Carbon Reduction Plan For FiveFour Engineering

Publish date:

Created by: Sean Barry









Our Commitment

FiveFour Engineering is committed to achieving Net Zero emissions by 2040.

What does Net Zero mean in practice?

To achieve Net Zero, we will be aiming to reduce emissions in line with the latest science-based targets (SBTs). SBTs are greenhouse gas reduction goals set by organisations, they 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. To achieve Net Zero under this scenario, we will need to reduce our revenue emissions intensity by 97% from our baseline year.

SBTi recommends that organisations commit to near-term targets (that cover a minimum of 5 years/maximum of 10 years from the baseline year), as well as long-term targets.

Our near-term targets:

- Reduce scope 1 (ie. direct emissions) emissions to zero by 2030.
- Maintain scope 2 (ie. indirect emissions under our control) emissions at zero.
- Reduce scope 3 (ie. indirect emissions under our influence) revenue emissions intensity from our baseline year by 75% by 2030.

Our long-term targets:

- Maintain our scope 1 and 2 market-based emissions intensity at zero from 2030.
- Reduce our scope 3 market-based revenue emissions intensity from our baseline year by at least 97% by 2040.
- Neutralise any residual emissions using verified carbon offsets.

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.

Our Carbon Footprint

Baseline Emissions Footprint

Baseline emissions are a record of the greenhouse gases that have been produced in the past and were produced prior to 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 to 1 January 2022 – 31 December 2022.

Baseline Year: 2022

Additional details relating to the Baseline Emissions calculations:

Realigned baseline year emissions due to the following new information about the baseline year:

- **Purchased goods & services:** added production-related procurement spend, as only operational procurement was included in the original measurement
- **Upstream transportation and distribution:** used distribution vehicle types by country to approximate 2022 vehicle types
- Waste and water: used 2023 data to estimate, as original data did not take days on client sites into account
- **Commuting and homeworking:** because 2023 figures include commuting to client sites (which is more accurate as opposed to the original 2022 commuting figures, which did not take client site visits into account), 2023 data scaled to 2022 FTE figures were used to give a better estimate of 2022 commuting emissions.
- **Upstream leased assets:** because there was no data for this category in 2022, data for 2023 was scaled to 2022 office usage to estimate.

Emissions	Total (tonnes CO₂e)
Scope 1	8.5
Scope 2* (none as all sites are externally managed)	Market-based: 0.0 Location-based: 0.0
Scope 3 including: - Purchased Goods & Services - Capital Goods (none) - Fuel & Energy Related Activities - Business Travel - Upstream Transportation & Distribution - Downstream Transportation & Distribution (none) - Employee Commuting & Homeworking	271.1

 Operational Waste & Water Upstream Leased Assets Downstream Leased Assets (none) Franchises & Investments (none) 	
Total Emissions*	Market-based: 279.6 Location-based: 279.6

^{*}Purchased electricity can be measured in two ways. A location-based method reflects the average emissions intensity of grids on which energy consumption occurs (using mostly grid-average emission factor data). A market-based method reflects emissions from electricity that companies have purposefully chosen (or their lack of choice). A market-based method therefore takes into account the purchase of electricity via a verified renewable energy tariff. We have chosen to base our Net Zero target on a market-based methodology.

Carbon Intensity Metrics

Baseline year: 2022	Carbon intensity metric
Employees (tCO ₂ e per FTE)	21.5
Revenue (kgCO₂e per £)	X.X

Based upon 13.0 FTEs (full-time employee equivalents), and a <u>£X million</u> revenue during the measurement period. We are using market-based emissions to calculate our intensity metrics.

