



Annual Environmental Report 2024/25

Securing Britain's energy. Unlocking a net zero future.

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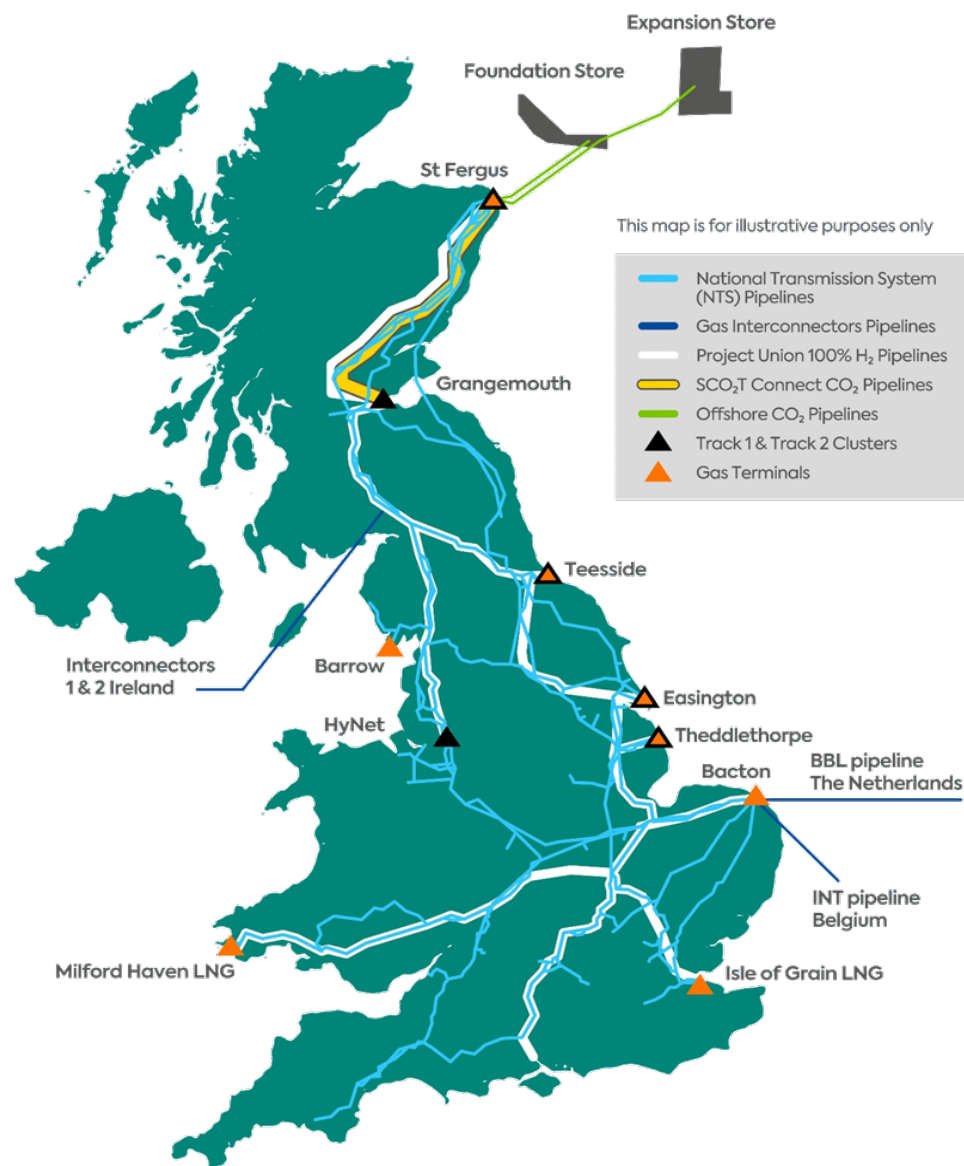
Address

Warwick Technology Park
Gallows Hill
Warwick CV34 6DA
United Kingdom

Get in touch

This AER and the previous reports are accessible via our external page: <https://www.nationalgas.com/responsibility/environment>
If you have questions, feedback or suggestions, please email us at box.gtshe.envsust@nationalgas.com

Our business at a glance



c.5,000 miles of pipeline



>60 compressors across 21 compressor sites



>500 above ground installations

Purpose of the report

This Annual Environmental Report (AER) has been prepared to meet the requirement of Special Condition 9.1 (SpC 9.1) of the gas transmission (GT) licence.

