Carbon Reduction Plan

Supplier name: Cory Group

Publication date: 10 April 2025

Cory is committed to achieving net zero emissions by 2040.

Baseline Emissions Footprint

Baseline Year: 2022
Additional Details relating to the Baseline Emissions calculations.
Our reporting methodology is in accordance with UK Government Environmental Reporting Guidelines and the GHG Protocol Corporate Accounting and Reporting Standard. GHG emission factors are taken from the 2024 UK Government's conversion factors for GHG reporting, our electricity tariff's conversion factor and AIB's European Residual Mix 2023. For 2024, the CO_2 emissions from Riverside 1 EfW facility are measured using Carbon-14 testing, also known as radiocarbon dating. Carbon-14 is used in industry to determine if CO_2 emissions are sourced from biomass or from fossil-based materials. For an EfW facility, it allows us to determine the amount of CO_2 emissions derived from combusting waste that is comprised of biomass, (i.e. plants, food, paper, cardboard) and fossil sources, (i.e. plastics). It is a more accurate method of determining the fossil and biogenic split of our CO_2 emissions than the annual waste composition analysis, used hitherto. Our reported CO_2 emissions from waste processed through Riverside 1 were measured using the facility's Continuous Emissions Monitoring System (CEMS) in both 2022 and 2024, and then for 2024, apportioned using the average Carbon-14 testing results from November 2023 to October 2024 which gave an average of 62.17% biogenic content. During 2022, the total emissions were measured using the CEMS and the apportioned using the annual waste composition analysis, which gave a figure of 48.46% biogenic content. As per the 2006 Intergovernmental Panel on Climate Change (IPCC) Guidelines for National Greenhouse Gas Inventories, the carbon emissions from our EfW facility are separated into fossil and biogenic origin, and only the fossil CO2 is included in this Carbon Reduction Plan as Scope 1 emissions. However, Cory's commitment to reach net zero by 2040 or sooner, also includes the biogenic emissions from our EfW process and we report these emissions in our Streamlined and Energy Carbon Reporting which is published in our Annual Report. The biogenic emissions from our EfW process were 401,840 tCO2e in 2022 and 559,274 tCO2e in 2024. Our baseline year is 2022 due to the acquisition of a new Waste Transfer Station in Barking and the inclusion of the emissions from its operation into our carbon accounting.

Baseline year emissions:

<table>
<tr><td>EMISSIONS</td><td>TOTAL (tCO_2e)</td></tr>
<tr><td>Scope 1</td><td>433,274</td></tr>
<tr><td>Scope 2 – location based</td><td>1,663</td></tr>
<tr><td>Scope 2 – market based</td><td>823</td></tr>
<tr><td>Scope 3
(Included Sources)</td><td>
<table>
<tr><th>Scope 3 category</th><th>Activity</th><th>Emissions source</th><th>Tonnes CO2e</th></tr>
<tr><td>Upstream transportation and distribution</td><td>Waste collection</td><td>Customer fleet energy use (waste collections)</td><td>8,697</td></tr>
<tr><td>Waste generated in operations</td><td>By-products from EfW process</td><td>Incinerator Bottom Ash, Air Pollution Control Residue sent for reprocessing and Air Pollution Control Residue sent to long-term storage</td><td>3,372</td></tr>
<tr><td>Business travel</td><td></td><td>Company car and personal car use for business travel</td><td>24</td></tr>
<tr><td>Employee commuting</td><td></td><td></td><td>We do not have this information available</td></tr>
<tr><td>Downstream transportation and distribution</td><td></td><td></td><td>As Cory do not operate the substation that transfers the electricity we generate to the UK national grid, this category is not applicable to our operations.</td></tr>
</table>
</td></tr>
<tr><td>Total Emissions</td><td>Total Scope 1 and Scope 2 emissions: 434,937
Total Scope 1, Scope 2 and Scope 3 emissions as outlined above: 447,030</td></tr>
</table>

