

Virgin Atlantic 2022 Non-Financial Reporting Criteria

March 2023

2022 Non-Financial Reporting Criteria covers the methodologies, scopes and boundaries used for the following areas:

1. Greenhouse Gas Emissions
2. Diversity, Equity and Inclusion

1. Greenhouse Gas Emissions

Overview

This statement summarises Virgin Atlantic Airway's (VAA's) carbon footprint reporting methodology for 2022. The methodology and Scope for reporting (excluding scope 3 category 11) are consistent with The Greenhouse Gas Protocol Corporate Accounting and Reporting Standard (GHG Protocol Corporate Standard) and mandatory carbon reporting requirements of the Companies Act 2006 (Strategic Report and Directors' Report) Regulations 2013.

Organisational boundary

VAA use the operational control approach to establish the organisational boundary of the carbon footprint reporting. In accordance with the GHG Protocol Corporate Standard, this includes 100% of GHG emissions from activities of owned or leased assets over which VAA has operational control (full authority to introduce and implement its operating policies at the operation). VAA defines operational control as where we have operational activities and equipment that we control, including the implementation of operating policies.

Both Virgin Atlantic and Virgin Holidays are included together under the single VAA operation.

Operational Scope

All GHG emissions under the operational boundary of VAA are included and categorised by Scope 1 (direct), Scope 2 (indirect) and Scope 3 (indirect value chain) emissions.

The Scope of VAA's operations covered by this approach include:

- VAA Aircraft
- VAA's offices and buildings
 - The VHQ, Crawley
 - Clubhouse, London Heathrow
 - Revivals Lounge, London Heathrow
 - London Heathrow Hangar
 - London Heathrow offices, rooms, desks
 - London Gatwick Hangar (in VAA operation until end of 2022)
 - Manchester Airport offices, rooms, desks
 - Alexandra House, Swansea
 - Virgin Holidays retail stores
- VAA vehicle fleet

Emissions factors:

- UK Government UK Government conversion factors (2022)
- United States Environmental Protection Agency (US EPA) Supply Chain Greenhouse Gas Emission Factors for US Industries and Commodities - kgCO₂e/2018 USD Supply Chain Emission Factors with Margins. This is a comprehensive dataset of supply chain emission factors covering all categories of goods and services in the US economy. It is deemed appropriate to use these US factors for the 2022 GHG calculation given VAA's predominantly transatlantic operation, and the accessibility and detailed categorisation of the dataset. A 2018 average GBPUSD currency exchange rate was used to convert the USD-based factors into GBP.
- For 2019 – 2021 GHG calculations, Comprehensive Environmental Data Archive (CEDA) 5.0 emissions factors were used, prior to updating the calculation to US EPA factors for 2022. These are cost-based emissions factors (2019), which is an economic input-output database. CEDA provides information about embodied lifecycle emissions per dollar spent on items used in over 400 sectors of the U.S. economy. 2019 – 2021 GHG emissions calculations have not been recalculated using the US EPA factors, as the methodological change is deemed to have an immaterial impact on the overall figures. Furthermore, Virgin Atlantic is in the process of improving the scope 3 GHG calculations, with more detailed changes to be made to the methodology in 2023, at which point it will be a more appropriate time to re-baseline.

Scope 1 & 2

VAA's Scope 1 and Scope 2 carbon footprint is calculated using activity consumption data, multiplied by an appropriate UK Government emissions factor. The tables below summarise the activity sources, data collection approach emissions factor.

Scope 1

Activity	Unit	Source
Jet fuel consumption on VAA aircraft	tonnes	Measured actuals. Data is collected directly from the aircraft, recording accurate fuel burn of every flight taken during the year. This data is independently audited by Verifavia for additional compliance reporting purposes including EU/UK ETS Schemes and CORSIA
Gas consumption in VAA offices & hangars	kWh	Energy supplier invoices – measured actuals
Gas consumption in LHR clubhouse and LHR revivals lounge	kWh	Estimated using the CIBSE Restaurant Gas benchmark for gas consumption (1250 kWh/m ²) and the known floor space and number of days active
Diesel (airport equipment)	Litres	Energy supplier invoices – measured actuals
Gas oil (airport equipment)	Litres	Energy supplier invoices – measured actuals
Refrigerants (airport properties)	Kg	Property manager invoices – measured actuals
Vehicles (airport and operational)	Miles	Measured actuals. Data is collected by the VAA Facilities team, requesting year-end mileage data of each vehicle from drivers of all ground fleet vehicles

Scope 2

Activity	Unit	Source
Electricity at VAA offices, hangars, airport properties and retail stores	kWh	Energy supplier invoices

CO₂e emissions from purchased electricity are calculated using both a location-based and market-based approach.

