

Carbon Reduction Plan

Supplier Name: Lightning Fibre Limited

Publication Date: January 2023

General Information

Current (Baseline) Reporting Year – 2022 GHG Emissions Footprint

Lightning Fibre Limited's ("**LFL**") baseline greenhouse gas (GHG) emissions footprint for the 2022 calendar year (1st January 2022 – 31st December 2022) is presented below. These results will be used as a benchmark against which future targets and our progress towards Net Zero will be measured against.

GHG emissions have been calculated following best practice methodology set out by the GHG Protocol and UK Government Reporting Guidelines. Scope 1 and Scope 2 GHG emissions have also been calculated in accordance with existing Streamlined Energy and Carbon Reporting requirements (SECR), whilst Scope 3 GHG emissions have been calculated closely following recognised best practice set out by the GHG Protocol. All results are presented in tonnes CO₂e (carbon dioxide equivalent) and have been normalised per £M turnover and per employee.

Supporting energy consumption and fuel data used to calculate GHG emissions covers the whole of the 2022 reporting year, which runs from 1st January 2022 – 31st December 2022. To this effect we have full control over the GHG reduction plan we put in place for LFL only and our operational boundaries.

These consist of the following:

- Scope 1 emissions include the use of fuels for Lightning Fibre vehicle fleet
- Scope 2 emissions from electricity by Lightning Fibre
- Scope 3 emissions generated from Electricity Transmission & Distribution, well-to-tank

Lightning Fibre Limited is supported by Foresight Group LLP in adopting and implementing a Carbon Reduction Plan. The environmental measures set out in this Carbon Reduction Plan will be applied to Lightning Fibre Limited only, as part of our reporting requirements under this plan.

Foresight Group LLP are already operating as a registered Carbon Neutral company.

Commitment to achieving Net Zero

Lightning Fibre is committed to achieving Net Zero Carbon emissions by 2050 (or sooner). This requires Lightning Fibre to reduce our operational GHG emissions as close to zero as operationally possible by 2050, we are then committed to using carbon offsetting/sequestration to mitigate our remaining operational emissions (residual emissions from essential business operations), therefore ensuring Net Zero Carbon emissions are achieved, not later than 2050.

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.

Baseline Year: 2022
Lightning Fibre Limited – 1st Year's Emission Capture
Additional Details relating to the Baseline Emissions calculations.

Lightning Fibre started collecting and reporting carbon emissions from January 2022 and we will use 1 January 2022 to 31st December 2022 year as our baseline of reporting.

Actual data was used for Q1, Q2 , Q3 and Q4

As Lightning Fibre are rapidly growing, we will adopt a carbon intensity score based on employee numbers and per £M turnover.

- Number of employees
 - 1/01/2022: 61
 - 31/12/2022: 151
 - Average: 106 - used for baseline reporting
- Turnover figures:
 - Financial year 2022 (01/01/2022 – 31/12/2022) £0.4M estimated figure - used for baseline reporting

Baseline Year Emissions: 2022

EMISSIONS	TOTAL (tCO ₂ e)		
Scope 1	GHG Emissions Source	GHG Emissions (tonnes CO ₂ e)	Percentage of GHG Emissions (%)
	Company Fleet – Cars (Fuel Based)	171.690	57.36
Scope 2	GHG Emissions	GHG Emissions (tonnes CO ₂ e)	Percentage of GHG Emissions (%)

	Source		
	Electricity	52.53	21.86
Scope 3 (Included Sources)	GHG Emissions Source	GHG Emissions (tonnes CO ₂ e)	Percentage of GHG Emissions (%)
	Electricity Transmission & Distribution	1.21	0.50
	Well-to-tank	14.887	20.28
Total Emissions	Total GHG Emissions (tonnes CO ₂ e)		240.31
	GHG Emissions per employee (tonnes CO ₂ e)		1.59

Current Emissions Reporting Year 2022

Reporting Year: 2022			
EMISSIONS	TOTAL (tCO₂e)		
Scope 1	GHG Emissions Source	GHG Emissions (tonnes CO ₂ e)	Percentage of GHG Emissions (%)
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(Included Sources)	Electricity Transmission & Distribution	1.21	0.50
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Total Emissions	Total GHG Emissions (tonnes CO ₂ e)		240.31
	GHG Emissions per employee (tonnes CO ₂ e)		1.59

SCOPE 1 EMISSIONS

Fuel Consumption

We use fuel receipts to report on the actual litres of fuel consumed by our vehicle fleet (currently petrol and diesel vehicles only).

SCOPE 2 EMISSIONS

Electricity use

Lightning Fibre have gathered information on our electricity consumption we have included the power for the ISP service network components of the and our daily consumption from our two offices .

