



Carbon Reduction Plan

Supplier name: Rolls-Royce SMR Limited

Publication date: June 2024

Commitment to achieving Net Zero

Rolls-Royce SMR is committed to achieving Net-Zero greenhouse gas emissions by 2050¹.

Our definition of Net-Zero aligns with the Science Based Targets Initiative (SBTi). It means that we will pursue deep decarbonisation across our value chain before neutralising any residual emissions that cannot be eliminated through carbon removal projects.

Our commitment to Net-Zero is underpinned by our 2030 and 2050 emissions targets that we have set for our Scope 1 (Direct Emissions), Scope 2 (Indirect Emissions), and Scope 3 Categories 1 (Purchased Goods & Services), 6 (Business Travel), and 7 (Employee Commuting). We have set these targets in accordance with SBTi's methodology and are committed to having these targets validated by SBTi, or a suitable alternative, in the future.

We have established emission reduction actions to support the targets set out in this plan. More detail on these can be found at the end of this document.

Baseline Emissions Footprint

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 emission reductions can be measured.

The following emissions relate to Rolls-Royce SMR specifically as the bidding supplier, unless otherwise stated. These have been calculated and reported as tonnes of carbon dioxide equivalent (tCO₂e) for the simplicity of reporting while ensuring we account for all greenhouse gases considered under the Kyoto Protocol. The baseline emissions will be used as the reference point by which Rolls-Royce SMR measures the impact of emission reduction actions.

The emissions presented below cover Scope 1 and Scope 2 emissions, as well as our measured Scope 3 categories. These Scope 3 categories comply with the requirements of PPN06/21.

¹ Rolls-Royce SMR will reduce absolute emissions by at least 90% by 2050. The remaining emissions will be offset in line with the SBTi guidance.





SMR

Baseline: 2023**Additional details relating to the baseline and reporting year emissions calculations.**

Due to the infancy and nature of our business, we have not previously measured our emissions. Therefore, 2023 serves as both our baseline year and our current reporting year. The reporting period for our 2023 baseline is 1 January to 31 December.

Our Scope 3 Category 4 and 9 emissions are recorded as zero due to limited data and visibility on these emissions. Additionally, as a largely office-based business, we do not have any significant upstream or downstream transportation and distribution of goods or services.

Baseline emissions: 2023

EMISSIONS	TOTAL (tCO₂e)
Scope 1	36.0
Scope 2 (Location-based approach)	47.1
Scope 3 (Total)	2,941.1
Scope 3 – Category 1 (Purchased Goods and Services)	2,602.7
Scope 3 - Category 4 (Upstream Transportation and Distribution)	0
Scope 3 - Category 5 (Waste Generated in Operations)	1.0
Scope 3 - Category 6 (Business Travel)	184.0
Scope 3 – Category 7 (Employee Commuting)	153.4
Scope 3 - Category 9 (Downstream Transportation and Distribution)	0
Total Emissions	3,024.2

Current emissions reporting**Reporting year: 2023**

EMISSIONS	TOTAL (tCO₂e)
Scope 1	36.0
Scope 2 (Location-based approach)	47.1





SMR

Scope 3 (Total)	2,941.1
Scope 3 – Category 1 (Purchased Goods and Services)	2,602.7
Scope 3 - Category 4 (Upstream Transportation and Distribution)	0
Scope 3 - Category 5 (Waste Generated in Operations)	1.0
Scope 3 - Category 6 (Business Travel)	184.0
Scope 3 – Category 7 (Employee Commuting)	153.4
Scope 3 - Category 9 (Downstream Transportation and Distribution)	0
Total Emissions	3,024.2

Emissions reduction targets

This year (2023) is Rolls-Royce SMR's first carbon footprint and therefore our first year of setting carbon reduction targets.