The location-based approach is a method to quantify Scope 2 GHG emissions based on average energy generation emission factors for defined geographic locations, including local, subnational, or national boundaries and is calculated using the UK grid average emission factors from UK Government conversion factors, representing average emissions from energy generation occurring in the UK in 2022.

The market-based approach is a method to quantify the Scope 2 GHG emissions of a company based on the specific GHG emissions emitted by the generators from which the company has chosen to purchase energy from, including any contractual instruments such as Renewable Energy Guarantees of Origin and energy supplier contractual evidence. This is calculated using emission factors derived from the GHG emission rate represented in the contractual instruments that meet Scope 2 Quality Criteria.

Scope 3

VAA calculate and report on indirect value chain emissions from 9 out of the 15 Scope 3 categories. These categories were both material and relevant to VAA. The methodologies and data used to calculate these are summarised below.

Categories 1, 2 & 4

A cost-based approach has been used to calculate the emissions for categories 1, 2 and 4.

- Category 1 – The indirect emissions from the extraction, production, and transportation of VAA's purchased goods and services, calculated using VAA's operational expenditure data on items and services purchased for their processes in the reporting year. This spend data is based on actual spend in year, on a cash basis, as opposed to the year the spend relates to. Fuel expenditure is excluded as this is captured in our Scope 1 and Scope 3 (category 3) emissions.
- Category 2 – The indirect emissions from the extraction, production, and transportation of VAA's capital goods, calculated using VAA's operational expenditure data on items and services purchased for their processes in the report year. This spend data is based on actual spend in year, on a cash basis.
- Category 4 – The indirect emissions from the transportation and distribution of products and services purchased, calculated using data on VAA's purchased logistics between all suppliers and its own operations. This spend data is based on actual spend in year, on a cash basis.

Each line-item value of spend was multiplied by an assigned cost-based United States (U.S) EPA emissions factor (2018), providing a GHG emissions value for each item of spend. U.S. EPA categories were applied based on the category that best suited the expenditure, using the category information provided. This was done for both categorised and uncategorised spend.

For category 1. Purchased goods and services, this was done for both categorised and uncategorised spend. Emissions from spend that could not be categorised have been estimated by uplifting the the categorised emissions by the proportion of spend that is uncategorised.

Due to U.S. EPA factors relating to kgCO₂e/USD spend in 2018, VAA have adjusted the emissions factors to reflect GBP using a 2018 currency conversion. VAA have also adjusted to remove the impact of inflation from 2018 to 2022 from the spend data. The inflation rates (source: Bloomberg World Economic Statistics) between 2018-2022 for each of VAA's countries of operation were used, and a weighted average based on passenger numbers by country in 2022 `was applied. This weighted average inflation rate was then removed from each line-item of spend. While US-based emissions factors have been used to reflect the

transatlantic nature of our operations, an average inflation rate that is reflective of our international operations has been applied to spend. This is deemed appropriate given the large U.S. weighting reflected in the inflation factor applied, and where certain spend (e.g., category 11) is in destinations, the international component can be reflected.

Category 3 – Fuel and energy-related activities not included in Scope 1 or Scope 2

This includes emissions from three distinct activities:

- (1) Upstream emissions of purchased fuels (both stationary and mobile combustion).
- (2) Upstream emissions from purchased electricity.
- (3) Transmission & Distribution (T&D) Losses from purchased electricity.

The indirect upstream extraction, production, and transportation emissions from VAA's aviation fuel, office gas consumption, ground vehicle fuel and purchased electricity are calculated using the activity consumption data (used in Scope 1 and Scope 2 calculations) and applying UK Government UK Government well-to-tank emissions factors, plus transmission and distribution emissions factors for electricity (UK Government conversion factors).

Category 5 – Waste generated in operations

This includes emissions from the disposal and treatment of waste generated in the reporting year in facilities owned or controlled by VAA. VAA's waste is split into 3 distinct categories.