Current Emissions Reporting

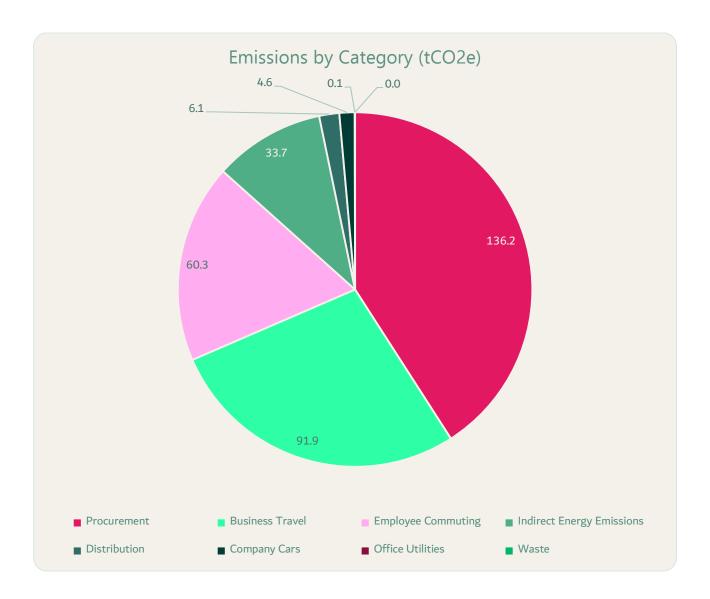
Current Reporting Year: 2023			
Emissions	Total (tonnes CO₂e)		
Scope 1	4.6		
Scope 2* (none as all sites are externally managed)	Market-based: 0.0 Location-based: 0.0		
Scope 3 including: - Purchased Goods & Services - Capital Goods - Fuel & Energy Related Activities - Business Travel - Upstream Transportation & Distribution - Downstream Transportation & Distribution (none) - Employee Commuting & Homeworking - Operational Waste & Water - Upstream Leased Assets - Downstream Leased Assets (none) - Franchises & Investments (none)	328.4		
Total Emissions*	Market-based: 333.0 Location-based: 333.0		

Carbon Intensity Metrics

Current year: 2023-2024	Carbon intensity metric
Employees (tCO₂e per FTE)	13.3
Revenue (kgCO₂e per £)	X.X

Based upon 25.0 FTEs (full-time employee equivalents), and a <u>£X million</u> revenue during the measurement period. We are using market-based emissions to calculate our intensity metrics.

Carbon Emissions Breakdown



Scope 1	tonnes CO₂e
Stationary Combustion	0.0
Mobile Combustion	4.6
Fugitive Emissions	0.0
Process Emissions	0.0
Scope 2	
Electricity (Location-based)	0.0
Electricity (Market-based)	0.0
Heat & Steam	0.0
Scope 3 (Upstream)	
Purchased Goods & Services	134.4
Capital Goods	1.8
Fuel & Energy Related Activities	33.7
Upstream Transportation & Distribution	6.1
Operational Waste & Water	0.01
Business Travel	91.9
Employee Commuting & Homeworking	60.3
Upstream Leased Assets	0.1
Scope 3 (Downstream)	
Downstream Transportation & Distribution	0.0
Processing of Sold Products	0.0
Use of Sold Products	0.0
End-of-Life Treatment of Sold Products	0.0
Downstream Leased Assets	0.0
Franchises	0.0
Investments	0.0

Carbon Reduction

Our Net Zero targets

FiveFour Engineering is committed to achieving Net Zero by 2040. To achieve Net Zero under this scenario, we will need to reduce our revenue emissions intensity by 97% from our baseline year. To keep us on track, we have also set the following near-term targets to 2030.

Our near-term targets:

- Reduce scope 1 (ie. direct emissions) emissions to zero by 2030.
- Maintain scope 2 (ie. indirect emissions under our control) emissions at zero.
- Reduce scope 3 (ie. indirect emissions under our influence) revenue emissions intensity from our baseline year by 75% by 2030.

Our long-term targets:

- Maintain our scope 1 and 2 market-based emissions intensity at zero from 2030.
- Reduce our scope 3 market-based revenue emissions intensity from our baseline year by at least 97% by 2040.
- Neutralise any residual emissions using verified carbon offsets.

Progress

Emissions	Total Carbon Footprint (tonne	% Change	
	Baseline year: 2022	Current year: 2023	% Change
Scope 1	8.5	4.6	-46%
Scope 2	0.0	0.0	-
Scope 3	271.1	328.4	+21%
Total emissions	279.6	333.0	+19%

Emissions	Carbon intensity metric	% Change

	Baseline year: 2022	Current year: 2023	
Employees (tCO ₂ e per FTE)	21.5	13.3	-38%
Revenue (kgCO₂e per £)	X.X	X.X	<mark>X%</mark>

We are on track / off-track to achieve our near-term targets and will therefore continue to maintain / accelerate our progress.