Rolls-Royce SMR is committed to meeting Net-Zero greenhouse gas emissions by 2050. To enable us to meet this commitment, we have set emissions reductions targets across our Scope 1 and 2 emissions, and sources of materially significant Scope 3 emissions that have been calculated as part of our 2023 baseline. Reduction targets have been set using the most appropriate target type which includes, absolute targets for Scope 1 and 2, and intensity-based targets or supplier engagement targets for Scope 3. These targets are as follows:

- Scope 1 & 2:
 - Near term - Rolls-Royce SMR commits to reduce Scope 1 and 2 emissions by 42% by 2030 from a 2023 base year.
 - Long term -Rolls-Royce SMR commits to reduce Scope 1 and 2 by 90% by 2050 from a 2023 base year.
- Scope 3 Category 1
 - Near term - Rolls-Royce SMR commits that by 2029, suppliers responsible for 77% of our Scope 3 Category 1 emissions will have set science-based targets.
 - Long term - Rolls-Royce SMR commits to reduce Scope 3 Category 1 emissions from indirect procurement sources² by 97% per employee from a 2023 base year.

² We are only targeting indirect procurement sources (e.g., computers, hardware, software) in our current target due to there being no direct procurement in our business at present. Additionally, the use of tCO2e/employee as a basis for direct procurement would not be appropriate as the amount of physical materials procured has no bearing on employee numbers.



