Environmental performance

In 2019, we introduced a new approach to measuring and assessing our environmental performance, using the Sectoral Decarbonisation Approach (SDA) methodology to set ourselves a number of environmental targets, alongside more traditional environmental targets or key performance indicators (together, the KPIs). The SDA methodology is the only approach with transport sector-specific metrics, using climate science to enable organisations to set targets relevant to their industry. We set new SDA KPIs on traction energy usage, traction carbon emissions and total (Scope 1 & 2) carbon emissions, which at the time met the 2018 Intergovernmental Panel on Climate Change (IPCC) goal of controlling the increase in global warming to below 2°C. The SDA KPIs were set over an initial seven-year performance period – 2019 to 2025 – from a 2018 baseline. We supplemented these SDA targets with KPIs on site emissions, waste to landfill and water usage, which we also aim to achieve over the same seven-year performance period against a 2018 baseline.

Our intention is to review the SDA KPIs on a regular basis as climate science, technology and forecasting methods improve, and we intend to refresh our KPIs in 2023, using 2022 as the baseline year and aligned to the ambition of the Paris agreement to control the increase in global warming to below 1.5°C. These targets have a purpose to aid our commitment to an overarching goal of achieving net zero (Scope 1 & 2 emissions) across the Group by 2040.

Group 2025 targets

Reduction target description (metric)	Base year (2018)	2025 target	2021	2022	% change from base year	% change 2021-2022	Required to meet target
Traction Energy: (vehicle fuel and							
electricity) MWh/mpkm	66.92	58.72	86.19	83.82	25.3%	(2.7%)	(29.9%)
Traction Carbon Emissions							
tCO ₂ e/mpkm	17.67	15.45	24.15	23.38	32.3%	(3.2%)	(33.9%)
Total Scope 1 & 2 Emissions							
tCO₂e/mpkm	19.26	16.45	25.34	24.17	25.5%	(4.3%)	(31.9%)
Site Scope 1 & 2 Emissions							
(building use only) tCO₂e	41,656	38,199	31,683	29,839	(28.4%)	(5.8%)	Met
Landfill Waste Disposal tonnes	7,711	5,783	4,491	4,215	(45.3%)	(6.1%)	Met
Water Consumption m ³	478,956	439,209	424,347	429,170	(10.4%)	1.1%	Met

The performance against KPI intensity targets in 2022 was still impacted by Covid-19, with disruption caused by the Omicron variant in the early part of the year affecting discretionary travel. This had the effect of reducing the environmental efficiency relative to normalised operation. The year began, therefore, with Covid-19 continuing to have a significant impact on our intensity metrics.

Over the full year, the 2022 traction metrics have all improved on the 2021 result as patronage improved over the year. Whilst we remain behind our 2025 targets on all three traction metrics, we are seeing the start of a positive impact of ZEV transition, mostly in the UK, and expect this to continue as we roll out the ZEV transition in future years and therefore there remains potential for material improvement in intensity metrics as this progresses.

There was a good performance on absolute site emissions and landfill waste disposal in the year, with a 5.8% and 6.1% respective reduction year on year. Whilst water consumption slightly increased on 2021 levels, this was a good result given both the service curtailments and low office occupancy levels in 2021 reduced water usage significantly, e.g. from vehicle cleaning.

Absolute emissions

tCO₂e emissions by scope	2019	2020	2021	2022	Change (2021 vs. 2022)
Scope 1	823,582	514,106	657,239	830,287	26.3%
Scope 2	49,938	67,879	73,649	83,577	13.5%
Scope 3	8,221	8,641	5,762	600,400 ¹	N/A ¹
Total	881,741	590,626	736,650	1,514,264	N/A ¹

¹ Scope 3 absolute emissions has increased significantly year on year due to the Group completing a full baseline assessment of Group-wide Scope 3 emissions during the year and including all relevant categories in the 2022 numbers. Prior year scope 3 included only business travel, waste, water and certain other upstream emissions, hence no year on year % change has been disclosed as they are not comparable. Please refer to the below for the detailed methodology and breakdown of Scope 3 emissions by category.