Completed Carbon Reduction Initiatives

The following emissions management measures and projects have been completed or implemented.

Activity	Completion Date	Scope
Commit to measuring carbon footprint of business activities year on year to gain an understanding of pinch points and regularly be making efficient and direct improvements to reduce these emissions. Year 1 appointed Positive Planet to support with calculating baseline carbon footprint and reduction recommendations.	2023	1,2,3
Sustainability was already ingrained within day-to-day processes throughout the entire team, who already have dedicated parts to play and are responsible for implementing initiatives. Nevertheless, we have now also formalised a Green Lead in 2023 to help ensure that initiatives and management of data is coordinated. To ensure all new staff are properly inducted with our company-wide sustainability processes, we have created a short induction video for new staff to explain ISO 14001, our work to measure and reduce emissions with Positive Planet, and so on.	Since inception	1,2,3
ISO 9001, ISO 14001 certification. As part of this management system, the organisation has put the following initiatives into place: - the adoption of LED/PIR lighting controls - changes to policy resulting in a reduction in company travel and flights - looking at the electrification of the company fleet	2023 (ISO 9001) (ISO 14001)	1,2,3
Worked with our landlord at Theale for the whole site (including our managed office) to be run off a 100% renewable tariff, installing solar panels, changing lighting to LED, installing lighting motion sensors, installing EV charging points, and improving utility reporting for tenants. This was only possible by working with other tenants to influence the landlord to implement these actions.	2023	1,2,3

Future Carbon Reduction Plans

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

Reduction Plans – Scope 1				
Activity No.	Activity	Target Date	% Reduction Target	Category
1	Currently we do not have any site Scope 1 or Scope 2 emissions, and we intend to keep it this way. However, if we are to procure a site under our control, we shall do our best to ensure the site: • is powered by 100% renewable electricity (market based) • does not have gas heating or uses as little as possible in the short term • uses energy-efficient appliances. We shall also explore the medium-term possibility of that site having on-site renewable energy generation technologies such as solar PV panels. If the UK Grid is 100% powered by renewable energy before this point, your Scope 2 location-based (and market-based) electricity emissions will already be zero.	-	-	Stationary Combustion Fugitive Emissions Purchased Electricity
2	To reduce emissions from current leased and hire vehicles, prioritise using leased/hired electric vehicles (or hybrid where unavailable), or consider procuring active transport (such as using e-bikes) for shorter use cases. Commit to only leasing or hiring electric vehicles by 2030 or before.	20 <mark>24</mark>	100%	Mobile Combustion Purchased Electricity (EVs)

3	Consider driver-efficiency training for company car users – this should demonstrate a reduction in total fuel/electricity use.	20 <mark>24</mark>	Low- medium	Mobile Combustion Purchased Electricity (EVs)
---	--	--------------------	----------------	---

Based upon the above completed and planned initiatives, it is projected that Scope 1 carbon emissions will decrease to **0 tCO**₂**e** by 2030.

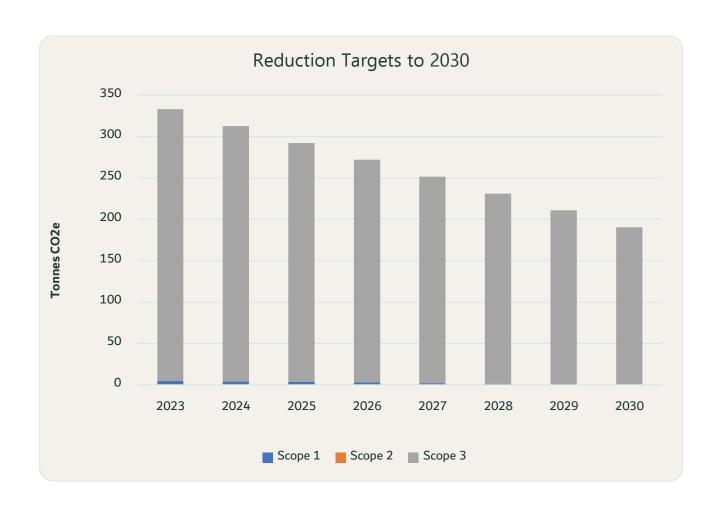
We also aim to implement the further initiatives below to reduce Scope 3 emissions:

	Plans – Scope 3		%	
Activity No.	Activity	Target Date	Reduction Target	Category
1	Consider training and engagement for the Green Team, leadership, and the wider employee base. Including and not limited to, creating spaces for environmental positive conversations (internal comms, newsletters, slack, Teams etc), certified Carbon Literacy Training for all applicable to roll out to further workforce and share with externals where appropriate. On average, certified learners reduce their carbon footprints by 5-15%, of which ~50% are work-related.	20 <mark>24</mark>	2.5 - 7.5%	Commuting & Homeworking Business Travel
2	Implement a Sustainable Procurement Policy. Encourage suppliers to adopt sustainable practices and improve their own carbon footprint through supplier engagement, procurement policies and contracts, and monitoring reporting mechanisms. Commit to a Sustainability Audit or Survey to request further information regarding credentials – Plan to send these to the top 10/20 suppliers by spend. This data collection will support reduction journey by gathering important data for future measurements & 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 prioritise suppliers with lower carbon footprints as part of the above phased approach. This may also involve purchasing second hand/refurbished (furniture, IT equipment) and extending the lifespan of purchased items. Develop and monitor procurement policy for all	20 <mark>24 -</mark> 2027	High	Purchased Goods & Services

3	Review logistics partners/couriers and utilise the above Sustainable Procurement Policy. Work with providers to gather their emissions data, and/or switch to lower-carbon providers. Prioritise purchasing from local suppliers to limit delivery mileage.	20 <mark>24</mark> - 2027	Medium- high	Upstream Distribution
4	Policy 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. Monitor and consider alternatives to air-based travel as a priority and 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 tCO₂e per year), extra holiday days for low emission travel choice, bonuses, subsidised travel, equal mileage payments for diesel/petrol/EVs/cycling.	20 <mark>24</mark>	High	Business Travel Commuting
5	Ask the landlord at managed sites to consider low-cost options such as reducing the boiler temperature and adding heat & solar control reflective window sheets. Consider moving to premises without gas heating for 100% reduction in stationary combustion emissions.	20 <mark>24</mark>	Low	Upstream Leased Assets (Stationary Combustion)
6	There are still location-based electricity emissions at our managed sites (National Grid energy mix), so there is an opportunity to reduce energy use.	2024	Low (location- based)	Upstream Leased Assets (Purchased Electricity)

	We will implement behaviour change initiatives within the workplace for reduction of emissions, including clear messaging for turning off lights, monitors, computers, and other electrical appliances where appropriate. We will assign roles and responsibilities to Green Team members. High-level monitoring of energy use is key to understanding further pinch points.			
	Implement energy efficiency measures to reduce the overall amount of electricity consumed at our managed sites. Optimise operational procedures and implement energy management systems (such as ISO 14001) if not already implemented. Examples of reduction measures include: - upgrading lighting and introducing more sensor lighting, and aligning sensor times to usage patterns (eg 3		Medium	Upstream Leased Assets
7	minutes for corridors, 20 minutes for working spaces) installing timers on sockets/equipment to automatically turn appliances off during non-working hours reviewing and renewing inefficient equipment (when at end of life), and actively consider the energy efficiency of equipment when new purchases are required (eg laptops, fridges, dishwashers)	20 <mark>XX</mark>	(location- based)	(Purchased Electricity)

Based upon the above completed and planned initiatives, it is projected that (as a minimum) Scope 3 revenue-based carbon emissions intensity will further decrease over the next seven years from the current normalised measurement of XXX kgCO₂e/ \pm to XXX kgCO₂e/ \pm by 2030. This is a **reduction of 75%** and will keep us on track to Net Zero.



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 standard¹ and uses the appropriate Government emission conversion factors for greenhouse gas company reporting².

This Carbon Management Plan has been reviewed and approved by FiveFour Engineering Executive Team.

Signed on	behalt	ot FiveFour	Engineering

Name:

Position:

Date:

https://ghgprotocol.org/corporate-standard

https://www.gov.uk/government/collections/government-conversion-factors-for-company-reporting