The report provides our stakeholders with an overview of progress against our Environmental Action Plan (EAP) and the activities we have undertaken over the reporting period to manage and reduce our environmental impacts. The reporting period for this AER is 1 April 2024 to 31 March 2025 in line with the RIIO-T2 price control period that applies to the five-year licence that began on 1 April 2021.

Progress against our environmental pillars are included within the Ofgem Regulatory Reporting Process narrative (RRP). National Gas considers our governance process for RRP to provide consistent and robust coverage for the sign off of data assurance activities as stipulated by Ofgem.

This report applies to National Gas Transmission including National Gas Services. This report excludes National Gas Metering as per our regulatory reporting requirements.

Who we are

National Gas is responsible for transporting gas to more than half a million businesses and 24 million homes through nearly 5,000 miles of pipes across Britain. We are Britain's gas network, providing secure energy to power the country, achieve net zero and maintain our industrial competitiveness. Our organisation comprises four businesses: National Gas Transmission, National Gas Metering, National Gas Services and Premtech.

National Gas Transmission

National Gas Transmission owns, operates and maintains the gas National Transmission System (NTS), comprising nearly 5,000 miles of high-pressure pipelines and associated assets. The NTS transports natural gas to power stations and major industries, storage facilities, interconnectors, and to the Gas Distribution Networks (GDNs) that take gas into homes and businesses. Our NTS is the motorway network for gas, transporting energy safely and reliably to every part of the country – every minute of every day.

National Gas Metering*

National Gas Metering maintains and oversees millions of metering assets across Great Britain. From connection and installation to ongoing management and maintenance, our accredited engineers ensure the safe, reliable, precise operation of diverse and often complex metering equipment used by homes and businesses.

National Gas Services

National Gas Services is the UK's trusted authority in pipeline repair, maintenance and intervention. Our specialists carry out planned and emergency pipeline inspection, repair and maintenance work across the gas network. Our vital work keeps all of the UK's gas networks safe and keeps gas flowing securely and reliably to every part of the country.

Premtech*

Premtech is one of the UK's foremost engineering design consultancy specialising in high-pressure onshore pipelines and associated infrastructure for the energy sector. It has more than 15 years' experience in designing complex pipelines and associated infrastructure for gas transmission and distribution networks across the country.

*This part of the business is excluded from this report.

Our environmental responsibilities

Gas is, and will be for decades to come, a major contributor to the blend of energy sources powering the country. At any one time, up to 50% of the nation's energy could be supplied by gas. Security of energy supply is something many of us take for granted, and delivering it is a responsibility we take extremely seriously, but we know it is important to balance this with our environmental obligations.

We are aware of the critical role we play in solving current and future challenges for energy and are ensuring that we are flexible in how we provide and use energy. A gas like hydrogen, for example, will be an integral part of the United Kingdom's (UK) future energy mix and we want to be at the forefront of delivering the benefits of connecting supply and demand.

We strive to achieve minimal adverse environmental impacts across all our operations, while also seeking ways to enhance the local environment. Our overall ambition here is to protect the environment and act sustainably every day.

This approach aligns with Ofgem's environmental focus areas for the RIIO-T2 regulatory period:

- Decarbonising the energy networks – with a focus on business carbon footprint and embodied carbon.
- Reducing the networks' other environmental impacts, i.e. pollution to local environment; resource use and waste management; biodiversity loss and other adverse effects that are specific to the sector.
- Supporting the transition to an environmentally sustainable low carbon energy system. As a responsible business, we are committed to delivering environmental benefits for the communities we serve, while prioritising the issues that matter most to our customers, our employees and our wider stakeholders.

National Gas plays a leading role in Britain's journey to a clean energy future, and this has shaped our EAP. Prior to RIIO-T2, we worked with our stakeholders to identify 30 environmental targets where we believe we can have a positive impact.



make to help turn this ambition into reality.

Through our EAP, we will be aiming not only to decarbonise our network but also to reduce the environmental impact of our activities, and to continually stretch ourselves to improve our environmental performance.

2024/25 has been a pivotal year for National Gas as we completed the operational separation of the company from National Grid. This milestone represented the symbolic closing of one chapter in the history of the company and the opening of an exciting new one.

