Tradebe Environmental Services UK Carbon Reduction Plan 2025

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Tradebe Environmental Services UK Carbon Reduction Plan 2025

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Our Commitment to Net Zero

Tradebe Environmental Services Ltd (TES) provide vital environmental solutions for waste produced in all types of industry. Sustainability drives what we do, and it is our aim to drive the circular economy. Our business must find approaches which reduce the emissions released within our operations and across our value chain, whilst maintaining the critical waste management services we provide. TES are committed to achieving Net Zero greenhouse gas (GHG) emissions by 2040, which is in advance of the UK's commitment to achieve Net Zero by 2050.

Setting a Baseline Carbon Footprint

Quantification of baseline emissions forms the reference point against which any future emission reductions are measured. TES's baseline is defined as the emissions for the period 1st January 2021 to 31st December 2021. This approach ensures the baseline is representative of a typical year where services are operating as usual across the business. TES has used the UK GHG Conversion factors for company reporting (2021) to calculate emissions related to each scope.

As a multi-site and multi divisional company, data is collected centrally for the UK parent company Tradebe Environmental Services Ltd and our 2040 Net Zero commitment is established at this level. In line with 'PPN06/21 Technical Standard for the Completion of Carbon Reduction Plans' we proportion the emissions to our bidding entities.

Baseline Carbon Footprint (2021)

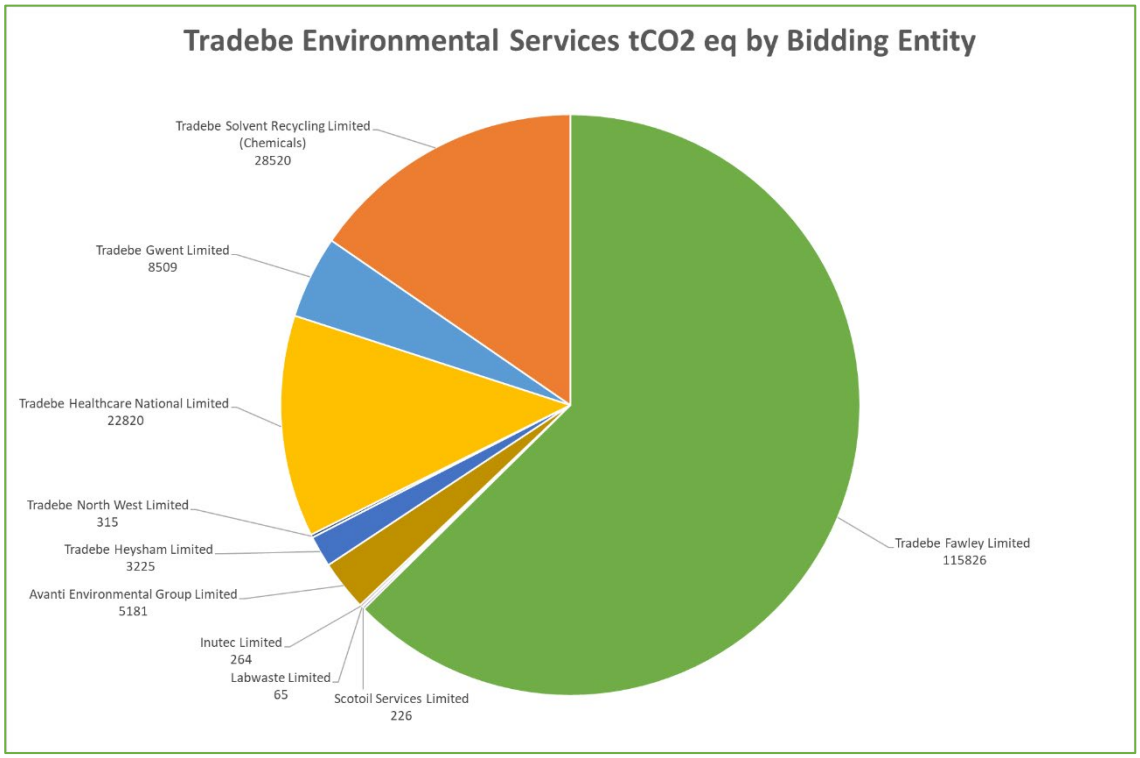

Figure 1- 2021 baseline emissions split by bidding entity.