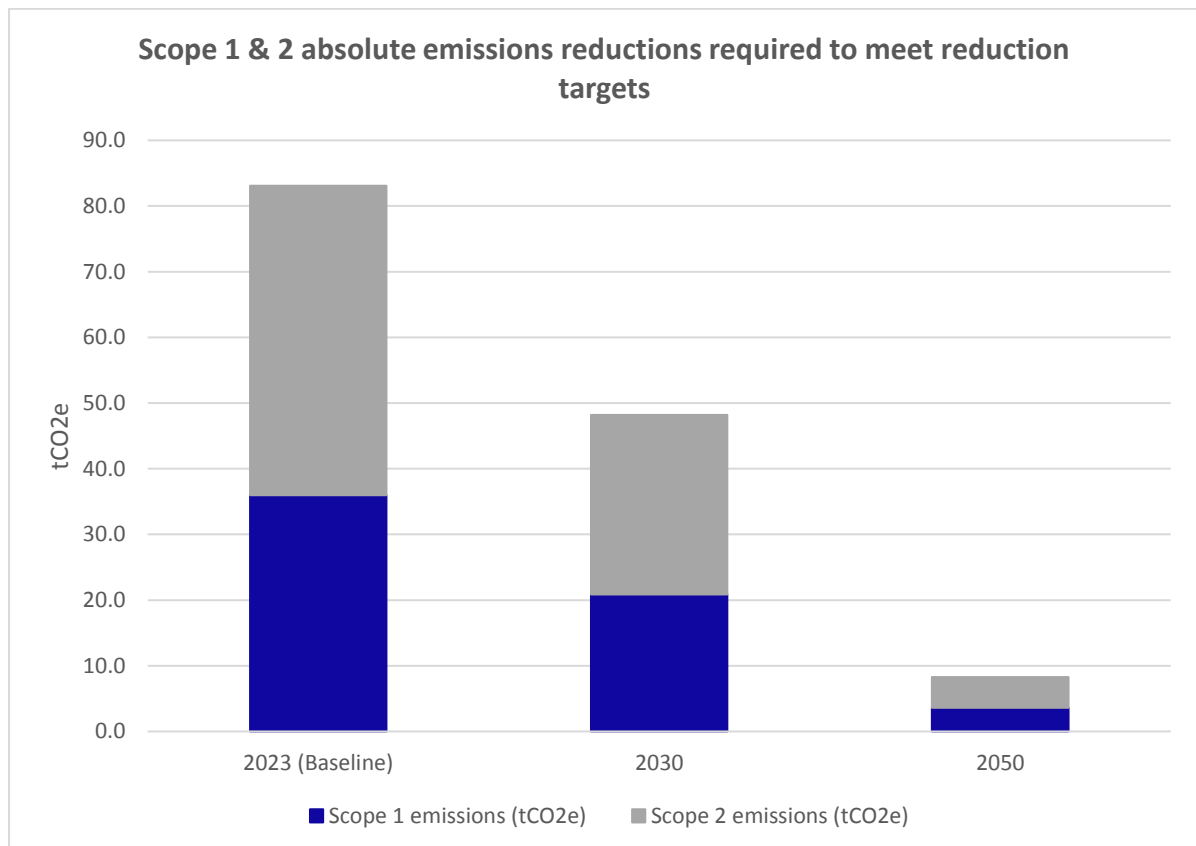


SMR

- Scope 3 Category 6:
 - Near term - Rolls-Royce SMR commits to reduce Scope 3 Category 6 emissions by 51.6% per employee by 2030 from a 2023 base year
 - Long term - Rolls-Royce SMR commits to reduce Scope 3 Category 6 emissions by 97.0% per employee by 2050 from a 2023 base year.

