Carbon Reduction Plan
for
Global Substation Solutions

Published: September 2025

Our Commitment.

Global Substation Solutions is committed to achieving Net Zero emissions by 2045.

What are our targets?

We will be aiming to reduce emissions in line with the latest guidance from the Science Based Targets Initiative (SBTi). Targets are defined as "science-based" when they align with the scale of reductions required to limit global temperature increases to 1.5°C compared to pre-industrial temperatures. The SBTi recommends that organisations commit to near-term targets (that cover a maximum of 10 years from the baseline year), as well as long-term targets. **Our scope 1, 2 and Net Zero targets have been validated by the SBTi.**

Our near-term targets:

- Reduce our scope 1 emissions by 42% by 2030
- Reduce our location-based* scope 2 emissions by 42% by 2030
- Procure 80% renewable energy by 2025 and 100% by 2030
- Reduce our scope 3 emissions by 42% by 2030

Our Net Zero target:

- Reduce our total location-based emissions (scope 1, 2 and 3) by at least 90% from the baseline year by 2045.
- Neutralise any residual emissions using verified carbon offsets.

Emissions covered by our targets:

- Scope 1 emissions: direct greenhouse gas emissions that occur from sources owned or controlled by a company, such as emissions from the combustion of fuels in on-site boilers, furnaces, or vehicles.
- Scope 2 emissions: indirect greenhouse gas emissions that result from the generation of purchased electricity, steam or other forms of energy consumed by a company.
- Scope 3 emissions: all other indirect greenhouse gas emissions that occur in an organisation's value chain, including emissions from upstream and downstream activities.

**Purchased electricity emissions are measured in two ways: the location-based method and the market-based method. The location-based method takes into account the emissions intensity of the grid from which the electricity was purchased, whilst the market-based method also takes into account the emissions intensity of the tariff and suppliers the reporting organisation has specifically chosen. The market-based method can, therefore, take into account purchases of renewable energy via a tariff. We have chosen to set targets based on both methodologies but use the market-based methodology in final reporting.*

Our Carbon Footprint.

Baseline Emissions

Baseline emissions are a record of the greenhouse gases that have been produced in the past and were produced before the introduction of any strategies to reduce emissions. Baseline emissions are the reference point against which emissions reduction can be measured. We have chosen to set our baseline year as 1st April 2022 – 31st March 2023, which is also our most recent reporting period.

Baseline Emissions: 2023	
All scope 1, 2 and 3 emissions have been measured using the operational control approach. Emissions were also measured in 2020 and 2021, but these were incomplete measurements during years affected by COVID-19, so 2023 has been chosen as a more accurate representation of baseline emissions.	
Emissions	Total (tonnes CO_2e)
Scope 1	74.4
Scope 2	Market-based: 5.8 Location-based: 8.1
Scope 3	2,009.4
Total Emissions	Market-based: 2,089.6 Location-based: 2,091.9

Carbon Intensity Metrics

Metric	Carbon Intensity
Employees (Tonnes of CO_2e per FTE)	34.8

Based on total market-based results and FTE figures for the year.

