JPS Projects

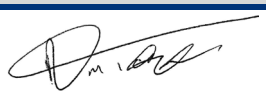
Net Zero Carbon Roadmap

794-PLN-ESH-00248
JPS NZC Roadmap
Rev 1
April 2026

Document status

Version	Purpose of document	Authored by	Reviewed by	Approved by	Review date
0	Draft Issue	OK	AP	AT	April 26
1	Final Issue	OK	AP	AT	April 26

Approval for issue

Andrew Tasker		April 26

Prepared by:

Tetra Tech

Orla Knight

Graduate Consultant – EIA & Sustainability

20 Farringdon Street
London
EC4A 4AB

T +44 (0)20 3691 0500

E orla.knight@rps.tetratech.com

Prepared for:

JPS Projects Ltd

Paul Muncaster

Executive Chairman

JPS House, 2 Kildare Street
Farnworth
BL4 9NP

T +44 1204 408 258

E paul.muncaster@jpsprojects.co.uk

Contents

Tables

Figures

Acronyms

Acronym	Definition
BEIS	Department for Business, Energy & Industrial Strategy
CCC	Climate Change Committee
DEFRA	Department for Environmental, Food and Rural Affairs
DESNZ	Department for Energy Security and Net Zero
GHG	Greenhouse Gas
IPCC	Intergovernmental Panel on Climate Change
ISO	International Organization for Standardization
NDC	Nationally Determined Contribution
NZC	Net Zero Carbon
PIU	Pending Issuance Unit
REGO	Renewable Energy Guarantees of Origin
SBT	Science Based Target
SBTi	Science Based Target initiative
UKGBC	UK Green Building Council
UNFCCC	United Nations Framework Convention on Climate Change
VCS	Verified Carbon Standard
VER	Verified Emission Reduction
WB2˚C	Well-Below 2°C
WCC	Woodland Carbon Code
WCU	Woodland Carbon Unit

1 Introduction

1.1 Scope

1.1.1 Tetra Tech is supporting JPS Projects Ltd (hereafter JPS) in developing its Net Zero Carbon (NZC) strategy. This report establishes a baseline of current carbon performance for JPS and reviews potential carbon reduction trajectories in line with sector expectations, which is also supported by science-based targets detailing the level of decarbonisation required to limit climate change to current global best practice.

1.1.2 To achieve the required level of carbon reduction for NZC, we have identified opportunities across JPS' operations. These opportunities are intended to supplement existing carbon reduction improvements already implemented by JPS. In addition, we frame the current thinking surrounding carbon offsetting and options that JPS could explore to address residual emissions following abatement through absolute reduction of emissions.

1.2 Net Zero Carbon

1.2.1 The UK is committed to a trajectory to achieve net zero emissions by 2050. On 30th January 2025, the UK communicated its new Nationally Determined Contribution (NDC) under the Paris Agreement to the United Nations Framework Convention on Climate Change (UNFCCC). The NDC commits the UK to reducing economy-wide greenhouse gas (GHG) emissions by at least 81% by 2035, compared to 1990 levels (Department for Energy Security and Net Zero (DESNZ), 2025a).

1.2.2 The UK Government published their Net Zero Strategy in October 2021 (DESNZ and Department for Business, Energy and Industrial Strategy (BEIS), 2022) which sets out their strategy and policies to decarbonise the UK economy across all sectors to meet NDC targets and achieve net zero ahead of the UK's original 2050 target.

1.2.3 Beyond the legal requirement for the UK to achieve net zero by 2050, companies are recognising the importance and role they play in limiting global warming to 1.5°C. Careful consideration should be given to market expectations, stakeholder attitudes (including shareholders, customers, employees amongst others) and realistic reduction opportunities.

1.2.4 When defining carbon reduction targets, it is important to be clear when setting boundaries and the use of terminology. Three key terms are used throughout literature relating to absolute carbon reduction trajectories and strategies. These are: net zero, net zero carbon and carbon neutral. There is still some ambiguity regarding their true definitions, nevertheless, the below represents our understanding of the terms based on robust sources.

1.2.5 The Institute of Sustainability and Environmental Professionals (ISEP, formerly IEMA) GHG Hierarchy guidance (ISEP, 2020) describes the differences in terminology for carbon neutral and net zero, and the types of carbon offsets as follows. Carbon neutrality can be achieved at any point as a helpful staging post on the journey. Net zero on the other hand, is regarded as the destination after a science-based targets programme has eliminated, reduced or substituted out carbon emissions. The residual emissions that are left are balanced by either carbon credits (purchased from credible eligible schemes) or by removals within the organisation or entity itself (e.g. nature based solutions on owned land or land with partners).

1.2.6 Additionally, the Science Based Target initiative (SBTi) uses the Intergovernmental Panel on Climate Change's (IPCC) definition of net zero: 'when anthropogenic emissions of GHGs to the atmosphere are balanced by anthropogenic removals over a specified period' (SBTi, 2026). 'Where multiple GHGs are involved, the quantification of net-zero emissions depends on the climate metric chosen to compare emissions of different gases (such as global warming potential, global temperature change potential, chosen time horizon, and others)' (SBTi, 2020).

2 Carbon Footprint

2.1.1 A review of GHG emissions data for JPS was undertaken with a baseline year of 2025 (covering a reporting period from October 2024 to September 2025). Scope 1, 2 & 3 emissions relevant to JPS' baseline year are presented in Table 2.1, below.

Table 2.1: JPS carbon footprint for 2025 baseline year

Scope	Absolute Emissions (tCO_2e)
Scope 1	
Company fleet	54.29
Refrigerant	0.63
Head office – fuel consumption	5.42
Project sites – fuel consumption	0.08
Sub-total	**60.41**
Scope 2	
Head office electricity consumption – location based	3.56
Head office electricity consumption – market based*	8.47
Sub-total (location-based)	**3.56**
Scope 3	
Purchased goods and services	4,484.90
Fuel and energy related activities	1.38
Waste generated in operations	74.53
Business travel	62,21
Employee commuting	22.31
Upstream leased assets	1.73
Use of sold products	8.03
Investments	62.96
Sub-total	**4,718.04**
Gross GHG Emissions	**4,782.01**

*Not included within gross GHG emissions given it is best practice to report location-based emissions only, with market-based emissions provided for additional information.

2.2 Scope 1

2.2.1 Relevant Scope 1 emissions for JPS during the baseline year comprise those from:

- Company fleet (diesel vans);
- Air conditioning refrigerant loss in offices;
- Gas consumption in offices (Farnworth office); and
- Project site fuel consumption (where this is procured by JPS for use on site).

2.2.2 Emissions associated with fuel consumption from the company fleet and office gas consumption were calculated using emissions factors applicable to the baseline period[1] available from UK Government GHG Conversion Factors for Company Reporting (DESNZ,

[1] All emissions factors used have been selected based on the baseline period from which the activity data has been sourced, i.e. much of the baseline period lies within 2025, as such emissions factors for 2025 have been used where relevant.

2025b), scaling them by the level of activity (i.e. mileage of vehicles in the company fleet and kWh gas consumption over the baseline period).