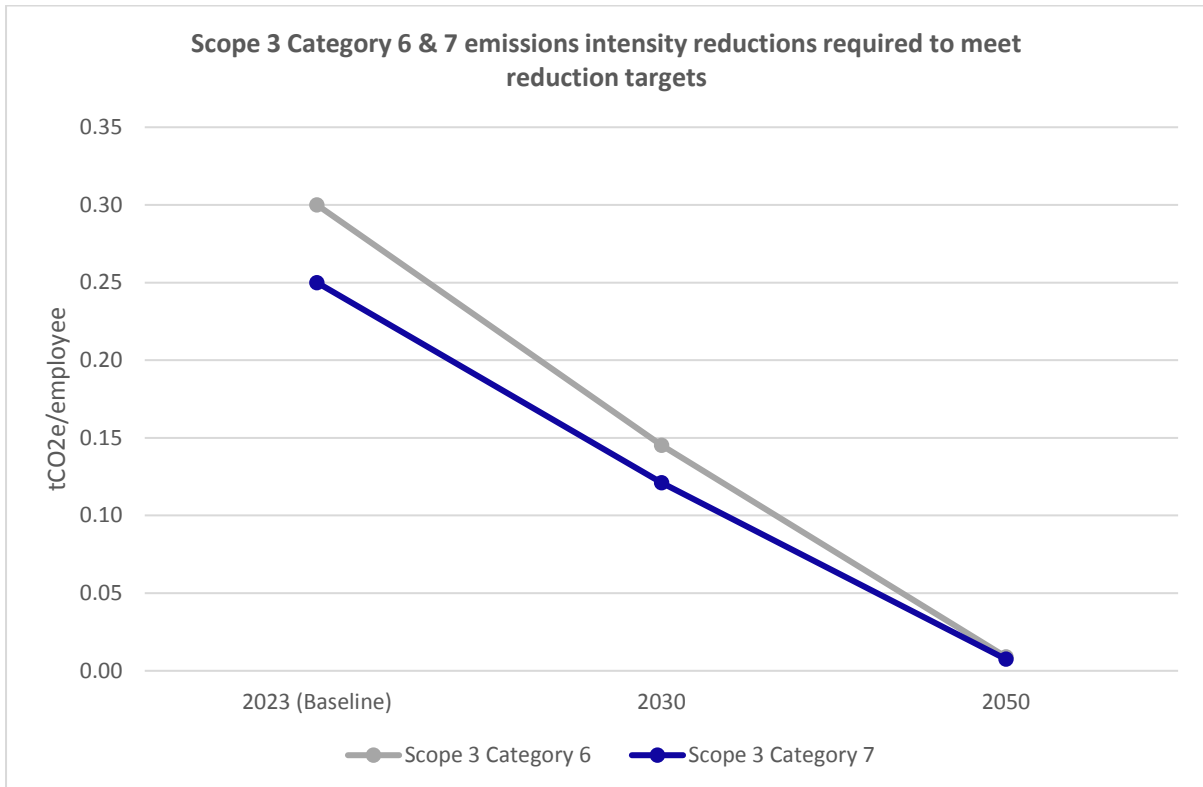
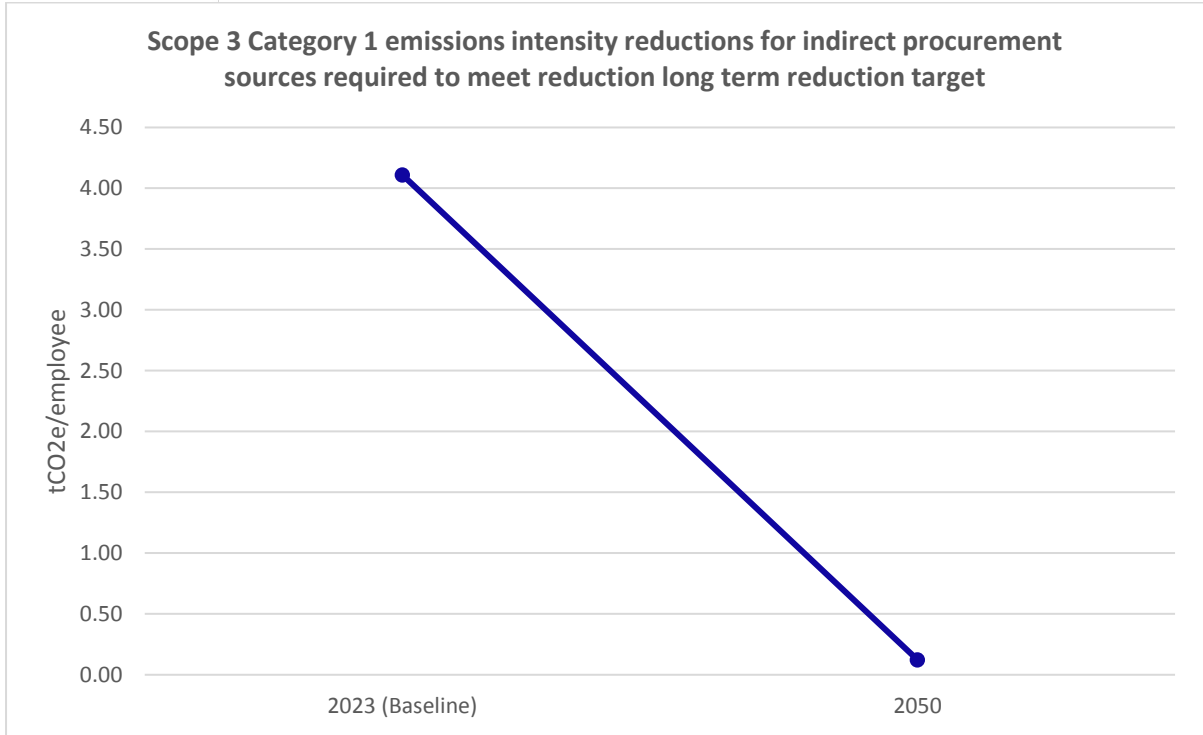
- Scope 3 Category 7:
 - Near term - Rolls-Royce SMR commits to reduce Scope 3 Category 7 emissions by 51.6% per employee by 2030 from a 2023 base year
 - Long term - Rolls-Royce SMR commits to reduce Scope 3 Category 7 emissions by 97.0% per employee by 2050 from a 2023 base year.

All our current targets are developed in accordance with the SBTi cross sector pathway methodology. As this is the first year, we have captured data to inform our baseline and setting of targets, we are currently reviewing our data to identify any improvements required to enable verification by the SBTi. We are committed to submitting these targets for verification by the SBTi or a suitable alternative in the future.





