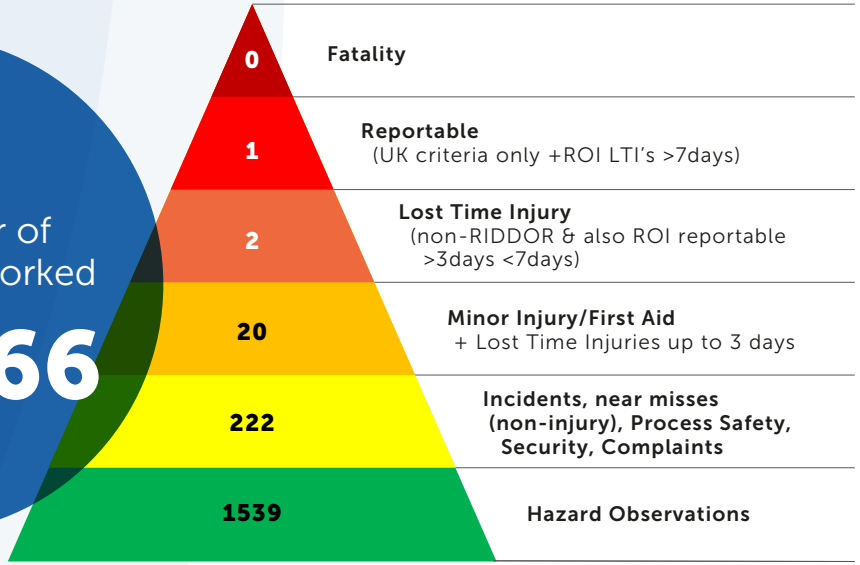
For this update of our Sustainability Report, we have combined UK and Republic of Ireland safety data from our operations to create a whole portfolio view for the first time, alongside a direct comparison with our 2023 performance. The data clearly shows a reduction in incidents as a proportion of total hours worked by our teams. The sole reportable incident during the reporting period was fully investigated with corrective actions implemented and lessons learned which were communicated throughout the organisation.

The continual reinforcement of our Safety First reporting culture also resulted in an increase in voluntary (hazard observation & near miss) reporting in 2024 versus 2023, part of our desire to maximise the use of EcoOnline to drive continuous improvement.

2023

Total number of person hours worked

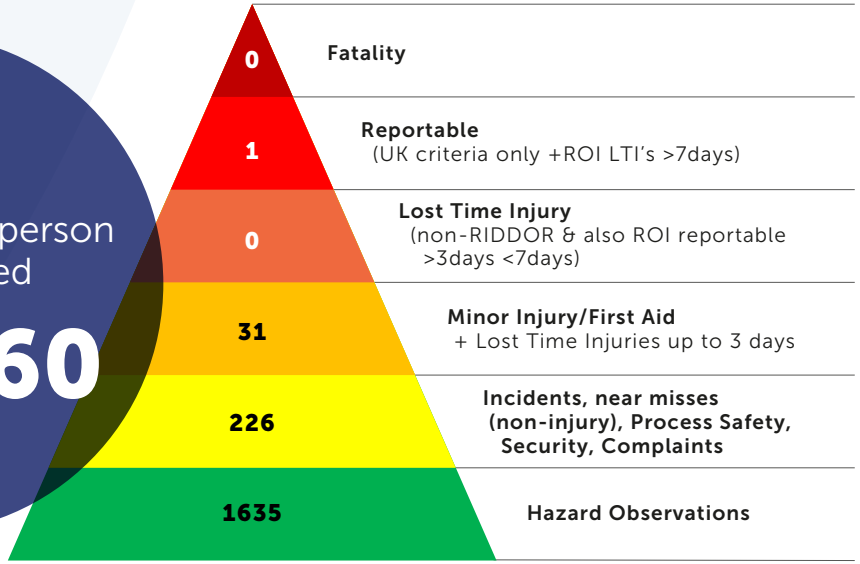
515,466



2024

Total number of person hours worked

629,760



DEVELOPING OUR USE OF ECOONLINE TO ACT ON REAL-TIME MANAGEMENT DATA

Regularly monitoring and acting on our safety management data is an essential part of keeping our facilities safe. With this in mind, our EcoOnline system for event reporting, inspections and auditing was further developed and enhanced throughout 2024, resulting in a measurable improvement in internal auditing; a total of 112 Internal Audits and 687 Workplace Inspections were completed across our operational facilities in 2024. These included 'Leading by Example' Health, Safety & Compliance Tours led by Directors that were successful in providing visible leadership, interaction and consultation with employees across our portfolio.

Since EcoOnline's launch in 2023, the data from this platform has also been actively monitored to identify a number of 'lagging indicators' - defined as a measure of the occurrence and frequency of past events, such as hazard observations, illnesses or serious incidents. These have provided the basis for targeted topic-specific monthly toolbox talks with the workforce, alongside 36 Health, Safety & Compliance pieces of communication being issued to specific members of staff.

TRAINING & MEASURES TO KEEP OUR STAFF SAFE AT WORK

Training and on-site measures to reinforce the 'Safety First' Charter and safety rules remain a central part of our health and safety approach. Specific training for our operations & maintenance staff and contractor personnel in 2024 included:

- Training to reinforce the Working at Height Safety First Rule; and
- An on-site workshop with global specialists in dropped object prevention, where staff and contractors received training on dropped object awareness and tool tethering.

This continued to be supplemented by 'Stop Work Authority' being enforced in all of our facilities in 2024, empowering all employees and contractors to initiate a 'Safety Stop' at work if a perceived unsafe condition, act, error, omission or lack of understanding could result in a safety incident.

A series of other improvements were made in 2024 in relation to permit compliance and the streamlining of operational risk insurance, alongside the maintenance of triple ISO certification at both Newhurst ERF and Rookery South ERF. This is explained in further detail within the Governance section from page 64.

5.2 Developing our people to be the best they can be

Our people are central to the sustainability and reliability of our services. In order to attract, develop, and retain the skilled staff that we need to support the transition to net zero, we act as an employer of choice. This means being a living wage employer, investing heavily in skills, career development, training and apprenticeships to make Encyclis a great place to work.

A STRUCTURED APPROACH TO CAREER DEVELOPMENT AND TRAINING

At the core of our offering is providing training and development that meets two specific objectives:

- Supporting staff to do their jobs more effectively through knowledge sharing and the development of new skills; alongside
- Meeting our legal requirements, particularly in relation to health and safety.

At a company level this involves undertaking a training needs analysis which determines the priorities for the business, prior to training being agreed and organised and subsequently monitored through our new learning management system which will be introduced from the middle of 2025.

This new system has been designed to bring together all existing training and training records into one place, providing alignment between all sites.

The system helps to solve one of our biggest training issues; ensuring our teams are up to date with training while balancing different working patterns and operational priorities across our portfolio.

This improved co-ordination brings both operational and cost efficiencies in properly planning when staff can be brought together versus relying on manual systems. The system also allows for the better planning and recording of Personal Development plans, and for Continuous Professional Development for staff in specialist roles to be properly monitored and audited.

QUALIFICATIONS

10 staff completed CMI qualifications in 2024, with a further 19 staff actively working towards achieving theirs by Summer 2025.

TRAINING WORKSHOPS

With a new Training Manager hired in 2024, our training workshops focused on both supporting staff to be more productive in reducing time on day to day tasks, as well as running open courses in time and stress management for any staff member to attend.

GROWING OUR APPRENTICESHIP & STUDENT PLACEMENT SCHEMES

We further extended our **apprenticeship programme** in 2024 whilst facilitating a series of student placements for the first time, growing the practical experience that we offer to support future careers and strengthen the talent pipeline for the company and the wider Energy-from-Waste and decarbonisation sectors.

Our well-established apprenticeship programme in Dublin welcomed a third apprentice in 2024, placed within Dublin Waste-to-Energy's Maintenance Electrical, Controls & Instrumentation team. All three apprentices are undertaking a four year apprenticeship in the following disciplines:

- Electrical Instrumentation; and
- Mechanical Automation & Maintenance Fitting.

Each programme is split into seven phases: four on-the-job (where the apprentices will work at Dublin Waste-to-Energy) and three off-the-job (where course content is delivered in college). Learning from the Dublin programme is directly influencing the launch of our first UK Apprentice programme this year - with the specific aim of building our own pipeline of skilled workers for harder to fill vacancies including Electrical, Control and Instrumentation Engineers. The project will begin the training of our first scheme and NVQ assessors, developing relationships with providers and local colleges close to our operational facilities.

This was supplemented by our first Student Placement programme, split into two areas:

- Eight young people joined us for short Summer placements which provided work experience and an insight into a number of our central business functions, including six students from the BPP 'ESG in Law Award' summer vacation scheme; and
- As part of our maturing partnership with Loughborough University, we welcomed an undergraduate studying for a BSc degree in Marketing and Management, for a one year student placement within our Procurement team at the nearby Newhurst ERF. The success of their placement will form the basis of future placements for the University's undergraduate students.

DIVERSITY, EQUITY AND INCLUSION (DE&I)

Hearing and acting upon different perspectives ultimately produces a stronger and happier workforce by acting as a catalyst for innovation and creativity, whilst improving employee engagement and supporting our recruitment programme. This underpinned the development and launch of our first Diversity Strategy in 2024, one of our key commitments from last year's Sustainability Report which provides a baseline and direction of travel for our DE&I activities.

