



Carbon Reduction Plan

September 2023

Commitment to achieving Net Zero

DEA Aviation Limited is committed to achieving Net Zero emissions by 2050.

Baseline Emissions Footprint

Baseline Year - 2021/2022 (01 Sep 22 to 31 Aug 23)

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

The methodology for measuring our carbon footprint is in line with the Greenhouse Gas Protocol and the BEIS Environmental Reporting Guidelines. The calculations were completed using the current UK Government emissions factors.

2021/2022 is the baseline reporting year.

EMISSIONS	TOTAL (tCO₂e)
Scope 1	791.42
Scope 2	29.80
Scope 3	106.77
Total Emissions	927.99

Current Emissions Reporting

Reporting Year: 2022/2023 (01 Sep 22 to 31 Aug 23)

GHG emissions reporting has focused on the key mandatory reporting elements:

- All Scope 1 emissions - Direct GHG emissions;
- All Scope 2 emissions - Indirect GHG emissions;
- Scope 3 emissions: Categories 4, 5, 6, 7 and 9.

	EMISSIONS	TOTAL (tCO₂e)
SCOPE 1	Fuels (Owned Aircraft)	781.81
	Refrigerants (HFCs) ¹	43.80
	Owned vehicles ²	0
	Bioenergies ³	0
	Scope 1 Total	825.61
SCOPE 2	Electricity Grid ⁴	0
	Scope 2 Total	0
SCOPE 3⁵	Cat 4: Upstream T&D	0
	Cat 5: Waste generated in operations	20.79
	Cat 6: Business Travel	85.38
	Cat 7: Employee commuting	63.35
	Cat 9: Downstream T&D	0
	Scope 3 Total	169.52
Total Emissions		995.13 tCO₂e

¹ Refrigerants are used in office air conditioning units and across the fleet of aircraft.

² DEA does not own any motor vehicles.

³ No sources of Bioenergy are used.

⁴ DEA electricity is sourced from a supplier providing 100% of its electricity from renewable sources. No other sources of Scope 2 emissions are used.

⁵ Categories 4 & 9 - T&D: As DEA is a Service based operation and no products are purchased for resale or distribution, it has no associated Upstream or Downstream Transport & Delivery emission costs.

Emissions reduction targets

The nature of the company's business makes it reliant upon the development and availability of low and zero emission technologies in the aviation sector that will provide a significant contribution to DEA's carbon reduction ambitions, e.g. Sustainable Aviation Fuel (SAF), electric engines, zero carbon (synthetic) fuels. Whilst SAF is currently available through suppliers such as Air BP, it is not yet distributed in appropriate quantities to smaller, outlying aerodromes.

Government has set a target of 10% (1.5 billion litres) of UK fuel to be made from sustainable sources from 2030; this should ensure availability increases throughout the UK. It is anticipated that when distribution channels are more widely accessible, and once commercial considerations have been resolved, the implementation of SAF across the DEA fleet of aircraft could see up to a possible 40% carbon emissions reduction relative to Jet A-1 (based on the currently available 50% SAF/Jet A-1 mix).