2.2.3 Refrigerant consumption has been approximated by assuming an annual leakage rate (informed by GHG Protocol Guidance on calculating emissions associated with refrigeration and air conditioning (World Resources Institute (WRI) and World Business Council for Sustainable Development (WBCSD), 2005)) for JPS Projects' office air conditioning units. This rate was scaled by the charge capacity for each unit, and appropriate emissions factors (DESNZ, 2025b).

2.2.4 Fuel consumption at project sites, where this was procured by JPS for use on site, was calculated by scaling financial spend on such fuel, by an appropriate spend-based emissions conversion factor. See paragraph 2.4.3 below for further detail.

2.3 Scope 2

2.3.1 Scope 2 emissions comprise those associated with electricity consumption at JPS' offices. Such emissions can be split into location-based emissions (which reflect the average emissions intensity of the grid from which the energy consumption occurs, i.e. the National Grid), and market-based emissions (which reflect purchased or supplier specific emissions). Both the location-based and market-based approach to quantifying electricity has been conducted in line with best practice.

2.3.2 The following UK-specific emission factors applicable to the baseline period were used in the calculation of Scope 2 emissions:

- UK Government GHG Conversion Factors for Company Reporting (DESNZ, 2025b); and
- European Residual Mixes (AIB, 2025).

2.4 Scope 3

2.4.1 Scope 3 emissions have been sorted within categories defined by the GHG Protocol (WRI and WBCSD, 2013). Those relevant to JPS are listed below, alongside each category's contribution to total Scope 3 emissions:

- 1. Purchased goods & services (95.1%)
- 3. Fuel & energy related activities (0.03%)
- 5. Waste generated in operations (1.6%)
- 6. Business travel (1.3%)
- 7. Employee commuting (0.5%)
- 8. Upstream leased assets (0.04%)
- 11. Use of sold products (0.2%)
- 15. Investments (1.3%)

2.4.2 The calculation of Scope 3 emissions has been informed by the following sources:

- Conversion factors $kgCO_2$ per £ spent, by SIC code 2022 (Defra, 2025); and
- UK Government GHG Conversion Factors for Company Reporting (DESNZ, 2025b).

2.4.3 The majority of Scope 3 emissions have been calculated based on financial spend (Scope 3 categories 1, 5, 6, 8, 11 and 15), informed by emissions conversion factors available for Standard Industrial Classification (SIC) code categories (Defra, 2025). Financial spend by JPS has been analysed and sorted into relevant SIC code categories before applying the

relevant conversion factor (kgCO_2e per £). Where identified spend did not directly match SIC code categories (i.e. where the description of spend did not align with the categories, or where invoices could not be divided between spend attributed to construction works and materials), an appropriate overarching SIC code category was used.

2.4.4 The remaining emissions associated with Categories 3, 6 and 7 were calculated by scaling the relevant activity over the baseline period (i.e. electricity consumption and distance travelled) with an appropriate emissions conversion factor (DESNZ, 2025b).

2.4.5 Categories 2 (capital goods), 4 (upstream transportation and distribution), and 9 (downstream transportation and distribution) are considered relevant to JPS' activities. However, it was not possible to separate out emissions from category 1 and 5 due to the inability to isolate spend against these categories from that in the wider categories. Where material quantities associated with projects becomes available (see opportunities lised at paragraph 5.3.5), it is recommended that associated emissions identified and separately reported under category 2.

3 Sector Expectations

3.1 UK Seventh Carbon Budget

3.1.1 The Climate Change Act 2008 (as amended) includes a requirement for the UK Government to set carbon budgets to act as “stepping stones” towards the 2050 net zero emissions target. The budgets act as thresholds or caps which span a five-year period. The Seventh Carbon Budget, produced by the Climate Change Committee (CCC) (CCC, 2025), is the latest iteration of these carbon budgets, recommending a Seventh Carbon Budget to be adopted taking account of the UK Government commitment for 100% reduction in emissions by 2050.

3.1.2 The CCC note ‘the level of the Seventh Carbon Budget is informed by an updated Balanced Pathway. This is an ambitious, deliverable pathway that represents our assessment of the UK’s best path to reach Net Zero by 2050, based on the latest evidence and data. The pathway is developed by dividing the UK’s emissions into sectors of the economy and determining credible emissions reductions for each from 2025 to 2050.’

3.1.3 Many of these sectors, including surface transport, buildings, industry and electricity supply, are expected to reach net zero or close to net zero by 2050 through cost-effective options, in line with the UK’s commitment to supporting the Paris Agreement.

3.1.4 The sector pathway which is most relevant to JPS would be that of the industry sector (see Figure 3.1 for sector trajectory) given this sector accounts for material manufacture (e.g. concrete and steel), while the non-residential buildings sector focuses on in-use emissions (i.e. electricity and gas consumption associated with the use of a building). Wider pathways also relevant to JPS’ activities includes those for surface transport, waste, and the UK as a whole also relevant.

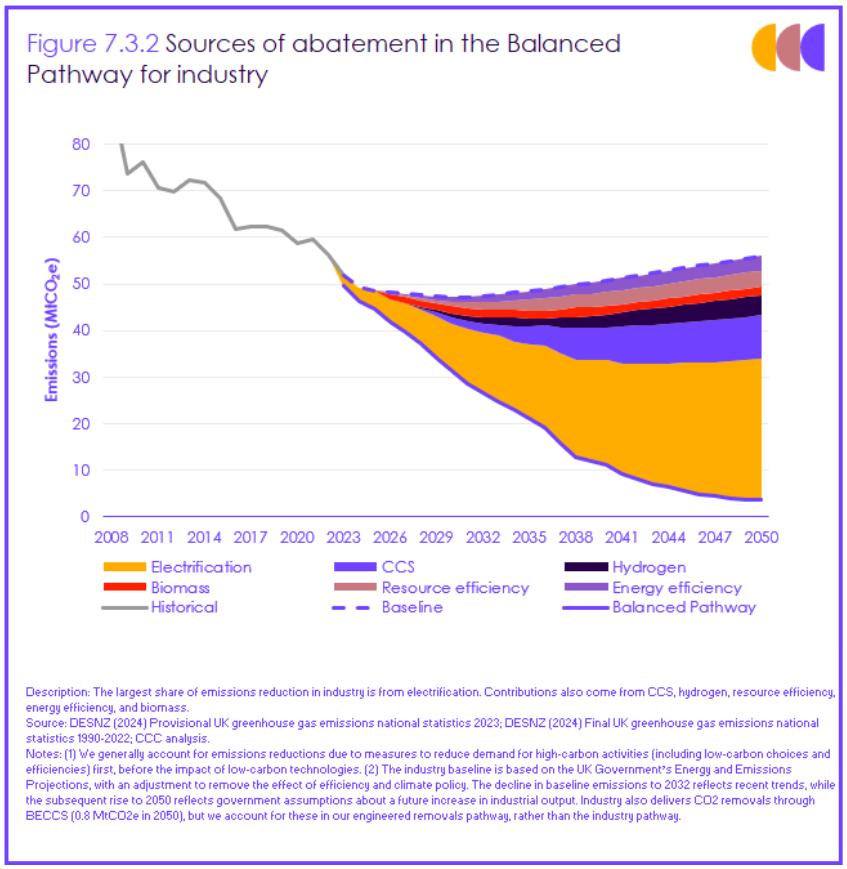


Figure 3.1: Industry sector Trajectory within the Seventh Carbon Budget.

