

# Alstom Transport UK Ltd Carbon Reduction Plan

Supplier name: Alstom Transport UK Ltd

Publication date: 31st March 2023

## Commitment to achieving Net Zero

Alstom Transport UK Ltd is committed to achieving Net Zero emissions by 2050.

## Baseline Emissions Footprint

Baseline emissions are a record of the GHGs that have been produced in the past and were produced prior to the introduction of any strategies to reduce emissions, and provide the reference point against which emissions reduction can be measured.

<b>Baseline Year: 2021/22</b>	
<b>Additional Details relating to the Baseline Emissions calculations.</b>	
<p>The historic baseline taken in 2018/19 was for Alstom Transport UK Limited. Alstom acquired Bombardier Transport in February 2020 and a new baseline covering the new company was established (2021/22) following the integration of the two companies.</p> <p>The Scope 1 emissions are a combination of Gas and other fuels used for heating and other activities within the UK and Alstom company transport.</p> <p>The scope 2 data is derived from Electricity use within our UK operations. The carbon emissions generated for electricity could be shown as zero although we have chosen to represent them using the local grid emission factor. The potential for a zero figure arises as Alstom purchases 100% certified green electricity from UK sources within the UK.</p> <p>The scope 3 data shown is derived from emissions for non-Alstom commuting vehicles and water consumption data. We are expanding what is to be included within our Scope 3 data within the FY2023/24 currently being collected and will continue to be developed in our subsequent Carbon Reduction submissions.</p> <p>All emission data is calculated using the DEFRA emission factors for each scope type.</p>	
<b>Baseline year emissions:</b>	
<b>EMISSIONS</b>	<b>TOTAL (tCO<sub>2</sub>e)</b>
<b>Scope 1</b>	11074.652
<b>Scope 2</b>	8561.293
<b>Scope 3</b>	358.633
<b>Total Emissions</b>	19994.578

## Current Emissions Reporting

Reporting Year: 2022/23 (*Note1)	
EMISSIONS	TOTAL (tCO <sub>2</sub> e)
Scope 1	12357.042
Scope 2	7775.182
Scope 3 (Included Sources)	735.884 Includes data for water consumption which isn't included in baseline figure
<b>Total Emissions</b>	<b>7774.58</b>
<b>*Note 1</b>	The data included covers 12 months 2022/23 financial year for Ex Alstom sites and 15 months data (Jan 2022 to March 2023) for Ex Bombardier sites to align reporting cycles. These figures are derived from the SECR submission of each legal entity April 2023.

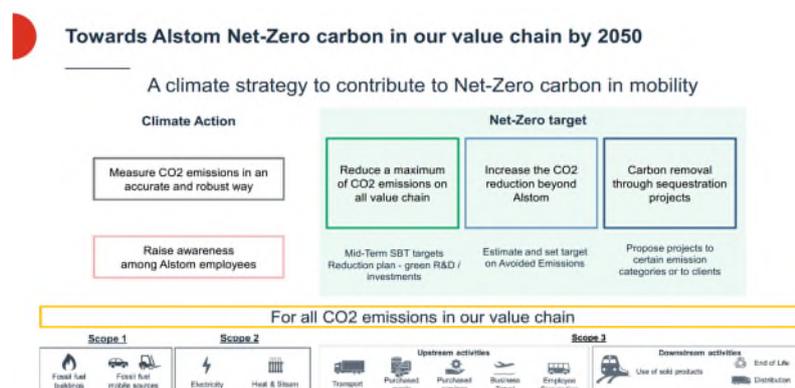
## Emissions reduction targets

### Our route to Net Zero by 2050

Alstom, global leader in smart and sustainable mobility, has had its near-term science-based emissions reduction targets validated by the Science Based Targets initiative (SBTi) as consistent with levels required to meet the goals of the Paris Agreement.

The SBTi has validated the corporate greenhouse gas (GHG) emissions reduction targets submitted by Alstom as compliant with its criteria and recommendations (version 4.2). The SBTi's target validation team has classified Alstom Group's scope 1 and 2 target ambition and has determined that it is in line with a 1.5°C trajectory.

Alstom has updated its carbon targets following the Bombardier Transport acquisition in 2021 which resulted in an expanded perimeter and therefore a revised GHG emissions baseline. Alstom has increased the ambition of its new near-term targets compared to the previous validated ones.