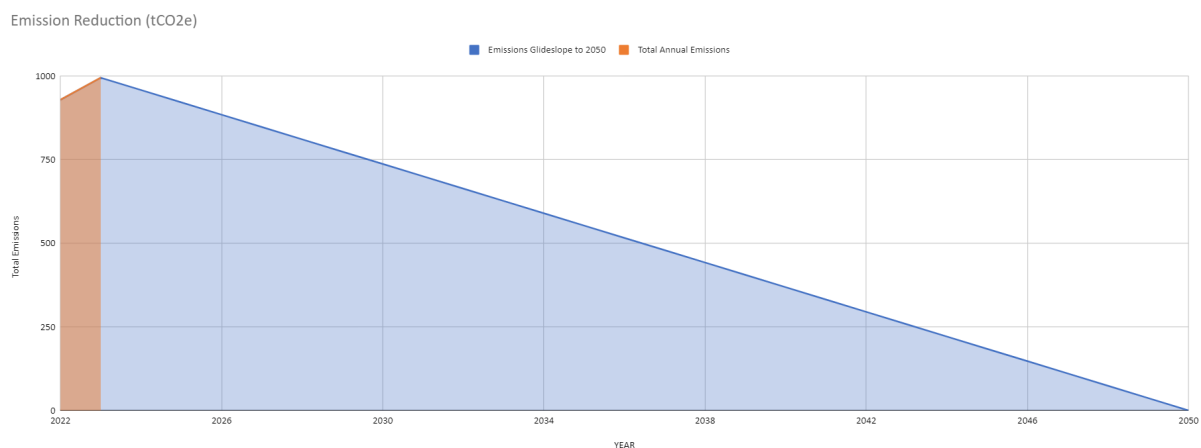
Additionally, DEA is a successful enterprise which continues to grow. As such, the associated challenges of managing a growing business are recognised, for example: increased aircraft numbers, hours flown and therefore fuel consumed; additional personnel, commuting and business travel. As such DEA expects its GHG emissions will initially continue to increase until the widespread availability of low and zero carbon technologies deliver the potential for significant and meaningful reductions to our baseline data.

DEA is committed to achieving Net Zero by 2050 and is researching a number of carbon reduction projects and initiatives in order to continue the company's progress towards Net Zero.

Based on the baseline/latest figures, the following targets have been identified:

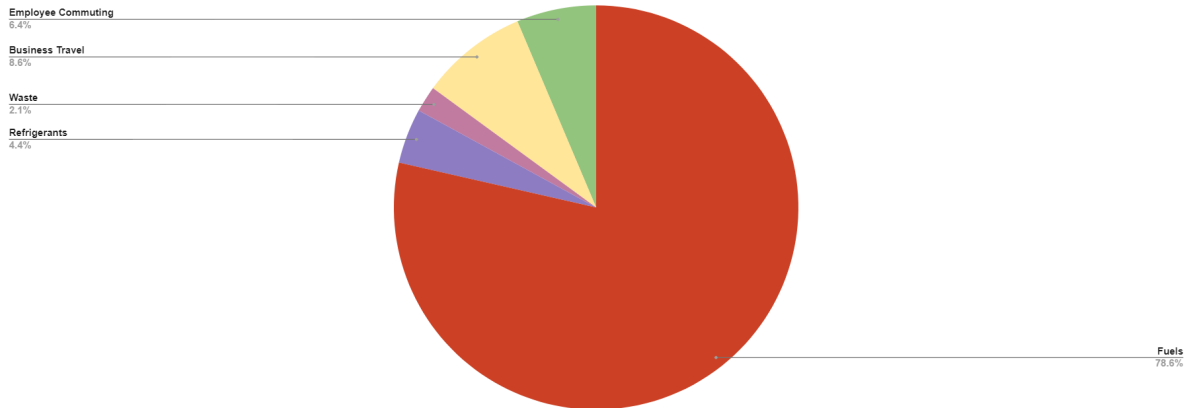
Implementation Time frame	Reduction Plan	Projected Annual Reduction
0-7 years	Sustainable Aviation Fuels implementation	Up to 10% of fuel used being SAF by 2030 giving 10% reduction in Scope 1 emissions
8-10 years	Increase availability of sustainable aviation fuels	Up to 40% reduction in Scope 1 fuel emissions
10-20 years	Following introduction of Zero Carbon Fuels	Up to 100% reduction in Scope 1 fuel emissions

Current statistical charts are provided below:



The emission reduction graph above tracks DEA's ambition to meet Net Zero by 2050; this assumes the new average annual reduction of 37 tCO₂e. This graph will be updated annually to track DEA's carbon emissions. The orange block shows this year's increase due to the increase in aircraft/flying.

Current DEA Emissions by Category



The above chart provides emissions data by category percentage of total emissions.