Current Emissions Reporting

Reporting Year: 2024	
EMISSIONS	**TOTAL (tCO_2e)**
Scope 1	**346,464**

<table>
<tr><td>Scope 2 – location based</td><td>2,003</td></tr>
<tr><td>Scope 2 – market based</td><td>373</td></tr>
<tr><td>Scope 3
(Included Sources)</td><td>
<table>
<tr><th>Scope 3 category</th><th>Activity</th><th>Emissions source</th><th>Tonnes CO2e</th></tr>
<tr><td>Upstream transportation and distribution</td><td>Waste collection</td><td>Customer fleet energy use (waste collections)</td><td>8,235</td></tr>
<tr><td>Waste generated in operations</td><td>By-products from EfW process</td><td>Incinerator Bottom Ash, Air Pollution Control Residue sent for reprocessing and Air Pollution Control Residue sent to long-term storage</td><td>3,578</td></tr>
<tr><td>Business travel</td><td></td><td>Company car and personal car use for business travel</td><td>17</td></tr>
<tr><td>Employee commuting</td><td></td><td></td><td>We do not have this information available</td></tr>
<tr><td>Downstream transportation and distribution</td><td></td><td></td><td>As Cory do not operate the substation that transfers the electricity we generate to the UK national grid, this category is not applicable to our operations.</td></tr>
</table>
</td></tr>
<tr><td>Total Emissions</td><td>Total Scope 1 and Scope 2 emissions: 348,467
Total Scope 1, Scope 2 and Scope 3 emissions as outlined above: 360,297</td></tr>
</table>

Emissions reduction targets

99 per cent of our Scope 1 and Scope 2 emissions relate to the combustion of our customers' residual non-recyclable waste in our Energy from Waste (EfW) facility. EfW remains the lowest carbon method to process waste, saving 450kg per tonne of waste compared to disposal in landfill.[1]

Achieving net zero is dependent upon Cory installing carbon capture and storage (CCS) technology at our EfW facility, Riverside 1, and future EfW facility, Riverside 2, which will become operational in 2026. The project aims to capture at least 95% of the fossil and biogenic CO_2 emissions from the facilities - approximately 1.4mtCO_2 per annum - making it one of the largest single-site carbon capture projects in the UK.

[1] See the calculations behind this figure in Cory's 2024 Annual Report which will be available on our website in May 2025: https://www.corygroup.co.uk/ Our methodology is available to review in our 2023 report pages 83-85 (corygroup.co.uk/application/files/4617/1688/7007/Cory_AR23_Final.pdf)