Our strategy focuses on 'getting the basics right' and incorporates five key themes:

1. **Demographic data:** making sure we have demographic data about our teams which will allow us to engage in the right ways and support planning of future people-related policies.
2. **Talent development and apprenticeships:** recruiting and developing talent from a diverse range of backgrounds, alongside the formal launch of our UK Apprenticeship scheme.
3. **Avoiding discrimination and a diversity analysis of HR processes:** proactively avoiding discrimination and harassment both to meet new legislation and to further develop the culture of the business we want to be.
4. **Gender pay:** creating the company's first gender pay reports as a pre-cursor for further action.
5. **Improving the mental health of our employees:** The company will develop activities that promote positive mental health and provide support to staff at times when this is needed (explained in further detail later in this section of the report).

The delivery of this Strategy will be overseen by a Diversity and Equality group, comprising of staff from across the business which meets on a Quarterly basis to gauge progress and to set further direction against each of the five themes.

SUPPORTING OUR EMPLOYEES TO REDUCE THEIR CARBON FOOTPRINT

A key part of our efforts to reduce Scope 3 carbon emissions remains helping to reduce employees carbon footprint from business travel and commuting. Our key programmes in 2024 included:

- **The launch of Season Ticket loans in November 2024**, providing a flexible and cost-effective way for staff to travel to the London head office and reducing reliance on cars.
- **Our Electric Vehicle Lease Scheme** (launched in September 2023) continues to be popular with several new staff taking vehicles. This salary sacrifice scheme, delivered in partnership with Tusker, offers our employees the opportunity to drive a brand new fully insured and maintained electric vehicle to accelerate the transition away from internal combustion engine (ICE) vehicles. 41 staff have already taken up the use of this scheme, with further increases expected once facilities such as Protos become operational.
- **Our Cycle to Work Scheme**, launched in 2023 across the UK and Ireland, offers a cost-effective and sustainable travel option, with 15 staff members so far choosing to commute by bike through this Government-backed initiative.

ACTING ON THE RESULTS OF OUR EMPLOYEE ENGAGEMENT SURVEY

We conduct an annual employee engagement survey to gauge how well we are acting as a leading employer and to address any concerns raised by staff to keep Encyclis as a great place to work.

The 2024 survey was conducted over a five-week period between 13 March and 19 April 2024. All staff were invited to reply to the survey of which 68% of staff responded, with a fair representation from all functions and locations. The survey was delivered via a new platform, Korero, which provided a quicker completion rate for staff and swifter reporting versus previous years.

Results were once again strong: 78% of staff would recommend Encyclis as a great place to work. The two highlights were as follows:

- Staff believe that the company's key strengths include the quality of relationships with colleagues and managers alongside the focus on environmental and sustainability issues.
- Areas that require development include remuneration and recognition, and communication about the wider business.

In response to these results, we commissioned further activity in 2024 including the development of a new external website (which went live in Spring 2025) alongside making improvements to the layout and content of the company's intranet.

Follow up conversations post-survey also revealed an underlying theme of needing to support staff with their mental health whether this involved health, relationships, or managing finances and balancing work and home demands. We responded by offering workshops on time and stress management as well as finalising our initial training of Mental Health First Aiders, covering around 10% of the workforce including coverage across shift patterns and in different locations. Further detail is provided within the case study on page 56.

Case Study 5

The delivery of our first Mental Health First Aiders programme

We have a strong track record of ensuring the safety and physical wellbeing of staff across our sites. The results of our 2023 staff survey and the recovery from the COVID-19 pandemic have shown the need for us to further strengthen the Mental Health support we offer to our employees across all of our places of work.

We created a proactive programme of work to support the mental wellbeing of our staff, comprising two key elements.

PART 1: TRAINING A FULL COMPLEMENT OF MENTAL HEALTH FIRST AIDERS

Mental Health First Aid (MHFA) is an internationally recognised training course, designed to teach people how to spot the signs and symptoms of mental ill health and provide help on a first aid basis. In the same way as learning physical first aid, MHFA teaches people how to recognise those crucial warning signs of mental ill health and feel confident to guide someone to appropriate support. Embedding MHFA training within any organisation or community also encourages people to talk more freely about mental health, reducing stigma and creating a more positive working culture.

In order to create a network of properly trained and supported Mental Health First Aiders, we commissioned leading training provider OMS to provide a series of two day workshops both virtually and on-site, using recognised MHFA England materials.

These began at Newhurst in November 2023 and following the delivery of several others in 2024, we now have 38 Mental Health First Aiders (MHFAs) with at least three in place in each of our locations. This means that we now have a recognised network of MHFAs in place across our portfolio, ready for staff to contact for help should they need it. Staff can also choose someone from another location or team should they wish which allows for greater confidentiality.

PART 2: SITE-SPECIFIC INITIATIVES

This training, alongside the creation of a corporate MHFA group chaired by our Director of HR to provide support for staff, has acted as a catalyst for each of our principal business locations to run their own tailored Mental Health sessions for staff.
Examples include:

HEAD OFFICE

Staff at our Head Office in London took part in 'Health Week' in October, consisting of a programme including:

- A step count challenge;
- An office desk yoga session;
- Office massages to help relieve stress and improve posture; and
- A refresher session on the company employee health benefits and the work and support available through our Mental Health First aiders.

ROOKERY SOUTH ERF

Rookery South employees hosted a brunch event to mark World Mental Health day in October to make colleagues aware of the support available through their Mental Health First Aid team.

NEWHURST ERF

Staff have developed a comprehensive on-site programme which includes:

- A quarterly meeting at Newhurst for the MHFAs to discuss engagement and depersonalised actions with the management team as a standard agenda item (which has also been applied at Rookery South);
- A Midweek Mental Health Check-In every Wednesday, where MHFAs share some information and awareness for Team Leaders within the facility to cascade to their teams;
- A weekly Canteen Social to support team-building; and
- Creating dedicated space within the facility's first aid room should anyone need quiet or time out.

Our focus in 2025 will be on speeding up and increasing the resources available to our staff and MHFAs, including the creation of a dedicated area on "The Grid", the company's intranet.

AT A GLANCE

Basis of approach	Use of MHFA England approved trainers and materials to create a robust network of Mental Health First Aiders across the Encyclis business
Trainer used	OMS
Total number of MHFAs in place	38, covering all locations
Benefits of applying an MHFA programme	Provides appropriate, timely support for staff whatever their issue; encourages people to talk more freely about mental health; helps to create a more positive and supportive working culture
Key measures of success	Staff survey measures, tracking happiness and wellbeing of staff across the business

5.3 Being a good neighbour in the communities where we work

We extended our excellent track record of working with community groups and organisations close to our sites in 2024 to deliver social value, including work placements, site tours, the use of dedicated community funds and supporting the local supply chain where possible.

Dublin Waste-to-Energy

WELCOMING A RANGE OF VISITORS TO OUR FACILITY

In its eighth year of operation, Dublin Waste-to-Energy (DWtE) welcomed an increasing number of visitors to tour the facility, with 1966 visitors from 97 tour groups (2023: 1769 visitors from 88 tour groups) to learn about the operation and benefits of a Waste-to-Energy facility. This included 32 schools and 14 university visits, as well as an increased number of elected officials and members of the local community.

In February 2024, DWtE welcomed the Minister of State with responsibility for Public Procurement, eGovernment and Circular Economy, Ossian Smyth, for a comprehensive tour of the facility, followed by an engaging discussion on the waste and energy markets. Other notable visitors in 2024 included members of the Boards of both the Sustainable Energy Authority of Ireland (SEAI) and the Government-appointed Climate Action Committee.

Given the site's long established role in the community, we also welcomed local residents from the adjacent local communities of Sandymount and Ringsend for a presentation and tour of the facility. The feedback received was both a reflection of the operational excellence of the facility and the hard work of staff in making it a success.

A similarly full calendar of events has already been organised for 2025, tied to our ongoing investment in the island of Ireland's first IBA processing facility, showcased on page 40.

COMMENTS FROM SOME OF OUR VISITORS IN 2024 INCLUDED:

CONTRIBUTING TO LOCAL COMMUNITY PROJECTS

The long-established Dublin WtE Community Gain Fund continues to provide financial help to community-based clubs, groups, voluntary organisations, educational groups, individuals and businesses for the development of educational, environmental, community and recreational projects in neighbouring areas.

Five of the projects funded in 2024 included:

- Installing a Schools Sports Grass onto a concrete playground, for an all-weather, safe sports surface at Scoil Mhuire Girls Primary School in Sandymount;
- Developing a Café and Tranquillity Room Development at the Ringsend and Irishtown Community Centre;
- Contributing towards the Shellybanks Educate Together National School for Educational Resources;
- Installing a Community Automated External Defibrilator (AED) for Poolbeg Quay Residents; and
- Upgrading club facilities and maritime equipment at the 1st Port of Dublin Sea Scouts.

Our work at Sandymount School

A further key project funded in 2024 was the redevelopment of Enable Ireland Sandymount School's playground, which benefitted from receiving €88,000 from the Dublin Waste-to-Energy Community Gain Fund. The school is a co-educational special needs school providing a primary and second-level education for students aged between 4 to 18 with physical and other complex needs, with the playground forming a central part of the support it offers to students.

This is the latest funding award in recognition of the school's crucial work. Previously in 2021, the school was granted €220,000 by the fund to refurbish their hydrotherapy pool, specialised equipment and changing rooms to support young people for decades to come.