In December 2024, we also submitted our RIIO-GT3 business plan for the next price control period. The submission included our Environmental Action Plan (EAP) which seeks to address significant environmental challenges, the climate emergency and future environmental sustainability requirements.

Over the year, we have further delivered our 'three-molecule' (natural gas, hydrogen and carbon) strategy. This has involved

not only maintaining and seeking to improve the existing natural gas network but also taking further steps towards building our capability for hydrogen and carbon capture and storage.

This year, we were pleased to receive FEED (Front End Engineering Design) funding for the first phase of Project Union in the East Coast. This funding means we can begin to deliver, in earnest, on our hydrogen ambitions and prepare our transmission network for the transition to low-carbon energy. We have also made the case to government for a strategic policy decision to enable hydrogen blending at transmission level and were pleased to see the publication of a consultation on this in summer 2025.

Throughout the year, we have also worked to pursue our aspirations for carbon capture and storage, working closely with our partners in Scotland to further our SCO2T Connect project. We have been engaging government and other stakeholders to demonstrate the value that the

Scottish Cluster will deliver – creating thousands of jobs, safeguarding industrial sites, and directly supporting the government's Clean Power 2030 ambitions.

Within this report, you will find more detail on the work we have undertaken this year, as well as a comprehensive update on our EAP for 2024/25.

I am incredibly proud of all that we are doing, not only to make our business more sustainable. There is still much to do to tackle the environmental challenges ahead, but we will meet them with enthusiasm, determination and commitment.

Jon Butterworth

Chief Executive Officer

Environmental performance indicators

The tables summarise key environmental performance indicators relevant to National Gas.

KPI and impact		Unit
Climate change impact		
2.1	Licensee's long-term greenhouse gas reduction target, aligned to science-based methodology. Where possible, validated against SBTi or equivalent	Committed to a Net Zero target of 2050 with an ambition of 2040, aligned to the Science Based Target Initiative (SBTi)
2.2	Annual change in licensee's business carbon footprint, excluding losses/shrinkage in comparison to last year	-14%
2.3	Annual change in compressor emissions (Compressor related combustion and venting)	-18%
Resource use and waste		
3.1	Annual total operational waste	767.98 tonnes
	Annual total office waste	22.43 tonnes
	Annual total construction waste	89, 907.54 tonnes*
3.2	Fate of operational waste: diverted	44.1%
	recycled	50.3%
	landfill	6%
	Fate of office waste: diverted	58.2%
	recycled	41.8 %
	landfill	0%
	Fate of construction waste: diverted	51.8 %*
	recycled	47.7 %*
	landfill	0.5 %*
Sustainable procurement		
4.1	Proportion of suppliers meeting the licensee's environmental supplier code or equivalent	See page 26
Local Environment		
5.1	Annual investment in schemes to enhance or restore local environmental quality on non-operational land	£1.1m
5.2	Land area treated in schemes to enhance or restore local environmental quality on non-operational land during RIIO-T2	8.7 hectares
5.3	Net change in biodiversity units from network development projects granted planning consent in the year that impact the local environment	Not quantified

*based on data currently available from a proportion of projects.

Environmental commitments

Our environmental action plan

Our Environmental Action Plan (EAP) demonstrates how we work together with our employees and stakeholders to reduce our impact on the environment. It sets out 30 commitments that help guide and measure our performance against each target. These commitments are in place until the end of the RIIO-T2 regulatory period which concludes in March 2026. Each commitment is driven by both legislative and non-legislative factors and grouped under five pillars.

Five environmental pillars



1. Air quality

We are working to reduce nitrogen oxide (NO_x) emissions from our operations by the end of RIIO-T2. This includes replacing some of the older compressors on our network with cleaner technology, so we can improve local air quality.

Intended benefit: Improved air quality



2. Climate change

In October 2023, we achieved our key commitment within this pillar of developing a Science-Based Target initiative aligned pathway for carbon reduction for our scope 1 and 2 emissions. We have established a commitment to achieving net zero by 2050, with an ambition of 2040.

Intended benefit: Reducing our contribution to climate change



3. Responsible asset use

We are managing our redundant assets in a manner that contributes to a sustainable, lower-carbon future by decommissioning them responsibly, refurbishing for re-use where viable, or changing their purpose where possible. We are also working closely with our suppliers to implement a more sustainable approach to purchasing goods or services, and are working hard to minimise the waste we generate and maximise waste recycling and re-use.