- (1) Ground waste (VHQ, LHR Hangar and LGW Hangar only – data provided by contractor. Waste at all other sites including retail and airport properties (including Clubhouse) and Alexandra House, is managed by airport, shopping centre, and building management respectively)
- (2) Onboard aircraft cabin amenities waste
- (3) Catering waste onboard aircraft and production facility

Primary waste data of tonnages by waste pathway (recycling, incinerated for energy recovery, and landfill) is provided by VAA's waste contractors, for VHQ ground waste, onboard waste and catering and production waste. UK Government emissions factors for given waste pathways are then applied, to calculate the emissions from each waste source. The following waste emissions factors are used:

- Waste Disposal, Open loop
- Waste Disposal, Refuse, Household residual waste, Combustion
- Waste Disposal, Refuse, Household residual waste, Landfill

Clubhouse ground waste is estimated using an extrapolation of VHQ waste, based on floor area, due to lack of primary data. This accurately uplifts ground waste to account for all ground waste.

Category 6 – Business travel

The calculation of emissions from VAA employee business travel includes both staff business travel flights on Virgin Atlantic and other airlines, ground-based business travel, staff business travel hotel stays, as well as crew hotel stays and crew ground transport. This category does not include flight crew flying emissions when operating a flight.

Staff business travel flights data is recorded for all staff flights booked internally on both VAA and other airlines. Using this data, the distance (Great Circle Distance) determined by the route of travel, and the cabin class is used to assign the appropriate UK Government cabin-specific per passenger kilometre (pax.km) emissions factor to each journey.

Hotel stay and ground transport business travel emissions are calculated using a spend-based approach, assigning the appropriate US EPA accommodation and transport spend-based emissions factors to the relevant categories of spend, with the same inflation-reduction and exchange rate approach applied as outlined above.

Category 7 – Employee Commuting

The calculation of employee commuting emissions between home and work is based on the results of a VAA staff commuting survey and UK Government emissions factors by mode of transport. The responses from staff provided a dataset of commuting distance and mode. The survey data was split by ground-based staff and flight crew, as they typically have different commuting patterns. Using the distance and mode and commuting frequency assumptions, the total emissions were calculated by applying the relevant UK Government emissions factor to the distance commuted by each mode. The emissions were then uplifted to reflect the total number of staff (ground and flight crew).

Category 9 – Downstream transportation and distribution

The calculation of emissions from transportation and distribution of products sold between the VAA's operations and the end consumer is based on passenger travel to the airport of departure and from the airport where they land to their final destinations. Data on the number of passengers by route and average distances from destination and origin airports to town centres were applied to calculate emissions. Average UK Government emission factors for both train and unknown fuel car transport types were used. Total travel distance was doubled to account for travel either side of each airport.

Category 11 – Use of sold products

The calculation of emissions from the end use of goods and services sold by VAA is based on cost of sales. Cost of sales is categorised by type of sales, including VHOLs tours, transfer costs etc. Each item's/service's £ value was multiplied by an assigned cost-based US EPA emissions factor, providing a GHG emissions value associated with each cost of sale. US EPA categories were applied based on the category that best suited the expenditure, using the category information provided. It is assumed that 80% of the cost of sales from flights is attributable to Virgin Atlantic, and therefore not included as these emissions are already accounted for in the aircraft fuel burn emissions. 20% is attributable to Virgin Holidays and is included in this category emissions calculation. This assumption is based on historic average data of the split between VAA vs. other airlines cost of sales from flights. The same inflation-reduction approach was applied to category 11 spend as for other categories spend-based categories outlined above.

Virgin Atlantic is working to improve the calculation of category 11 use of sold products emissions in future reporting cycles, by improving data quality and methodological approach.

Excluded

The remaining 6 Scope 3 categories are not calculated by VAA, as they are either not relevant to the operation, or are deemed as immaterial.

