



# Carbon Reduction Plan

2025

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Version Control					
Version	Status	Date	Author	Reviewer	Changes
0.1	Draft	28/01/2025	Jenny Cooper	Eddie Adams	Initial draft
1.0	Approved	31/01/2025	Jenny Cooper	Paul Bryce Eddie Adams	Approved version

## Commitment to Achieving Net Zero

Node4 Limited is committed to achieving Net Zero emissions by 2030 and maintaining this commitment through to 2050.

Energy efficiency and environmental sustainability are integral to everything Node4 does, whether we're building new data centres or upgrading existing facilities. We have committed to designing, building, and operating our data centres with high energy efficiency standards. We are proud to say that our data centres, including those with attached offices, are now powered by 100% clean and renewable energy. This is not just a short-term achievement but a standard we are committed to maintaining in the long term. Our goal is to ensure that our operations remain sustainable and environmentally friendly at all times.

All of our data centres and managed offices are certified to ISO 14001, and our data centres are certified to ISO 50001. This further demonstrates our commitment to improving environmental performance by having dedicated environmental and energy management systems, which are audited externally. This ensures we remain forward-thinking and proactive in our operational excellence, sustainability, and environmental issues.

## Baseline Emissions Footprint

**Baseline Year: 2023**

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

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.

We have changed our baseline emissions reporting year from 2021 to 2023, as this was the year when all acquisitions were finalised. Therefore, 2023 is the more appropriate baseline to show environmental performance and base our offsetting strategies on, as it now reflects the whole business operations and all office locations.

The scope of our carbon reduction plan encompasses all of our business operations, covering our four data centres (two in Derby, one in Northampton, and one in Wakefield), the offices attached to these data centres, as well as our offices in Stafford and Newbury. It also includes reporting for remote workers, reflecting the business operations of a 1,100-employee company.

Baseline year emissions:

Emissions	TOTAL (tCO <sub>2</sub> e)
<b>Scope 1</b>	Scope 1 emissions are direct greenhouse gas emissions that occur from sources that are controlled or owned by the reporting organisation. e.g., emissions associated with fuel combustion in boilers, furnaces, vehicles.

	<p><b>Total Scope 1: 78.66 tonnes CO2e</b></p> <ul style="list-style-type: none"> <li>• Diesel for the generators – 56.12tonnes CO2e (last delivery September 2023)</li> <li>• Fleet vehicles (diesel and petrol) – 22.54 tonnes CO2e</li> </ul> <p>Node4 Limited confirms that all direct (Scope 1) emissions are accurately reported in accordance with the GHG Protocol Corporate Accounting and Reporting Standard and SECR requirements.</p>
<p><b>Scope 2</b></p>	<p>Scope 2 emissions are indirect greenhouse gas emissions associated with the purchase of electricity, steam, heat, or cooling. They are accounted for by the reporting organisation as they are a result of the organisation’s energy use.</p> <p>Node4’s electricity usage at data centres, offices, and for electric fleet vehicles is the only factor that falls into Scope 2. However, Node4 procures 100% renewable energy at our data centres in Northampton, Wakefield, Derby, and at our Stafford office, which eliminates our emissions associated with electricity usage. Emissions related to electricity transmission and distribution are included in Scope 3. The only office not currently on a renewable energy tariff is our Newbury office.</p> <p><b>Total Scope 2: 29.36 tonnes CO2e</b></p> <ul style="list-style-type: none"> <li>• Electricity usage at Data Centres (with attached offices) and Stafford office – 0 tonnes</li> <li>• Electricity usage at Newbury office – 3.54 tonnes CO2e</li> <li>• Electric / hybrid vehicles – 25.82 tonnes CO2e</li> </ul> <p>Node4 Limited confirms that all indirect (Scope 2) emissions are accurately reported in accordance with the GHG Protocol Corporate Accounting and Reporting Standard and SECR requirements.</p>
<p><b>Scope 3</b></p>	<p>Scope 3 emissions are indirect greenhouse gas emissions that occur as a result of activities both upstream and downstream of the organisation's operations. They are not directly controlled by the organisation but are generated by sources such as business travel, employee commuting, waste disposal, and the production of purchased materials. These emissions are accounted for by the reporting organisation as they represent a significant component of the organisation's overall carbon footprint.</p> <p><b>Total Scope 3: 1711.8 tonnes CO2e</b></p> <ul style="list-style-type: none"> <li>• Waste (black bag, wood, and mixed) – 91.66 tonnes CO2e</li> <li>• Hotel stays – 18.82 tonnes CO2e</li> <li>• Business Travel (land and air) – 295.91 tonnes CO2e</li> <li>• Water Supply – 3.70 tonnes CO2e</li> </ul>