## Our interim carbon reduction targets FY2030/31

# 40%

reduction of absolute scope 1 & 2 GHG emissions by FY2030/31

# 42%

reduction per passenger-km of scope 3 GHG emissions from the use of sold products covering passenger rolling stock by FY2030/31

# 35%

reduction per ton-km of scope 3 GHG emissions from use of sold products covering freight by FY2030/31

# 100%

renewable electricity supply from renewable sources in its operations by end of 2025

# 25%

reduced energy consumption of the portfolio of solutions by 2025

# 100%

of newly developed solutions to be eco-designed

Key topics	Main CSR targets and KPI	2022/23	Progress	SDG
Energy and Greenhouse gas emissions performance of operations	2025: 100% electricity supply from renewable sources	57%	<div style="width: 57%;"><div style="width: 57%;"></div></div>	 
	2030: 40% reduction in Scope 1 & 2 emissions (TCO <sub>2</sub> )	22%	<div style="width: 22%;"><div style="width: 22%;"></div></div>	 
Low carbon solutions	2025: 25% energy reduction in solutions	23.4%	<div style="width: 23.4%;"><div style="width: 23.4%;"></div></div>	 
	Scope 3 Use of SoldProducts – Passenger (gCO <sub>2</sub> /pkm)	4.6 gCO <sub>2</sub> /pkm	<div style="width: 4.6%;"><div style="width: 4.6%;"></div></div>	 
	Scope 3 Use of SoldProducts – Freight (gCO <sub>2</sub> /tkm)	9.2 gCO <sub>2</sub> /tkm	<div style="width: 9.2%;"><div style="width: 9.2%;"></div></div>	
Eco-design and circular economy	2025: 100% of newly-developed solutions eco-designed	65%	<div style="width: 65%;"><div style="width: 65%;"></div></div>	 
	2025: 25% recycled rate in newly-developed Rolling stocks solutions	22.5%	<div style="width: 22.5%;"><div style="width: 22.5%;"></div></div>	 

■ Reached ■ On progress

### The approved near-term targets are:

- Alstom is committed to reduce absolute direct GHG emissions (scope 1) and indirect GHG emissions (scope 2) from Alstom sites by 40% by 2030/31 from 2021/22 baseline – in line with a 1.5°C trajectory.
- Alstom is committed to reduce GHG emissions (scope 3) from the use of sold products from its portfolio of rolling stock solutions by 42% (increased from previous target set at 35%) per passenger-km and 35% per ton-km by 2030/31 from a 2021/22 baseline.

Both targets are in line with the Beyond 2°C scenario (B2DS), the most ambitious one available for Sectoral Decarbonisation Approach for transport sector.

### Our 2050 Net Zero Target

- At least a 90% absolute reduction on our value chain for all Scopes vs FY2021/22
- Balance the remaining emissions through sequestration projects

Rail is among the most energy efficient modes of transport for freight and passengers, the modal shift from other type of passenger transport to rail will play a key role in the decarbonisation of the mobility sector. Alstom strongly believes in its role to support the transition towards a low carbon future. Its solutions help to decarbonise mobility and contribute to reaching the climate targets set by countries and cities.

To achieve these targets, the Alstom in Motion strategy includes operational energy efficiency and transition ambitions: decarbonising its operations, with the goal of achieving 100% renewable electricity supply from renewable sources in its operations by end of 2025; reducing the energy consumption of the portfolio of solutions by 25% by 2025 compared to 2014; and for 100% of newly developed solutions to be eco-designed.

Alstom is engaging to complete a deep decarbonisation of its activities over the value chain, while contributing to the mitigation efforts beyond the company. The net-zero ambition means that climate targets will be gradually expanded to cover the whole value chain, by setting the right measure efforts and establishing the milestones towards absolute GHG reduction by 2050.

## **Carbon Reduction Projects**

### **Completed Carbon Reduction Initiatives**

The following environmental management measures and projects have been completed or implemented since the 2021/22 baseline.

Alstom continues to operate a certified ISO14001:2015 Environmental Management System, to drive continuous improvement the Alstom 2025 AIM (Alstom in Motion) strategy has set a series of objectives centred around energy usage and carbon reduction.