We use billed energy consumption from our electricity provider and the square footage. The bills contain a mixture of estimates and actual readings.

SCOPE 3 EMISSIONS

Well-to-Tank

Accounting for Lightning Fibre emissions produced in own supply chain Well to tank (WTT)

KEY COMMENTARY:

Lightning Fibre GHG emissions footprint for the 2022 reporting year (1st January 2022 – 31st December 2022) is 240.31 tonnes CO₂e. Key commentary and analysis of our results includes:

- Company Fleet accounts for the majority (71.4%) of our total GHG emissions footprint; accounting for 137.85tCO₂e. This therefore represents our most significant direct environmental impact and is a key reduction priority.
- Electricity use accounts for the remaining emissions we are currently reporting and makes up 28.6% of our GHG emissions footprint, equating to 52.3 tCO₂e. To calculate these emissions, we have used
- We have no natural gas on site therefore this has been excluded from our footprint
- Suitably accurate data was not available to Lightning Fibre to be able to report on GHG emissions arising from fugitive emissions as well as waste disposal and water consumption. Lightning Fibre will continue to review opportunities to improve the quantification of our supply chain emissions moving forward.
- Lightning Fibre does not currently collect information on staff commuting, hence its exclusion from our GHG emissions. We are currently assessing how this information can be collated and included with future emission calculations.

EMISSIONS REDUCTION TARGETS & TRAJECTORY

Lightning Fibre is currently in the process of developing our Net Zero Carbon Strategy and defining interim targets that we will set, aligned with our commitment to become Net Zero by 2050. We recognise that to achieve Net Zero we will have to mitigate our residual GHG emissions (i.e., those from essential operation of the company) through carbon offsetting and/or sequestration mechanisms.

The trajectories outlined below present a reduction pathway aligned with the 1.5°C Warming Scenario outlined by the Science Based Targets Initiative (SBTi) Absolute Contraction Approach, which will act as a benchmark to compare our GHG emissions against. This

approach is designed to provide a reduction trajectory which is aligned with the most ambitious published climate science and the aims of the Paris Agreement.

Progress against these targets can be seen in the graph below:

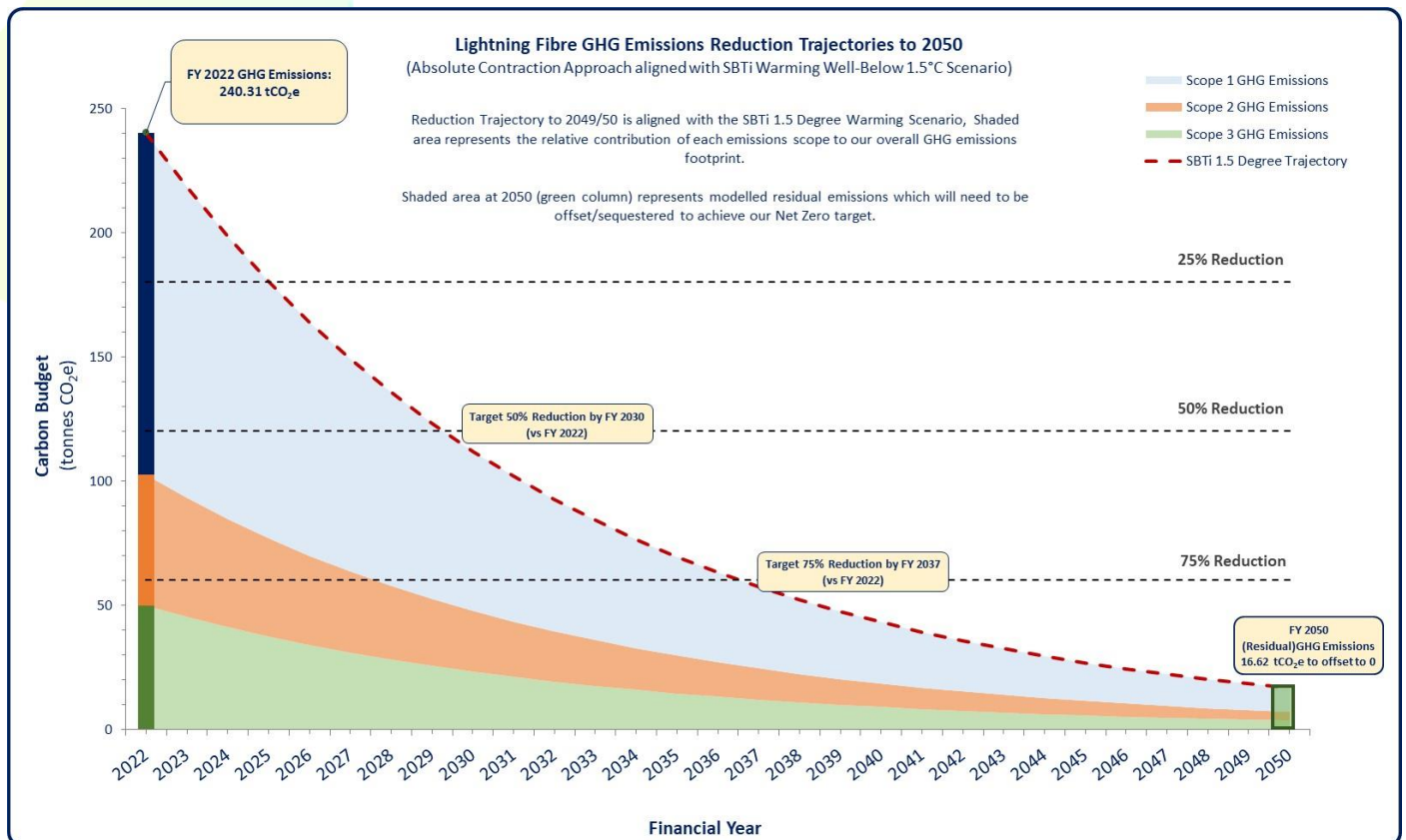
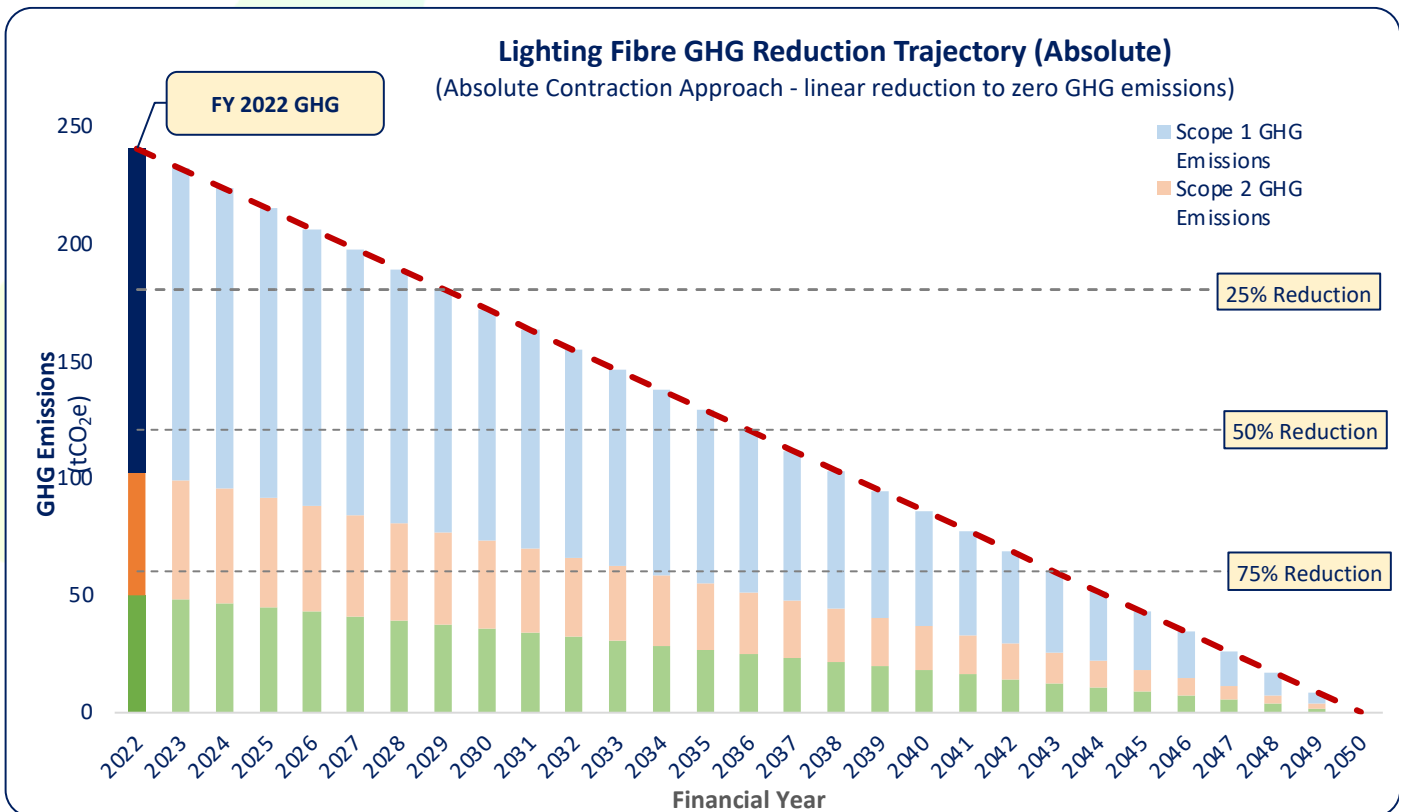


Figure 1 – Lightning Fibre Scope 1 – 3 GHG Emission Reduction Trajectory to 2050

Shading denotes the gap between trajectory and zero GHG emissions and is used to provide an indication as to the magnitude of offsetting/sequestration required to achieve Net Zero. This chart will be updated on an annual basis to show our progress against these reduction trajectories (red line).