Newhurst ERF

DEVELOPING OUR RELATIONSHIP WITH LOUGHBOROUGH UNIVERSITY

With our Newhurst ERF just four miles from Loughborough University's main campus, we are developing a long-term partnership with one of the UK's top 20 research-led universities to provide local pathways into work for undergraduates and postgraduates, the development of placements and graduate secondments as well as supporting the delivery of its 'Creating Better Futures. Together' strategy for 2030 through the district heat programme explained on page 36. Longer-term, we believe significant potential exists for Research & Development projects.

Our initial focus has been on developing close links with its Chemical Engineering department. In February, 70 chemical engineering students and lecturers came for a tour of Newhurst ERF, focusing in particular on the treatment process, the potential of carbon capture and the use of chemical absorption within emissions control systems.

2024 also saw us welcome our first ever placement student, offering a one year placement within our Procurement team, based full-time at Newhurst ERF. Their success and experience in the role will influence future secondments, whilst their own views on the placement has given confidence to the University of our ability to provide high quality work as reflected opposite.

DEVELOPING OUR RELATIONSHIP WITH WIDER STAKEHOLDERS

We also continued to host regular liaison meetings with key community representatives throughout 2024, with the liaison committee itself (as well as Shepshed Town Council) touring the facility in Summer 2024.

"Encyclis distinguished itself as the only company in my search that was proactively working toward real change, not only focusing on what we can do now, but what we can accomplish in the future. Not only do they have multiple Waste-to-Energy facilities across the UK, a strong company culture and values that resonated with me, they have passionate people.

Working in my current position at Encyclis, I've had the privilege of being exposed to nearly every facet of the business. From managing my colleagues' expectations to initiating supplier negotiations worth millions of pounds, this experience has provided me with invaluable insights I plan to keep building upon. I've gained a deeper understanding of what our shareholders seek in suppliers and what drives the business as a whole, broadening my perspective and enhancing my critical thinking skills significantly.

I am especially grateful for all the staff in the Newhurst facility welcoming me with open arms. Working closely with senior management and the HSE team has been an incredible experience. Their support, guidance, and willingness to share their knowledge have made it both enriching and enjoyable."

Quote from placement student from Loughborough University

Rookery South ERF

Our community programme for Rookery South ERF in 2024 focused on three key elements: the efficient running and deployment of our Rookery South Community Trust Fund; engaging in fundraising and providing donations to local good causes throughout the year; and continuing to run our dedicated Visitor & Education Centre.

ROOKERY SOUTH COMMUNITY TRUST FUND

Grant applications continue to be invited on an annual basis from not-for-profit organisations within close proximity to Rookery South ERF. The fund prioritises those which promote renewable energy, energy efficiency and recycling.

A total of £121,083 was awarded in 2024. Key grant recipients included:

- **Maulden Parish Council** for Tree Planting and Verge Wilding;
- **Alameda Middle School** for the Installation of Solar PV Panels;
- **Safety Centre (Hazard Alley) Ltd** for a Safer Environment Project; and
- **Buddies of Broadmead at Broadmead Lower School** to build a Wellbeing Area.

CHARITABLE DONATIONS, FUNDRAISING AND VOLUNTEERING

An extensive employee-led programme of fundraising, donations and volunteering generated significant local benefits in 2024. This included the continuation of Rookery South Donates, an initiative launched in 2023 which makes items that are no longer needed, such as furniture and office supplies, available for reuse locally.

January

We donated a redundant fridge freezer to the NHS's 0-19 Children's Universal Health Services in Newport Pagnell for their small staff room.

March

The Radcliffe School in Wolverton, Milton Keynes received a large number of donated chairs as well as computer equipment such as keyboards and mice.

April

Five members of Rookery South ERF staff hiked 24 miles through The Chilterns, Bedfordshire in support of East Anglian Air Ambulance, raising an impressive £1,137.

In addition, Ampthill Climate Change Group received a number of surplus hi-vis vests which we rebranded for reuse by the group through local supplier Ink Print Solutions. These were then subsequently collected by the Mayor of Ampthill and her colleagues from Ampthill Climate Change Group at Rookery South.

July

Our rowing team returned to the annual Dragon Boat Race in Milton Keynes following their initial foray in 2023; the team rowed their way into the semi finals, raising £500 for Brain Tumour Research.

December

Throughout December, team members donated new and pre-loved items for IMPAKT Housing and Support, which helps families facing challenges of domestic abuse and homelessness. The Bedfordshire-based charity also collected donations of food, toys and household items from Rookery South to help families at Christmas.

5.4
Looking ahead: Our Social programme for 2025 and beyond

Our top priority within the 'Social' pillar of our sustainability programme in 2025 is our core value: 'Safety First'. We are advancing targeted Safety First initiatives and continuous improvement programmes to embed this commitment more deeply across all our operations.

As Encyclis continues to grow, building strong teams and investing in our people is also fundamental to long-term success. This year, we are placing a renewed emphasis on training and development, alongside expanding the range of mental health and wellbeing resources available to our employees.

Finally, maintaining open and meaningful communication with the communities in which we operate is essential. We will continue to engage proactively, listen to feedback, and host a range of visits across all our sites to strengthen our relationships with local stakeholders.

DEVELOPING OUR PEOPLE TO BE THE BEST THEY CAN BE

OUR PEOPLE DEVELOPMENT PROGRAMME

- Delivery of annual employee engagement survey, acting on the results accordingly
- Launch of the company's first UK Apprentice programme, building on our experience at Dublin in developing long-term relationships with providers and local colleges
- Implement our 'Diversity Action Plan', getting the 5 "Basics" right
- Implement a new Learning Management System which will allow us to better plan and manage training across the business
- Improve the range of Mental Health support resources available to staff and our Mental Health First Aiders, including via our corporate intranet.

SCAN THE QR CODE TO VIEW SOCIAL DATA TABLES

MAINTAINING A 'SAFETY FIRST' CULTURE

ENCYCLIS' 'SAFETY FIRST' PROGRAMME

- Implement several Safety First initiatives based around continuous improvement including completing a Health & Safety Culture Survey with TSO (the Health and Safety Executive's (HSE) Official Publications and Products Partner)
- Progress the objective to develop digitised Encyclis Site Inductions for all operational sites
- Implement software platform for Root Cause Analysis with a view of establishing a robust and effective RCA process.

COMMUNICATING EFFECTIVELY WITH LOCAL COMMUNITIES AND SUPPORTING LOCAL GOOD CAUSES

SUPPORTING LOCAL COMMUNITY PROGRAMMES

- At Rookery South ERF, we will continue to foster a positive relationship with the local community that we serve through a range of visits, including Cranfield Parish Council and with Bedfordshire Police (Rookery South ERF will host a close protection course for the force)
- At Newhurst ERF, we are planning visits from the Charnwood U3A Science and Technology group to strengthen our relationship with the local community whilst showcasing the advanced, innovative technologies within the facility itself
- Sustainability Council members will volunteer with English Community Forests to plant new trees and maintain woodlands.

EFFECTIVELY ENGAGING WITH LOCAL STAKEHOLDERS

- Continuation of Quarterly liaison meetings at all operational facilities to maintain strong links with key local stakeholders
- Closely work with Walsall Council and KVI (as principal contractor) to maximise the social value delivered through the build of the Walsall ERF.

Section 6.
Governance

6.1
Effectively overseeing, managing and promoting sustainability

EFFECTIVELY OVERSEEING AND MANAGING SUSTAINABILITY

Responsibility for our Sustainability programmes and their outcomes is clearly defined within our Governance structure, with the business adopting a clear three-tier model of responsibility as shown on the diagram opposite.