Current Emissions

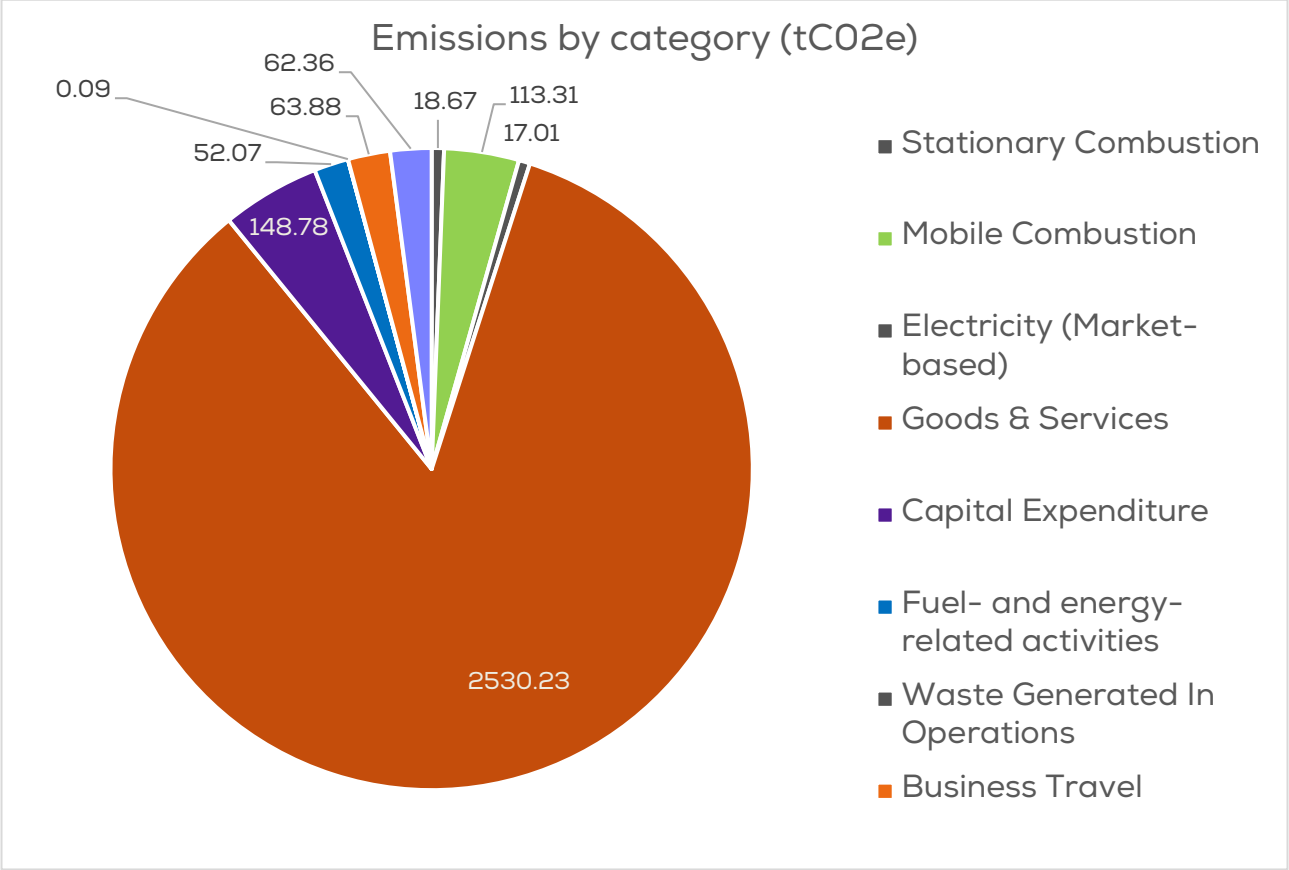
Current Emissions: 2025	
All scope 1, 2 and 3 emissions have been measured using the operational control approach.	
Emissions	Total (tonnes CO_2e)
Scope 1	132.0
Scope 2	Market-based: 17.0 Location-based: 17.0
Scope 3	2,874.4
Total Emissions	Market-based: 3006.4 Location-based: 3006.4

Carbon Intensity Metrics

Metric	Carbon Intensity
Employees (Tonnes of CO_2e per FTE)	42.9

Based on total market-based results and FTE figures for the year.

Carbon Emissions Breakdown



Our largest contributing GHG category was Goods & Services, with 2,530.23 tCO_2e estimated to have been emitted in our most recent reporting year. This category includes emissions from a variety of physical goods and services required to run our business such as insurance, office and business support services and IT support and cloud services. Our second largest source of emission was our Capital Expenditure 148.78 tCO2e which included emissions from property renovation, purchasing a motor vehicle and electrical equipment which is an increase in spend from last year.

Our third largest source of emissions was our company vehicle use, producing 113.31 tCO_2e throughout the year. This was followed by Business Travel 63.88 tCO_2e and Commuting & WFH emissions, which were estimated to be 62.36 tCO_2e which was a reduction from last year and this reflects the change in working patterns with employees being allowed to work from home 1 day per week.