Emissions	Description	Total (tCO_2e)
Scope 1	Emissions from sources that are owned or controlled by the company.	153,609
Scope 2	Emissions from the generation of electricity, which is then purchased by the company.	4,956
Scope 3 (Included Sources)	Emissions that are a consequence of the activities of the company but occur at sources owned or controlled by another company. (Included sources are Upstream Transportation & Distribution, Waste Generated in Operations, Business Travel, Employee Commuting and Downstream Transportation & Distribution)	26,385
Total Emissions		**184,951**

Analysis of 2021 data shows that 86% of our carbon footprint arises from our own operations and processes, shown as Scope 1 and 2 emissions. These consist predominantly of direct GHG emissions from incineration processes. The remaining 14% of emissions are reported in Scope 3 and occur at sources owned or controlled by businesses in our value chain. Due to the nature of our industry, our value chain is considerably simpler than most manufacturing processes. Therefore, whilst emissions from transport and distribution, employee commuting and business travel are reported, their impact amounts to less than 2% of our footprint. Using standard UK factors, the major contributor to Scope 3 emissions is residual waste sent to landfill (12%).

Current Emissions Reporting (2024)

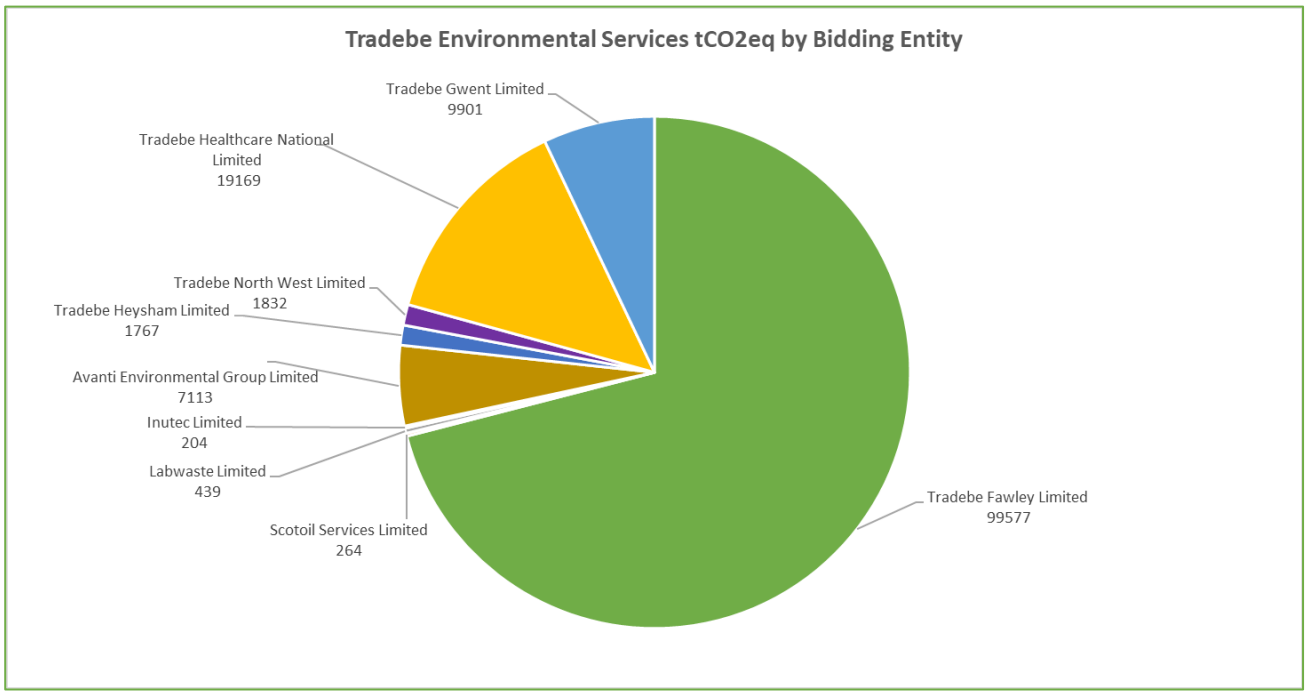

Figure 2- Current emissions reporting (2024) split by bidding entity

Emissions	Description	Total (tCO_2e)
Scope 1	Emissions from sources that are owned or controlled by the company.	114,545
Scope 2	Emissions from the generation of electricity, which is then purchased by the company.	445
Scope 3 (Included Sources)	Emissions that are a consequence of the activities of the company but occur at sources owned or controlled by another company. (Included sources are Upstream Transportation & Distribution, Waste Generated in Operations, Business Travel, Employee Commuting and Downstream Transportation & Distribution)	23,632
Total Emissions		**138,623**

