

# Carbon Reduction Plan

Supplier name: Boeing Defence UK Ltd.

Publication date: 16th June 2023

## Commitment to achieving Net Zero

Boeing Defence UK Ltd. is committed to achieving “Net Zero” Emissions by 2050 for Scope 1 & Scope 2 emissions, as well as applicable Scope 3 emissions categories. For Scope 1 and 2 emissions, this will be achieved by increasing our operational efficiency, transitioning from fossil fuels to renewable electricity, and accelerating the use of low emission vehicles. For relevant Scope 3 emission categories, Boeing Defence UK will work with our customers and supply chains to reduce life cycle emissions of products and operations. Where relevant emissions cannot be reduced to zero, verified offsets will be used. At a global enterprise level, Boeing is committed to increasing the sustainability of its products including the shift towards sustainable aviation fuels, green hydrogen and batteries.

## Baseline Emissions Footprint

Baseline emissions are a record of the greenhouse gases that have been produced in the year prior to the introduction of any strategies to reduce emissions linked to a Carbon Reduction Plan. Baseline emissions are the reference point against which future emission reductions can be measured.

### Baseline and reporting Year: 2021

#### Additional Details relating to the Baseline Emissions calculations.

A baseline year of 2021 emissions has been used for Boeing Defence UK's Scope 1, 2 & 3 emission reporting.

Scope 1 & 2 emissions have been calculated in line with the Streamlined Energy & Carbon Reporting requirements.

The following Green House Gas Protocol scope 3 categories have been calculated as follows:

4. & 9. Upstream and downstream transportation and distribution – A spend based approach was used using the Quantis Suite 2.0 tool and the amount spent of transportation and distribution.

5. Waste Generated in Operations – A data driven approach was taken by calculating quantities of each waste type generated and then using the most appropriate UK Government Emission Factor to convert these quantities to the CO<sub>2</sub>e emissions.

6. Business Travel – A spend based approach using the Quantis Suite 2.0 was used to calculate business travel emissions for public transportation. For the air travel, flight mileage obtained was converted into CO<sub>2</sub>e emissions using the UK Government emission factors. Grey fleet travel has been included in the scope 1 category.

7. Employee Commuting – Average-data method has been used for this calculation, which involves estimating employee commuting emissions based on average commuting patterns. A representative headcount has been used alongside data from the Department for Transport to generate travel mileage averages. UK Government emission factors have been applied to average miles per head to generate CO<sub>2</sub>e.

Note: Data may be subject to change due to methodology or data improvements

**Baseline year emissions: 2021**

<b>EMISSIONS</b>	<b>TOTAL (tCO<sub>2</sub>e)</b>
<b>Scope 1</b> Natural Gas Kerosene Vehicle (Petrol & Diesel)	<b>616</b> <b>28</b> <b>240</b> <b>Total: 884</b>
<b>Scope 2</b> Electricity	<b>Net Total: 195</b> (includes renewable subtraction) <b>Gross Total: 1035</b> (does not include renewable subtraction)
<b>Scope 3</b> <b>(Included Sources)</b> 4. & 9. Upstream and downstream transportation and distribution 5. Waste Generated in Operations 6. Business Travel 7. Employee Commuting	<b>664</b> <b>7</b> <b>622</b> <b>1,681</b> <b>Total: 2974</b>
<b>Total Emissions</b>	<b>Net Total: 4054</b> <b>Gross Total: 4893</b>

## Current Emissions Reporting

### Reporting Year: 2022

There was a significant increase in tCO<sub>2</sub>e reported for 2022 compared to the baseline 2021 emissions. This was primarily down to the increase in employee and commuting and business travel which returned to pre-pandemic levels as a part of COVID-19 recovery.

<b>EMISSIONS</b>	<b>TOTAL (tCO<sub>2</sub>e)</b>
<b>Scope 1</b> Natural Gas Kerosene Vehicle (Petrol & Diesel)	<b>464</b> <b>39</b> <b>462</b> <b>Total: 965</b>
<b>Scope 2</b> Electricity	<b>Net Total: 191</b> (includes renewable subtraction) <b>Gross Total: 945</b> (does not include renewable subtraction)
<b>Scope 3</b> <b>(Included Sources)</b> 4. & 9. Upstream and downstream transportation and distribution 5. Waste Generated in Operations 6. Business Travel 7. Employee Commuting	<b>897</b> <b>7</b> <b>1572</b> <b>2920</b> <b>Total: 5396</b>
<b>Total Emissions</b>	<b>Net Total: 6551</b> <b>Gross Total: 7306</b>

## Emissions reduction targets

At a global enterprise level, Boeing is committed to reducing its emissions which includes: net zero emissions for Scope 1, 2 and business travel, by 2030.