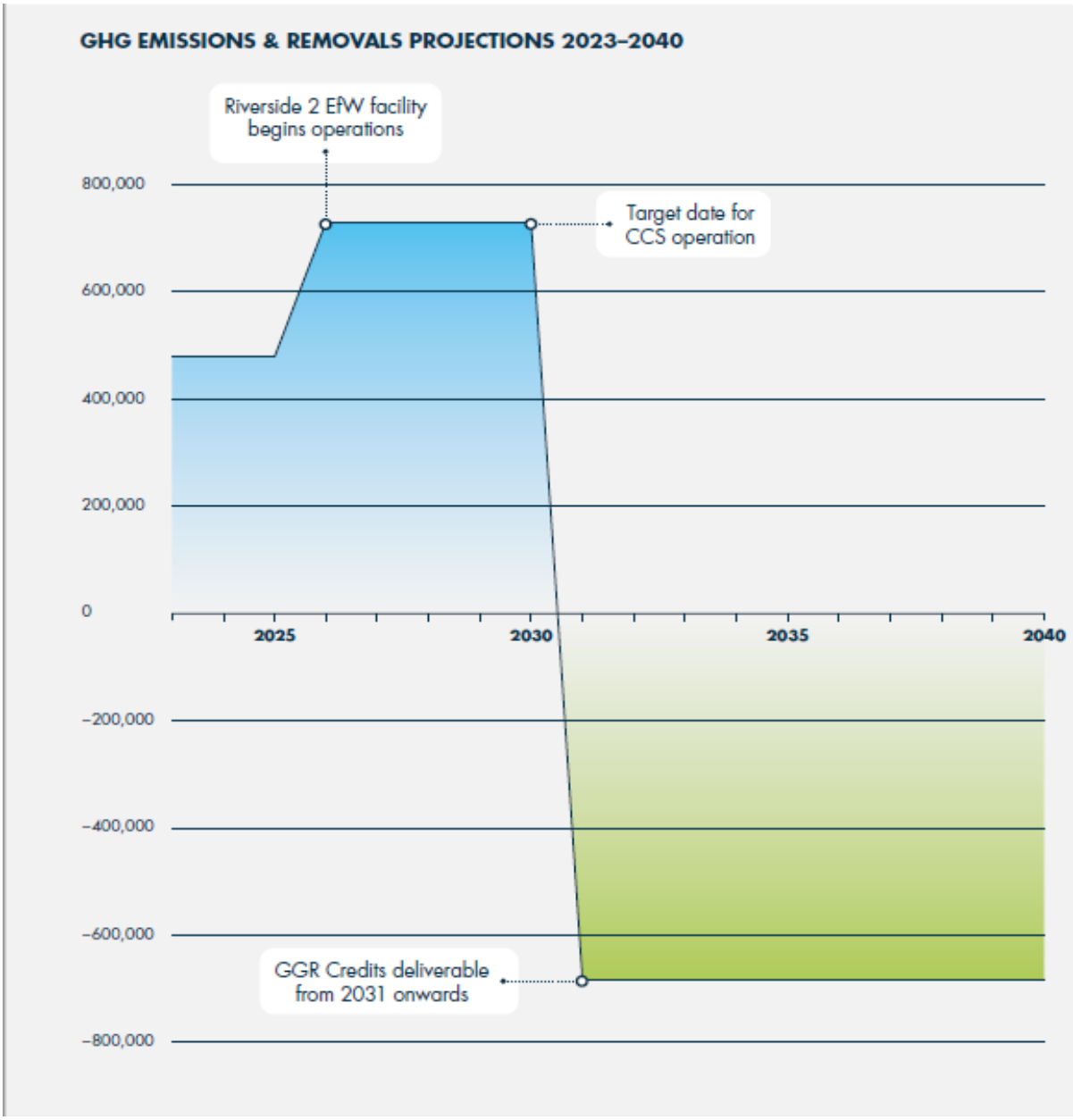
Our objective is to achieve 'CCUS readiness' (consents in place, front-end engineering, and design (FEED) completed, T&S provider identified) by 2026, and, subject to a favourable financial investment decision, be in a position to be fully operational by 2031. Once the CCS plant is operational our EfW operations will become 'carbon negative', i.e. removing more CO_2 from the atmosphere than is emitted due to the composition of waste (waste from households and businesses is composed of materials which contain both biogenic carbon such as paper, food, cardboard, and wood, and fossil carbon from materials containing plastics.). There is further information about our project available on our dedicated consultation website - https://corydecarbonisation.co.uk/ as well as our recent Sustainability Reports available on our website (www.corygroup.co.uk).

Cory uses electricity from the UK National Grid to power our waste processing and recyclate sorting operations. In 2024, we purchased renewable energy across all our sites, excluding our Waste Transfer Station in Barking. This was acquired by the company in 2022 and will be covered by Renewable Energy Guarantees of Origin (REGOs) from mid-2025. The renewable energy we procure meets the quality criteria of the GHG Protocol (2015) for reporting zero carbon emissions and has been independently assured by Carbon Clear.

We have made the following commitments to progress our journey to net zero in our operational emissions (which comprises all activities outside of our EfW process – approximately 1% of emissions) to be delivered before 2030:

- Maximise energy efficiency across all sites and activities.
- Invest in no new diesel heavy plant from 2030 and achieve total phase-out of all diesel-fuelled plant and site vehicles by 2040.
- Halve zero emissions dock tractors operating at our site in Belvedere by 2030.
- Phase out natural gas from all sites by 2030.
- Use low carbon fuels in our river fleet while undertaking research and development into zero emissions marine vessels.

Anticipated performance against these targets can be seen in the graph below:



Carbon Reduction Projects

The following environmental management measures and projects have been implemented or completed since the 2022 baseline:

- In March 2024 we submitted a Development Consent Order application seeking permission to build and operate a CCS project at both of our EfW facilities to the UK Secretary of State for Energy Security and Net Zero. We will receive a decision before the end of 2025. Delivery of this scheme will result in our business being net carbon negative.
- We have been working to utilise waste heat from Riverside 1 since 2018. During 2024, we made a commercial proposal to a potential anchor offtaker for the Riverside heat network. We have also been exploring innovative options to supply heat to the large district heat networks being developed in central London. In early 2024 we announced a project

which would move waste heat along the River Thames on barges. Operating as a combined heat and power plant (CHP) will significantly improve the efficiency of our EfW process, as well as roughly half the carbon intensity of processing each tonne of waste. Once Riverside 2 is commissioned, Cory will produce almost 3TWh of heat, using this to displace gas boilers would save approximately 600,000 tonnes of CO_2 a year in the UK economy.