Excluded as not relevant:

- Category 8 – Upstream leased assets.
 - The emissions from upstream leased assets have already been included under Scope 1 and 2 inventory, as the footprint has been calculated following the operational control approach
- Category 10 – processing of sold products
 - Not relevant, VAA do not sell intermediate products
- Category 14 – Franchises
 - No relevant franchises
- Category 15 – Investments
 - No relevant investments

Excluded as immaterial:

- Category 12 – End of life treatment of sold products
 - VAA sold products are fundamentally transportation services, from which there is no end-of-life treatment
- Category 13 – Downstream leased assets
 - VAA have minimal downstream leased assets

Emissions factors

GHG emissions are reported in line with the UK Government's 'Environmental Reporting Guidelines: including mandatory greenhouse gas emissions reporting guidance' (2013). These emissions calculations use:

Emissions source	Emissions factor	EF units	Source
Aircraft fuel	3,181.43	kgCO ₂ e/tonne	UK Government 2022 - Aviation turbine fuel
Natural gas	0.18397	kgCO ₂ e/kWh	UK Government 2022 - Natural
Refrigerants – Rf10a	2088.00	kgCO ₂ e/kg	UK Government 2022 - Refrigerant & Other
Refrigerants – HFC134a	1430.00	kgCO ₂ e/kg	UK Government 2022 - Refrigerant & Other
Gas oil	2.75857	kgCO ₂ e/litres	UK Government 2022 - Fuels - Liquid Fuels - Gas Oil
Diesel Small Car	0.22514	kgCO ₂ e/miles	UK Government 2022 - Passenger vehicles - Cars (by size) - Small Car - Diesel
Diesel Medium Car	0.27039	kgCO ₂ e/miles	UK Government 2022 - Passenger vehicles - Cars (by size) - Medium Car - Diesel
Diesel Large Car	0.33722	kgCO ₂ e/miles	UK Government 2022 - Passenger vehicles - Cars (by size) - Large Car - Diesel
Petrol Small Car	0.23580	kgCO ₂ e/miles	UK Government 2022 - Passenger vehicles - Cars (by size) - Small Car - Petrol
Petrol Hybrid Medium Car	0.17702	kgCO ₂ e/miles	UK Government 2022 - Passenger vehicles - Cars (by size) - Medium Car - Hybrid
Petrol Hybrid Large Car	0.24929	kgCO ₂ e/miles	UK Government 2022 - Passenger vehicles - Cars (by size) - Large Car - Hybrid
Diesel Class I Van	0.22836	kgCO ₂ e/miles	UK Government 2022 - Delivery vehicles - Vans - Class I (up to 1.305 tonnes) - Diesel
Diesel Class II Van	0.28186	kgCO ₂ e/miles	UK Government 2022 - Delivery vehicles - Vans - Class II (1.305 to 1.74 tonnes) - Diesel
Diesel Class III Van	0.41010	kgCO ₂ e/miles	UK Government 2022 - Delivery vehicles - Vans - Class III (1.74 to 3.5 tonnes) - Diesel
Diesel Average Van	0.37268	kgCO ₂ e/miles	UK Government 2022 - Delivery vehicles - Vans - Average (up to 3.5 tonnes) - Diesel
Petrol Average Van	0.34330	kgCO ₂ e/miles	UK Government 2022 - Delivery vehicles - Vans - Average (up to 3.5 tonnes) - Petrol
WTT small car diesel	0.05381	kgCO ₂ e/miles	UK Government 2022 - WTT pass vehs & travel land - Cars (by size) - Small Car - Diesel
WTT medium car diesel	0.06467	kgCO ₂ e/miles	UK Government 2022 - WTT pass vehs & travel land - Cars (by size) - Medium Car - Diesel
WTT large car diesel	0.08142	kgCO ₂ e/miles	UK Government 2022 - WTT pass vehs & travel land - Cars (by size) - Large Car - Diesel
WTT small car petrol	0.06737	kgCO ₂ e/miles	UK Government 2022 - WTT pass vehs & travel land - Cars (by size) - Small Car - Petrol