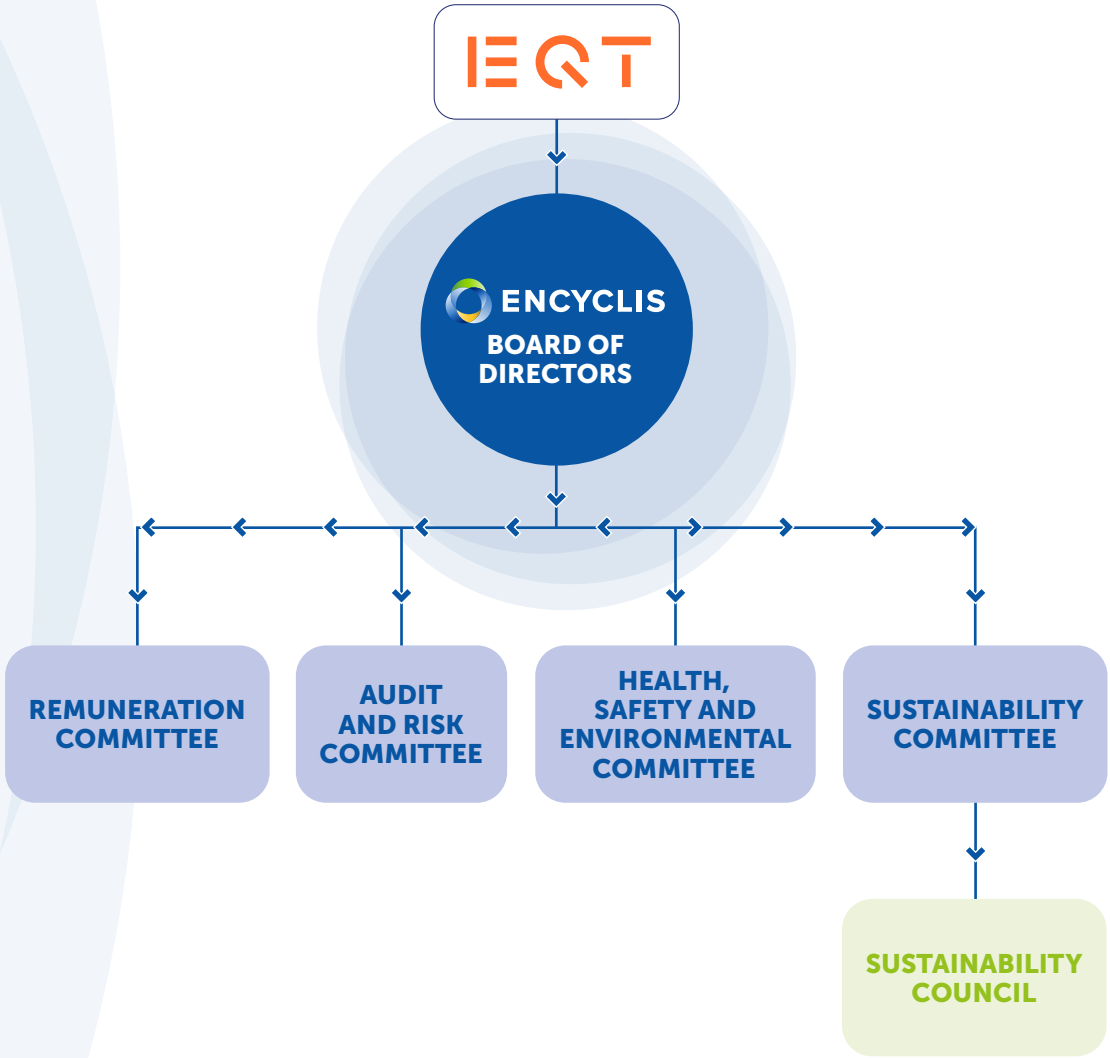
OUR BOARD OF DIRECTORS is responsible for approving our Sustainability Report and in assessing progress via a standing quarterly item at Board meetings. It is led by an independent Chair, with a number of external experts appointed to the Board as Non-Executive Directors that provide critical challenge to the company's Executive Leadership Team (ELT) on all sustainability matters. The ELT, through our Chief Executive Officer, oversees the delivery of our sustainability commitments throughout the year. Further details on our Board can be found via the QR code below.

SCAN THE QR CODE FOR FURTHER DETAILS ON OUR BOARD OF DIRECTORS

OUR SUSTAINABILITY COMMITTEE sets the company's Sustainability commitments. Comprising a majority of Non-Executive Directors including the Chair of the Board and the Chair of the Audit & Risk Committee, it meets on a quarterly basis and is responsible for:

- Following current trends and identifying emerging sustainability risks and developments in the regulatory landscape (such as the EU's Corporate Sustainability Reporting Directive), in turn advising the Board on changes required;
- Overseeing the regular review and updating Encyclis' policies and procedures including the review, edit and approval of the Sustainability Report, as well as the controls for the collection, management, and monitoring of sustainability information; and
- Reviewing and monitoring the mechanisms for stakeholder engagement and advising the Board on their results.

OUR SUSTAINABILITY COUNCIL acts as a 'critical friend' in the delivery of our Sustainability programme. The Council is comprised of ten subject matter experts who together have different technical expertise and perspectives from across the portfolio. The Council meets quarterly and is chaired by Victoria Merton as Director of Sustainability reporting directly to the Chief Executive Officer and the Encyclis Board. To ensure alignment, the Chair of the Sustainability Committee engages directly with the Council on an annual basis.



PROMOTING THE KEY SOCIETAL ROLE OF ENERGY-FROM-WASTE

We continue to promote the role of Energy-from-Waste as a contributor of essential social infrastructure with governments and other stakeholders through our membership of several industry groups and trade associations. This helps to ensure the development of policy to support decarbonisation, the circular economy and continued investment in Energy-from-Waste and related facilities.

INTERNATIONAL TRADE BODIES

European Waste Management Association (FEAD)

FEAD promotes the circular economy by representing Europe's private resource and waste management industry.

Confederation of European Waste-to-Energy Plants (CEWEP)

CEWEP is the umbrella association of the operators of Waste-to-Energy plants, representing about 410 plants from 23 countries. Its members, including Encyclis, are committed to ensuring high environmental standards, achieving low emissions and maintaining state of the art energy production from remaining waste that cannot be recycled in a sustainable way.

The Carbon Capture and Storage Association (CCSA)

The CCSA is the lead European association accelerating the commercial deployment of carbon capture, utilisation and storage (CCS) through advocacy and collaboration.

The UN Global Compact

We became a signatory to the ten principles of the UN Global Compact (UNGC) in 2024, a framework that requires businesses worldwide to adopt sustainable and socially responsible policies, and to report on their implementation.

The UNGC asks companies to embrace, support and enact, within their sphere of influence, a set of core values in key areas including human rights, labour standards, the environment, and anti-corruption.

UK TRADE BODIES

Environmental Services Association (ESA)

The ESA is the trade body representing the UK's resource and waste management industry, focused on promoting the role of its members delivering a sustainable, low-carbon economy through its recycling, resources and waste management work.

Resource Recovery UK (RRUK)

Chaired in 2023 and 2024 by Owen Michaelson (CEO of Encyclis)

RRUK is the leading alliance for UK Energy-from-Waste operators. Its purpose is to promote the essential role of EfW in the UK's circular economy and to advocate its contribution to a greener, decarbonised future.

Chartered Institute of Wastes Management (CIWM)

Founded in 1898, CIWM (the Chartered Institution of Wastes Management) is the leading professional membership organisation for individuals in the sustainability, resources and waste management sector.

IRELAND TRADE BODIES

Irish Waste Management Association (IWMA)

The IWMA is a trade association for waste management companies in Ireland. All of its members work towards the Rules of the Association to ensure that they provide waste management services to the public and to businesses in a professional and ethical manner.

Irish Business Employers Confederation (IBEC)

IBEC and its trade associations work with the Irish Government, policymakers and other key stakeholders with evidenced-based policies designed to positively shape business conditions and drive economic growth.

OUR UK POLICY PROGRAMME

Our 2024 programme, both through our own efforts and as part of our trade memberships, responded to the rapidly evolving policy commitments of two different Governments. Whilst our efforts with the previous Government were in response to the short-lived pause on the issuing of new permits for EfW facilities (announced in April), the majority of our programme ultimately focused on three key forward-looking matters:

- The consultation on the proposed expansion of the UK's Emissions Trading Scheme to include EfW facilities; alongside
- The new Government's desire to accelerate the pace of carbon capture and storage development, including its affirmation that any new EfW facility must be 'CCS enabled'; and
- EfW's continued role as essential social infrastructure, reducing emissions from landfill and being an enabler of growth in the regions.

EfW facilities equipped with CCS can generate carbon removals because approximately 50% of the waste processed is biogenic, meaning it originates from organic materials like food and paper. Through the natural carbon cycle, plants absorb CO_2 from the atmosphere as they grow. When these materials decompose or are combusted without capture, that carbon is re-released. However, with CCS in place, the biogenic CO_2 is permanently stored instead of returning to the atmosphere, effectively removing past emissions and creating Greenhouse Gas Removals.

PROPOSED CHANGES TO THE EMISSIONS TRADING SCHEME (ETS)

The proposed inclusion of Energy-from-Waste into the UK Emissions Trading Scheme (ETS) represents the most significant policy shift for our industry in a generation. In 2024, we prioritised policy advocacy to ensure a workable framework for this transition.

We ultimately support the expansion of the ETS as the cornerstone of the Government's net zero ambition, helping to provide incentives to accelerate decarbonisation. Its incorporation must be handled with the utmost care however to prevent unintended negative consequences, most notably the risk of waste shifting down the hierarchy to landfill that would significantly increase Greenhouse Gas emissions.

This formed the basis of our extensive response to the ETS consultation released in Summer 2024, prior to repeating these points with both senior DESNZ officials and Sarah Jones MP, Minister of State at both the Department for Energy Security and Net Zero, and the Department for Business and Trade.

As things stand and ahead of the Government's formal response to the consultation, there will be a two year transitional phasing period to new arrangements from 1 January 2026. In this period emissions will only be monitored, reported, and verified, whilst there will be no obligation to purchase and surrender UK ETS allowances until 2028. As the transition date approaches, we are continuing to urge the Government to use the proposed monitoring, reporting and verification (MRV) only period (2026-2028) effectively through the establishment of robust MRV systems whilst issuing guidance that enables fair billing mechanisms, laying the groundwork for the successful transition to a new ETS framework.

In 2024, DESNZ also consulted on integrating Greenhouse Gas Removals (GGRs) into the UK ETS. We are supportive of this proposal, as bringing GGRs into scope could stimulate further investment into CCS, in turn generating carbon removals that are essential to net zero.

PROMOTING CARBON CAPTURE AND STORAGE

As part of our role in partnering with DESNZ to deliver the UK's first major carbon capture facility allied to an EfW, we participated in a number of promotional events that emphasised the pivotal role of CCS in securing growth, achieving climate goals and transitioning to a low-carbon economy.

As emphasised in the Environmental section, the UK Government confirmed £21.7 billion in funding for five CCS projects across two clusters, including for a new facility at Protos ERF. Members of our management team discussed our plans in person at the announcement with Prime Minister Sir Keir Starmer MP, Chancellor of the Exchequer, Rachel Reeves MP and Secretary of State for Energy and Climate Change, Ed Miliband MP, including the potential application of CCS across the remainder of our portfolio and the policy incentives that could accelerate its delivery.