**Fuel- and Energy-Related Activities emissions are those that occur upstream of energy use. In the other energy use categories e.g. business travel and employee commuting, we are accounting for the generation of electricity used or the combustion of fuels used. But these calculations do not consider the other emissions that occur e.g. the generation emissions of electricity lost in the transmission and distribution system or the well-to-tank (extraction, processing and transportation) emissions of fuels. To ensure we are measuring our full impacts, we have included these emissions for all scope 1, scope 2 (mandatory) and upstream scope 3 (optional) energy use activities.*

Category	Baseline Emissions (tCO_2e)	Current Emissions (tCO_2e)	Change (tCO_2e)	Change (%)
Scope 1				
Mobile Combustion	74.4	132.0	57.6	77.4
Scope 2				
Electricity (Location-based)	8.1	17.0	8.9	109.8
Electricity (Market-based)	5.8	17.0	11.2	193.10
Scope 3				
Goods & Services	1,779.6	2530.23	750.63	42.1
Capital Expenditure	21.4	148.78	127.38	595.23
Fuel- and energy-related activities*	31.1	52.1	21	67.52
Upstream Transportation and Distribution	13.3	0.0	13.3	100
Waste Generated In Operations	3.7	0.09	3.61	97.57
Business Travel	132.3	63.88	68.42	51.73
Commuting	43.6	62.36	18.76	43.02
Total (Location-based)	2,107.5	3006.4	898.9	42.65
Total (Market-based)	2,105.2	3006.4	901.2	42.81

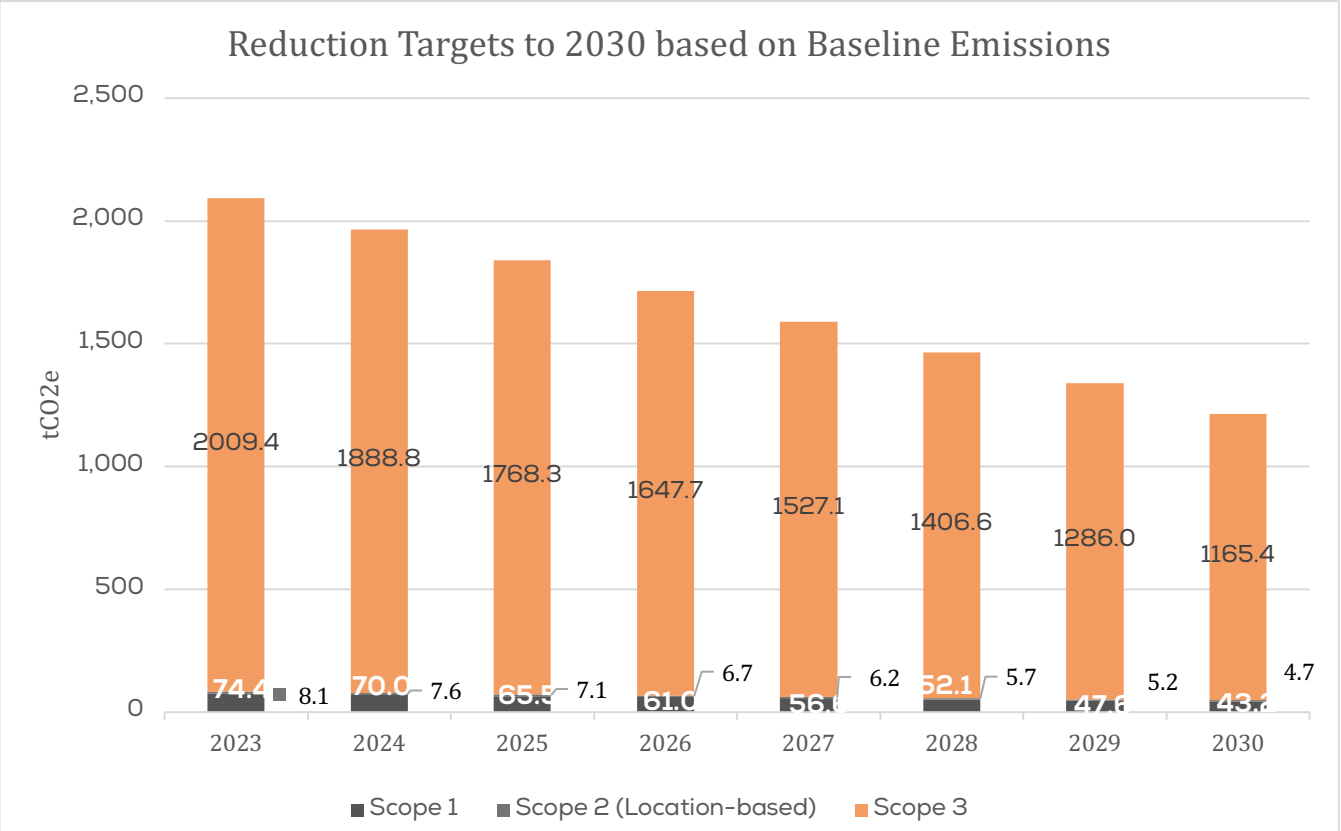
Carbon Reduction.