Intended benefit: Reducing unnecessary consumption of resources and production of waste



4. Caring for the natural environment

Whenever we deliver construction and decommissioning projects, there is a requirement to ensure initiatives are developed to protect and promote biodiversity. We are enhancing the value of natural assets on non-operational land that we own, through habitat improvement.

Intended benefit: Improving the natural environment



5. Leadership for change

We are embedding sustainability in our decision-making, continuing to be transparent on our progress and working with the industry to drive forward the sustainability agenda.

Intended benefit: Improving environmental awareness to increase positive environmental outcomes

2024/25 Progress

Target status		No. of targets
✓	Complete	3
●	On track	22
●	In progress	2
●	Off track	3

Status definitions

- On track: progress against the implementation milestones is on track
- In progress: progress against implementation milestones is delayed but likely to be achievable before the end of the price control period
- Off track: progress against implementation milestones is at risk

More information about our commitments can be found under [Our commitments in action](#)

Commitments in action



Status: On track



Enable reduction in NO_x emissions per hour of gas turbine running from the business by the end of RIIO-T2 in March 2026

Description: Maintaining and operating our BAT equipment as the lead units for compression. We will replace 2 compressor units in RIIO-T2 and, subject to FEED, start work at a further 3 sites to be delivered in RIIO-GT3. These will help reduce NO_x emissions into RIIO-GT3 and beyond.

Benefit: Improved air quality

Status update: The NO_x from our gas compressor running as an intensity measure of kilograms per hour (kg/h) has fallen from 5.42kg/h in the previous year to 4.74kg/h which equates to a 12.5% reduction due to the increased utilisation of Best Available Technique (BAT) units (newer, cleaner units). There has been a reduction in run hours across the network of 15.9%, with a greater proportion of the hours being attributed to electric Variable Speed Drive (VSD) running (27.4% in 2023/24 to 32.8% in 2024/25).

Measure/metric: Reduction in NO_x emissions per hour of gas turbine running. Delivery of new compressors measured through price control deliverables.

Milestones:

- Monitor NO_x levels quarterly
- Complete annual network review
- Four new compressors replaced and operationally commissioned



Status: Complete



10% increase in environmental value on non-operational land by the end of the RIIO-T2 period

Description: Natural Capital tool is used to assess how land can be developed and used to enhance the value of ecosystem services.

Benefit: Caring for the natural environment

Status update: In 2024/25, our efforts towards this commitment have focused on woodland, scrub and grassland enhancements at two of our compressor stations – Chelmsford and Diss. This is to improve opportunities for a range of flora and fauna, the management of which is to be delivered by volunteers with benefits of education and health and social wellbeing.

In 2023/24 a 3.2% increase in natural capital valuation was achieved, a further 3.4% has been achieved by the above two projects in 2024/25 – contributing towards our target to obtain a 10% increase in environmental value of our non-operational land by the end of this regulatory period. The cumulative total to date is 13.2%.

Measure/metric: £ natural capital biodiversity (# units)

Milestones:

- 13.2% environmental value delivered.
- New habitats and biodiversity management delivered



Status: On track



Act as custodians of our redundant sites by ensuring that we reinstate them to deliver a net gain in environmental value where we are not restricted

Description: Where possible incorporate environmental value enhancement on redundant sites to deliver a net gain. Restrictions such as planning conditions may impact how redundant sites can be managed.

Benefit: Caring for the natural environment

Status update: A net gain in environmental value means leaving the environment in a measurably better state than before development begins. This includes improvements in biodiversity, climate resilience, ecosystem services, and social value. We are currently evaluating net gain opportunities during decommissioning to identify the most suitable options across our land portfolio. To date, no applicable decommissioned sites have been identified.

Measure/metric: % of net gain achieved against number of sites viable

Milestones:

- Review of applicable sites

Our commitments in action continued



Status: On track



Educate the public about environmental issues through outreach linked to major compressor emissions projects

Description: Engage with local community through school visits, local talks, including the environmental impact of our major projects

Benefit: Caring for the natural environment

Status update: In 2024/25, ahead of a planned emission reduction project at Wormington Compressor Station, our construction team—working in partnership with operations and corporate affairs—hosted a site visit for 14 residents from the local community. This initiative reflected a strong commitment to early and transparent community engagement. This visit created a space for dialogue, helping to build trust and address concerns, particularly around safety and emissions management. Residents responded positively, showing interest in how the station contributes to the broader energy transition. In a further show of community support, colleagues from the Western Gas Network Project and the Compressor Emissions Project teams graduates, trainees, contractors and a community relations agency, came together to help clear the ground of St Katharine's Church in Wormington.