Analysis of 2024 emissions shows that 83% of our carbon footprint arises from our own operations and processes, shown as Scope 1 and 2 emissions. The remaining 17% of emissions are reported in Scope 3. Emissions from transport and distribution, employee commuting and business travel impacts to less than 2% of our factors. Using standard UK factors, the major contributor to Scope 3 emissions is residual waste sent to landfill (15%).

Roadmap to Net Zero

Progress towards Net Zero will be tracked against the following trajectory, which incorporates the short- and long-term targets defined in this commitment.

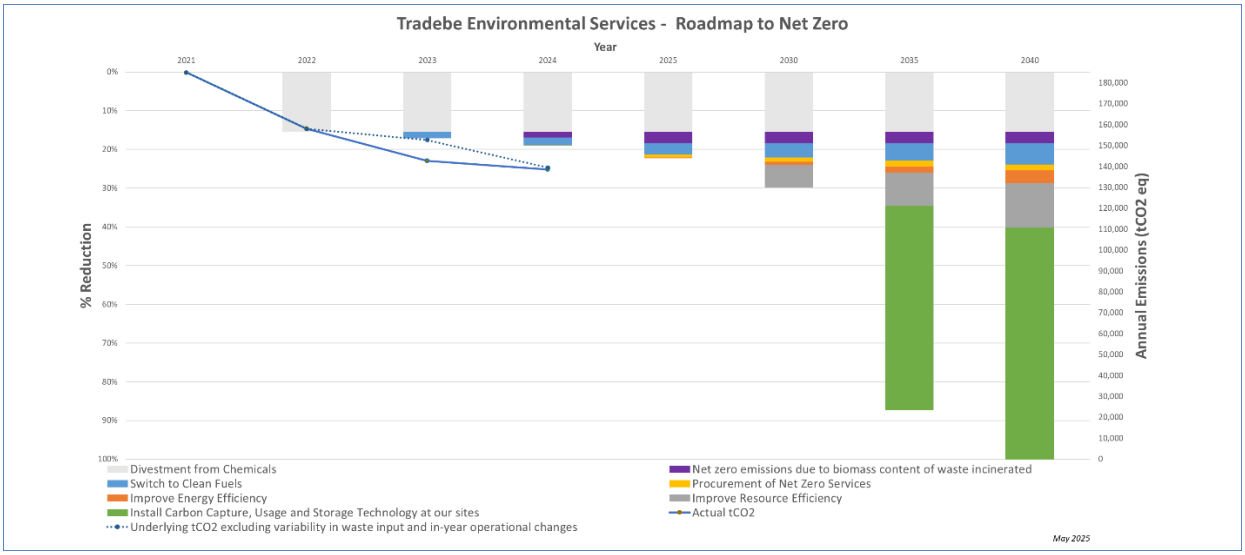

Figure 3- TES roadmap and targets to reach to net zero GHG emissions by 2040

- In 2024 we achieved a reduction of 24% from our baseline year. This is an overachievement of 5% over the 2024 reduction target of 19% compared to baseline. This was achieved by a 5,262 tCO_2eq reduction in landfill emissions due to the consolidation and improvements of activities in our healthcare division.
- To ensure our improvement plan is robust and able to meet our net zero 2040 target we monitor our underlying performance to decouple true improvements achieved by our targets from temporary non-systemic improvements caused by normal variations in waste types and volumes received as shown above.
- We decreased our overall carbon footprint by 3% in 2024 compared to 2023, despite a negative business fluctuation of 2%. This was achieved by a 21% decrease in scope 3 emissions as a result of waste being diverted from landfill.
- In 2024 we have continued to procure electricity from renewable sources for 16 out of 19 of our operational sites. These sites made up 86% of our baseline scope 2 emissions excluding Tradebe Chemicals which are now divested from TES-UK. These emissions made up 1.7% of total baseline emissions.
- By 2030, we anticipate that Net Zero procurement, decarbonisation of fuels and electricity, and efficiency improvements will provide a cumulative reduction of 30% from baseline emissions.
- We plan that by 2035 we will install carbon capture, usage, and storage (CCUS) technology at our Fawley incineration site, which is our largest incinerator and accounts for 63% of our total baseline carbon emissions. This will provide a cumulative reduction of 87% from baseline carbon emissions.
- Final reduction to net zero emissions will be through increased use of clean fuels, improved fuel efficiency, diverting waste from landfill and installing CCUS in our final incineration sites at Redditch and Wrexham.