3.2 UK Net Zero Strategy

3.2.1 The UK Government published its Net Zero Strategy in October 2021 (DESNZ and BEIS, 2022) which sets out its strategy and policies in order to decarbonise the UK economy across all sectors to net zero ahead of the UK target of 2050.

3.2.2 The UK Government's Net Zero Strategy presents sector-specific policies for sectors that contribute significantly to the UK's GHG emissions. With regards to the UK Building Sector and Manufacturing and Construction Sector, the UK Net Zero Strategy illustrates a predicted trajectory (Figure 3.2 and Figure 3.3 for both sectors respectively) of reductions through to 2037 in line with the UK Government's target of cutting emissions by 100% by 2050.

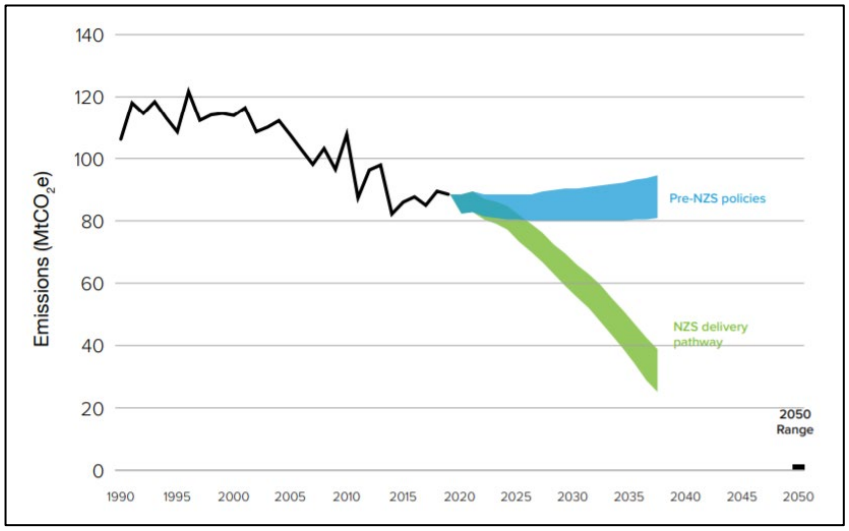


Figure 3.2: Indicative heat and buildings emission pathway to 2037.

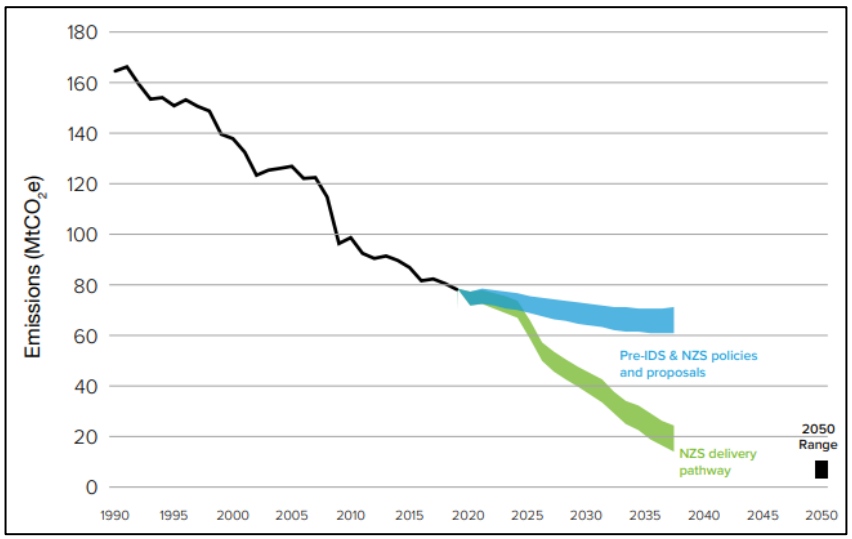


Figure 3.3: Indicative industry emissions pathway to 2037.

4 Net Zero Targets Based on Science

4.1.1 The SBTi is a corporate climate action organisation that develops standards, tools and guidance which allow companies to set GHG emissions reduction targets in line with what is needed to keep global heating below catastrophic levels and reach net-zero by 2050 at latest.

4.1.2 When considering setting a robust and effective carbon reduction target one key consideration is how this target relates to the required reductions to limit global temperature increase to either 1.5°C (applicable to Scope 1 & 2) or Well-Below 2°C (WB2˚C) (applicable to Scope 3).

4.1.3 When considering the absolute reduction in near-term emissions (5 to 10 years), companies must perform in accordance with the minimum reduction rates required to be consistent with the 1.5˚C trajectory (for Scope 1 & 2), and the WB2˚C trajectory (for Scope 3 emissions). These require a:

- minimum absolute reduction target calculated as 4.2% x (target year - 2020), where a post-2020 base year is used (1.5°C trajectory). Where a 2032 target year is used, this equates to a minimum 50.4% absolute reduction, equal to a 7.2% reduction per annum from a 2025 baseline year; and
- minimum absolute reduction target calculated as 2.5% x (target year - 2020), where a post-2020 baseline is used (for a WB2°C trajectory). Where a 2032 target year is used, this equates to a minimum 30% absolute reduction, equal to 4.3% reduction per annum from a 2025 baseline year.

4.1.4 These minimum linear reductions are consistent with that of the pathways derived from the IPCC Sixth Assessment Report (IPCC, 2022).

4.1.5 To achieve long-term NZC targets based on science, and reach a state of net zero, companies must deeply reduce emissions and counterbalance the impact of any emissions that remain. The SBTi Corporate Net-Zero Standard (SBTi, 2025a) defines corporate net zero as:

- Reducing Scope 1, 2 and 3 emissions to zero or a residual level[2] consistent with reaching net zero emissions at the global or sector level in eligible 1.5˚C-aligned pathways; and
- Permanently neutralising[3] any residual emissions at the net zero target year and any GHG emissions released into the atmosphere thereafter.

4.1.6 An absolute reduction of Scopes 1, 2 and 3 by 90% is required by 2050 or sooner, with the remaining emissions considered residual to be offset.

4.1.7 The target reductions and reduction trajectories consistent with the science based 1.5˚C and WB2˚C scenarios consider absolute reductions and focus on the abatement of emissions, as opposed to any emissions offsetting.

4.1.8 All active targets must be reviewed, at a minimum, every 5 years to ensure consistency with the latest SBTi criteria.

4.1.9 Targets can be set using the location- or market-based Scope 2 emissions calculation methodology.

[2] Residual emissions refer to the company's Scope 1, 2 and 3 emissions that remain once its long-term emissions reduction target has been achieved (SBTi, 2026).
[3] Neutralisation refers to measures companies take to remove carbon from the atmosphere and permanently store it, counterbalancing the impact of emissions that remain unabated after the long-term science-based target is achieved (SBTi, 2026).

4.1.10 To contribute to societal net-zero goals, companies are strongly encouraged to go further than their science-based targets to mitigate emissions beyond their value chains (known as 'beyond value chain mitigation') (SBTi, 2025a). Such actions aim to accelerate global progress towards net-zero by supporting other economic and social actors to reduce and/or remove GHG emissions and by taking responsibility for their unabated emissions that contribute to climate change. Beyond value chain mitigation is not accounted for within a company's Scope 1, 2 or 3 GHG inventory and therefore do not count towards achieving value-chain emission reduction targets (SBTi, 2024).