The village, located near one of our compressor stations, is set to undergo several infrastructure upgrades in the coming years to maintain security of supply and reduce emissions resulting from compressor operations. Furthermore, a team of fifteen volunteers helped spring clean the grounds around the Church land, clearing a huge mound of grass cuttings, weeding, and uncovering gravestones. The team took pride in sprucing up the outdoor space, where a marquee will be set up for the community events. Additionally, the Eden Rivers Trust based in Penrith, was successfully awarded £20,000 worth of funding from the National Gas Community Grant Fund. This funding will support hedge planting, soil improvement on ten farms, and soil management advice for up to thirty farms in the Eden Valley, promoting sustainable practices in collaboration with both town and rural communities..

Measure/metric: Community engagement

Milestones:

- National Gas Community Grant Fund delivered
- Corporate Social Responsibility (CSR) initiatives progressed.



Status: In progress



Deliver 10% net gain in environmental value (including biodiversity) on planned construction projects (including third party delivery)

Description: Net Gain target is applied on all schemes that lead to permanent or temporary habitat loss, negative impacts on the habitat condition or provision of ecosystem function e.g. screening, flood management, recreation

Benefit: Caring for the natural environment

Status update: Biodiversity Net Gain (BNG) is a way of making sure the habitat for wildlife is in a better state than it was before development took place. Our construction project to commission new compressors at our Hatton station was committed to deliver 10% BNG. During the past year, we have engaged with specialists to assess and calculate our BNG requirements according to statutory metrics. Our 10% BNG will be delivered through off-site habitats by partnering with local stakeholders and external providers.

To enhance our governance of Biodiversity, we have developed our first BNG Strategy for Construction Projects which will serve as our guiding framework throughout RIIO-GT3.

Measure/metric: #projects and % net gain

Milestones:

- BNG project assessment completed
- Construction BNG Strategy developed

Our commitments in action continued



Status: On track



Reduce methane emissions (CO₂e) from leaks on the network during RIIO-T2

Description: Establish a baseline for methane emissions leaks on the network through improved monitoring during RIIO-T2 and use that information to inform reductions.

Benefit: Response to climate change

Status update: In the final quarter of 2023/24, we secured funding through the Methane Emission Reduction Campaign (MERC) to expand NGT's Leak Detection and Repair (LDAR) Programme. This marked the beginning of a three-year initiative to strengthen our approach to identifying and managing methane leaks across our network.

2024/25 was the first year of this expanded programme and by the end of the three years, we aim to establish a clear baseline of our fugitive methane emissions. This will allow us to design a long term LDAR strategy and build strong investment cases to further reduce emissions in the future.

NGT is expanding its in-house capability to deliver the LDAR programme with an increase in headcount within the Emission Monitoring Team from four to seven in the last 12 months. Pace of LDAR delivery is expected to increase with this additional headcount and capability.

Performance trends: In 2024/25, we recorded 258 tonnes of methane leakage at our compressor stations and terminals, compared to 229 tonnes for 2023/24. This increase is not unexpected as we expand the leak monitoring programme.

Measure/metric: Kg of CO₂e per mcm transmitted / Tonnes of CO₂

Milestones:

- Narrative for the LDAR programme expansion delivery included in the 2024/25 Regulatory Reporting Pack (RRP).



Status: On track



Replace 100% of our operational vehicle fleet with alternative fuel vehicles (AFV) where there is a market alternative and if it is operationally viable

Description: This translates as 5% of our operational vehicle fleet (including operational job requirement company cars) moving to AFVs by 2026.

Benefit: Response to climate change

Status update: We are progressing towards switching our fleet to AFV's. However, we need to meet our obligations and any AFV's within the fleet must be able to meet our operational needs.

Performance trends: A replacement programme has been developed in 2024/25 to identify the number of electric vehicles (EVs) to be replaced for 2025/26. As part of this plan, eight EV vans have been ordered, with rollout expected by March 2026. These vans will contribute to the overall target of replacing 15 EV vans out of a total fleet of 300, representing 5% of the fleet

Measure/metric: % vehicle replacement

Milestones:

- Eight EV vans ordered

Our commitments in action continued



Status: On track



Reduce carbon emissions for our business transport by 10%

Description: Reduce vehicle use by promoting rail and virtual meetings, promote EVs on company car scheme and install electric car charging points at compressor sites.