Encyclis CEO, Owen Michaelson, meeting with Prime Minister Sir Keir Starmer

WIDER WASTE ISSUES: ENERGY-FROM-WASTE CAPACITY AND RECYCLING

We also continue to engage with Government departments on a regular basis on both the future of Energy-from-Waste capacity and the policy mechanisms required to increase recycling rates, reaffirming EfW's role as essential social infrastructure.

Energy-from-Waste Capacity

The Government's current position on the future of Energy-from-Waste was clarified through the Department for Environment, Food and Rural Affairs (DEFRA) publication of its long anticipated Residual Waste Infrastructure Capacity Note for England. This capacity note is intended 'to support decision makers in planning for residual waste treatment, to support the transition to a circular economy' and:

- Explores likely waste arisings forecast following the implementation of DEFRA's packaging reforms (Simpler Recycling, a Deposit Returns Scheme for drinks containers and Extended Producer Responsibility for packaging); and
- Considers the non-recyclable waste infrastructure treatment needs as a result of the packaging reforms.

The modelling undertaken for the note indicates that there is likely to be sufficient residual waste infrastructure capacity to treat England's forecast municipal residual waste arisings. More support is required however to move waste further up the waste hierarchy and incentivise circularity. Future EfW facilities will have to meet "strict" new criteria on local and environmental conditions.

We broadly welcome the note and its findings, which reflect several areas of alignment with our priorities:

- The note advocates having the right makeup of waste treatment capacity in the UK. This correlates with our view that residual waste should be treated by the most efficient facilities that can demonstrate the pursuit of decarbonisation.
- It also makes clear that any future Energy-from-Waste developments need to capture and make use of their waste heat, as well as being built carbon capture ready. We are strongly supportive of this position, given our portfolio supports both decarbonisation and the circular economy.
- Finally, the note refers to a statutory target that, by the end of 2042, residual waste in England must not exceed 287kg per person (a 50% reduction from 2019 levels). It is clear that our portfolio of ERFs will have a significant role to play in continuing to treat part of the c.17.6 million tonnes that will need to be effectively treated rather than landfilled.

Recycling

The Residual Waste Infrastructure Capacity Note was released alongside a Recycling Infrastructure Capacity Analysis that specifically examines recycling capacity across England. The most up to date available data from DEFRA shows that England's recycling rate has largely stagnated. In 2023 it was 44.0%, up only slightly from 43.4% in 2022.

Through our work with the Environmental Services Association, we are continuing to advocate for a comprehensive overhaul of the UK's recycling system to support a circular economy, including consistent kerbside collections through Simpler Recycling, full implementation of the Extended Producer Responsibility for Packaging scheme (pEPR) with modulated fees based on recyclability, and Deposit Return Schemes (DRS) for targeted materials. To reduce plastic waste, the ESA has also called for mandatory separate WEEE collections, statutory recycling targets for local authorities, a ban on unprocessed recyclable exports by 2030, and significant demand-side reforms such as a Plastic Packaging Tax (PPT) escalator to increase the recycled content threshold and tax rate. These policies aim to boost domestic reprocessing capacity and ensure a high-quality recycling stream.

In addition, whilst limited plastic recycling policies are starting to be implemented, including the initial rollout of the pEPR (which requires packaging producers to pay fees to cover the costs of managing the waste their products generate), we feel more needs to be done to align this with the Emissions Trading Scheme (ETS) to maximise its benefit. We support the ESA's recommendation of a fair cost pass-through mechanism linking carbon pricing to the fossil content of residual waste

LOOKING AHEAD: SUPPORTING GROWTH

Finally, both we and our trade associations have been engaging proactively with UK Government in demonstrating how the industry supports the Government's five key missions, particularly on kickstarting economic growth and making Britain a clean energy superpower.

The UK Government has made growth and inward investment its top priority, with the Invest 2035: the UK's modern Industrial Strategy at the heart of this agenda. Encyclis responded to the consultation on the Industrial Strategy in November 2024, emphasising the billions of pounds of inward investment the sector has already driven into regional economies, as well as the investment potential of EfW with CCS and its catalytic role in supporting the circular economy.

This role has been well demonstrated through the development of our Walsall ERF, where we are closely working with key local and regional stakeholders to maximise the economic and social value that it will deliver over the next three decades. Read more in the case study on the following page.

Case Study 6

Effective local engagement: Working with key regional and local stakeholders in the West Midlands

The construction of our Walsall ERF is one of the largest ongoing construction projects in the West Midlands, recognised by key stakeholders as both a key source of social value and as a critical investment in green infrastructure within the region's new Smart Energy System Cluster.

In February, the then Mayor of the West Midlands, Andy Street visited the 8-acre site on Fryers Road, along with Walsall Council Deputy Leader Adrian Andrew, and had the opportunity to see the critical site remediation works being undertaken by West Midlands-based specialist contractor, McAuliffe Group.

These preparatory groundworks progressed well in 2024 and, as a result, our main contractor Kanadevia Inova, formerly HZI, was able to begin construction in November 2024 slightly ahead of schedule. The programme supported both Kanadevia Inova and our engagement with the Council on social value, and is developing to maximise local supply chain jobs and spend including apprenticeships once the plant is operational.

Both the West Midlands Combined Authority and the Council have recognised the new facility's role in supporting the region's 2041 net zero commitment. This led to the Walsall ERF forming part of the new 'West Midlands Smart Energy Cluster' as a key clean tech investment, one of only three in the Borough.

The Cluster, launched in September 2024, intends to develop the region's capabilities as a strategic centre for smart energy systems - covering technology, data, products and services to support smarter, more efficient and flexible energy usage across systems in commercial industrial and urban settings. This includes the production, use of and services around applications such as smart meters, smart grids, micro-grids, sensors, digital twins, demand management technologies and energy monitoring among others.

Our engagement work in 2025 will focus on maximising the delivery of the new facility in developing a district heat network alongside SSE (as referred to on page 35), alongside local recruitment activities with Walsall Council (including jobs fairs) and supply chain open days to increase the proportion of local spend.

Largest

live development and investment across Walsall Borough

AT A GLANCE

Location	Walsall, West Midlands
Focus of 2024 work	Completion of remediation work; preparing for handover to principal contractor; liaison on both issues with key bodies including Walsall Council
Local supply chain interaction	West Midlands-based McAuliffe Group acted as lead contractor for remediation work
Contribution to regional and local priorities	Forms part of West Midlands Smart Energy Cluster, launched in late 2024
2025 focus	Further development of district heat network and engagement with potential offtakers and funders; regular liaison with Walsall Council to maximise job and supply chain opportunities


NO
ENTRY
WITHOUT
AUTHORISATION

6.2
Effectively managing risk and our supply chain

RISK MANAGEMENT

A key part of the management of sustainability is the effective management of risk for all of the business and operational activities of Encyclis Holdco Limited and all direct and indirect subsidiaries thereof ("Encyclis Group"). Operating across the waste and power sectors, we are exposed to a variety of risks that could materially impact our ability to achieve our strategic and sustainability priorities. Both the Encyclis Board and the Encyclis Executive Leadership Team work to ensure that the identification, management, mitigation and reduction of risk is embedded into every level of the culture and operations of the business.

Risk management is frequently reviewed, challenged and adapted to meet the Group's risk appetite. Risk review is carried out at all levels of the business, from the supply chain, in day-to-day operations and at plant level, all the way to the Board's strategic assessment of the Group's business plan. This includes the effective management of Environment, Social and Governance factors, with this Report acting as our principal method of reporting progress and determining our work in the future.

ENSURING THE AVAILABILITY OF KEY MATERIALS AND PRODUCTS & A COMMITMENT TO SUSTAINABILITY THROUGH OUR SUPPLY CHAIN

One of our continued key methods of managing our principal business risks and effectively managing sustainability is effectively working with our supply chain to assure the quality and availability of the key materials and products that we need to both successfully build and operate our facilities. This means conducting our business with honesty, respect and integrity and acting as a trusted partner to our customers, communities, suppliers, and regulators to ensure they do the same.

We have implemented a structure and framework to help us drive good governance within our operations and wider value chain. A key part of this has been the roll out of our supply chain evaluation criteria; we continue to review and evaluate suppliers' policies and procedures from the perspective of a number of key themes, including:

- ENVIRONMENTAL LAW
- ENVIRONMENTAL POLICIES
- HEALTH & SAFETY LAW
- HEALTH AND SAFETY POLICIES
- COMBATING MODERN SLAVERY
- INSURANCE POLICIES
- CORPORATE COMPLIANCE

Part of this work included commencing a comprehensive review of Encyclis Limited standard Terms & Conditions ("T&Cs") in 2024, with Procurement and Legal colleagues closely working with external legal support. This document has enhanced language and wording compared to the original document. The T&Cs document clearly stipulates to suppliers their obligations relating to the Modern Slavery Act 2015, as well as the Bribery Act and internal policies such as our Data Protection and Privacy Policy. These updated T&Cs have been published on our website, alongside being made available to all suppliers and contractors that we use in our business operations.

This change further supports close working relationships with a number of similarly minded and responsible supply chain contractors, including Singleton Birch as explained within the supplier profile on page 75.

As reflected within our Governance 'look ahead', our procurement focus in 2025 will be ensuring that all standard purchase orders placed by the business will refer to Encyclis Limited Terms & Conditions of Purchase. More complex contractual arrangements are covered by service agreement terms, which are specially negotiated with each supplier, often specially for the work being undertaken. Under these circumstances the same compliance terms exist for all suppliers. This workstream will add a further level of protection to our defined mode of operating, particularly in the ways we engage our supplier base, contract with them and how they make their obligations to Encyclis Limited. This also further reinforces the standards we expect our suppliers to uphold, at facility level on a day in, day out basis.

