

Reference no: ZAM-FM- CRP01/24	Issue No: 001
Issue date: 01/2024	Address: 1b Bank House, The Paddock, Wilmslow, Handforth, SK0

ZAM FM Carbon Reduction Plan

Introduction

ZAM FM acknowledges the urgent need to address climate change and reduce our carbon footprint. As a responsible Facilities Management Company, we are committed to taking proactive measures to mitigate our environmental impact and contribute to a more sustainable future. This Carbon Reduction Plan outlines our strategies and actions to reduce greenhouse gas emissions associated with our operations.

Baseline Assessment

1. Conduct a comprehensive assessment of ZAM FM's current carbon footprint, including direct emissions from operational activities (such as energy consumption, transportation, and waste) and indirect emissions from purchased electricity and other sources.
2. Identify key sources of emissions and hotspots within our operations to prioritize mitigation efforts effectively.

Goal Setting:

1. Establish ambitious yet achievable targets to reduce ZAM FM's greenhouse gas emissions over a specified timeframe, aligned with international best practices and climate science.
2. Set interim milestones to track progress towards our long-term carbon reduction goals and ensure accountability.

Strategies and Actions:

- **Energy Efficiency:**
 - Implement energy-efficient measures to reduce electricity and fuel consumption in our facilities and operations, such as:
 - Upgrading lighting systems to LED technology.
 - Installing energy-efficient appliances and equipment.
 - Encourage behavioural changes among staff to promote energy conservation and awareness.
- **Renewable Energy:**
 - Increase the use of renewable energy sources to power ZAM FM's operations, including:
 - Purchasing renewable energy certificates (RECs) or entering into power purchase agreements (PPAs) with renewable energy providers.
 - Explore opportunities to participate in community solar projects or support local renewable energy initiatives.
- **Transportation:**

- Promote sustainable transportation options for employees, such as:
 - Encouraging carpooling, cycling, and the use of public transit for commuting.
 - Providing incentives for employees to choose low-emission vehicles or electric vehicles (EVs).
 - Optimize fleet management practices to reduce fuel consumption and emissions from company vehicles.
- **Waste Reduction and Recycling:**
 - Minimise waste generation and divert recyclable materials from landfill by:
 - Implementing waste reduction strategies, such as reducing paper usage and single-use plastics.
 - Establishing recycling programs for paper, plastic, glass, and other recyclable materials.
 - Composting organic waste generated in our facilities, where feasible.
- **Carbon Offsetting:**
 - Offset unavoidable greenhouse gas emissions through reputable carbon offset projects that contribute to emission reductions or removals, such as:
 - Supporting reforestation and afforestation projects.
 - Investing in renewable energy projects in underserved communities.
 - Purchasing verified carbon credits from certified offset providers.

Monitoring and Reporting:

1. Establish a system for regularly monitoring and tracking ZAM FM's carbon emissions, including data collection, analysis, and reporting.
2. Develop transparent and accessible reporting mechanisms to communicate our progress on carbon reduction initiatives to stakeholders, including employees, customers, suppliers, and the public.
3. Conduct periodic reviews and evaluations of our carbon reduction efforts to assess effectiveness, identify opportunities for improvement, and adjust strategies as needed.

Employee Engagement and Stakeholder Collaboration:

1. Engage employees at all levels of the organization in carbon reduction efforts through education, training, and awareness-raising activities.
2. Encourage collaboration with industry peers, partners, and stakeholders to share best practices, lessons learned, and innovative solutions for addressing climate change.

Conclusion

ZAM FM is committed to reducing our carbon footprint and contributing to global efforts to combat climate change. By implementing the strategies and actions outlined in this Carbon Reduction Plan, we aim to minimise our environmental impact, foster sustainability, and build a more resilient future for generations to come.

1. Scope Identification:

- The scope of our carbon emissions inventory includes three scopes:
 - Scope 1: Direct emissions from sources that are owned or controlled by ZAM FM, such as fuel combustion in company vehicles or on-site generators.
 - Scope 2: Indirect emissions from purchased electricity, heat, or steam consumed by ZAM FM.
 - Scope 3: Other indirect emissions from sources outside ZAM FM's direct control, such as employee commuting, business travel, waste generation, and supply chain activities.