4.1.11 Figure 4.1 summarises the above, showing the process whereby near-term targets are set and long term NZC targets are achieved.

Figure 4.1: Key elements of the Corporate Net-Zero Standard (SBTi, 2025a)

5 Net Zero Pathway, Assumptions and Opportunities

5.1.1 JPS have identified the following draft net zero targets:

- Net zero Scope 1 and 2 emissions by 2032; and
- Net zero Scope 3 emissions by 2040.

5.1.2 This section sets out JPS' modelled decarbonisation trajectory, with emissions in 2032 and 2040 reported to review the feasibility of JPS' draft targets.

5.2 Scope 1 & 2 Emissions

5.2.1 Using a range of assumptions and opportunities based on current policy and national NZC targets, technological advancements and behavioural change, a Scope 1 and 2 pathway was developed that presents a feasible route to achieving NZC. Modelled reductions are shown in Table 5.1, below.

Table 5.1: Scope 1 & 2 NZC Pathway

Scope	2025 Baseline (tCO_2e)	2030	2032 (Target Year)	2035	2040
Scope 1					
Absolute emissions	60.41	17.74	0.33	0.32	0.30
Reduction from baseline	n/a	70.6%	99.5%	99.5%	99.5%
Scope 2					
Location-based method					
Absolute emissions	3.56	1.35	0.90	0.53	0.42
Reduction from baseline	n/a	62.2%	74.8%	85.0%	88.2%
Market-based method					
Absolute emissions	8.47	8.47	0.00	0.00	0.00
Reduction from baseline	n/a	0%	100%	100%	100%
Total (Scope 1 and Scope 2)					
Location-based method					
Absolute emissions	63.98	19.09	1.22	0.85	0.72
Reduction from baseline	n/a	70.2%	98.1%	98.7%	98.9%
Market-based method					
Absolute emissions	68.88	26.21	0.33	0.32	0.30
Reduction from baseline	n/a	62.0%	99.5%	99.5%	99.6%

5.2.2 The assumptions used to inform the calculation of the above NZC pathway are detailed below. Additional emissions reduction opportunities that could be adopted to better the above NZC pathway are also detailed for consideration by JPS.

5.2.3 Growth in the business has not been accounted for quantitatively. JPS forecasts 5% growth annually which would not affect the targeted emissions reductions to be achieved in a given year, as these are relative to reductions from the baseline year. Growth achieved and any resultant increase in annual emissions will result in change to the absolute emissions reductions required in any given year to achieve targets.

Scope 1 Assumptions and Opportunities

5.2.4 The Scope 1 pathway shows decarbonisation of 99.5% by 2032 is feasible, with the remaining residual emissions associated with refrigerant use and fuel consumption at project sites. This trajectory is based on the following assumptions:

- commitment to the electrification of JPS' company fleet by 2032 – it is assumed that from 2032 there will be no further Scope 1 emissions associated with the company fleet. This is ahead of the UK's commitment to ban sales of petrol and diesel vehicles by 2035 (Department for Transport (DfT), 2023);
- commitment to remove gas reliance at the Farnworth office by 2032 – to switch to lower carbon alternatives such as air source heat pumps (where feasible). It is assumed that from 2032 there will be no further Scope 1 emissions associated with gas consumption;
- commitment to use lower carbon refrigerants within JPS' offices, with HVAC systems to be retrofitted with lower carbon refrigerants by 2032. This has been built into the pathway, with R410a being replaced with R32 (a lower carbon emission refrigerant) from 2032; and
- the Seventh Carbon Budget balanced pathway for the industry sector has been used to inform the emissions associated with fuel consumption at project sites (where this is procured by JPS) in the NZC pathway. This considers a 75% and 92% reduction in industry emissions by 2040 and 2050 respectively (from 2025). It is noted that JPS are committed to the procurement of low carbon fuels on project sites where JPS are responsible for fuel procurement. In the absence of a quantifiable target, this has not been accounted for within the decarbonisation trajectory.

5.2.5 Additional opportunities JPS can explore to further reduce Scope 1 emissions include:

- Undertaking yearly service reports for all air conditioning units, to ensure any potential leakage is identified and steps can be taken to reduce such refrigerant loss where possible.
- Explore a specific commitment to procure low carbon fuel consumption from project sites (e.g. hydrotreated vegetable oil (HVO), and electrified solutions).

Scope 2 Assumptions and Opportunities

5.2.6 The Scope 2 pathway shows decarbonisation of 74.8% by 2032 and 88.2% by 2040 under the location-based methodology; and decarbonisation of 100% by 2032 under the market-based methodology. This is based on the following assumptions:

- The UK Government is committed to decarbonising the national power system by 2035 (BEIS, 2021). The NZC pathway uses the latest UK consumption-based long run marginal grid average factors for grid intensity projections to 2040 (DESNZ, 2023), which provides an estimation of progress on grid decarbonisation. This means JPS' Scope 2 emissions (location-based) will be reduced from ongoing national grid decarbonisation efforts.
- JPS have made a commitment to make the switch to 100% renewable energy by 2032. This will be achieved through the purchase of Renewable Energy Guarantees of Origin (REGO) backed 100% renewable energy tariffs, and has been included in the modelling of JPS' market-based Scope 2 emissions.
- On-site renewable energy generation will be explored to provide a proportion of electricity consumption at the Farnworth office. It is not known to what extent electricity generation will be installed on site, and as such has not yet been included within JPS' Scope 2 decarbonisation trajectory. Should JPS adopt on-site renewable energy

generation, it can be expected that the reported Scope 2 emissions (both location- and market-based) will be reduced further than that reported above, thereby achieving additional emissions reductions.

5.2.7 Additional opportunities JPS can explore to further reduce Scope 2 emissions include:

- Improve energy efficiency throughout the business to reduce overall energy consumption. Measures may include, but are not limited to:
  - Run targeted training surrounding behavioural change including switching off equipment, use of natural ventilation for cooling etc.

Scope 1 & 2 Net Zero Pathway Review

5.2.8 The modelled decarbonisation pathway shows that near-term 1.5°C aligned decarbonisation which achieves a 50.4% reduction by 2032 (SBTi near term target) can feasibly be achieved for Scopes 1 and 2. Further, the long term NZC target, requiring absolute reductions of 90%, can also be achieved by 2032 (the earliest point at which emissions reductions exceed 90%).

5.2.9 However, it should be noted that under both the location-based and market-based methods residual emissions are modelled beyond 2032, and as such offsets would need to be purchased to claim NZC. Under both methodologies residual emissions arise from refrigerant use in air conditioning and fuel consumption at project sites (see paragraphs 5.2.4 and 5.2.6).

5.2.10 In addition, under the location-based methodology residual emissions result from electricity consumption - the calculation of Scope 2 emissions has been informed by emissions intensity projections of the National Grid (DESNZ, 2023) which do not account for carbon capture, usage and storage (CCUS) required to achieve a net-zero electricity grid by 2035. As such a small amount of residual emissions remain from the consumption of grid electricity beyond 2035. Should the National Grid not decarbonise in line with the projections, there is some risk that the decarbonisation trajectory detailed in Table 5.1 would not be met and residual emissions would be greater. The use of renewable energy generated on-site can mitigate this risk – see paragraph 5.2.6.