	<ul style="list-style-type: none"> <li>Employee commuting – 365.99 tonnes CO<sub>2</sub>e</li> <li>Gas usage (homeworkers) – 402.67 tonnes CO<sub>2</sub>e</li> <li>Electricity usage (homeworkers) – 33.10 tonnes CO<sub>2</sub>e</li> <li>Electricity T&amp;D (data centres with attached offices, Stafford and Newbury) – 495.22 tonnes CO<sub>2</sub>e</li> <li>Oil (Newbury) – 1.27 tonnes CO<sub>2</sub>e</li> <li>Hiring of other office locations – 0.21 tonnes CO<sub>2</sub>e</li> <li>Company events – 3.25 tonnes CO<sub>2</sub>e</li> </ul> <p>1983.15</p> <p>Node4 Limited confirms that all required categories of Scope 3 emissions, including waste generated in operations, business travel, and employee commuting are comprehensively covered and accurately reported.</p>
<b>Total emissions</b>	<b>1819.82 tonnes CO<sub>2</sub>e</b>

## Current Emissions Reporting

Reporting year: 2024

Additional Details relating to the current emissions reporting:

Node4 have calculated and reported our emissions in line with the GHG Protocol Corporate Accounting and Reporting Standard (revised edition) and emission factors from the UK Government's GHG Conversion Factors for Company Reporting.

SECR methodology and the CO<sub>2</sub> calculation has been verified by ISO 50001 UKAS accredited auditor.

Usage Data has been taken from energy supplier billing information.

Baseline year emissions:

Emissions	TOTAL (tCO <sub>2</sub> e)
<b>Scope 1</b>	<p>Scope 1 emissions are direct greenhouse gas emissions that occur from sources that are controlled or owned by the reporting organisation. e.g., emissions associated with fuel combustion in boilers, furnaces, vehicles.</p> <p><b>Total Scope 1: 40.83 tonnes CO<sub>2</sub>e</b></p> <ul style="list-style-type: none"> <li>Diesel for the generators – 0 tonnes CO<sub>2</sub>e (last delivery September 2023)</li> <li>Fleet vehicles (diesel and petrol) – 40.83 tonnes CO<sub>2</sub>e</li> </ul> <p>Node4 Limited confirms that all direct (Scope 1) emissions are accurately reported in accordance with the GHG Protocol Corporate Accounting and Reporting Standard and SECR requirements.</p>

<p><b>Scope 2</b></p>	<p>Scope 2 emissions are indirect greenhouse gas emissions associated with the purchase of electricity, steam, heat, or cooling. They are accounted for by the reporting organisation as they are a result of the organisation's energy use.</p> <p>Node4's electricity usage at data centres, offices, and for electric fleet vehicles is the only factor that falls into Scope 2. However, Node4 procures 100% renewable energy at our data centres in Northampton, Wakefield, Derby, and at our Stafford office, which eliminates our emissions associated with electricity usage. Emissions related to electricity transmission and distribution are included in Scope 3. The only office not currently on a renewable energy tariff is our Newbury office.</p> <p><b>Total Scope 2: 48.69 tonnes CO2e</b></p> <ul style="list-style-type: none"> <li>• Electricity usage at Data Centres (with attached offices) and Stafford office – 0 tonnes</li> <li>• Electricity usage at Newbury office – 10.76 tonnes CO2e</li> <li>• Electric / hybrid vehicles – 37.93 tonnes CO2e</li> </ul> <p>Node4 Limited confirms that all indirect (Scope 2) emissions are accurately reported in accordance with the GHG Protocol Corporate Accounting and Reporting Standard and SECR requirements.</p>
<p><b>Scope 3</b></p>	<p>Scope 3 emissions are indirect greenhouse gas emissions that occur as a result of activities both upstream and downstream of the organisation's operations. They are not directly controlled by the organisation but are generated by sources such as business travel, employee commuting, waste disposal, and the production of purchased materials. These emissions are accounted for by the reporting organisation as they represent a significant component of the organisation's overall carbon footprint.</p> <p><b>Total Scope 3: 1992.36 tonnes CO2e</b></p> <ul style="list-style-type: none"> <li>• Waste (black bag, wood, and mixed) – 107.98 tonnes CO2e</li> <li>• Hotel stays – 33.16 tonnes CO2e</li> <li>• Business Travel (land and air) – 549.87 tonnes CO2e</li> <li>• Water Supply – 1.40 tonnes CO2e</li> <li>• Employee commuting – 416.28 tonnes CO2e</li> <li>• Gas usage (homeworkers) – 273.38 tonnes CO2e</li> <li>• Electricity usage (homeworkers) – 92.95 tonnes CO2e</li> <li>• Electricity T&amp;D (data centres with attached offices, Stafford and Newbury) – 482.49 tonnes CO2e</li> <li>• Oil (Newbury) – 34.49 tonnes CO2e</li> <li>• Hiring of other office locations – 0.36 tonnes CO2e</li> </ul>

