Carbon Reduction Plan

For Beebug Ltd.

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Created by: Ayesha (Lead Consultant)

beebug
ICT Specialists for Schools

positive planet

Our Commitment

Beebug Ltd. 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 absolute emissions by 90% 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 and 2 emissions to zero by 2030.
- To procure 80% renewable electricity by 2028 and 100% by 2030.
- Reduce Scope 3 emissions by 42% by 2030.

Our long-term targets:

- Reduce our total market-based emissions (scope 1, 2 and 3) by at least 90% 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 as January - December 2022.

Baseline Year: 2022	
Beebug Ltd. calculated baseline reporting year in compliance with the PPN 06/21 categories.	
Emissions	Total (tonnes CO_2e)
Scope 1	3.317
Scope 2*	Market-based: 11.583 Location-based: 11.583
Scope 3 including: - Fuel & Energy Related Services - Business Travel - Transportation & Distribution (Upstream & Downstream) - Employee Commuting & Homeworking - Operational Waste & Water	18.558
Total Emissions* (excluding procurement)	**Market-based: 33.458** **Location-based: 33.458**

Our total emissions equate to a Carbon Intensity Metric of 3.345 tCO_2e per full-time employee equivalent (FTE) based on 10 FTEs during the baseline period (using market-based emissions).

*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.

Current Emissions Reporting

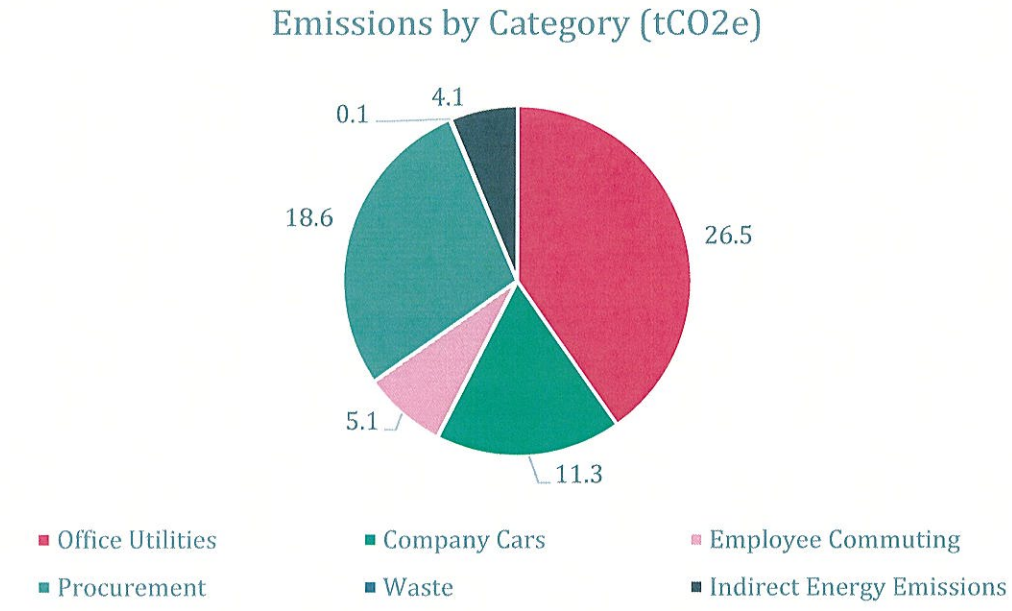
Current Reporting Year: January - December 2023	
Emissions	**Total (tonnes CO_2e)**
Scope 1	13.2
Scope 2*	Market-based: 24.6 Location-based: 24.6
Scope 3 including: - Purchased Goods & Services - Capital Goods - Fuel & Energy Related Services - Business Travel - Transportation & Distribution (Upstream & Downstream) - Employee Commuting & Homeworking - Operational Waste & Water	27.9
Total Emissions* (including procurement)	**Market-based: 65.8** **Location-based: 65.8**

Carbon Intensity Metrics

Current year: 2023-2024	Carbon Intensity Metric (tonnes CO_2e / unit)
Employees	6.58
Turnover (£)	43.3

Based upon 10 employees, and a £1.518 m turnover during the measurement period. We are using market-based emissions to calculate our intensity metrics.

Carbon Emissions Breakdown



Carbon Reduction

Progress

Emissions	Total Carbon Footprint (tonnes CO_2e)	
	Baseline year: 2022	Current year: 2023
Scope 1	3.3	13.2
Scope 2	11.5	24.6
Scope 3	18.55	27.9
Total emissions	**33.45**	**65.8**

We are on track to achieve our near-term targets and will therefore continue to maintain / accelerate our progress. To improve on our reporting and accuracy of organizational emissions, we have included our procurement emissions in our current reporting period.