Our Net Zero targets

Global Substation Solutions is committed to achieving Net Zero by 2045. We have also set the following near-term targets which we will use to track progress to 2030:

- Reduce our scope 1 emissions by 42% by 2030
- Reduce our location-based* scope 2 emissions by 42% by 2030
- To procure 80% renewable energy by 2025 and 100% by 2030
- To reduce our scope 3 emissions by 42% by 2030

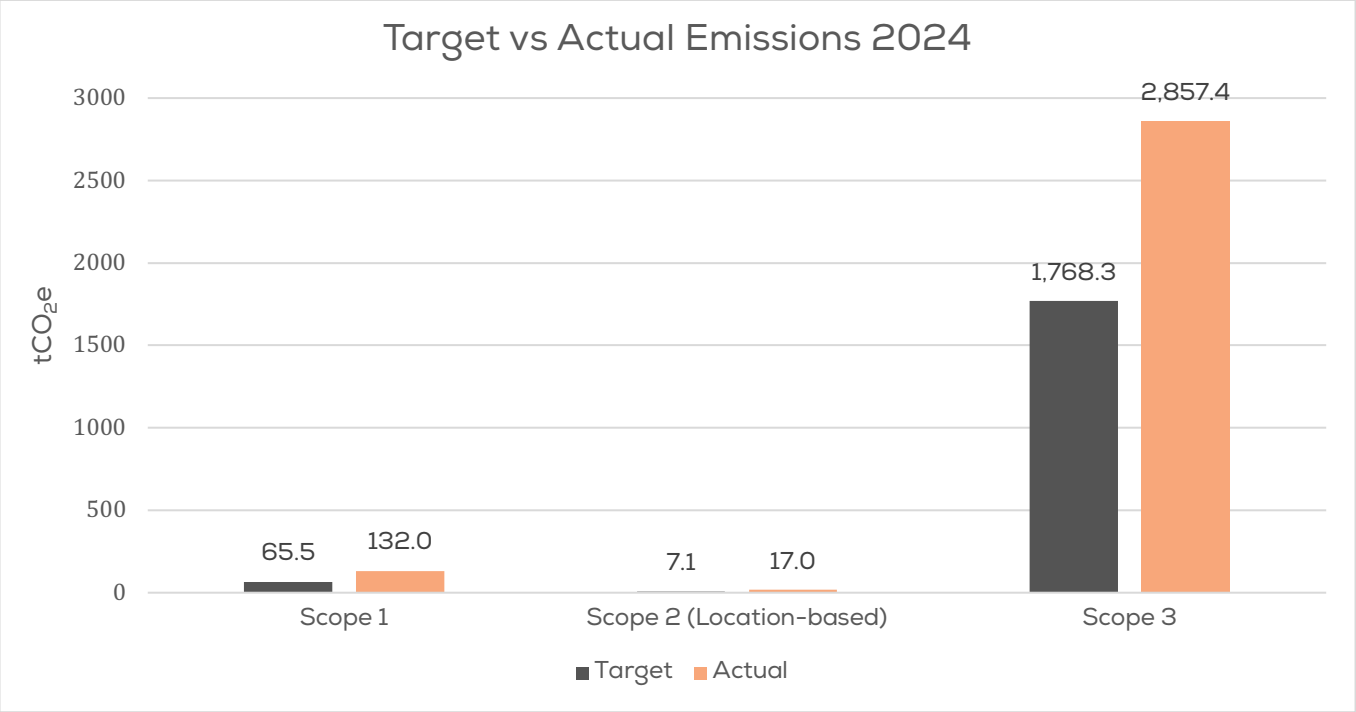
The graph below shows our scope 1, location-based scope 2 and scope 3 emissions reduction targets to 2030 based on baseline emissions. To achieve a linear reduction, we would need to reduce emissions in each scope by 6% each year. This would be a scope 1 reduction of 4.5 tCO_2e, a location-based scope 2 reduction of 0.5 tCO_2e and a scope 3 reduction of 120.6 tCO_2e each year.