WTT medium car Petrol Hybrid	0.08475	kgCO ₂ e/miles	UK Government 2022 - WTT pass vehs & travel land - Cars (by size) - Medium Car - Hybrid
WTT large car Petrol Hybrid	0.12606	kgCO ₂ e/miles	UK Government 2022 - WTT pass vehs & travel land - Cars (by size) - Large Car - Hybrid
WTT van class I diesel	0.05743	kgCO ₂ e/miles	UK Government 2022 - WTT - delivery vehs & Freight - WTT vans - diesel
WTT van class II diesel	0.07190	kgCO ₂ e/miles	UK Government 2022 - WTT - delivery vehs & Freight - WTT vans - diesel
WTT van class III Diesel	0.10446	kgCO ₂ e/miles	UK Government 2022 - WTT - delivery vehs & Freight - WTT vans - diesel
WTT average van diesel	0.09489	kgCO ₂ e/miles	UK Government 2022 - WTT - delivery vehs & Freight - WTT vans - diesel
WTT average van petrol	0.09497	kgCO ₂ e/miles	UK Government 2022 - WTT - delivery vehs & Freight - WTT vans - petrol
UK Government 2022, Business Travel, Land, Car, Average car, unknown fuel	0.17067	kgCO ₂ e/km	UK Government 2022 - Business Travel-Land- Car- Average car- unknown fuel
UK Government 2022, Business Travel, Land, Rail, National Rail	0.03549	kgCO ₂ e/passenger.km	UK Government 2022 - Business Travel-Land- Rail- National Rail
UK Government 2022, Business Travel, Land, Bus, Average local bus	0.09650	kgCO ₂ e/miles	UK Government 2022 - Business Travel-Land- Bus- Average local bus
UK Government 2022, Business Travel, Land, Taxi, Regular Taxi	0.14876	kgCO ₂ e/passenger.km	UK Government 2022 - Business Travel-Land- Taxi- Regular Taxi
UK Government 2022, Business Travel, Land, Motorbike, Average	0.18274	kgCO ₂ e/km	UK Government 2022 - Business Travel-Land- Motorbike- Average
UK Government 2022, Business Travel-air, Domestic, Average passenger, With RF	0.24587	kgCO ₂ e/passenger.km	UK Government 2022 - Business Travel-air- Domestic- Average passenger- With RF
UK Government 2022, WTT-pass vehs & travel -land, Average Car, unknown fuel	0.04508	kgCO ₂ e/km	UK Government 2022 - WTT-pass vehs & travel -land- Average Car- unknown fuel
UK Government 2022, WTT-pass vehs & travel -land, National Rail	0.00892	kgCO ₂ e/passenger.km	UK Government 2022 - WTT-pass vehs & travel -land- National Rail
UK Government 2022, WTT-pass vehs & travel -land, Average local bus	0.02494	kgCO ₂ e/passenger.km	UK Government 2022 - WTT-pass vehs & travel -land- Average local bus
UK Government 2022, WTT-pass vehs & travel -land, Regular Taxi	0.03632	kgCO ₂ e/passenger.km	UK Government 2022 - WTT-pass vehs & travel -land- Regular Taxi
UK Government 2022, WTT-pass vehs & travel -land, Average Motorbike	0.03134	kgCO ₂ e/km	UK Government 2022 - WTT-pass vehs & travel -land- Average Motorbike
UK Government 2022, WTT-Business travel air, Domestic, Average Passenger, With RF	0.02691	kgCO ₂ e/passenger.km	UK Government 2022 - WTT-Business travel air- Domestic- Average Passenger- With RF
Purchased Electricity – location-based	0.19338	kgCO ₂ e/kWh	UK Government 2022 - UK Electricity generated
Purchased Electricity – market-based	0.0	kgCO ₂ e/kWh	Energy supplier

T&D - Electricity	0.01769	kgCO ₂ e/kWh	UK Government 2022 - Transmission and Distribution
WTT - Electricity	0.04625	kgCO ₂ e/kWh	UK Government 2022 - WTT UK & Overseas elec
WTT T&D	0.00423	kgCO ₂ e/kWh	UK Government 2022 - WTT - Elec Transmission and Distribution
Waste Disposal, Refuse, Household residual waste, Landfill	446.20411	kgCO ₂ e/tonne	UK Government 2022 - Waste Disposal, Refuse, Household residual waste, Landfill
Waste Disposal, Open loop	21.28019	kgCO ₂ e/tonne	UK Government 2022 - Waste Disposal, Open loop
Waste Disposal, Refuse, Organic: Mixed food and garden waste, Composting	8.91058	kgCO ₂ e/tonne	UK Government 2022, Waste Disposal, Refuse, Organic: Mixed food and garden waste, Composting
Waste Disposal, Refuse, Household residual waste, Combustion	21.28019	kgCO ₂ e/tonne	UK Government 2022 - Waste Disposal, Refuse, Household residual waste, Combustion
Waste Disposal, Refuse, Organic: Mixed food and garden waste, Anaerobic digestion	8.91058	kgCO ₂ e/tonne	UK Government 2022 - Waste Disposal, Refuse, Organic: Mixed food and garden waste, Anaerobic digestion
Domestic Air Travel	0.24587	kgCO ₂ e/passenger.km	UK Government 2022 - Business travel - air, Flights, Domestic, to/from UK, Average passenger, With RF
Short Haul Air Travel	0.15353	kgCO ₂ e/passenger.km	UK Government 2022 - Business travel - air, Flights, Short-haul, to/from UK, Average passenger, With RF
Long Haul Air Travel	0.19309	kgCO ₂ e/passenger.km	UK Government 2022 - Business travel - air, Flights, Long-haul, to/from UK, Average passenger, With RF
International Air Travel	0.18362	kgCO ₂ e/passenger.km	UK Government 2022 - Business travel - air, Flights, International, to/from non-UK, Average passenger, With RF
Spend-based emissions, including PG&S, Capital goods etc.	Various	kgCO ₂ e/£	US EPA (2018) – see table below