- At Riverside 1 during 2024, we upgraded our high-pressure – low-pressure steam reducing station, following a Root Cause Analysis study. As part of the study, we collected a year's worth of plant data, consisting of 16 variables recorded at 7-second intervals, resulting in a data set of 72 million data points. This comprehensive dataset allowed us to conduct an in-depth analysis of system behaviour and perform root cause analysis across a wide range of operating conditions. The findings offered valuable insights across multiple areas, including technical specifications, pipework design, calculations, process interlocks, control logic, proportional integral derivative (PID) control loop tuning and thermodynamics. Ultimately, we were able to improve net efficiency by 1.5%, electricity export per tonne of waste by 0.45 MWs and electricity generation by 4-6 MW/h.

- We are currently redeveloping our Waste Transfer Station in Barking to maximise electrification of on-site processes and reduce reliance on fossil fuels. Once the main works are completed, we anticipate all processes being electrified. The Main Works Contractor for the redevelopment are working to the standard PAS 2080: Carbon management in infrastructure and implementing an Energy and Carbon Management and Reduction Plan.

- We have been using hydrotreated vegetable oil (HVO, also referred to as renewable diesel) in our river operations since June 2021, and our Northumberland Wharf, Smugglers Way and Cringle Dock waste transfer stations used HVO throughout 2024, reducing our CO2 emissions from fuel use by 3,765 tonnes in 2024.

- We are focused on energy efficiency on our tugs and have longstanding programmes to reduce engine idling and operate the fleet at a maximum of 75 per cent engine power when underway and when it is safe to do so. During 2024, the Lighterage team used an average of 1.51 litres of fuel per tonne of waste moved, reduced from 1.53 in 2023.

- Every year we undertake energy reviews with site representatives at Riverside 1, our WTSs, Barge Yard and Ship Repair Yard to develop energy efficiency plans for each site. Waste Transfer Station (WTS) Site Managers are sent their energy use intensity ratio quarterly. The intensity ratios are the calculation of energy used to process one tonne of waste at each site.
- We make continual upgrades to plant and equipment as required, for example, during 2024 we installed new long travel motors for both container cranes at Cringle Dock WTS, replaced the waste transfer cranes at Smugglers Way WTS, installed energy efficient motors in the crane at the MRF in Wandsworth and installed a heat exchanger on the exterior of Northumberland Wharf to reduce gas use for heating.

- In 2023 we completed the installation of 6 electric vehicle chargepoints at our new site in Barking, bringing our total to 43 chargepoints across 7 sites. We provide free electrical vehicle charging for employees.

- During 2023 we upgraded the desiccant dryers for the instrument air system at Riverside 1 to a more efficient vacuum pump type dryer. The next phase of the project is to upgrade the compressed air system controller which will provide trends and reports on the total air and electricity consumption of the system and its components. This will allow us to monitor and report on future energy savings achieved and will be delivered in 2025.

- We engage with the manufacturer of the dock tractors operating at Riverside 1 on an on-going basis, on the opportunity to electrify our fleet. We successfully trialled an electric unit in 2022 and now await the development of a hydraulic wet pack that would enable containers to be tipped from the vehicle. We purchased two additional internal combustion engine units in 2023 which are modular, which means the power pack can be upgraded to an electric engine in the future.

Declaration and Sign-Off

This Carbon Reduction Plan has been completed in accordance with PPN 06/21 and associated guidance and reporting standard for Carbon Reduction Plans.

Emissions have been reported and recorded in accordance with the published reporting standard for Carbon Reduction Plans and the GHG Reporting Protocol corporate standard[2] and uses the appropriate Government emission conversion factors for greenhouse gas company reporting[3].

Scope 1 and Scope 2 emissions have been reported in accordance with SECR requirements, and the required subset of Scope 3 emissions have been reported in accordance with the published reporting standard for Carbon Reduction Plans and the Corporate Value Chain (Scope 3) Standard[4].

This Carbon Reduction Plan has been reviewed and signed off by the board of directors (or equivalent management body).

Signed on behalf of the Supplier:

Dougie Sutherland
Chief Executive
Date: 10 April 2025

[2] https://ghgprotocol.org/corporate-standard
[3] https://www.gov.uk/government/collections/government-conversion-factors-for-company-reporting
[4] https://ghgprotocol.org/standards/scope-3-standard