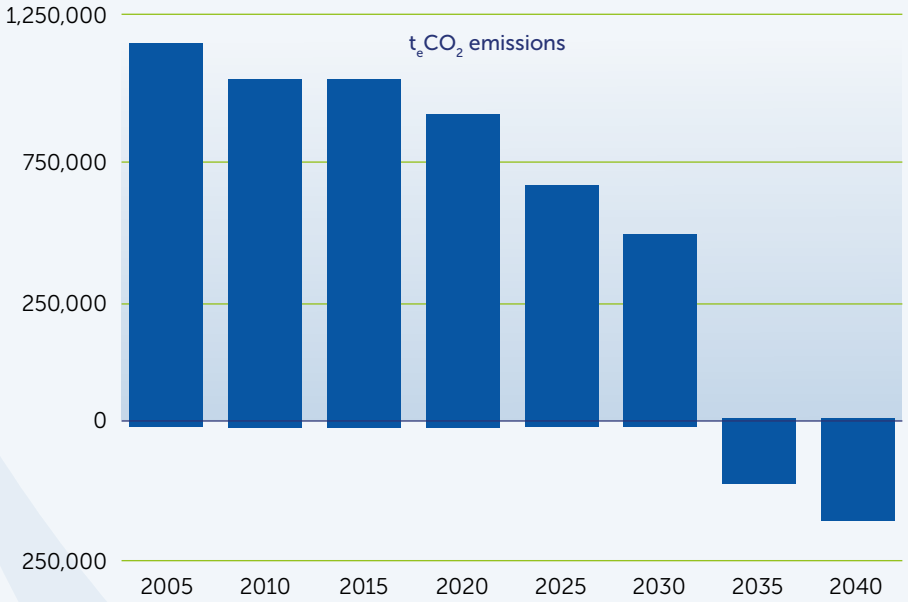
Supplier profile

Working successfully with our supply chain: Singleton Birch

Singleton Birch is a long-standing supplier of lime to Encyclis. Lime plays a crucial role in EfW facilities by neutralising acidic gases produced during combustion, converting flue gases into a solid residue that can be captured in filters, directly supporting our efforts to meet the strict Emission Limit Values (ELVs) set within our operating permits. We continue to work with them due to both the quality and reliability of what they provide and their commitment to sustainability.

Singleton Birch is one of the UK's leading and longest-standing providers of lime solutions to industry. It is also a member of Mineral Processing Association (MPA) - Lime ("MPA-Lime") which represents the UK's manufacturers of lime products. MPA - Lime members have an ambitious shared goal to reach net negative carbon emissions by 2040:

Lime Decarbonisation Lime manufacturing hits net negative by 2035



Singleton Birch

Lime manufacturing can play a key role in decarbonisation through the natural reversal of the reaction that generated the process emissions in the kiln. Carbon Dioxide from the atmosphere is absorbed and returns the lime back to a limestone like material, removing CO_2 from the atmosphere without any energy consumption and permanently locking it away. A recent study commissioned by the European Lime Association (EuLA) shows that, across major applications of lime, around 33% of the process CO_2 emitted during lime production is captured permanently by carbonation during use. Although there are differences between the wide-ranging uses of lime, 95% of the carbonation reactions have been found to occur within the first year of their life.

Singleton Birch is taking an innovative approach to reducing future carbon emissions by partnering on several projects looking at Carbon Capture and alternative fuels, including plans to build a Hydrogen Electrolyser in conjunction with Centrica Energy Storage Limited to allow partial fuel switching of their kilns to Green Hydrogen.

Their strong sustainability commitment can also be seen through the investment it has made in onsite renewable electricity generation. Singleton Birch typically produces more renewable electricity than it consumes, with surplus exported to local businesses and the national grid.

6.3
Behaving responsibly

COMPLYING WITH OUR ENVIRONMENTAL PERMITS TO LIMIT EMISSIONS

Making sure that our facilities comply with their Environmental Permits is one of the most important functions that we perform as a business. Continually monitoring and working to the emission guidelines set within these permits ensure that our facilities minimise their impact on local communities, ultimately only making a small contribution to local concentrations of air pollutants.

Environmental Permits for all of our UK facilities are regulated and issued by the Environmental Agency (EA), whilst the Environmental Protection Agency in Ireland (EPA) performs the same function for our Dublin facility. These Permits provide Emission Limit Values (ELVs) for different substances that we emit, alongside stating the different monitoring regimes for each substance. These requirements are in line with the EU's Industrial Emissions Directive (IED).

Our Environmental Permits also include the management of fugitive emissions not controlled by limits, for example odour and dust. We have procedures in place to manage and comply with those requirements and did not have to report any compliance issues in 2024.

All of our facilities are therefore closely monitored in two key respects. Firstly, our facilities are equipped with the latest continuous monitoring systems for emissions such as oxides and particulates to ensure continued compliance. Secondly, other emissions (including mercury and dioxins) are independently monitored by a third-party EA-certified organisation on a quarterly or six-monthly basis. All combined emissions data, alongside other exchanges of information, are regularly submitted to the EA (in the UK) and EPA (in Ireland) for assessment.

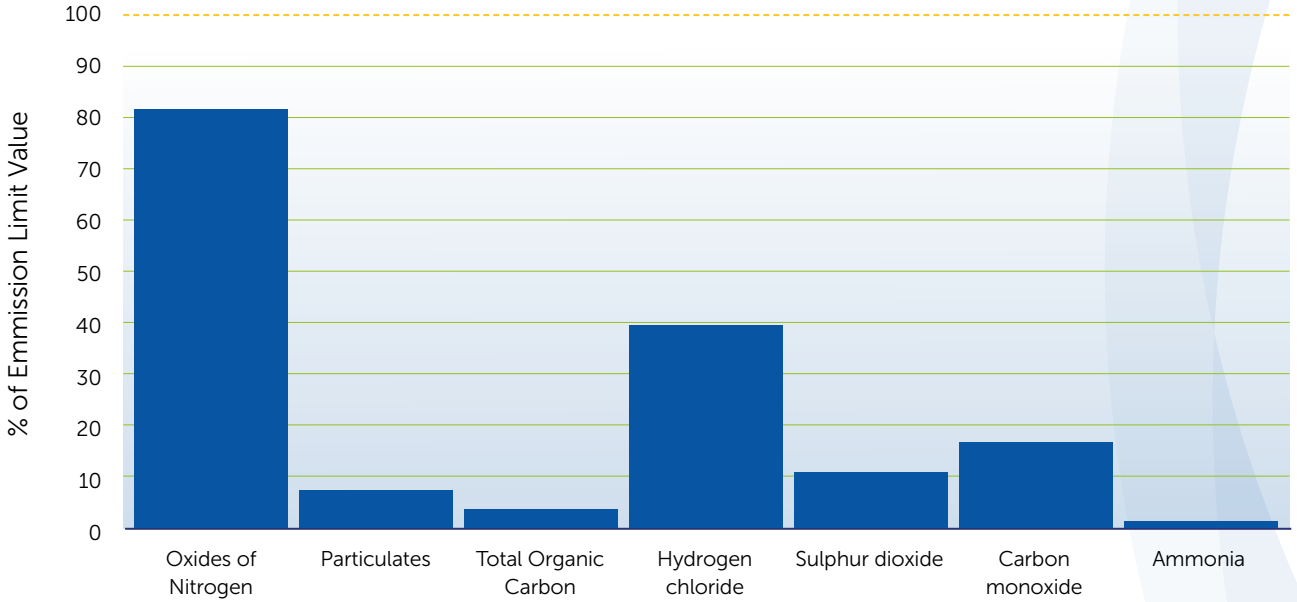
As we highlighted in last year's report, a significant change to the EfW industry came in December 2023 through the implementation of revised Environmental Permits for all ERFs in the UK and across Europe. The revised permits were issued in England by the EA, and encompassed the changes required from the Europe-wide Best Available Techniques Reference Document (BREF) review on waste treatment. In many cases these conclusions should improve the environmental performance of each ERF, for example by lowering the achievable emission level associated with the application of the Best Available Techniques (BAT-AEL).

We operate a modern fleet which meets the requirements of the BAT conclusions. Combined with robust systems to investigate emission spikes as a preventative measure against limit exceedances, this ensures a consistently high level of compliance across our sites.

OUR 2024 PERFORMANCE

When daily substance averages across all three sites (Rookery South, Newhurst and Dublin) are accounted for, the overall result for the year is an emissions profile below the defined ELVs for each of the seven monitored substances.