Benefit: Response to climate change

Status update: In 2024/25, our total business mileage emissions—including those from company, personal, and hire cars—were 776tCO₂e, representing a 52% reduction compared to the 2019/20 baseline of 1,608 tCO₂e and an 8.7% decrease from the previous year's 850.18 tCO₂e.

This progress has been driven by a significant increase in electric vehicle (EV) uptake, rising from 55% in 2023/24 to over 70% in 2024/25. This has been supported by a 25% increase in the EV company car allowance, which has been communicated to all National Gas employees.

Performance trends: 8.7% reduction from previous year.

Measure/metric: Tonnes of CO₂e, baseline: 1608tCO₂e for FY2019/20

Milestones:

- Review of EV company car uptake
- Company car EV voucher increased



Status: On track



Focus on an efficiency-first approach to decrease carbon emissions from our office energy use by 20% by 2026

Description: Implement energy saving initiatives

Benefit: Response to climate change

Status update: We have continued to implement efficiency measures to reduce the need for heating and cooling at our main office – National Grid House, Warwick.

Performance trends: We continue to make meaningful progress in reducing carbon emissions at our main office in partnership with the landlord, achieving a further 2% reduction in emissions from office energy use in 2024/25 (405 tCO₂), building on the substantial 40% reduction achieved in 2023/24 of 411 tCO₂* (correct for 2023/2024).

*416 (reported for 2023/2024) amended for this report.

Measure/metric:

Milestones:

- Building Management System optimised by landlord
- Engagement with landlord to promote behavioural change initiatives



Status: On track



Purchase 100% of electricity for our offices from renewable sources

Description: As target states

Benefit: Response to climate change

Status update: In 2023/2024 we gained a Renewable Energy Guarantee of Origin (REGO) certificate to confirm 100% of electricity supply at our Warrington Archives office was backed by renewable sources in the UK. We will continue to review contracts we control and expand this to other sites at contract renewal where possible.

As a tenant at our main office at National Grid House, we have continued to benefit from the building's commitment to renewable energy. In 2024/25 National Grid House, Warwick, agreed the procurement of electricity via a Power Purchase Agreement (PPA), backed by 100% REGO-certified renewable energy. This is complemented by on-site solar PV generation, which contributes 1.1% of building's total electricity demand.

Measure/metric: Tonnes of CO₂e saved

Milestones:

- Review of office energy contracts we control

Our commitments in action continued



Status: On track



Continue to participate in the UK Emissions Trading Scheme (UK-ETS) and use as an opportunity to provide focus on our CO2 emissions across the business.

Description: Continue to follow in-house processes for 1st, 2nd, 3rd line assurance of direct carbon emissions from permitted sites.

Benefit: Response to climate change

Status update: The UK-ETS (Emissions Trading Scheme) is a government-run scheme designed to reduce greenhouse gas emissions by creating a market for carbon reduction through tradable allowances. Assurance lines continue to operate to ensure compliance with the UK-ETS. All site activity level reports have been verified and submitted to the Competent Authority for the recent reporting year.

Measure/metric: No direct measure

Milestones:

- Site improvement reports submitted (if applicable)
- Verified Activity Level Reports (VAR) submitted



Status: On track



We will work towards achieving carbon neutral construction for major projects starting in RIIO-T2.

Description: For major projects (projects >£50m), we will calculate embodied carbon (data dependent) to allow identification of carbon intensive aspects.

Benefit: Response to climate change

Status update: We have been using our Carbon Interface Tool (CIT) to measure embodied carbon across major live projects, completing seven assessments in 2024/25—up from two in 2023/24. The CIT helps quantify emissions from materials, construction activities, and employee travel, enabling us to identify opportunities for carbon reduction. Recognising the importance of contractor engagement, we have delivered three supply chain workshops to build capability in using the CIT. Additionally, we have drafted our first Construction Carbon Management Strategy, which outlines a holistic approach to reducing embodied carbon across our projects.