Net Zero Objectives

In addition to carbon reduction achievements, the following systemic achievements have been made to underpin our net zero journey:

- All sites are certified to ISO14001, Environmental Management and ISO50001, Energy Management.
- Our Heysham site and our high temperature incinerator at Fawley are signed up to Industry sector climate change agreements, targeted at achieving sector wide decarbonisation. Compliance has been achieved in all previous target periods.
- TES work with existing and potential customers to measure waste life stage emissions for our customers using a Life Cycle Assessment tool complying to ISO14044.
- We have committed to an action plan compliant with the UK Energy Saving Opportunity Scheme (ESOS), which includes multiple equipment upgrades and process improvements across our sites to reduce energy consumption.
- 16 out of 19 of our operational sites have electricity supplied from certified renewable sources.
- In 2024 TES progressed with the internalisation of the transport fleet, meaning we will have more control over our transport emissions due to them being scope 1.

TES have set the following forward-looking objectives to progress to Net Zero:

- *Net zero emissions due to biomass content of waste incineration*

A proportion of TES waste incinerated at the three incineration sites in Wrexham, Redditch and Fawley is known to contain biomass, and therefore Net Zero GHG emissions. It is expected from January 2026 TES we will be calculating the amount of waste which is biomass and will be regularly monitoring the biomass of waste incinerated. This is expected to account for a reduction of 3% of total emissions. This reduction will fluctuate depending on the waste composition.

- *Switching to Clean Fuels*

TES aims to switch to clean fuels across our own sites and our transport fleet as these become economically available, with a gradual replacement programme completed in 2040. TES is currently undergoing a trial electric LGV and is evaluating the benefit of using clean fuels in transport. We are also working with our energy supplier to ensure our electricity supply is derived from 100% renewable sources. In 2025 our scope 2 emissions will either be purchased from 100% renewable sources or will be 100% carbon offset with certified emissions reductions, therefore emissions associated with our electricity consumption will be net zero.

- *Improving Energy Efficiency*

TES aims to increase energy efficiency for all non-renewable energy consumption within our own sites and transport. This reduces the emissions related to burning of fossil fuels alongside the transition to clean fuels. We are expecting energy efficiency improvements to reduce total emissions by 3% by 2040. We have committed to several energy efficiency improvements through our ESOS action plan, for example upgrading out of date equipment to improve efficiency and changing site processes to reduce consumption. The upcoming projects are estimated to reduce emissions by 64 tCO2eq.

- *Improving Resource Efficiency*

TES aims to reduce the quantity of waste sent to landfill and incineration by finding new innovative treatment and recovery routes to move waste up the waste hierarchy. For example, we are working on re-using sharps containers and diverting them from incineration routes by 2027. We are also exploring the benefit of diverting all Tradebe

healthcare treatment sites' residual waste from landfill to energy-from-waste facilities. This is estimated to reduce scope 3 emissions by 4,122 tCO2eq.

- *Increasing Procurement of Net Zero Services*

TES aims to reduce emissions from scope 3 emissions category- upstream transportation and distribution. This is by selecting haulage providers who mirror our commitment to achieve net zero by 2040. We are also working on changing our operations to internalise our transport fleet. Although this will not initially reduce our emissions, it will provide us with more control over our transport emissions and allow us to accelerate our transition to clean fuels in transport.

- *Install Carbon Capture, Usage and Storage (CCUS) Technology*

TES aims to invest in CCUS technology to capture carbon emissions unrelated to fuel usage i.e. those resulting directly from waste being incinerated. CCUS is currently at the forefront of innovative solutions in accelerating the UKs transition to net zero. We target installation of CCUS at Fawley, our largest incineration site, by 2035, which will reduce our total emissions by 87% by 2035. By 2040 we will also have installed CCUS technology at Wrexham and Redditch incineration sites, which will reduce total emissions by 100% and achieve net zero.