	<p>Node4 Limited confirms that all categories of Scope 3 emissions, including waste generated in operations, business travel, and employee commuting are comprehensively covered and accurately reported.</p> <p>*We do not currently report on upstream and downstream emissions. However, we plan to start reporting on these emissions in FY26, and this information will be published in the 2026 Carbon Reduction Plan.</p>
<b>Total emissions</b>	<b>2081.88 tonnes CO2e</b>

## Emissions Reductions Targets

In order to continue our progress to achieving Net Zero by 2030, we have adopted the following carbon reduction targets to facilitate a gradual decrease in Node4’s emissions. Our aim is to reduce emissions gradually by increasing the percentage of emissions offset each year, starting from the 2023 baseline.

Based on the 2023 baseline of **1819.82 tonnes of CO2e**, here is the year-on-year reduction plan for offsetting emissions from 2025 to 2030:

- 2025: 1455.86 tCO2e (offsetting 20% of 2023 emissions = 363.96 tCO2e)
  - Additional offset needed for 2025 based on 2024 emissions: 262.06 tCO2e
- 2026: 1273.87 tCO2e (offsetting 30% of 2023 emissions = 545.95 tCO2e)
- 2027: 1091.89 tCO2e (offsetting 40% of 2023 emissions = 727.93 tCO2e)
- 2028: 909.91 tCO2e (offsetting 50% of 2023 emissions = 909.91 tCO2e)
- 2029: 454.95 tCO2e (offsetting 75% of 2023 emissions = 1364.87 tCO2e)
- 2030: 0.0 tCO2e (offsetting 100% of 2023 emissions = 1819.82 tCO2e)

This plan assumes a linear increase in the percentage of emissions offset each year. It also assumes that our total emissions remain constant at the 2023 level, which we know may not be the case in reality. We will regularly monitor and evaluate our progress towards our carbon neutrality goal. This will allow us to make necessary adjustments to our strategies and keep our emissions reduction on track.

In situations where our emissions are found to be higher than the 2023 baseline, we commit to offsetting these additional emissions. This is to ensure we meet the target emissions set out in this carbon reduction plan. By doing so, we maintain our commitment to achieving carbon neutrality by 2030, regardless of fluctuations in our emission levels.

## Carbon Reduction Projects in 2024

### Completed Carbon Reduction Projects and Initiatives

Our commitment to reducing our environmental impact includes securing fixed renewable energy for our data centres, attached offices, and Stafford locations until March 2026. This ensures that the electricity used in these locations emits zero

emissions, with only the transmission and distribution of electricity contributing to emissions.

In 2024, we closed our Nottingham branch, positively impacting our emissions by ensuring we only use offices that are utilised, thus avoiding the heating and powering of extra, unnecessary spaces.

Significant upgrades to our data centres were also made in 2024 as follows.

#### Data Centre 1:

- Reduced fan speeds.
- Installed new condensers and repositioned them on a new gantry with new pipework, further reducing external fan speeds.
- Overall reduction of 200,071 kWh PA achieved.

#### Data Centre 2:

- Implemented hot aisle containment in Hall 1 and increased the set point by 1 degree.
- Overall reduction of 291,789 kWh PA achieved.

#### Data Centre 3:

- Increased CRAH set points in halls 1, 2, and 4 to 22 degrees.
- Increased chiller set points: Chillers 1 & 2 from 15 to 17 degrees, and Chillers 5 & 6 from 20 to 21 degrees.
- Installed new CRAH units in halls 1 and 2.
- Further reduced plant room AC usage to 1,551 kWh in 2024, down from 16,505 kWh in 2023.
- Overall reduction of 347,137 kWh PA achieved.