US EPA industry category emissions source	Emissions factor	EF units
Civic, social, professional, and similar organizations	0.130	kgCO ₂ e/£
Accommodation	0.175	kgCO ₂ e/£
Business support services	0.110	kgCO ₂ e/£
All other retail	0.180	kgCO ₂ e/£
Accounting, tax preparation, bookkeeping, and payroll services	0.051	kgCO ₂ e/£
Monetary authorities and depository credit intermediation	0.047	kgCO ₂ e/£
Architectural, engineering, and related services	0.112	kgCO ₂ e/£
Computer systems design services	0.063	kgCO ₂ e/£
Advertising, public relations, and related services	0.096	kgCO ₂ e/£
Transit and ground passenger transportation	0.114	kgCO ₂ e/£
Insurance agencies, brokerages, and related activities	0.032	kgCO ₂ e/£
Services to buildings and dwellings	0.150	kgCO ₂ e/£
Other computer related services, including facilities management	0.093	kgCO ₂ e/£
Management consulting services	0.075	kgCO ₂ e/£
Investigation and security services	0.078	kgCO ₂ e/£
Radio and television broadcasting	0.051	kgCO ₂ e/£
Other nonresidential structures	0.319	kgCO ₂ e/£

Legal services	0.059	kgCO ₂ e/£
Travel arrangement and reservation services	0.096	kgCO ₂ e/£
Truck transportation	1.269	kgCO ₂ e/£
Management of companies and enterprises	0.129	kgCO ₂ e/£
Dry-cleaning and laundry services	0.166	kgCO ₂ e/£
Satellite, telecommunications resellers, and all other telecommunications	0.130	kgCO ₂ e/£
Transit and ground passenger transportation	0.114	kgCO ₂ e/£
Apparel manufacturing	0.161	kgCO ₂ e/£
All other miscellaneous professional, scientific, and technical services	0.074	kgCO ₂ e/£
Air transportation	0.882	kgCO ₂ e/£
Search, detection, and navigation instruments manufacturing	0.052	kgCO ₂ e/£
Commercial and industrial machinery and equipment rental and leasing	0.140	kgCO ₂ e/£
Scientific research and development services	0.124	kgCO ₂ e/£
Wired telecommunications carriers	0.077	kgCO ₂ e/£
Office supplies (except paper) manufacturing	0.345	kgCO ₂ e/£
Other petroleum and coal products manufacturing	0.668	kgCO ₂ e/£
Aircraft manufacturing	0.137	kgCO ₂ e/£
Commercial and industrial machinery and equipment rental and leasing	0.140	kgCO ₂ e/£
Electronic computer manufacturing	0.075	kgCO ₂ e/£
Scenic and sightseeing transportation and support activities for transportation	0.199	kgCO ₂ e/£
Water transportation	0.641	kgCO ₂ e/£
Amusement parks and arcades	0.121	kgCO ₂ e/£

US EPA factors have been from USD to GBP using a 2018 average currency exchange rate of 1.34 GBPUSD (Source: Bloomberg CMPL)

Additional voluntary disclosure/reporting of Sustainable Aviation Fuel (SAF) emissions (and reductions)

In 2022, VAA purchased and used 2,000 metric tonnes of neat SAF. Neat SAF refers to the sustainable portion (bioquantity) of the SAF only, and not the fossil jet fuel that it is blended with. The emissions from the consumption of this SAF on our aircraft are reported as an additional disclosure. These emissions are reported on a well-to-wake basis, as an additional disclosure separate to VAA's main Scope 1 and 3 reported emissions. The well-to-wake basis reflects the fact that the emissions of SAF relate to both Scope 1 and Scope 3 and are encompassed in one emissions factor related to the fuel used.