Environmental performance continued

tCO₂e emissions by division	2019	2020	2021	2022	Change (2021 vs. 2022)
ALSA	324,007	234,477	368,714	712,900	N/A ¹
Bahrain	22,833	20,214	17,810	23,946	N/A ¹
Germany	29,269	52,347	58,939	122,486	N/A ¹
United Kingdom	227,380	142,769	147,789	288,524	N/A ¹
USA and Canada	276,693	140,168	142,800	362,514	N/A ¹
Central Functions	1,559	569	598	3,894	N/A ¹
Group total	881,741	590,545	736,650	1,514,264	N/A ¹

¹ Scope 3 absolute emissions has increased significantly year on year due to the Group completing a full baseline assessment of Group-wide Scope 3 emissions during the year and including all relevant categories in the 2022 numbers. Prior year scope 3 included only business travel, waste, water and certain other upstream emissions, hence no year on year % change has been disclosed as they are not comparable. Please refer to the below for the detailed methodology and breakdown of Scope 3 emissions by category.

In the current year aggregate Scope 1 & 2 GHG emissions in our UK operations amounted to 169,877 tCO2e (2021: 122,578 tCO2e), and totalled 743,987 tCO2e (2021: 582,936 tCO2e) in our global (excluding UK) operations.

Scope 1 absolute emissions increased by 26.3% on 2021 predominantly due to the strong patronage growth in the year and the inclusion of the WeDriveU business in North America for the first time following a full assessment of their emissions.

Scope 2 emissions (primarily electricity usage) have increased by 13.5%, primarily driven by the expansion of the German Rail business which mobilised an additional contract in the year, and from electric vehicles brought into service during the year.

During the year, we completed a Group-wide assessment of our Scope 3 emissions across all relevant categories, enabling fuller disclosure of our Scope 3 emissions compared to previous years.

Prior to calculating our Scope 3 footprint, all categories were screened for relevance using the GHG Protocol criteria. Those listed as "N/A" in the table below were considered to make a negligible or no contribution to the Group's scope 3 emissions. The same operational control approach was used as for scope 1 & 2 emissions, with all divisions in the Group being included.

Note that for categories 1 and 2 (purchased goods and services and capital goods), the calculation methodology for 2022 was based on actual spend data, which was then applied to emissions factors by spend category, as supplier-specific data is not yet available. The same methodology was used within category 8 for emissions from the manufacture of leased vehicles, which includes the optional disclosure of life cycle emissions associated with manufacturing leased assets.

We aim to transition to a supplier-specific approach over time, starting with the most material suppliers, for example the companies who manufacture and produce our vehicles, some of which have committed to Scope 1 & 2 Science-Based Targets already. We are already working with some of our major vehicle manufacturers to obtain supplier-specific emissions data. We will continue to improve the data quality and methodology for calculating emissions in these categories, and therefore, these three categories may see more significant year on year movements in the future.

For employee commuting (category 7), assumptions have been made around commuting patterns applied to the actual number of employees at each location.

For investments (category 15), the 'average data' method is used, based on the sector the investee company operates in, which drives the sector specific emission factor used, applied to revenue data, and our proportional share of equity held.

For all other scope 3 categories (3, 4, 5, 6 and 13), actual usage data has been obtained. A breakdown of scope 3 emissions by category for 2022 is shown on the next page:

Cat	egory	Absolute emissions (tCO ₂ e)	% of total scope 3
1.	Purchased goods & services	221,783	36.9%
2.	Capital goods	92,680	15.4%
З.	Upstream fuel and energy production and distribution	214,893	35.8%
4.	Upstream transportation & distribution	N/A	N/A
5.	Waste and water	1,967	0.3%
6.	Business travel	2,349	0.4%
7.	Employee commuting	41,819	7.0%
8.	Upstream leased assets	10,543	1.8%
9.	Downstream transportation & distribution	N/A	N/A
10.	Processing of sold products	N/A	N/A
11.	Use of sold products	N/A	N/A
12.	End-of-life treatment of sold products	N/A	N/A
13.	Downstream leased assets	1,118	0.2%
14.	Franchises	N/A	N/A
15.	Investments	13,248	2.2%
TO	TAL	600,400	100.0%

