

# Carbon Reduction Plan for Advanced Emergency Vehicles Limited

#### Introduction

Advanced Emergency Vehicles Limited (AEV) is committed to reducing its carbon footprint and contributing to global efforts to mitigate climate change. This Carbon Reduction Plan is developed in accordance with PPN 06/21 and associated guidance, meeting the required standards for reporting carbon reductions. The plan outlines our commitment, baseline emissions, current emissions reporting, carbon reduction targets, and the initiatives we will undertake to achieve these targets.

#### **Commitment**

AEV is dedicated to achieving Net Zero emissions by 2050. This plan provides a structured approach to reducing greenhouse gas (GHG) emissions across our operations, including manufacturing, supply chain, and lifecycle management of our emergency vehicles.

## **Baseline Emissions Footprint**

Our baseline emissions have been calculated for the year 2024, serving as the reference point for our reduction targets.

- Baseline Year: 2024
- Scope 1 (Direct Emissions): 162 tonnes CO<sub>2</sub>e
- Scope 2 (Indirect Emissions from Electricity): 10 tonnes CO<sub>2</sub>e
- Scope 3 (Other Indirect Emissions): 236 tonnes CO<sub>2</sub>e
- Total Emissions: 408 tonnes CO<sub>2</sub>e

## **Next Emissions Reporting**

- Reporting Year: 2025
- Scope 1: TBA tonnes CO<sub>2</sub>e
- Scope 2: TBA tonnes CO<sub>2</sub>e
- Scope 3: TBA tonnes CO<sub>2</sub>e
- Total Emissions: TBA tonnes CO<sub>2</sub>e

# **Carbon Reduction Targets**

- By 2025: Reduce total emissions by 20% from baseline levels.
- By 2030: Reduce total emissions by 50% from baseline levels.
- By 2050: Achieve Net Zero emissions.

AEV recognises that absolute carbon emissions vary based on production volumes and output, therefore we have also calculated a normalised emission figure of 0.39 per unit of output. This measure is subject to the 20% reduction target to 0.31 tonnes CO<sub>2</sub>e per unit output.



### **Carbon Reduction Projects and Initiatives**

### 1. Energy Efficiency and Renewable Energy

- o **Energy Audits**: Conduct comprehensive energy audits to identify and implement energy-saving opportunities across the whole facility.
- **Renewable Energy Transition**: Transition to 100% renewable energy sources for the manufacturing facility and offices by 2030.
- **Energy Management Systems**: Implement advanced energy management systems to monitor and optimise energy use in real-time.

## 2. Sustainable Manufacturing Processes

- o **Recycled Materials**: Increase the use of recycled and sustainable materials in the production of emergency vehicles.
- Waste Reduction: Implement zero-waste-to-landfill initiatives and enhance recycling rates within our operations.
- Process Optimization: Invest in cutting-edge, energy-efficient manufacturing technologies to reduce energy consumption and emissions.

## 3. Product Design and Lifecycle Management

- Eco-friendly Design: Focus on designing vehicles that are energy-efficient, durable, and recyclable.
- o **Lifecycle Assessments**: Conduct thorough lifecycle assessments to identify and mitigate environmental impacts from production to end-of-life.
- o **Battery Recycling**: Develop and implement a robust battery recycling program to ensure responsible disposal and reuse of battery components.

# 4. Supply Chain Sustainability

- Supplier Collaboration: Work closely with suppliers to reduce emissions and adopt sustainable practices throughout the supply chain.
- Sustainable Sourcing: Ensure that materials are sourced from suppliers who demonstrate strong environmental stewardship.
- Logistics Optimization: Optimize logistics and transportation methods to reduce fuel consumption and emissions.

# 5. Operational Efficiency

- Fleet Electrification: Transition our vehicle fleet to electric vehicles (EVs) and optimise routes to reduce emissions.
- o **Telecommuting and Flexible Work**: Promote telecommuting and flexible work arrangements to minimize travel-related emissions.



o **Green Building Standards**: Ensure all new buildings and renovations meet green building standards such as LEED or BREEAM.

### 6. Employee Engagement and Training

- o **Awareness Programs**: Regularly conduct training and awareness programs to educate employees on carbon reduction practices.
- o **Incentives**: Provide incentives for employees to adopt sustainable practices, such as using public transport or cycling to work.

# 7. Monitoring and Reporting

- o **GHG Inventory**: Maintain a detailed inventory of GHG emissions across all operations, following international reporting standards.
- Progress Tracking: Use key performance indicators (KPIs) to monitor progress towards carbon reduction targets.
- o **Transparent Reporting**: Publish annual sustainability reports detailing our carbon reduction efforts and achievements, in line with recognized standards such as the Global Reporting Initiative (GRI) or the Carbon Disclosure Project (CDP).

# Governance and Responsibility

- **Board Level Oversight**: Our Board of Directors oversees the Carbon Reduction Plan, ensuring alignment with our strategic objectives.
- **Sustainability Committee**: A dedicated team responsible for implementing and monitoring carbon reduction initiatives.
- **Employee Involvement**: Engage all employees in sustainability efforts through training and awareness programs.

#### **Future Actions**

- **Annual Reviews**: Regularly review and update the Carbon Reduction Plan to reflect progress and incorporate new best practices.
- **Technology Investments**: Continuously invest in new technologies and innovations to further reduce our carbon footprint.
- **Stakeholder Engagement**: Actively engage with stakeholders, including customers, suppliers, and regulatory bodies, to support and promote sustainability initiatives.

By implementing this Carbon Reduction Plan, Advanced Emergency Vehicles Limited aims to significantly reduce its carbon footprint, promote sustainability, and lead by example in the emergency vehicle industry. Through ongoing commitment and collaboration, we will contribute to a more sustainable future while delivering high-quality, eco-friendly emergency vehicles.