Boeing Defence UK emission reductions are tracking to broader Boeing enterprise targets. A more detailed Boeing Defence UK emission reduction plan with specific targets will be published in due course.

Performance Area <sup>1</sup>	2025 Goals Versus 2017	2021 Progress Toward 2025 Goals <sup>3</sup>	2030 Goals
 <b>Greenhouse Gas Emissions</b>	Reduce emissions by 25% <sup>2</sup>	<b>25% reduction</b> Greenhouse gas emissions were 10% under plan primarily due to reduced production activities and procurement of renewables.	<ul style="list-style-type: none"> <li>• Net-zero emissions<sup>4</sup></li> <li>• 55% GHG reduction from 2017</li> <li>• 100% renewable electricity</li> </ul>
 <b>Energy</b>	Reduce energy <sup>5</sup> consumption by 10%	<b>12.2% reduction</b> Despite cold northwestern U.S. weather in December, energy continued to be under plan overall for the enterprise, ending the 2021 reporting year at 9.8% under plan. Remote working conditions; reduced production activities; and conservation gains contributed.	<ul style="list-style-type: none"> <li>• 10% energy-intensity reduction from 2025</li> </ul>
 <b>Water</b>	Reduce water withdrawal by 20%	<b>26.4% reduction</b> Water consumption was 18.9% under plan in 2021, primarily due to remote working conditions and reduced production.	<ul style="list-style-type: none"> <li>• 5% reduction from 2025</li> </ul>
 <b>Solid Waste</b>	Reduce solid waste to landfill by 20%	<b>53% reduction</b> Solid waste was steady at 44% under plan in 2021. Reduced production rates and work-from-home operations throughout 2021 drove this metric.	<ul style="list-style-type: none"> <li>• 30% reduction in waste produced from 2025</li> <li>• Over 90% diversion from landfill or incineration</li> <li>• Zero solid waste where applicable at major sites</li> </ul>
 <b>Hazardous Waste</b>	Reduce hazardous waste by 5%	<b>28% reduction</b> Hazardous waste was 16% under plan in 2021. Key events, including improvements in treatments lines, were positive. Dealing with unused expired materials is an issue.	<ul style="list-style-type: none"> <li>• 5% hazardous waste reduction from 2025</li> </ul>

1. Operational goals shown are absolute targets and not indexed to production levels or growth. 2021 performance was affected by changes associated with occupancy and operations during the COVID-19 pandemic, as well as conservation and changes in how Boeing purchases energy. The targets were established against a 2017 baseline. The 2025 goals will act as a milestone to guide actions and progress to the 2030 goals.

2. The 2025 GHG reduction goal was set with an operational boundary of the Core Metric Sites, which represent the majority (70%) of Boeing's operations, and includes emissions from electricity use and natural gas.

3. The 2030 GHG reduction goal is set with an operational boundary of The Boeing Company, and includes all Scope 1 and Scope 2 emissions.

4. The net-zero achievement covered Scope 1 and Scope 2 emissions for all manufacturing and work sites within the company's operational control as well as Scope 3 – Business Travel.

5. Energy includes natural gas, other fuels and electricity.

[Source: Boeing Sustainability Report 2022 -](https://www.boeing.com/principles/sustainability/annual-report/index.page)

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## Carbon Reduction Projects

### Completed Carbon Reduction Initiatives

Boeing Defence UK achieved the following UK carbon reduction initiatives in 2022:

- Procurement of 100% renewable electricity
- Continued expansion of electric and hybrid vehicle fleet
- Inauguration of UK sustainability council and appointment of a UK sustainability director

Carbon reduction projects and strategy will continue to be developed in 2023 by the new UK sustainability function to support Boeing Defence UK's commitment to deliver Net Zero 2050.

## 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 Boeing Defence UK board of directors prior to publication on the 16th of June 2023.

### Signed on behalf of the Supplier:

Steve Burnell

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*Stephen Burnell*  
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Director Boeing Defence UK

Date: 16th June 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>