The emissions of the SAF are calculated using data provided by the producer of the SAF, evidenced through the Product Transfer Document, or Proof of Sustainability, documentation. VAA's 2022 SAF emissions are calculated using data provided by Neste Oyj. The emissions data of the SAF are calculated by Neste Oyj using a fossil fuel comparator of 94 gCO₂e/MJ, as per Renewable Energy Directive (2018/2001/EU Annex V) ("RED II"). The emissions factor of the SAF (8.45 gCO₂e/MJ) was multiplied by the quantity of SAF (2,000 tonnes) and a conversion factor of 43 MJ/KG for Jet-A fuel.

The emissions savings of SAF are reported on the same basis as above, using the % reduction in emissions intensity (gCO₂e/MJ) vs. the fossil fuel comparator.

Note, SAF is not yet recognised by the GHG protocol, and is therefore reported as a supplementary disclosure.

Reporting period

Virgin Atlantic report carbon emissions on a calendar year basis. This report summarises the period 1st January 2022 to 31st December 2022.

Restating of historic emissions

Virgin Atlantic follow the GHG Protocol accounting procedures that require that historic emissions data be recalculated as organisations undergo significant structural changes such as acquisitions, divestments, and mergers or methodology changes such as error correction and changes in calculation methodology. Historic year adjustments are necessary as structural and methodological changes will change the historical reporting profile, making meaningful comparisons over time difficult. To allow like-for-like comparison over time, historic emissions data may need to be recalculated. Virgin Atlantic's approach is continuously reviewed during the year and no restatement of historic emissions were required.

2. Diversity, Equity and Inclusion Methodology

Overview

Annual Report methodology

Calculation methodology data is extracted from the HR management system to calculate our diversity figures. The diversity figure published is calculated based on the number of employees at the 31st of December 2022. An employee is defined as a person with an employment relationship with Virgin Atlantic, who is paid by Virgin Atlantic through our payroll. This includes those who are on short/long-term leave and on parental leave, however, excludes those who are on Income Protection.

Percentage of women in D+ leadership roles

We define those who are in leadership positions are those who are in the following grades: D, E, F, and G. Our leadership population does not include our pilot workforce as they are graded out with our leadership structure. All our gender data relies on our employees' classification of their own gender as male or female. This is a mandatory, binary field in our HR system and therefore Virgin Atlantic has a gender disclosure rate of 100%.

We use the following methodology to calculate: $\text{Percentage of females in D+ roles} = \frac{\text{(females in D+ roles)}}{\text{(total D+ workforce)}}$

Ethnicity of entire workforce

Total workforce refers to all employees, regardless of paygrade. The table below shows the groups that are defined as diverse and non-diverse. This data relies on our employees self-disclosing. Diverse employees are those that have self-declared their diversity status. Individuals who have chosen not to declare their diversity status are included in the calculation as non-diverse employees. At the 31st of December 2022, 91.5% of employees had disclosed their ethnicity.

We use the following methodology to calculate: $\text{Percentage of ethnic minority workforce} = \frac{\text{(Total ethnic minority employees)}}{\text{(Total employees)}}$

Asian – Any other Asian background	Ethnically diverse	Mixed – White & Asian	Ethnically diverse
Asian – Bangladeshi	Ethnically diverse	Mixed – White & Black African	Ethnically diverse
Asian – Chinese	Ethnically diverse	Mixed – White & Black Caribbean	Ethnically diverse
Asian – Indian	Ethnically diverse	Other – Any other ethnic group	Ethnically diverse
Asian - Pakistani	Ethnically diverse	White – Any other white background	Non-diverse
Black – African	Ethnically diverse	White – English/Welsh/Scottish/Norther Irish/ British	Non-diverse
Black – Any other	Ethnically diverse	White – Gypsy or Irish Traveller	Non-diverse
Black – Caribbean	Ethnically diverse	White – Irish	Non-diverse
Mixed – Any other mixed or multiple ethnic background	Ethnically diverse	Prefer not to say	
Mixed – White & Asian	Ethnically diverse		