Our renewable energy procurement target is not shown on the graph as this relies on a change in contract at a point in time rather than a gradual reduction.

Progress

The graph below shows our actual scope 1, location-based scope 2 and scope 3 emissions compared with the targeted emissions for this reporting year.



Our emissions have increased across all scopes since the baseline year. Whilst our workforce size and our revenue have increased, emissions increased by a greater percentage, meaning increases cannot solely be attributed to business growth. A large percentage of our emissions increase came from our goods and services category, which we are measuring using low-quality data (spend). This means that increases does not represent worsening supply chain sustainability but an increase in spending year on year. Emissions increase in categories that were measured using medium or high-quality data (i.e. mobile combustion, waste and commuting) are, however, a true representation of a change in activity. Next year we will focus on supply chain engagement which will improve our quality of data and provide specific emissions from key suppliers rather than spend data.

Completed Carbon Reduction Initiatives

The following emissions management measures and projects have been completed or implemented since the start of our baseline reporting period.

Activity	Completion Date	Scope
Encourage the use of video conferencing as well as low-emission travel (such as car sharing and public transport) to reduce business travel emissions.	2022	1 & 3
Reduce waste-related emissions by reducing the volume of waste going to landfills and providing all staff members with a reusable water bottle to reduce the volume of plastic waste being produced and improve the accuracy and availability of waste data.	2022	3
Implement a cycle-to-work scheme and an EV salary sacrifice scheme.	2022	3
Set up a regular maintenance routine for all company vehicles to ensure high fuel efficiency.	2025	1
Provide Positive Planet with fuel consumption data (litres) instead of mileage next reporting period. This will improve the accuracy of our mobile combustion calculation (currently marked at medium).	2025	1
Add sustainability-related criteria to our current approved supplier assessment. We will start by asking suppliers if they have measured emissions, if they have a carbon reduction plan, and if they have set any emissions reduction targets. We will develop these as required and trial some methods for collecting and storing this data to prepare for it being more widely available.	2025	3

Future Carbon Reduction Plans

We are committing to action the following emissions management measures and projects in line with our Net Zero targets.

Activity No.	Activity	Target Date	Category
1	**Look into moving towards hybrid vehicles** (a car and a van) with a forward plan to take initial steps toward fleet electrification. This will allow you to consider barriers and solutions to fleet electrification and help with driver attitudes towards alternative vehicles. We will look first at switching our pool cars with a view of switching them to hybrid by 2027.	2027	Stationary Combustion
2	**Contact our current energy provider** to enquire about switching to a 100% renewable electricity tariff. We already have an account with Octopus Energy so we will look into switching this and this will mean our scope 2 market-based emissions will be reduced to 0.	2026	Purchased Electricity
3	**Explore opportunities for onsite renewable energy generation**. This action has already been planned out and we will look to implement recommendations or commit to a new reduction plan for energy consumption. We will do an energy audit (using a tool such as Business Energy Scotland's energy audit checklist) to identify any improvements that can be made to increase energy efficiency.	2026	Purchased Electricity and Stationary Combustion
4	**We will review current expense/travel booking** processes to ensure the collection of high-quality data. Business travel is one of our highest-emitting categories and is currently being estimated using spend. To increase the accuracy of our business travel measurement, we will need to collect the distance for travel (e.g. miles travelled by train) and the number of nights (by room) and location booked in hotels. We are in the process of improving this data use SAGE.	2026	Purchased Goods and Services, Capital Goods
5	**We will keep an asset list for laptops and computers** that can be cross-referenced with financial accounts. Where product emissions data is available online, this can be used to estimate the cradle-to-gate emissions rather than spend. We will need to record the make	2025	Capital Goods