#### Data Centre 4:

- Further reduced plant room DX AC usage to 148,763 kWh in 2024, down from 559,372 kWh.
- Overall reduction of 278,021 kWh P/A achieved.
- Audited all customer equipment facing the wrong way, raised tickets to customers, and made progress.

As a result, our data centres now operate more efficiently, using less power and reducing our carbon footprint. The improved heat exchange has also eliminated the need for sprinklers in hotter weather, saving water.

We issued a home energy survey to all remote workers to increase the accuracy of our emissions reporting. This survey, issued company-wide and to all new starters, received 277 responses. Of these, 51% power their homes using renewable energy, and 38% heat their homes using renewable energy, further enhancing the accuracy of our emissions reporting.



In line with our compliance requirements, we have included all offices in our ESOS reporting, demonstrating our commitment to transparency and allowing for third-party review of our emissions calculations and performance.

We have partnered with Carbon Neutral Group, our chosen offsetting partner. Their mission is to help businesses understand their emissions and make a positive impact. We selected Carbon Neutral Group because they are a UK-based company with offsetting projects worldwide, aligning with our CSR approach and the United Nations Sustainable Development Goals. These projects create jobs, increase crop yields, provide training, and encourage women into the workforce, in addition to offsetting emissions. The projects are validated by the United Nations to ensure they do not greenwash emissions. In 2025, we will begin our offsetting journey with selected projects from Carbon Neutral Group.

## Future Carbon Reduction Projects

In Stafford, we have two office locations. As of January 2025, we have reduced the use of one of the buildings and are now only using one building, except for overflow when needed. This change aims to improve efficiency and reduce energy consumption.

In January 2025, we also provided training to all our employees on energy and environmental competence, awareness of our ISOs, and our environmental objectives and offsetting partners. Additionally, we have been recertified to ISO 14001 and 50001 for another three years, with all our office locations and data centres included in the scope of ISO 14001, and only the data centres in the scope of ISO 50001. This recertification furthers our commitment to environmental performance and improvements.

We will begin our offsetting journey with Carbon Neutral Group in February 2025. We plan to issue a poll to all employees, allowing them to choose the projects that interest them the most and that they want the company to fund. This will be our selected offsetting project, and we will issue the poll again when we come to offsetting another portion of emissions. We will also be reviewing Carbon Neutral Group's "50p a tree" service and looking to partner with them on this initiative. The "50p a tree" service will allow us to create our own corporate forest, which helps communities and farmers and will capture tonnes of carbon in the future.

Further improvements to our data centres are planned for 2025.

Data Centre 1:

- Investigate if AC settings can be tweaked to improve Delta T due to recent heat load reduction.

Data Centre 2:

- Complete the UPS replacement project, improving UPS efficiency by 5%.
- Install cold aisle containment in Hall 2.
- Merge Hall 2 and plant room cooling, allowing us to switch off three plant room AC units.

Data Centre 3:

- Increase cold aisle and chiller setpoints further where possible. Halls 1, 2, and 4 can increase from 22 to 22.5 or 23 degrees.
- Chiller setpoints may also be able to increase by 1-2 degrees with close monitoring.
- Replace the ageing chiller 4 with a more efficient new unit, similar to the replacement of chiller 3 in 2024.

#### Data Centre 4:

- Complete the chiller replacement and circuit separation for Halls 1 and 2, enabling separate control of the chillers and eliminating four pumps.

These planned improvements will enhance the efficiency of our data centres, reduce power usage, and further decrease our carbon footprint.

## Annual Review and Update

Node4 Limited is committed to conducting an annual review and update of this Carbon Reduction Plan. This review will reflect our progress in reducing emissions and incorporate any changes in our organisational structure, operations, or external factors. By regularly updating our plan, we ensure that our strategies remain effective and aligned with our commitment to achieving Net Zero emissions.

## 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 and uses the appropriate Government emission conversion factors for greenhouse gas company reporting.

Scope 1 and Scope 2 emissions have been reported in accordance with SECR requirements.

This Carbon Reduction Plan has been reviewed and signed off by:



Name: Jon Kay  
Role: CFO  
Dated: 28/02/2025