5.2.11 Under the market-based methodology there are no Scope 2 residual emissions from 2032, given it has been assumed that 100% of procured electricity would be from renewable sources (see paragraph 5.2.6). As set out in Section 4, net zero targets can be based on a market-based emissions methodology, however we would advise that there is some risk of perceived greenwashing when reporting under this methodology given absolute emissions reductions have not been achieved but purchased via renewable energy certifications.

5.3 Scope 3 Emissions

5.3.1 Using a range of assumptions and opportunities based on current policy and national NZC targets, technological advancements and behavioural change, a Scope 3 pathway was developed that presents a feasible route to achieving NZC. Modelled reductions are shown in Table 5.2, below.

Table 5.2: Scope 3 NZC Pathway

Scope 3	2025 Baseline (tCO2e)	2030	2032	2035	2040	2047
Absolute emissions	4,718.04	3,254.52	2,736.08	2,153.72	1,148.53	448.39
Reduction from baseline	n/a	31.0%	42.0%	54.4%	75.7%	90.5%

5.3.2 Scope 3 decarbonisation presents a significant challenge for all businesses as these consist of indirect emissions and covers a wide range of categories. The UK built environment is responsible for approximately 25% of total UK greenhouse gas emissions (Environmental Audit Committee, 2022), with the majority of those emissions associated with the construction of buildings and the emissions associated with the production of materials used in their construction.

5.3.3 As this is the sector within which JPS operates, and given the majority of JPS' Scope 3 emissions have been estimated to arise from construction activities and manufactured goods/building supplies, there is significant scope to reduce Scope 3 emissions.

Scope 3 Assumptions and Opportunities

5.3.4 The following assumptions have been made to inform the Scope 3 pathway:

- Purchased goods and services – construction works and manufactured goods / building supplies:
  - The Seventh Carbon Budget balanced pathway for the industry sector has been used to inform the emissions associated with construction works and supplies in the NZC pathway. This considers a 75% and 92% reduction in industry emissions by 2040 and 2050, respectively (from 2025).
- Purchased goods and services – professional services:
  - It is assumed that the majority of emissions associated with professional services (i.e. accountants, consultant teams, employment services) arise from the consumption of purchased electricity. As such, emissions associated with such activity have been scaled by the latest UK consumption-based long run marginal grid average factors for grid intensity projections to 2040 (DESNZ, 2023), which provides an estimation of progress on grid decarbonisation.
- Purchased goods and services – subsistence and entertainment, and 'other':
  - In the absence of specific sector-appropriate decarbonisation pathways, emissions associated with such activity have been scaled by the Seventh Carbon Budget balanced pathway for the UK as a whole. This considers a 74% and 100% reduction in industry emissions by 2040 and 2050, respectively (from 2025).
- Waste generated in operations:
  - The Seventh Carbon Budget balanced pathway for the waste sector is used to inform the waste emissions in the NZC pathway. This considers a 74% and 80% reduction in waste emissions by 2040 and 2050, respectively (from 2025).
- Business travel and employee commuting:
  - The Seventh Carbon Budget balanced pathway for surface transport is used to inform land transport decarbonisation in the NZC pathway. This considers an 85% reduction and near NZC by 2040 and 2050, respectively (from 2025).
- Upstream leased assets:
  - In the absence of specific sector-appropriate decarbonisation pathways, emissions associated with such activity have been scaled by the Seventh Carbon Budget balanced pathway for the UK as a whole. This considers a 74% and 100% reduction in industry emissions by 2040 and 2050, respectively (from 2025).
- Use of sold products:
  - Emissions associated with this category relate to the disposal of vehicles in JPS' fleet. The Seventh Carbon Budget balanced pathway for surface transport is used

to inform land transport decarbonisation in the NZC pathway. This considers an 85% reduction and near NZC by 2040 and 2050, respectively (from 2025).

- Investments:
  - In the absence of specific sector-appropriate decarbonisation pathways, emissions associated with such activity have been scaled by the Seventh Carbon Budget balanced pathway for the UK as a whole. This considers a 74% and 100% reduction in industry emissions by 2040 and 2050, respectively (from 2025).

5.3.5 Given the extent to which Scope 3 emissions dominate JPS' carbon footprint, the following opportunities should be explored to reduce such emissions where feasible:

- Purchased goods and services – construction works and manufactured goods / building supplies :
  - JPS should look to collect data to inform the calculation of Scope 3 emissions, and going forwards, of absolute decarbonisation, as this would not be accurately captured by the current Scope 3 emissions calculation methodology. This will better help inform where the greatest emissions arise and enable better planning of emissions reduction initiatives.
  - Information that should be sought includes, but is not limited to:
    - Detailed list of purchased products and materials (purchased by JPS/sub-contractors, can be divided into capital expenditures (CAPEX) and operational expenses (OPEX)), and where available source Environmental Product Declarations (EPDs);
    - Utilities consumption at project sites – while this may prove difficult on smaller sites, sub-metering (and the installation of smart meters where possible) and consumption monitoring should be targeted to collect energy and water consumption data associated with JPS' activities; and
    - Waste arising from site recorded by waste transfer notes and specification of waste management routes – again, while this may provide difficult on smaller sites, it would be valuable to enhance waste monitoring to understand and influence waste arising from JPS' activities.
  - The above can be enabled through project contracts that require sub-contractors to monitor their energy and water consumption, waste arisings and waste management routes, and materials procured throughout the project.
  - JPS should influence its supply chain in the procurement of goods by procuring from suppliers who are actively working to heavily decarbonise in line with the UK Government's commitment. This could be achieved by stipulating in procurement contracts that suppliers must have a science based NZC target in place or are working to set such a target.
  - JPS should maximise its waste to recycling waste streams and choose waste treatment companies who have committed to science-based targets.
  - JPS could incentivise the use of electric vehicles by offering schemes through work to lower the cost of purchasing these vehicles such as through salary sacrifice. Additional charging points for electric vehicles could be introduced on site to encourage electric vehicle ownership.
  - JPS can implement further measures to reduce employee commuting emissions by encouraging walking, cycling or the use of public transport.

5.3.6 JPS have committed to the completion of Whole Life Carbon Assessments where projects exceed a value of £2 million to identify carbon hotspots and potential low carbon alternatives.

Furthermore, JPS require suppliers to adhere to the JPS Supplier Code of Conduct, which includes commitments to carbon reduction, energy efficiency, material and product procurement, transport and waste, supporting the above recommendations. Such commitments are not able to be quantified at this stage. However, both support the collation of activity data which better reflects JPS' emissions, enabling increased accuracy of future Scope 3 emissions quantifications, also accounting for emissions reduction initiatives incorporated within projects.

Scope 3 Net Zero Pathway Review

5.3.7 The NZC pathway shows significant decarbonisation of 31.0% by 2030 and 75.7% by 2040. The modelled decarbonisation pathway shows that near-term WBC2°C aligned decarbonisation which achieves a 30% reduction by 2032 can feasibly be achieved. However, the modelled pathways shows that near-term 1.5 °C aligned decarbonisation which achieves a 50.4% reduction is not achieved.