	and model of each purchase and be able to deduct the cost from the total spend (so that some spend can still be used where data is not available, but we are not double counting).		
6	**Implement a new Sustainable Procurement Policy or update existing one to ensure Sustainability principles are embedded.** Encourage suppliers to adopt sustainable practices and improve their own carbon footprint through supplier engagement, procurement policies and contracts, and monitoring reporting mechanisms.	2026	Procurement
7	**Engage directly with the top 10-15 list of suppliers to** obtain their emissions data and start to build a database of supplier information. Commit to an annual Sustainability Audit or Survey to request further information regarding credentials – plan to capture specific emissions data from the top 50% of suppliers by spend by 2028. This data collection will support the reduction journey by gathering important data for future measurements & will encourage supply chain integration towards Net Zero. Complete this audit within two phases: 1. Identify suppliers for engagement 2. Formulate and collect data (survey/scoring) Once completed, a supplier ranking programme can be followed whereby suppliers with lower carbon footprints are prioritised. The Sustainable Procurement Policy may also involve purchasing second hand/refurbished (furniture, IT equipment) and extending the lifespan of purchased items.	2026-2027	Procurement
6	**Develop and implement a Sustainable Travel Policy** for Global Substation Solution to support environmental impact of choices when travelling, staying in hotels and commuting. The priorities within this policy will support active travel and low emission travel options where appropriate.	2026	Business Travel and Commuting

	Commit to offering support to workforce with options for active travel schemes, such as bike to work or car sharing opportunities. Utilise the emissions travel hierarchy: Digital communication Walking and cycling Public and shared transport EV's and car sharing/clubs ICE vehicles and car sharing/clubs Air travel Consider creative ways to engage and support the workforce to influence change. Examples include setting an internal organisation carbon credit scheme (limit that to a number of tCO_2e per year), extra holiday days for low emission travel choice, bonuses, subsidised travel, equal mileage payments for diesel/petrol/EVs/cycling.		
9	Work to **embed sustainability into the company culture** to encourage employees to make sustainable choices when it comes to the decisions they make at work as well as when travelling for business or commuting. Commit to sustainability training and engagement for the leadership team first and then role out to the wider employee base. As the organisation grows, seek to include role-specific sustainability training within this programme. Including and not limited to: • Creating spaces for environmental conversations • Certified Carbon Literacy Training for all applicable to roll out to further workforce and share with externals where appropriate Certified Carbon Literate learners typically reduce their carbon footprints by 5-15%, of which ~50% are work-related emissions.	2026	All Scopes
10	We will include questions surrounding home energy use and commuting-related initiatives in our next Positive Planet Commuting & WFH survey. This will allow us to more accurately measure our	2026	Business Travel, Commuting

	homeworking emissions and gain insight into employee interest in different commuting-related initiatives.		

Declaration and Sign Off.

Emissions have been reported and recorded in accordance with the published reporting standard for Carbon Reduction Plans and the GHG Reporting Protocol corporate standard[1] and uses the appropriate Government emission conversion factors for greenhouse gas company reporting[2].

This Carbon Management Plan has been reviewed and approved by the Global Substation Solutions Executive Team.

Signed on behalf of Global Substation Solutions:

Name: **Kelly Weatherson**

Position: **SHEQ Manager**

Date: 6.10.25

1. https://ghgprotocol.org/corporate-standard
2. https://www.gov.uk/government/collections/government-conversion-factors-for-company-reporting