- *Improving Data Quality and Verification*

TES aims to continually improve the availability, accuracy and reliability of all data used to calculate our business' carbon footprint. We have implemented a centralised approach to manage this data, integrated into our reporting.

Figure 4 shows our predicted performance if the improvement programs mentioned are implemented:

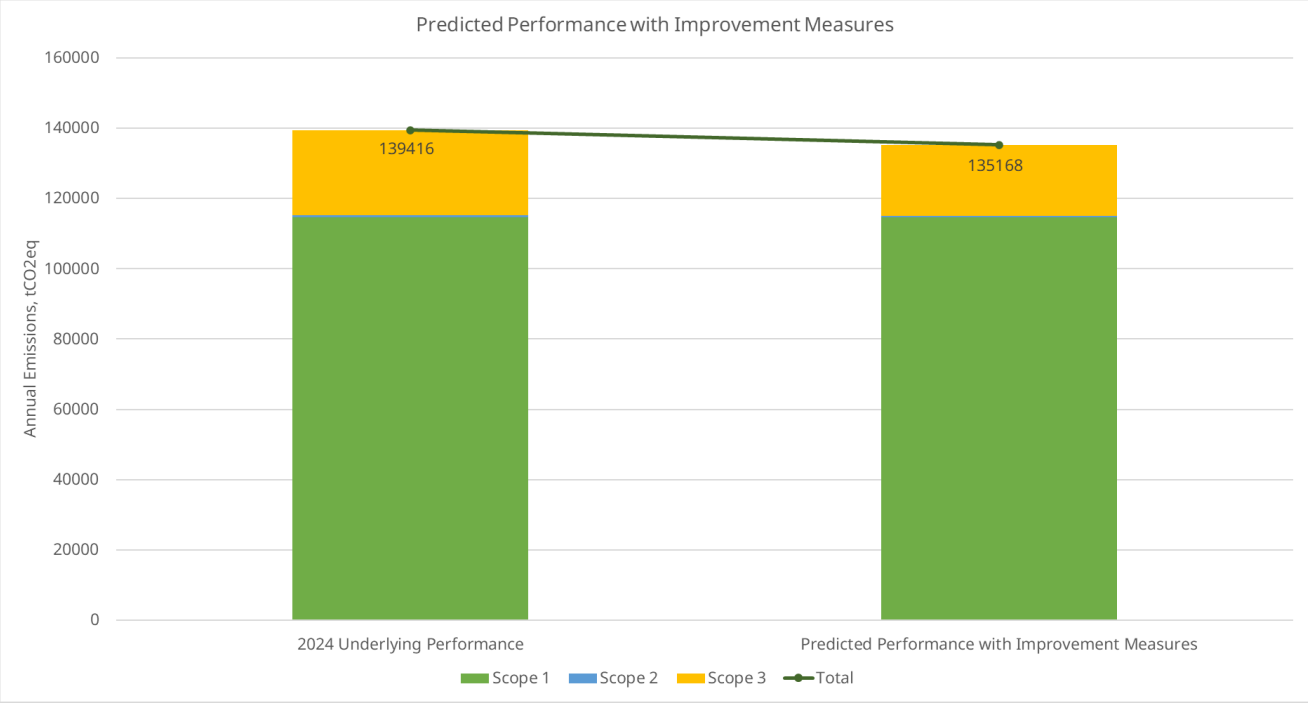

Figure 4- predicted GHG emissions performance with the upcoming improvement programs compared to the 2024 underlying ghg emissions performance.

Declaration and Sign Off

This Carbon Reduction Plan has been completed in accordance with PPN 06/21, and the 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 and uses the 2023 UK Government GHG Conversion Factors for Company Reporting.
Scope 1 and Scope 2 emissions have been reported in accordance with methodologies described in the GHG Protocol Corporate Accounting and Reporting Standard, and the required subset of Scope 3 emissions have been reported in accordance with methodologies described in the published reporting standard for Carbon Reduction Plans and the Corporate Value Chain (Scope 3) Standard.
This Carbon Reduction Plan is endorsed by the Tradebe Environmental Services Limited Executive Committee and reviewed and updated annually.

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29.05.2025

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