Intensity metrics

Intensity metrics	2019	2020	2021	2022	Change (2021 vs. 2022)
Group totals (million pass.km)	46,258	24,656	28,932	37,804	30.7%
Traction Carbon Emissions (Scope 1 & 2) tCO2e/mpkm	16.69	22.28	24.15	23.38	(3.2%)
Total tCO2e per million pass.km (Scope 1, 2 & 3)	19.06	23.93	25.34	34.37	N/A ¹

¹ Scope 3 absolute emissions has increased significantly year on year due to the Group completing a full baseline assessment of Group-wide Scope 3 emissions during the year and including all relevant categories in the 2022 numbers. Prior year scope 3 included only business travel, waste, water and certain other upstream emissions, hence no year on year % change has been disclosed as they are not comparable. Please refer to the below for the detailed methodology and breakdown of Scope 3 emissions by category.

Traction carbon emissions per passenger kilometre (tCO2e/million passenger km) decreased by 3.2% between 2021 and 2022, from 24.15 tcO2e/mpkm in 2021, to 23.38 tcO2e/mpkm in 2022, as passenger numbers/load factors continued to recover back towards pre-pandemic levels.

In 2022 we completed a Group-wide assessment of our Scope 3 emissions across all relevant categories, enabling fuller discloser of our Scope 3 emissions compared to previous years and forming a new baseline for comparisons in future years. This resulted in a significant increase in tCO2e/per million passenger km to 34.37 for Scope 1, 2 and 3 emissions.

Environmental performance continued

Methodology

The method we have used to calculate GHG emissions is the GHG Protocol Corporate Accounting and Reporting Standard (revised edition), together with appropriate emission factors taken from recognised public sources including, but not limited to, the Department for Business, Energy & Industrial Strategy (BEIS), Defra, the International Energy Agency, the US Energy Information Administration, the US Environmental Protection Agency and the Intergovernmental Panel on Climate Change.

We have used a materiality threshold of 5%, have accounted for all material sources of GHG emissions and have reported emissions for the period 1 January 2022 to 31 December 2022 in line with our Financial Statements.

We are committed to ensuring that our GHG accounting system, results and accompanying reports remain robust, continue to enhance our Group-level emission performance year-on-year and are in compliance with the mandatory requirements of the Companies (Directors' Report) and Limited Liability Partnerships (Energy and Carbon Report) Regulations 2018 (which Regulations implement the Government's policy on Streamlined Energy and Carbon Reporting (SECR)).

Streamlined Energy and Carbon Reporting

SECR regulations require the reporting (in MWh rather than tCO2 in line with existing standards) of the aggregate of:

- the annual quantity of energy consumed from activities for which the Company is responsible, including the combustion of fuel and the operation of any facility; and
- the annual quantity of energy consumed resulting from the purchase of electricity, heat, steam or cooling by the Company for its own use.

MWh by division	2021	2022
ALSA	1,325,774	1,566,970
USA and Canada	515,191	815,442
United Kingdom	489,515	622,607
Germany	137,700	196,221
Bahrain	54,950	56,081
All	2,523,130	3,257,319
Energy consumed from the activities for which the Company is responsible, including the combustion of		
fuel and the operation of any facility	2,333,066	3,012,926
Energy consumed resulting from the purchase of electricity, heat, steam or cooling	190,064	244,394
All	2,523,130	3,257,319

Proportion of figure that relates to energy consumed in the UK and offshore area	2021	2022
Offshore	2,033,615	2,634,714
United Kingdom	489,515	622,606
UK proportion	19%	24%

This is another way of stating existing disclosures (as it is simply stating the same information in different measurement units) so the drivers of movement in tCO2 and kWh for the Group should be broadly the same. The fact that, measured in MWh, emissions are up 29% year-on-year whereas measured in tCO2 they are up 25% is driven by a combination of definitions, measurement standards and changes in energy 'mix'.