2. Data Collection:

- We have gathered the relevant data on energy consumption, fuel usage, transportation, waste generation, and other activities that contribute to carbon emissions. Sources of data include:
 - Utility bills for electricity, natural gas, and other fuels.
 - Fuel consumption records for company vehicles and equipment.
 - Travel logs and expense reports for business travel.
 - Waste management records, including disposal and recycling data.
 - Supplier invoices and procurement records.

3. Emission Factors:

- We have used appropriate emission factors to convert activity data into carbon dioxide equivalent (CO₂e) emissions. Emission factors represent the amount of CO₂e emitted per unit of activity (e.g., per kWh of electricity consumed, per litre of fuel burned).
- Emission factors have been obtained from recognized sources such as government agencies, industry associations, or environmental consultants and we have ensured that the emission factors used are relevant to our geographical location and specific activities.

4. Calculation:

- We calculated emissions for each scope using the following formula:
 - Scope 1 Emissions = Activity Data (e.g., fuel consumption) × Emission Factor
 - Scope 2 Emissions = Electricity Consumption × Emission Factor for Electricity
 - Scope 3 Emissions = Activity Data (e.g., miles travelled) × Emission Factor

5. Verification and Validation:

- We will verify the accuracy and completeness of the data collected and calculations performed and cross-check with previous years' data and industry benchmarks.
- We will validate the results through an independent review or verification process, if required, to ensure credibility and transparency.

6. Reporting and Analysis:

- Each year we will prepare a carbon emissions inventory report summarizing the results of the calculation, including emissions by scope, sources, and trends over time.
- We will continually analyse the data to identify opportunities for emission reduction, prioritize actions, and set targets for carbon reduction initiatives.
- Communicate the findings internally and externally to stakeholders, demonstrating ZAM FM's commitment to transparency and sustainability.

7. Continuous Improvement:

- We have established a process for regularly updating and refining the carbon emissions inventory to reflect changes in operations, data availability, and emission factors.
- We will implement measures to reduce emissions, track progress toward reduction targets, and continuously improve ZAM FM's environmental performance over time.

By following these steps, ZAM FM can effectively calculate its carbon emissions and use this information to inform decision-making, drive emission reduction efforts, and contribute to climate action goals.

2024 Baseline Carbon Footprint Assessment:

	Description	Metric tons of CO ₂ e
Scope 1	Office emissions (gas)	0.6
	Other Scope 1 emissions	0.0
Scope 2	Office emissions (electricity)	3.9
Scope 3	Homeworker electricity emissions (home office)	8.9
	Homeworker electricity emissions (air-conditioning)	0.0
	Homeworker gas emissions	9.7
	Diesel emissions (commute)	7.7
	Petrol emissions (commute)	11.6
	Hybrid emissions (commute)	0.0
	Motorbike emissions (commute)	0.0
	Train emissions (commute)	0.0
	Bus emissions (commute)	3.9
	Taxi emissions (commute)	0.0
	Train emissions (in work travel)	0.4
	Diesel emissions (in work travel)	2.7
	Petrol emissions (in work travel)	2.8
	Hybrid emissions (in work travel)	1.9
	Bus emissions (in work travel)	0.0
	Taxi emissions (in work travel)	0.0
	Plane emissions	0.6
	Hotel emissions	0.3
	Additional estimates for purchases of goods and services	2.5
Other Scope 3 emissions	0.0	
Total emissions	Company CO ₂ Emissions (tons)	57.55
	Average CO ₂ Emissions per person (tons)	0.230
	Average CO ₂ Emissions per person per day (kgs)	0.63
	Equivalent airmiles travelled	196,704
	Trees required to offset	863

Total Scope Breakdown

Scope	Total metric tons of CO ₂ e
Scope 1	0.6
Scope 2	3.9
Scope 3	53.1