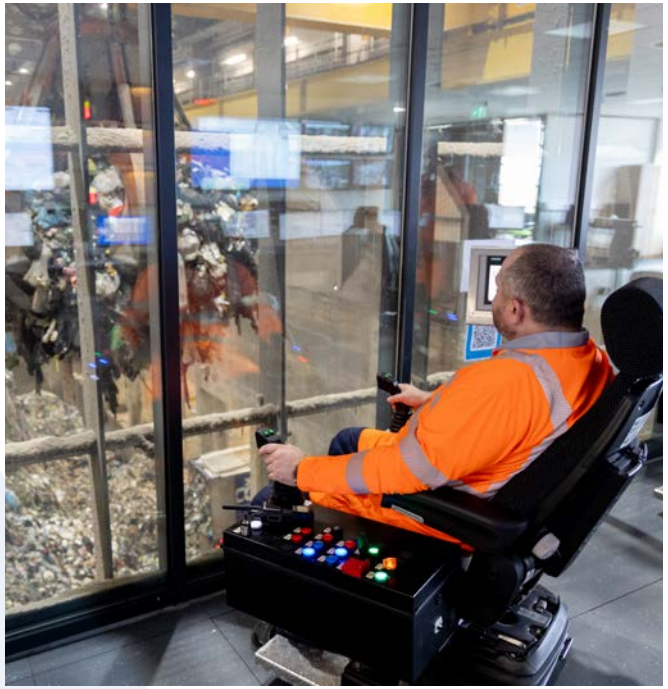
All site emissions as a % of the Emission Limit Value (ELV) in 2024



Note: Given reduced BREF limits were implemented in December 2023, this prevents a 'like for like' comparison of performance vs. 2023 being made

All facilities were compliant through 2024, except for a few Carbon Monoxide (CO) breaches due to gas canister explosions, a widely reported industry issue.

In recent years, there has been a significant increase in the number of nitrous oxide gas canisters arriving at EfWs in the waste stream in the UK and Ireland. In 2023, a YouGov Poll commissioned by our industry's trade association the ESA, found that the majority of those asked were not confident they knew how to safely dispose of a range of common domestic flammable or explosive items, including gas canisters.



OPERATING RESPONSIBLY:
OUR TRIPLE ISO COMPLIANT INTEGRATED MANAGEMENT SYSTEM (IMS)

As an operationally responsible business, we have implemented an Integrated Management System (IMS) that covers all of our operating sites and applies to all aspects of our operations and maintenance programmes.

Bringing together our systems, processes, and standards into one unified framework improves performance and efficiency while establishing accountability to comply with our environmental obligations. Failure to comply with legislation could result in health and safety issues, emissions exceedances (which would require investigation), fines, or removal of our permission to operate entirely.

In 2024 our IMS was re-certified by Lloyd's Register Quality Assurance (LRQA), a recognised external body according to:

- ISO 9001:2015 for Quality Management;
- ISO 14001:2015 for Environmental Management; and
- ISO 45001:2018 for Occupational Health and Safety Management

for our Rookery South and Newhurst facilities, following detailed audits.

9001

45001

14001

HELPING TO END MODERN SLAVERY

We also remain resolutely committed to trading ethically, sourcing responsibly and working to prevent modern slavery and human trafficking throughout our business and supply chain.

Our robust approach includes the publication of our updated Modern Slavery Statement on 1 May 2024 and a programme driven by our Modern Slavery Working Group, one of the key commitments made in last year's Sustainability Report. Our prevention work is split into four main themes as follows.

Organisational structure and supply chains	We conduct an annual review of our activities that includes input from our HR, Procurement, Operations and Legal teams. A key focus is the construction of our facilities. Whilst the construction of our new plants is sub-contracted, our project managers ensure that construction meets the contractual terms and specifications which include anti-slavery protections and obligations to comply with the Modern Slavery Act 2015.
Policies	We have appropriate policies in place that underpin our commitment to ensure that there is no modern slavery or human trafficking in our supply chains or in any part of our business. These include our Whistleblowing Policy and our Employee Code of Conduct; we also only use specified, reputable employment agencies to source labour.
Due Diligence	We undertake due diligence when considering taking on new suppliers, and regularly review the performance of our existing suppliers. Our due diligence and reviews include: • Evaluating the modern slavery and human trafficking risks of each new supplier as part of the procurement process by way of a supplier due diligence questionnaire and other "Know Your Customer" checks; and • Taking steps to improve any substandard suppliers' practices, including providing advice to suppliers through and requiring them to implement action plans.
Training and awareness	In 2023, we undertook a modern slavery training workshop with our Purchasing Managers and HR professionals which extended the company's understanding of our legal and statement commitments and allowed us to review: • Our purchasing practices; • How we assess the risk of slavery and human trafficking in relation to various aspects of our business, including resources and support available; • How to identify the signs of slavery and human trafficking and what initial steps should be taken if slavery or human trafficking is suspected; and • How to escalate potential slavery or human trafficking issues to the relevant parties within our organisation and where to obtain external help and support on the issue.

SCAN TO VIEW OUR UPDATED MODERN SLAVERY STATEMENT

6.4
Looking ahead: Our Governance programme for 2025 and beyond

Promoting sustainability as a core part of our business remains our key Governance priority. Our ability to deliver on this commitment is underpinned by a strong governance framework, supported by rigorous compliance reporting for our regulators, audit processes, and risk management procedures.

As the business evolves, we are focused on ensuring that our corporate governance framework remains robust, adaptable, and fit for purpose. This includes providing the necessary oversight to safeguard integrity and performance as we expand our work in areas such as district heating and carbon capture. It also involves our continued effort to promote the key societal role of our sector through engagement with Government.

In a complex and shifting geopolitical environment, strong governance is more important than ever. We are committed to upholding the highest standards to ensure our business practices remain sustainable, compliant, and commercially resilient.

EFFECTIVELY OVERSEEING, MANAGING AND PROMOTING SUSTAINABILITY

EFFECTIVELY OVERSEEING AND MANAGING SUSTAINABILITY

- Publication of this Sustainability Report in July 2025, prior to being updated on an annual basis.
- Refresh the Encyclis Sustainability Strategy following growth of the business, with input from cross departmental Sustainability Council members.

PROMOTING THE KEY SOCIETAL ROLE OF ENERGY-FROM-WASTE

- Continue to engage with Government and industry groups on the future Emissions Trading Scheme.
- Shareholder and CEO continued engagement with the UK Government (including Ministers) on investment opportunity in the sector.
- Continue to play an active role in our trade associations (the ESA, RRUK, and the CCSA).
- Proactive engagement with policy makers for UK district heating delivery.
- In partnership with our trade associations, continue to advocate for increased Landfill Tax, and a combustibles to landfill ban.
- With our trade associations, advocate for the escalation of the plastics tax to a minimum of £500/tonne and mandate 50% recycled plastic in new packaging.

SUPPORTING GROWTH ACROSS THE UK

- Actively support public-private programmes to accelerate green investment in the regions, including Walsall ERF's future role in the West Midlands smart energy cluster.
- Become members of Net Zero North West, focussed on promoting growth within the region.
- Proactive engagement with policy makers on how the EfW sector can drive growth and inward investment across the UK, including engagement with the Industrial Strategy and 10-year infrastructure strategy.

SCAN THE QR CODE TO VIEW GOVERNANCE DATA TABLES

EFFECTIVELY MANAGING RISK AND OUR SUPPLY CHAIN

RISK MANAGEMENT

- Continue to operate with a robust risk governance structure, bringing items to audit committee for regular notification at shareholder board.

ENSURING THE AVAILABILITY OF KEY PRODUCTS & COMMITTING TO SUSTAINABILITY THROUGH OUR SUPPLY CHAIN

- Publish standard Encyclis Terms & Conditions that clearly stipulate to suppliers their obligations relating to the Modern Slavery Act 2015, the Bribery Act, Data Protection and Privacy Policy.
- All purchase orders will refer to Encyclis Limited Terms & Conditions of purchase, reducing risk to Encyclis' operations and reinforcing the standards we expect suppliers to uphold.

BEHAVING RESPONSIBLY

COMPLYING WITH OUR ENVIRONMENTAL PERMITS TO LIMIT EMISSIONS

- Continue to ensure Encyclis operational facilities remain fully compliant with the Environmental Permit whilst delivering operational targets.
- Ensure all sites adhere to best practices, and proactively share lessons learned or important updates from the broader industry.

OPERATING RESPONSIBLY

- Achieve the re-certification of Triple ISO (9001:2015, 14001:2015 and 45001:2018) for both Rookery South ERF and Newhurst ERF, following detailed audit.

HELPING TO END MODERN SLAVERY

- Annual review of Modern Slavery Statement.
- Quarterly meetings of our Modern Slavery Working Group to assure that our supply chain complies with our corporate commitments.

Section 7.

Data summary for 2024

This section provides our performance in 2024 against a series of key Sustainability measures, reported to our Sustainability Committee on a quarterly basis to maintain oversight and drive appropriate action.

Our performance against a wider suite of measures for each of the ENVIRONMENTAL, SOCIAL and GOVERNANCE themes can be found on our website, accessible via the QR codes provided within this section.