SMR



We are aware that our emissions profile will change materially over time as we transition from planning and development into full production of our Rolls-Royce SMR product therefore re-





baselining exercises will be carried out to ensure targets are appropriate. To prepare for this, we have undertaken modelling of our emissions out to 2050 based on our projected growth plans to better understand how our emissions may change over time. As additional emissions scopes become material to our business e.g., Scope 3 Categories 4 and 9, we are committed to taking action to avoid and mitigate the impact of these categories and will establish emission reduction targets as and when it is logical to do so.

Emissions Reduction Projects

Completed or Ongoing Emissions Reduction Projects:

As we have only recently set targets to reduce our emissions, many of our emission reduction projects are still being developed. However, we highlight below a number of proactive steps taken by the business to minimise our carbon footprint, both in terms of our existing operations and in the design considerations for our SMR product:

Energy Efficiency and Renewable Energy

- **Renewable Energy:** The Rolls-Royce SMR Manchester Office is now powered by 100% renewable electricity.
- **Building Certification:** The Rolls-Royce SMR Manchester Office has achieved BREEAM Certification (Excellent).

Environmental Management Systems

- **ISO Certification:** Rolls-Royce SMR has achieved certification to ISO 14001:2015 Environmental Management System (EMS) as of April 2024. This certification covers current and future designs and operations.

Lifecycle Emissions Measurement

- **Life Cycle Assessment:** A comprehensive Life Cycle Assessment (LCA) for our Small Modular Reactor design is currently being completed and will be used to help identify and reduce emissions hotspots.

Employee Behaviour and Engagement

- **Hybrid and Flexible Working:** Rolls-Royce SMR promotes a hybrid and flexible working policy, enabling employees to work both from home and the office, helping to reduce commuting emissions.
- **Education and Awareness:** All staff at Rolls-Royce SMR have completed environmental sustainability training through our online SMART learning portal.
- **Employee Engagement Campaigns:** Ongoing employee engagement campaigns raise environmental and sustainability awareness, including events such as Earth Day, National Recycling Week, and Plastic Free July.
- **Commuting Survey:** An annual staff commuting survey is conducted to gather data on commuting habits and develop strategies to reduce commuting-related emissions.





Planned Emissions Reduction Projects:

Due to the expected growth in our business going forward, a key pillar of our emissions reduction strategy is establishing emission reduction actions that avoid emissions from materialising in the first place. We have used our modelled emissions out to 2050 to identify key hotspots for each material emissions scope. With a focus on these hotspots, we are currently developing actions to firstly avoid the emissions and secondly minimise as practicable by building prevention and reduction actions into our planning.

The emission reduction actions that we are pursuing are across our measured emissions scopes include:

Scope 1 – Direct emissions

- **Energy efficiency measures** - installing of sub-meters at new sites to manage and monitor gas consumption effectively.
- **Energy efficiency measures** – implementing advanced telematics to monitor and manage our future fleet’s performance and optimisation.
- **Energy efficiency measures** – ensuring our new manufacturing facilities are designed with state-of-the-art energy efficient technologies and insulation to avoid the use of fossil fuel-based heating and cooling.
- **Employee training & engagement** – building a culture of energy efficiency in our facilities by including employees in the planning stages of sustainability initiatives in the company.
- **Fuel switching** – identifying opportunities to transition our existing facilities to HVAC/electric heating and cooling, including moving our facilities to buildings that do not use natural gas or other fossil fuels.
- **Fuel switching** – ensuring future on-site vehicles, such as material handling equipment (MHE), will be designed as a fully electric fleet from the outset, avoiding the use of diesel.

Scope 2 – Indirect emissions

- **Energy efficiency measures** - installing of sub-meters at new sites to manage and monitor electricity usage.
- **Onsite renewables and energy storage systems** – investigating the opportunities to install onsite renewables such as solar and wind for any future facilities as well as battery storage systems to regulate energy from these renewable sources.
- **Procuring renewable electricity** - using applicable market instruments to ensure as much of our electricity supply as possible comes from renewable sources.