5.3.8 The long term NZC target, requiring absolute reductions of 90% in line with SBTi guidance, is not modelled as achieved by 2040 based on the current assumptions and commitments. Achievement of such absolute reductions has been modelled to be achieved by 2047 (at the earliest). This can largely be attributed to the slow decarbonisation of the industry sector, as Scope 3 emissions associated with construction works contribute the majority of projected emissions.

5.3.9 Despite this, the methodology used to calculate JPS' decarbonisation trajectory reflects decarbonisation in line with relevant industry projections, and does not quantitatively account for any future commitments made by JPS to promote accelerated Scope 3 decarbonisation. As such, should JPS implement the suggested Scope 3 reduction opportunities identified above, it could be possible to achieve NZC by 2040 and to further exceed the near-term WB2°C targets. Scope 3 NZC by 2040 can be set as an aspirational target. Progress against this target should be monitored to identify risk of non-compliance and implement remediation measures.

6 Carbon offsetting

6.1 Introduction

6.1.1 Although the focus of achieving NZC is on the absolute reduction of GHG emissions, there is a need to compensate for residual emissions as part of the wider NZC Strategy once abatement measures have been exhausted and science-based near-term and long-term targets have been met.

6.1.2 When purchasing offset credits, credit types and projects should be assessed against international guidance for net-zero-aligned carbon credit use (for example the Oxford Principles for Net Zero Aligned Carbon Offsetting (Revised 2024) and the SBTi Corporate Net-Zero Standard (2025)). Examples of potential standards are listed within the sections below.

6.1.3 Voluntary offsets may be categorised by the form of carbon balancing (i.e. avoidance, reduction or removal), or geographical location for example. By understanding the different offset typologies, informed decisions can be made when selecting and investing in offset projects so that those chosen align with JPS' own values and sustainability goals. To gain the most out of the chosen offset project or fund it should be considered in the context of what emissions the offset is compensating. For JPS, this is predominantly the supply chain.

6.1.4 It should be noted that to rebalance carbon sources and sinks in the long run, long-term carbon stores are necessary. Nature-based solutions like reforestation carry a higher risk of reversal from threats such as disease and fire, which can reduce the resilience of natural ecosystems. At the end of a tree's life, most of the CO_2 sequestered gets released back into the atmosphere when the wood is oxidised as a result of combustion or decomposition, thereby losing any emissions removal benefit that it once offered. For this reason, tree planting is currently considered a removal with a higher risk of reversal. UKGBC guidance on carbon offsetting provides further detail regarding long- and short-term solutions (UKGBC, 2024).

6.1.5 Carbon removal strategies with higher risk of reversal offered by nature-based solutions can play a transitional role and be used as part of a blended approach to offsetting, while storage options with a lower risk of reversal are currently being developed at scale. Storage methods with a lower risk of reversal, such as injecting CO_2 into geological reservoirs or mineralising carbon into stable forms, offer much higher storage durability. While these approaches are technically proven and operational, they remain at an early stage of market maturity and require further scaling.

6.1.6 Under the SBTi Corporate Net Zero Standard (2025), residual emissions (after achieving at least 90% absolute reduction by the net zero target year) must be neutralised through carbon dioxide removal with high durability.

6.2 UK Background

6.2.1 The Committee for Climate Change (CCC) in the Seventh Carbon Budget recommend that *'the government should plan to deliver the emissions reductions required to meet the Seventh Carbon Budget through domestic decarbonisation action.'* In addition, the CCC's conclusive remarks on its recommendations states that the Government should not plan to use international credits to achieve the Seventh Carbon Budget. The recommended balanced pathway achieves the required reductions through domestic action. However, the CCC acknowledges that 'while international credits should not be part of the UK's decarbonisation plan at this stage, there are potential future circumstances which might warrant their consideration'.

6.3 International Crediting Programmes

6.3.1 The following are good examples of certifications concerning internationally recognised carbon offsetting through the voluntary market. The voluntary market serves the purpose of businesses, government departments, NGOs and single individuals wanting to be accountable for their carbon footprint and help drive the transition to a low-carbon future. Standards have been set up to provide assurances to buyers that the emissions reductions generated by a particular project are indeed real, quantifiable and additional. These schemes are:

- Verified Carbon Standard (VCS): https://verra.org/

6.3.2 VCS is one of the most widely used voluntary GHG offsetting programmes. There are over 2,300 certified projects which collectively support the reduction and removal of emissions from the atmosphere. Once a project has been verified against the VCS rules and requirements Verified Carbon Units (VCUs) can be purchased by organisations. VCS projects range across 15 sectors including renewable energy, transport, waste handling and disposal and more. However, not all VCS-certified project types are appropriate for use in net zero aligned claims, depending on the credit type and durability.

- Gold Standard Verified Emission Reduction (VER): https://www.goldstandard.org/

6.3.3 The Gold Standard, as a standards body, work to ensure climate finance and funding goes as far as possible. There are over 4,300 projects across 114 countries. The Gold standard offers the option to purchase credits in support of a particular project or support a wider Climate+ portfolio where the finances are split between several. The Gold standard is also aligned with the UN Sustainable Development Goals. As with VCS, not all certified projects are appropriate for residual emissions under SBTi which requires neutralisation through permanent carbon dioxide removal.

- Puro.Earth: https://puro.earth/

6.3.4 Puro Earth is a carbon removal crediting platform focused solely on verified carbon dioxide removals. Puro.earth supports a range of carbon removal approaches, including biochar, carbon-storing construction materials, enhanced weathering and other emerging removal methodologies. Credits issued through the platform represent the physical removal of CO_2 from the atmosphere and are categorised according to storage durability, from medium-term to long-term storage. Carbon removal credits may be purchased in support of individual projects or through aggregated procurement across multiple suppliers, enabling participation at different scales. As a durable removal option, Puro.Earth is SBTi-aligned.

- Isometric: https://isometric.com/

6.3.5 Isometric is a carbon removal registry and crediting platform that focuses exclusively on verified carbon dioxide removal. Credits issued through Isometric are designed to reflect durable carbon removal, focused on geological and mineral storage pathways such as direct air capture with storage (DACCS), bioenergy with carbon capture and storage (BECCS), and mineralisation. credits issued via Isometric are considered appropriate for neutralising residual emissions at the net-zero target year, in line with the SBTi Corporate Net-Zero Standard

6.4 UK Focused Schemes

6.4.1 There are two main UK voluntary standards for purchasing carbon verified credits for offsetting: Woodland Carbon Code and Peatland Code. Given that these schemes do not

entail permanent carbon dioxide removal, they are not suitable for addressing residual emissions under SBTi.

- Woodland Carbon Code: https://www.woodlandcarboncode.org.uk/

6.4.2 The Woodland Carbon Code (WCC) issues carbon units which represent measurable amounts of carbon dioxide removed from the atmosphere by trees as they grow – one unit is 1 tonne of carbon dioxide equivalent. As trees take a while to grow and sequester carbon dioxide, there are two types of unit available to purchase. Companies can compensate for their UK-based emissions using carbon units from WCC projects, but not for their emissions overseas or emissions from international aviation or shipping.