ENVIRONMENTAL

TOTAL GHG EMISSIONS	2023 (tCO_2e)	2024 (tCO_2e)
Scope 1	699,542	762,159
Scope 2	5	8
Scope 3	45,060	44,676
TOTAL EMISSIONS	744,607	**806,843**

R1 ENERGY EFFICIENCY FACTOR	2023	2024
Newhurst ERF	0.90	0.91
Rookery South ERF	0.87	0.85
*Dublin WtE	80.1%	81.2%

*our Dublin facility follows a differerent methodology to calculate energy efficiency set by the Irish Government's Environmental Protection Agency

WATER USAGE	2023 (M^3)	2024 (M^3)
**Newhurst ERF (monthly average)	2,383	3,024
Rookery South ERF	73,882	71,240
Dublin WtE	252,382	239,481

**Newhurst ERF's water supply reflects a full year of operations in 2024, whereas it was only operational for 7 months in 2023 (May-December)

SCAN THE QR CODE TO VIEW ENVIRONMENTAL DATA TABLES

SOCIAL

SAFETY DATA: ALL SITES COMBINED	2023	2024
Total number of person hours worked	515,466	629,760
Number of fatalities	0	0
Number of reportable injuries	1	1
Number of lost time injuries (non-RIDDOR & also ROI reportable >3 days >7days)	2	0
Number of Hazard Observations	1539	1635

EMPLOYEE DATA	2023	2024
Gender split across the workforce	78% Male 22% Female	84% Male 16% Female
% of staff recommending Encyclis as a great place to work	87%	78%

SCAN THE QR CODE TO VIEW SOCIAL DATA TABLES

GOVERNANCE

TOTAL EMISSIONS AS A % OF THE EMISSIONS LIMIT VALUE (ELV)	2023 (%)	2024 (%)
Oxides of nitrogen	82	81
Particulates	3	7
Total Organic Carbon	3	3
Hydrogen chloride	34	39
Sulphur dioxide	8	10
Carbon monoxide	12	16
Ammonia	N/A	1

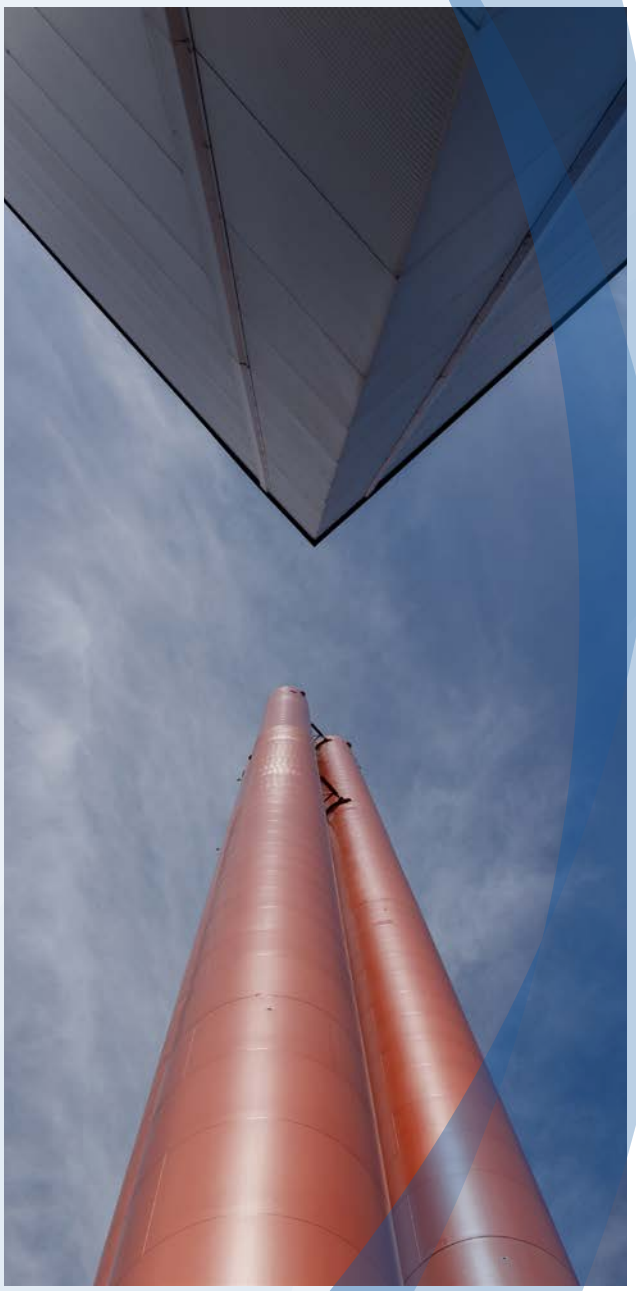
SCAN THE QR CODE TO VIEW GOVERNANCE DATA TABLES

Aerial image of the construction of our Walsall ERF

Aerial image of our Rookery South ERF

Appendix A.
Ownership of our facilities

FACILITY	ENCYCLIS OWNERSHIP	STATUS
Dublin waste to energy facility ("Dublin")	**50%** Dublin Waste to Energy Limited is a joint venture between Encyclis and Poolbeg (50:50)	Operational
Rookery South energy recovery facility ("Rookery")	**80%** Rookery South Limited is a controlling interest partnership between Encyclis and Veolia (80:20)	Operational
Newhurst energy recovery facility ("Newhurst")	**100%** Owned by Encyclis (as of June 2025)	Operational
Protos energy recovery facility ("Protos")	**100%** Owned by Encyclis (as of June 2025)	Under construction
Earls Gate energy recovery facility ("Earls Gate")	**50%** Earls Gate Energy Centre Limited is a joint venture between Encyclis and Brockwell Energy Ltd (50:50)	Operational
Walsall energy recovery facility ("Walsall")	**100%**	Under construction
Wellingborough incinerator bottom ash facility ("Wellingborough")	**50%** Jointly owned between Encyclis and Day Aggregates	Operational
Corby energy recovery facility ("Corby")	**100%**	Under development



Appendix B.
Glossary of terms

APCr – Air Pollution Control Residue
Typically, a mixture of ash, carbon, and lime. It is a hazardous waste.

BREF Limits – Best Available Technique Reference Document
A publication resulting from a series of information exchanges between various stakeholders, including regulators, industry and environmental non-governmental organisations. These contain guidance on the "Best Available Techniques" for installations.

BAT – Best Available Techniques
An available technique (technology or process) which is the best for preventing or minimising emissions and impacts on the environment. BATs are used by legislators or regulators to set emission limits for compliance with environmental permits.

C&I – Commercial and Industrial
Solid waste derived from commercial and industrial sources.

CCS – Carbon Capture and Storage
Refers to a suite of technologies that can play a diverse role in meeting global energy and climate goals.

CEMS – Continuous Emissions Monitoring Systems
An integrated system used to measure and report emissions continuously in order to comply with Environmental Permits.

CV – Calorific Value
A measurement of the amount of energy contained in waste.

DEFRA – Department for Environment, Food and Rural Affairs

DESNZ – Department for Energy Security and Net Zero

DMA – Double Materiality Assessment
An assessment of the sustainability matters that are financially material in influencing business value and material to the market, environment, and people.

EA – Environment Agency

EfW – Energy-from-Waste
The process of generating energy in the form of electricity and/or heat from the primary treatment of waste, or the processing of waste into a fuel source.

ELT – Executive Leadership Team

ELV – Emission Limit Value
Emission limit values are specific thresholds or boundaries established for different types of equipment, regulating and controlling the amount of emissions that are allowed to be released into the environment in line with operational permits.

EPA – Environmental Protection Agency (Ireland)

ERF – Energy Recovery Facility
A waste management facility that incinerates non-recyclable waste to produce energy, primary in the form of electricity, heat, or both.

ESG – Environmental, Social and Governance
A framework for assessing a company's impact on society and the environment, and how transparently it is governed.

ETS – Emissions Trading Scheme
A market-based approach to controlling pollution by providing economic incentives for reducing Greenhouse Gas emissions through the buying and selling of emission allowances.

GHG – Greenhouse Gas
Greenhouse gases constitute a group of gases contributing to global warming and climate change.

IBA – Incinerator Bottom Ash
Material that is discharged from the moving grate of municipal solid waste incinerators.

IMS – Integrated Management System
Combines all aspects of an organisation's systems, processes and standards into one smart system.

ISO standards
Internationally recognised standards that set guidelines to result in a safer, more consistent end result that benefits both the organisation and end user/customer. Three ISO standards specifically relate to Encyclis.

9001
Specifies requirements for a quality management system. Used to demonstrate the ability to consistently provide products and services that meet customer and regulatory requirements.

14001
Sets out the requirements for an environmental management system. It helps organisations improve their environmental performance through efficient use of resources and reduction of waste, gaining a competitive advantage and the trust of stakeholders.

45001
Specific requirements of an occupational health and safety management system. It provides guidance for its use, enabling organisations to provide safe and healthy workplaces by preventing work-related injury and ill health and proactively improving occupational health and safety.

KPIs – Key Performance Indicators
A quantifiable measure of performance over time for a specific objective.

M-LS – Manufactured Limestone

MSW – Municipal Solid Waste
The non-industrial waste generated by households, commercial establishments, public institutions, and other non-industrial sources within a municipality. It is waste that is typically collected by or on behalf of local authorities.

Net Zero
A state in which the greenhouse gases going into the atmosphere are balanced by removal out of the atmosphere.

NGO – Non-Governmental Organisations
Typically, a voluntary group or institution with a social mission which operates independently from the Government.

R1 Classified Energy Recovery Facility
Defined within the Waste Framework Directive as "any operation the principal result of which is waste serving a useful purpose by replacing other materials which would otherwise have been used to fulfil a particular function." Plants that do not reach the minimum standard are classified as waste disposal facilities.

RHI – Renewable Heat Incentive
A Government financial incentive to promote the use of renewable heat, which can help reduce carbon emissions and meet the UK's renewable energy targets.

RIDDOR – Reporting of Injuries, Diseases and Dangerous Occurrences Regulations

RWS – Resources and Waste Strategy
Sets out how we will preserve material resources by minimising waste, promoting resource efficiency and moving towards a circular economy in England.

UK ETS – UK Emissions Trading Scheme
A cap and trade system which caps the total level of GHG emissions, creating a carbon market with a carbon price signal to incentivise decarbonisation.

UNGC – United Nations Global Compact
A framework that requires businesses worldwide to adopt sustainable and socially responsible policies, and to report on their implementation.

WtE – Waste-to-Energy (the name for Energy-from-Waste in Europe)

2024 SUSTAINABILITY REPORT

ENCYCLIS

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