In order to reduce the carbon produced by our facilities, Alstom has implemented the recommendations from our SECR and ESOS reporting and further carbon reduction initiatives are proposed to improve our carbon performance before 2025.

These include, but are not limited to:

The Alstom 2025 strategy has set a target for 10% self-production of energy at all of our sites. This is currently being scoped within the UK. A deployment of Solar PV projects is planned to begin in 2023 with installation to follow on all chosen sites before 2025.

Implementation of a full overhaul of our lighting systems with deployment of LED fittings and building management systems, PIR and pressure sensors to optimise our energy usage and reduce maintenance on the lighting systems.

There is a drive within Alstom to reduce our dependence on Gas consumption given the current global situation and rising costs and scarcity of resources. Alstom are planning to interlock the doors of our traincare maintenance depots to the heating system. This will give instant payback where the heating system will switch off if the main doors are opened.

Initiatives such as heat pumps and solar heating are being explored where we have sole control of our sites and payback periods align with contract lengths. During 2022/23 we ended our work out of our Chester Depot in May, this reduced our gas consumption against 2021/22. Notwithstanding this activity at our sites remained stable and our hours worked had a slight increase and our gas consumption reduced by nearly 20% through efficiencies elsewhere giving an overall decrease in our scope 1&2 carbon intensity per hours worked;

Support of the global Science Based Targets through a cascade of UK level environmental improvement targets.

We continue to evolve the branded fleet beyond our bespoke PHEV vehicles. These have reduced our carbon emissions by over 75g CO<sub>2</sub>e/km with charging points being installed as part of the lease package to further encourage our staff to maintain the charge. We have taken this to our on-site plant such as forklifts and telehandlers which are now either hybrid or full EV.

An overhaul of our company cars has produced an average reduction of 40g CO<sub>2</sub>/km. We are now able offer full electric cars at all pay grades enabling our staff to find the low carbon option which suits their travel patterns;

The installation of charging points at our fixed sites is planned for 2024 and this will provide the infrastructure to reduce the use of fuel within our vehicles;

Telematics will continue to be fitted to branded vehicles to relay detailed carbon data and enable us to plan efficient routing and deployment of staff to limit UK wide travel;

Our project sites are transferring to fully electrified plant, removing the dependence on diesel, transferring sites where we are not able to gain a grid connection using HVO fuel or renewables to power activities. There is a commitment for our D&IS (Signalling) sites to move to diesel free during 2024 through use of alternative fuels and/or technologies;

The Company has used 100% green certified electricity from UK sources since 2017. This contributes to a global Alstom objective to use 100% green energy throughout the Company by 2025.

Our Wembley Traincare Centre has undergone an overhaul of its heating system to move from fuel oil to a far more efficient gas fed system (707,000kwh of energy savings per year). A full solar array has been fitted to the roof of the building which will produce 215,000kwh/yr. This is 13% of the electricity usage at Wembley in 2019/20 and the adoption of solar will give carbon savings (based on the 2019 emission factors) of 54 tCO<sub>2</sub>e per year; and

2023/24 sees Alstom participate in Phase 3 of ESOS with energy surveys planned for Q3 through an external consultant. The recommendations arising from the process will be applied to our sites and we will undertake initial audits of our sites with a view to implementing an ISO50001:2018 Energy Management System at selected UK sites for the first time.

### **Future measures**

- Full assessment of our Scope 3 emissions and inclusion within our annual reporting. We will set applicable targets in line with our global targets to reduce these within the UK.
- Further changes to our company fleet as new technologies reach market to extend the electric vehicle offering within Alstom.
- Alstom plans to install Solar PV at our owned sites within the UK – Crewe, Derby, Widnes and those sites with extended delivery contracts.
- Explore the option of ground source heating to reduce the reliance on natural gas for heating our offices and depots.
- A reduction in Diesel use on our maintenance depots through replacement fuels.

## 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<sup>1</sup> and uses the appropriate Government emission conversion factors for greenhouse gas company reporting<sup>2</sup>.

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<sup>3</sup>.

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

### Signed on behalf of Alstom:



Colin Haynes (UK EHS Director)

Date: 31<sup>st</sup> March 2023

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<sup>1</sup><https://ghgprotocol.org/corporate-standard>

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

<sup>3</sup><https://ghgprotocol.org/standards/scope-3-standard>