6.4.3 A Woodland Carbon Unit (WCU) is a tonne of CO_2e which has been sequestered in a WCC-verified woodland. It has been independently verified, is guaranteed to be there, and can be used by companies to report against UK-based emissions.

6.4.4 A Pending Issuance Unit (PIU) is effectively a 'promise to deliver' a Woodland Carbon Unit in future, based on predicted sequestration. It is not 'guaranteed' and cannot be used to report against UK-based emissions until verified. However, it allows companies to plan to compensate for future UK-based emissions or make credible corporate responsibility statements in support of woodland creation.

- Peatland Code: https://www.iucn-uk-peatlandprogramme.org/peatland-code-0

6.4.5 The Peatland Code is a voluntary standard issued by the IUCN UK National Committee. Peatland restoration is an internationally recognised and cost-effective way to tackle climate change. It is in everyone's interest for peatlands to be in a healthy state. The Peatland Code Registry shows available projects which can be purchased and expressed as an offset in terms of corporate reporting.

- Saltmarsh Code: https://www.ceh.ac.uk/our-science/projects/uk-saltmarsh-code

6.4.6 A further scheme that is currently under development is the Saltmarsh Code, which focuses on the potential of carbon storage within the UK's saltmarshes. It will aim to sell saltmarsh carbon credits and fund further restoration, similar to the above Woodland Carbon Code and Peatland Code. It is anticipated that the Code will be refined over the next couple of years, following which carbon credits may be available for purchase.

6.5 ISO 14068-1

6.5.1 ISO 14068-1 (International Organization for Standardization (ISO), 2023) is the internationally recognised specification for carbon neutrality and builds on the superseded PAS 2060 principles. It sets out requirements and guidance for quantification, reduction and offsetting of greenhouse gas (GHG) emissions for organisations. If an alternative carbon offsetting approach is desired, then the scheme or project would need to demonstrate how this adheres to the offsetting guidance and standards as set out in ISO14068-1.

6.5.2 ISO 14068-1 requires that offsets are only permissible after demonstration of reductions, emphasising high-quality offsets that meet criteria such as:

- Only used for emissions that cannot yet be eliminated through direct action.
- Genuinely additional (i.e. reductions that would not have happened anyway).
- Verified by an independent third party to ensure that emission reductions are permanent, avoid leakage (so that emissions are not increased in another area as a result of the project reductions) and are not double counted.
- Permanent (i.e. GHG removals are maintained over the long term).

6.6 Transition Fund

6.6.1 The UKGBC detail the value of a transition fund, which is a leadership approach towards carbon offsetting and corporate reporting (UKGBC, 2023). This involves setting an internal carbon price which can be used, in part, to purchase offsets with the remaining funds used in any other efforts that promote positive climate action and support wider sustainability outcomes.

6.6.2 The transition fund may be used for carbon insetting – where emissions reductions can be achieved through investment in initiatives within the supply chain. An example of this could involve investment into research and development that accelerates the reduction of emissions within the steel industry to drive decarbonisation of Scope 3 emissions. Alternatively, JPS could use such a fund to help partially fund lower carbon projects, again aiding in reducing Scope 3 emissions.

6.6.3 The adoption of internal carbon pricing is growing increasingly common across industry sectors. Within the context of built environment challenges it offers a useful financial mechanism to take a more holistic approach to ambitious offsetting (UKGBC, 2023).

6.6.4 The use of a transition fund may bring benefits, such as:

- Creating a financial disincentive for business as usual, and sends a signal of intent to reduce emissions;
- Increasing awareness of cost of carbon abatement, and encourages emissions reduction initiatives; and
- Driving innovation by generating finance and commitments for climate action.

7 Conclusion

7.1.1 A NZC pathway was developed for JPS which shows a feasible pathway to decarbonise in line with science-based targets for Scope 1, 2 and 3 emissions. This considers two-time horizon targets, a near-term target (2032) and long-term target (2040). The proposed NZC pathway for Scope 1, 2 & 3 is presented in Table 7.1.

Table 7.1: Scope 1, 2 & 3 NZC Pathway

Scope	2025 Baseline (tCO_2e)	2030	2032	2035	2040
Scope 1					
Absolute emissions	60.41	17.74	0.33	0.32	0.30
Reduction from baseline	n/a	70.6%	99.5%	99.5%	99.5%
Scope 2					
Absolute emissions (location-based)	3.59	1.35	0.90	0.53	0.42
Reduction from baseline	n/a	62.2%	74.8%	85.0%	88.2%
Scope 3					
Absolute emissions	4,718.04	3,254.52	2,736.08	2,153.72	1,148.53
Reduction from baseline	n/a	31.0%	42.0%	54.4%	75.7%
Total					
Absolute emissions	4,782.01	3,273.61	2,737.90	2,154.57	1,149.25
Reduction from baseline	n/a	31.5%	42.8%	54.9%	76.0%

7.1.2 The NZC pathway shows that significant Scope 1 and 2 reductions are possible. JPS would comfortably comply with SBTi's requirement of achieving 50.4% reduction in Scope 1 and 2 near-term emissions by 2032 from the 2025 baseline in line with the 1.5˚C scenario. A 90% reduction (i.e. long-term SBTi net zero target) can also be achieved by 2032. Residual emissions would need to be offset. As such, JPS' draft targets of achieving net zero Scope 1 and 2 emissions by 2032 are achievable, but would have to be supported by offsets to manage residual emissions.

7.1.3 The pathway highlights the challenge of reducing Scope 3 emissions as it is more difficult for JPS to influence indirect emissions. The near-term NZC pathway for Scope 3 is aligned with the WB2˚C scenario (30% reduction by 2032), and has been modelled as achievable. However, the long term NZC target, requiring absolute reductions of 90% in line with SBTi guidance, is not modelled as achieved by 2040. The earliest point at which the modelled decarbonisation trajectory shows a 90% reduction in Scope 3 emissions (and therefore achieving an SBTi-aligned net zero target) is 2047. It should be noted that this trajectory is a conservative position informed by third party assumptions (CCC, 2025). Should JPS wish to set an aspirational target of NZC Scope 3 emissions by 2040, additional efforts must be made to ensure such emissions align with a 90% reduction. Recommendations have been provided to support this aspiration.

7.1.4 Should JPS adopt any additional emissions reduction opportunities (i.e. within company policy and strategy), it is recommended that the decarbonisation trajectory is recalculated to account for such commitments.

7.1.5 It should be noted that as JPS' business grows, its associated emissions will grow alongside it. Whilst the percentage reduction targets presented are still applicable and show the extent of emissions reductions required from the 2025 baseline to meet NZC targets, absolute reductions to meet such targets may increase when accounting for annual growth. JPS

should look to move towards the monitoring of emissions intensity (e.g. Scope 1, 2 and 3 emissions by business turnover) that will enable emissions comparison year on year while also accounting for growth.

7.1.6 Following decarbonisation efforts to meet science based near-term and long-term targets, there will be unavoidable residual emissions. For JPS, this presents an opportunity to explore the use of carbon credits to further reduce its emissions.

7.1.7 A summary of committed decarbonisation actions for JPS are described in Table 7.2. This does not include policy levers and industry decarbonisation efforts that are outside of JPS' control.