Carbon Reduction Projects

Completed Carbon Reduction Initiatives

DEA remains certified to the ISO 14001 Environment Management System and now its second reporting year shows an increase in emissions (due to increased success), DEA are actively seeking reduction methods.



Certificate No:290212018

Certificate Number: 290212018

Expiry Date: 10/05/2028

Carbon Reduction Initiatives

The following key projects and initiatives will undergo continual review as DEA evolves its 2050 Net Zero Environmental Strategy.

1. Aviation Fuel - Alternatives

DEA operates a fleet of modern, fuel-efficient aircraft whilst working with its customers to ensure that all flight operations are as environmentally conscious as possible. DEA will continue to consult with suppliers and customers in order to progress and secure the commercial viability of alternative sustainable aviation fuels.

Sustainable Aviation Fuel (SAF): Currently DEA's fleet operates using Jet A-1 aviation grade fuel which has a lower carbon footprint than standard leaded AvGas. DEA remains committed to researching deeper into SAF which provides the significant emission improvements as described below.

As part of this research a trial has been conducted this year in conjunction with Ordnance Survey (OS). The trial confirmed the issues around the supply of SAF in the UK; having to divert the aircraft to obtain a 35:65 SAF/Jet A-1 mix and as such using fuel to fly to locations holding SAF. On another trial flight a different location was used where the mix was 38:62; this fuel mix was cheaper but the landing/handling costs were significantly higher. Other supply locations were identified but were unable to support the trial on the occasions required.

As part of the trial DEA investigated obtaining SAF at our home base but were unable to source the limited quantity required; the minimum order quantities (38,000 litres) being too large for the current storage ability. Added to this the current supply option costs remain much higher than the price of the standard Jet A-1. DEA remains engaged with SAF suppliers to maintain visibility of improving supply lines and its cost; with the government 2030 target of 10%, this availability should improve significantly in the coming years.

The aim is to obtain SAF as a 50/50 SAF/Jet A-1 blend, producing a reduction in GHG emissions of 40% when compared to 100% Jet A-1. Once in place, (and based on our baseline fuel figure), this will see the fuel usage emissions drop from 781.81 tCO₂e to approximately 469 tCO₂e.

Based on the overall Baseline figure, this equates to an effective total emissions reduction of 31.4%.

2. Carbon Offsetting

Carbon offsetting remains a consideration especially now DEA's annual carbon emissions have increased. Although a temporary measure DEA will continue to review the UK based charitable options available to utilise offsetting measures to make reductions.

3. Business Travel

With 8.6% of the overall emissions business travel remains stubbornly high and has overtaken employee commuting as the second highest emission. As such DEA are committed to investigate ways to reduce this; such as, looking at the cost effectiveness of hiring electric cars and also to review all travel with a view to understand if other means like electronic meetings can substitute the need to travel.

4. Employee Commuting

As employee commuting accounts for the third highest emission source, DEA are actively engaging with one of the largest electric vehicle salary sacrifice leasing companies (Octopus). They estimate 1.5 tonnes of carbon reduction per vehicle per year. Once in place this could see a sizable reduction in the 6.4% employee commuting emissions.

Other methods to reduce employee commuting that DEA will review and consider implementing in the next reporting year are:

- Employee cycle schemes - such as the Government Bike2Work scheme
- Car sharing/car pooling

Declaration and approval

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 standard⁶ and uses the appropriate Government emission conversion factors for greenhouse gas company reporting⁷.

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) Standard⁸.

This Carbon Reduction Plan has been reviewed and signed off by the DEA Executive.

Signed on behalf of DEA Aviation Ltd.

Gerald Cooper

Chief Executive Officer, DEA Aviation Ltd.

Date: October 2023

⁶ <https://ghgprotocol.org/corporate-standard>

⁷ <https://www.gov.uk/government/collections/government-conversion-factors-for-company-reporting>

⁸ <https://ghgprotocol.org/standards/scope-3-standard>