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
Created a Green Team to lead initiatives. This team has been made up of members from different departments to support the roll out of initiatives and management of data, this includes sharing and collaborating throughout the organisation.	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 & Scope 2				
Activity No.	**Activity**	**Target Date**	**% Reduction Target**	**Category**
1	Ask the facilities management to consider low-cost options such as reducing the boiler temperature and adding heat & solar control reflective window sheets. Consider planning for larger cost management (where appropriate) such as an efficient boiler system. Consider moving to premises without gas heating for 100% reduction is stationary combustion emissions.	2025-2030	6%	Stationary Combustion
2	Encourage the facilities management company at the office to procure a 100% renewable electricity tariff. This change will reduce **market-based** emissions (from chosen tariff) from the office (common areas) to 0 tCO2e.	2026-2030	100% (market-based)	Purchased Electricity
3	Implement energy efficiency measures to reduce the overall amount of electricity consumed at sites. Optimise operational procedures and implement energy management systems (such as ISO 14001). Examples of reduction measures include: - upgrading lighting and introducing more sensor lighting, and aligning sensor times to usage patterns (eg 3 minutes for corridors, 20 minutes for working spaces) - installing timers on sockets/equipment - reviewing and renewing inefficient equipment (when at end of life), and actively consider the energy efficiency	2026-2030	10% (location-based)	Purchased Electricity

	of equipment when new purchases are required (eg laptops, fridges, dishwashers) Invite colleagues from different sites to openly explore challenges and barriers to collaboratively find solutions for reduction.			
4	To completely reduce market and location-based energy emissions to zero, install on-site renewable energy generation technologies such as solar PV panels, solar heating, heat pumps (following an energy audit to assess feasibility and payback periods), to generate 100% of heating and energy demand. Consider removing on-site stationary combustion (gas) heating. Alternatively, encourage the landlord to do the above or consider moving site. 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. You would still need to consider gas emissions unless removed (or better technology is available).	2026-2030	100% (location and market-based)	Stationary Combustion Purchased Electricity

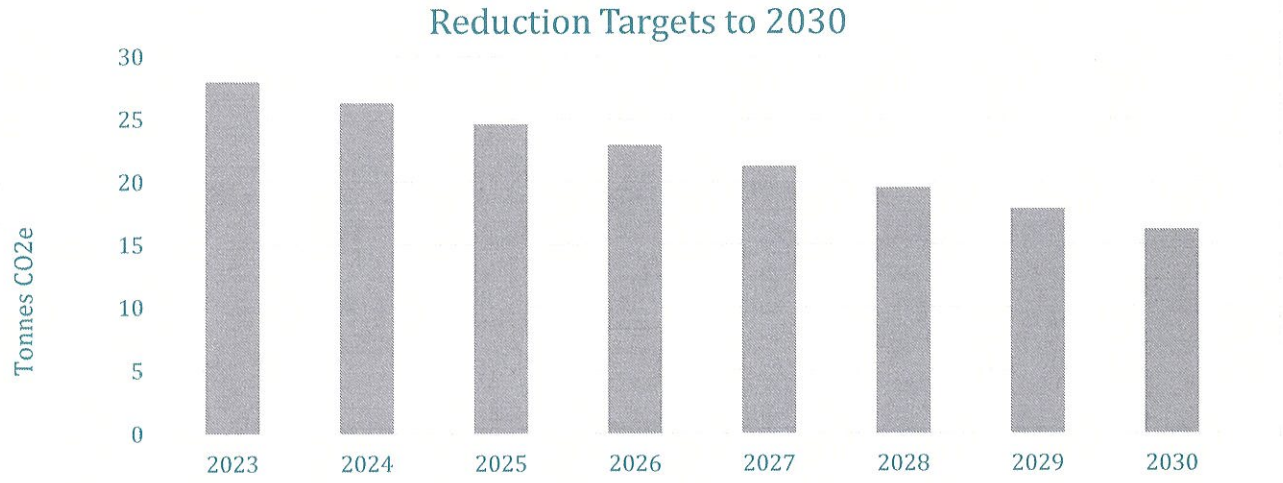
Based upon the above completed and planned initiatives, it is projected that Scope 1 & 2 carbon emissions will decrease to **0 tCO_2e** by 2030.

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

Reduction 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.	2026-2030	2.5 - 7.5%	Commuting & Home Working 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 year two measurement & 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.	2026-2030	20%	Purchased Goods & Services

	Develop and monitor procurement policy for all new suppliers to align to Net Zero goals.			
3	Liaise with key suppliers to see whether they can ship with the minimal amount of packaging needed to secure the product.	2024	25%	Waste

Based upon the above completed and planned initiatives, it is projected that (as a minimum) Scope 3 carbon emissions will further decrease over the next seven years from the current normalised measurement of 27.9 tCO_2e to 16.2 tCO_2e by 2030. This is a **reduction of 42%** and will keep us on track to Net Zero.



Declaration and Sign Off

This Carbon Reduction Plan has been completed and submitted in accordance with the Public Procurement Notice (PPN 06/21) and associated guidance and reporting standard for the 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[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 Beebug Ltd. Executive Team.

Signed on behalf of Beebug Ltd.

Name: Jimmy Varnavides

Position: Director

Date: 31/10/2025

1 https://ghgprotocol.org/corporate-standard

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