Interim targets will be established once planned carbon reduction initiatives are implemented. We aim to revisit and revise the above graph on an annual basis as we continue our journey to become a net zero carbon emissions business by 2050.



**Figure 2 – Lightning Fibre Scope 1 – 3 GHG Emission
 Absolute Reduction Trajectory to 2050**

Figure 2 assumes an equal year on year emission reduction of 8.58tco₂e, the trajectory is hypothetical and should only be used as a reference benchmark to compare annual GHG emission reductions. This apportioned method does not take into account passive decarbonisation (e.g. grid decarbonisation) and does not represent the SBTi approach to Net Zero reduction as shown in Figure 1.

CARBON REDUCTION PROJECTS AND ENVIRONMENTAL MANAGEMENT MEASURES

Lightning Fibre already has a number of environmental management and sustainability measures in place across our operations; designed to reduce our environmental impact of our operations. The progress and impact of these measures is actively monitored by one of our senior Project Managers.

➤ *Improve Data collection and accuracy:*

- Our first commitment is to expand and improve the scope of our GHG emissions data collection. By doing this we hope to publish a more accurate total carbon footprint.
- We will improve our data collection by using more reliable sources, including utility invoices, for future reporting.

➤ *Business Operation:*

- Our current fleet is made up of petrol and diesel vehicles. Over the next 6 – 8 years we will be looking to upgrade some vehicles to EV or low emission alternatives. We will also look at the feasibility of installing charge points at our Polegate site, we have 6 charge points installed at our Eastbourne site.
- A review of how the fleet operates will be conducted to ensure only necessary journeys are taken and that they are conducted in the most sustainable way.
- As of January 2023, the process to upgrade our HVAC systems (15 units) will be assessed and a project plan produced.
- Hazardous waste streams, such as fibre glass, is processed in a sustainable and environmentally friendly way by using a third-party service specifically for this.
- LEDs and PIR sensors have been installed throughout our sites to reduce our energy consumption.
- Lightning Fibre will commit to gathering accurate water consumption data for future reporting years. This will improve the transparency of our total carbon footprint.
- Our water system will be reviewed and upgraded to ensure easier monitoring but also allow the installation of water saving strategies including sensor taps and cistern water saving devices in toilets and washrooms.

ISO14001

Environment is integral to our management procedures, and we have started our journey to become ISO 14001:2015 accredited with an aim to gain the certification in 2023.

We are working with our Climate Carbon consultants to identify the relevant environmental legislation requirements and in turn will develop a specific Environmental Management Plan with each project identifying the potential environmental impact and the associated control measures taken to minimise it.

CIVILS BUILDING EFFICIENCY

When we design and build our network, we minimise disruption, by utilising the existing infrastructure where we can. We use existing infrastructure including poles, chambers, currently this represents ~50% of our network deployment which reduces carbon emissions by minimising disruption. This will also reduce the use of diesel combustion from mobile plant and equipment used for construction activities.

In addition, Lightning Fibre standard duct size is 50mm which only requires a narrow trench. This method requires fewer resources and can have a reduced environmental impact, with less material removed from trenches or transported to the site for backfill.

By building a 100% fibre broadband network, Lightning Fibre are providing access to a more environmentally friendly network - more energy efficient and less carbon polluting than traditional copper networks. Lightning Fibre only use full fibre to the premises: we do not use copper cables, which is subject to corrosion, short circuiting, electrical faults which can potentially shorten its practical working life.

Lightning Fibre will also investigate low carbon choices and investigate mechanisms to ensure staff can reduce their emissions. We also aim to update our Travel Policy and roll out behavioural change to support low carbon modes of transport.

WASTE MANAGEMENT

We will continue to raise awareness among our employees about the importance of sustainable waste management practices. We also aim to work with our build partners to ensure that all waste associated with our network build is minimised and follows the principles of circular economy.

EMISSIONS REDUCTION TARGETS

To continue our progress to achieving Net Zero, we have adopted the following carbon reduction targets. We project that carbon emissions will decrease over the next five years to 156 tCO₂e by 2028. This is a reduction of 35%.

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

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.

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

Signed on behalf of Lightning Fibre Limited:



Ben Ferriman

CEO

25 January 2023