Scope 3 Category 1 – Purchased Goods and Services

- **Sustainable Procurement Strategy** – we continue to develop a Rolls-Royce SMR specific sustainable procurement strategy that looks to address the key emissions hotspots in this emissions category (e.g. IT and services, steel, cement, modules and plastic).





SMR

- **Design optimisation** – work to optimise the design of our SMR product to reduce the quantity of steel, cement, and plastic that it uses (where safe to do so). Replace virgin materials with recycled alternatives where possible.
- **Sustainability monitoring** - mandate the use of the EcoVadis monitoring system with our supply chain partners to track sustainability metrics (including emissions) and to allow us to identify emissions hotspots and prioritise improvements.

Scope 3 Category 4 & 9 – Upstream and Downstream Transportation

- **Localising suppliers and optimising route planning** – identifying suitable suppliers located as close to our operations as possible and ensuring routes are optimised to transport the most amount of goods over the shortest distance.
- **Alternative fuels** – working with our suppliers and logistics providers to utilise low carbon fuels such as Hydrogenated Vegetable Oil (HVO) in their road transportation.
- **Transport modes** – identifying suppliers who can prioritise the use of lower carbon transport options such as rail and sea freight to reduce the amount of road transport required.
- **Optimise facility location** – choosing facility locations that favour access to rail networks over road transport to reduce reliance on higher-emission transport modes like heavy goods vehicles (HGVs).

Scope 3 Category 5 – Waste Generated in Operations

- **Supplier collaboration** – working with our suppliers on sustainable packaging solutions to reduce the environmental impact of the materials to package our product.
- **Sustainable packaging** - choosing lighter and more sustainable packaging options to reduce the emissions associated with disposal.
- **Returnable packaging** - implementing returnable media to reduce the waste produced on site, thereby minimising waste emissions.

Scope 3 Category 6 – Business travel

- **Travel policy** – strengthening our policies and requirements around how business travel occurs, such as restrictions on business class travel and restricting the use of flights where lower carbon alternatives exist e.g., rail.

Scope 3 Category 7 – Employee commuting

- **Facility locations** – considering employee home locations and public transport availability when selecting new sites for the business to reduce the need for private vehicles.
- **Active commuting** – providing facilities to support active commuting such as cycling by providing bicycle storage and showers at our sites.





SMR

- **Enabling uptake of low emissions vehicles, public transport, and cycling** – offering pre-tax benefits such as salary sacrifice to purchase low emissions vehicles, public transport passes, and cycle to work schemes.
- **Green travel plans** - establishing green travel plans for all staff across existing and new facilities promote the use of public transportation, carpooling, biking, and other sustainable travel options by leveraging benefits offered by Rolls-Royce SMR to support these measures e.g., public transport passes.

As our business evolves, we are committed to refining these strategies and expanding our efforts to ensure we meet our 2030 and 2050 targets.



Rolls-Royce SMR
Moor Lane, Derby, Derbyshire, United Kingdom, DE24 8BJ
Company number: 13039768
Rolls-Royce-smr.com



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 standard³ and uses the appropriate Government emission conversion factors for greenhouse gas company reporting⁴.

Scope 1 and Scope 2 emissions have been reported in accordance with Streamlined Energy and Carbon Reporting (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) Standard⁵.

This Carbon Reduction Plan has been reviewed and approved by the Rolls-Royce SMR Limited Board of Directors on 18th June 2024.

Signed for and on behalf of the Rolls Royce SMR Limited Board of Directors:

DocuSigned by:
Stephen Lovegrove
7DF6420393D445A...

.....
Sir Stephen Lovegrove, Chair of the Rolls-Royce SMR Limited Board of Directors.

³<https://ghgprotocol.org/corporate-standard>

⁴<https://www.gov.uk/government/collections/government-conversion-factors-for-company-reporting>

⁵<https://ghgprotocol.org/standards/scope-3-standard>