Table 7.2: Summary of committed decarbonisation actions for JPS

Scope	Decarbonisation actions
Scope 1	• Retrofit HVAC systems with lower carbon emission refrigerants by 2032 (e.g. R32 for R410A). • Electrification of vehicle fleet by 2032. • Removal of gas from head office by end of 2032.
Scope 2	• 100% renewable energy consumption at head office by 2032 – this will be met by purchasing 100% REGO backed renewable energy tariffs for electricity consumption. • Installation of on-site renewable energy generation at the Farnworth office.
Scope 3	• Completion of Whole Life Carbon Assessments where projects exceed a value of £2 million to identify carbon hotspots and potential low carbon alternatives. • Requirement for suppliers to adhere to the JPS Supplier Code of Conduct, which includes commitments to carbon reduction, energy efficiency, material and product procurement, transport and waste.

7.1.8 Table 7.3, summarises decarbonisation opportunities that JPS should explore.

Table 7.3: Summary of decarbonisation opportunities

Scope	Decarbonisation opportunities
Scope 1	• Undertaking yearly service reports for all air conditioning units, to ensure any potential leakage is identified and steps can be taken to reduce such refrigerant loss where possible. • Explore a commitment to remove fuel consumption from project sites beyond that of the expected decarbonisation of the industry sector.
Scope 2	• Run targeted training surrounding behavioural change including switching off equipment, use of natural ventilation etc.
Scope 3	• Enhance Scope 3 data collection to inform more accurate calculation of Scope 3 emissions to better inform decarbonisation pathway and emissions reductions opportunities. • Procure goods and services from suppliers who have set science-based targets, plan to set targets or are actively working to heavily decarbonise, where practicable. • Maximise waste to recycling waste stream and endeavour to choose waste treatment companies who have committed science-based targets. • Reduce the need for business travel and encourage online meetings or if domestic, use trains as the main mode of transport. • Encourage the use of walking, cycling or public transport methods over the use of personal vehicles. • Explore ability to incentivise electric vehicle ownership by offering schemes through work to lower the cost of purchasing these vehicles such as through salary sacrifice.

References

AIB (2025). *European Residual Mix | AIB*. [online] www.aib-net.org. Available at: https://www.aib-net.org/facts/european-residual-mix.

BEIS (2021). *Plans Unveiled to Decarbonise UK Power System by 2035*. [online] GOV.UK. Available at: https://www.gov.uk/government/news/plans-unveiled-to-decarbonise-uk-power-system-by-2035 [Accessed Mar. 2026].

CCC (2025). *The Seventh Carbon Budget - Climate Change Committee*. [online] Climate Change Committee. Available at: https://www.theccc.org.uk/publication/the-seventh-carbon-budget/ [Accessed Mar. 2026].

Defra (2025). *UK and England's carbon footprint to 2022*. [online] GOV.UK. Available at: https://www.gov.uk/government/statistics/uks-carbon-footprint#full-publication-update-history [Accessed Mar. 2026].

DESNZ (2023). *Green Book supplementary guidance: valuation of energy use and greenhouse gas emissions for appraisal*. [online] GOV.UK. Available at: https://www.gov.uk/government/publications/valuation-of-energy-use-and-greenhouse-gas-emissions-for-appraisal#full-publication-update-history [Accessed Mar. 2026].

DESNZ (2025a). *UK's 2035 Nationally Determined Contribution (NDC) emissions reduction target under the Paris Agreement*. [online] GOV.UK. Available at: https://www.gov.uk/government/publications/uks-2035-nationally-determined-contribution-ndc-emissions-reduction-target-under-the-paris-agreement [Accessed Mar. 2026].

DESNZ (2025b). *Greenhouse gas reporting: conversion factors 2025*. [online] GOV.UK. Available at: https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2025 [Accessed Mar. 2026].

DESNZ and BEIS (2022). *Net Zero Strategy: Build Back Greener*. [online] GOV.UK. Available at: https://www.gov.uk/government/publications/net-zero-strategy [Accessed Mar. 2026].

DfT (2023). *Government sets out path to zero emission vehicles by 2035*. [online] GOV.UK. Available at: https://www.gov.uk/government/news/government-sets-out-path-to-zero-emission-vehicles-by-2035?trk=public_post_comment-text [Accessed Mar. 2026].

Environmental Audit Committee (2022). *Building to Net zero: Costing Carbon in Construction First Report of Session 2022-23 Report, Together with Formal Minutes Relating to the Report by Authority of the House of Commons*. [online] Available at: https://committees.parliament.uk/publications/22427/documents/165446/default/ [Accessed Mar. 2026].

IPCC (2023). *Sixth Assessment Report — IPCC*. [online] IPCC. Available at: https://www.ipcc.ch/assessment-report/ar6/ [Accessed Mar. 2026].

IEMA (2020). *Using the IEMA GHG Management Hierarchy Pathways to Net Zero*. [online] Available at: https://www.isepglobal.org/media/bn3lgz1c/iema_ghg_hierarchy_nov_2020.pdf [Accessed Mar. 2026].

ISO (2023). *ISO 14068-1:2023*. [online] ISO. Available at: https://www.iso.org/standard/43279.html [Accessed Mar. 2026].

SBTi (2020). *Foundations for Science-Based Net Zero Target Setting in the Corporate Sector.* [online] Available at: https://files.sciencebasedtargets.org/production/files/foundations-for-net-zero-full-paper.pdf [Accessed Mar. 2026]

SBTi (2024). *Above and Beyond: An SBTi Report on the Design and Implementation of Beyond Value Chain Mitigation (BVCM).* [online] Available at: https://files.sciencebasedtargets.org/production/files/Above-and-Beyond-Report-on-BVCM.pdf [Accessed Mar. 2026].

SBTi (2025a). *SBTi Corporate Net Zero Standard*. [online] Available at: https://files.sciencebasedtargets.org/production/files/Net-Zero-Standard.pdf?dm=1757950109 [Accessed Mar. 2026].

SBTi (2025b). *Small and Medium-Sized Enterprises (SMEs) FAQs*. [online] Available at: https://docs.sbtiservices.com/resources/FAQsforSMEs.pdf [Accessed Mar. 2026].

SBTi (2026). *SBTi Glossary*. [online] Available at: https://files.sciencebasedtargets.org/production/files/SBTi-Glossary.pdf?dm=1773923613 [Accessed Mar. 2026].

UKGBC (2024). *Carbon Offsetting and Pricing Report.* [online] Available at: https://ukgbc.org/wp-content/uploads/2023/06/UKGBC-%E2%80%93-Carbon-Offsetting-Pricing-Report-Update-2024.pdf [Accessed Apr. 2026]

WRI and WBCSD (2005), *Calculating HFC and PFC Emissions from the Manufacturing, Installation, Operation and Disposal of Refrigeration & Air-conditioning Equipment (Version 1.0).* [online] Available at: https://ghgprotocol.org/sites/default/files/hfc-cfc_1.pdf. [Accessed Apr. 2026]

WRI and WBCSD (2013). *Technical Guidance for Calculating Scope 3 Emissions*. [online] Available at: https://ghgprotocol.org/sites/default/files/2023-03/Scope3_Calculation_Guidance_0%5B1%5D.pdf [Accessed Mar. 2026].