Measure/metric: Aligned to PAS2060 and PAS2080, tonnes of CO2e in 2026

Milestones:

- CIT completed for seven projects
- Construction Carbon Management Strategy drafted



Status: Complete



75% of our top 50 suppliers (by category/spend) will have carbon reduction targets

Description: Engage with our supply chain to set carbon reduction targets for suppliers engaged through the CDP supply chain program (top 50 supplier by category/spend)

Benefit: Response to climate change

Status update: In 2024/25, National Gas's supply chain includes around 1300 suppliers (based on spend in FY24). Our top 50 suppliers represent 70% of our spending, while the next 150 suppliers represent 23% of our spending. The remaining 7% of this spend sits with 1,144 suppliers.

Performance trends: In 2023/24, 76% of our top 50 suppliers had carbon reduction plans in place. In 2024/25 we engaged with our top 200 suppliers—representing 93% of our total spend—through the Carbon Disclosure Project to further drive climate action.

By the end of March 2025, 82% of our top 50 suppliers had set carbon reduction targets, exceeding our target. Where plans are not yet in place, we are working to upskill our supply chain through supplier management initiatives and collaboration with the Supply Chain Sustainability School.

Measure/metric: % of top 50 suppliers with carbon reduction targets

Milestones:

- 82% of top 50 suppliers with carbon reduction targets
- Supplier carbon reduction plan reporting process in place

Our commitments in action continued



Status: On track



Install renewable generation on our operational sites for our own use during RIIO-T2 – starting with compressor sites

Description: Install renewable generation, e.g. solar panels, on our sites to generate energy for site use and export excess to the grid for free

Benefit: Response to climate change

Status update: In 2024/25, our West Area and Property teams have taken a significant step towards sustainability by installing solar panels at Nether Kellet (21.0 KW) and Warrington Compressor Station (26.0 KW).

The project resulted in combined power outputs of up to 50KW across both sites. The initiative not only helps to reduce electricity usage, but also sets a new standard for making compressor stations more sustainable.

Alongside the PV panels and wind turbine already powering the AGI at Pennington, we are committed to continue expanding use of renewables at our sites.

Measure/metric: # sites with renewable generation or kWh generated (therefore saved)

Milestones:

- Delivery of renewable energy generation on three sites according to business plan



Status: Complete



Deliver a science-based target for National Gas by 2023

Description: Establish a project team to further develop the business carbon footprint, identify costed options and develop roadmap for delivering Net Zero; linked to wider delivery of decarbonising the NTS.

Benefit: Response to climate change

Status update: As discussed in the previous report, this target is deemed to be complete as a bespoke decarbonisation strategy and glidepath to net zero were finalised in October 2023.

Measure/metric: target developed

Milestones:

- SBTi Net Zero glidepath developed



Status: On track



An engaged workforce on environmental issues that leads by example

Description: Implement a comprehensive employee engagement programme on environmental issues including emissions, waste, reduction in plastics and employee travel.

Benefit: Leadership for change

Status update: In 2024/25, we updated our Environment and Sustainability Awareness Training to be in a more engaging format with activities. Following feedback we included more information on climate change, e.g. the difference between weather and climate & climate feedback loops.

By ensuring our colleagues are trained in environmental and sustainability matters, we are equipping them with the skills to identify and implement mitigation strategies for climate-related risks at an operational level. This training course is mandatory for all colleagues and 97% have completed this training in the last 3 years.

Measure/metric: % of engaged employees

Milestones:

- Environmental and Sustainability awareness training updated

Our commitments in action continued



Status: On track



Produce an Annual Environmental Report (including our BCF)

Description: Publish Gas Transmission environmental performance annually allowing feedback from stakeholders.

Benefit: Leadership for change

Status update: We will continue to publish this report annually on our website throughout RIIO-T2 to provide updates on our Business Carbon Footprint and progress against our targets.

Measure/metric: Annual publication of results and feedback where applicable

Milestones:

- 2024/25 report published



Status: On track



Lead in transparency on capital carbon and natural capital reporting

Description: We will drive forward industry in areas of sustainability where we are leading. We will work collaboratively through industry working groups to deliver this. We will focus on two areas: natural capital/net gain and capital carbon.

Benefit: Leadership for change

Status update: Capital carbon refers to the emissions associated with creating an asset such as a compressor. Natural capital refers to the elements of the natural environment that provide valuable goods and services to society.

We are strengthening our team capabilities to improve our reporting accuracy and governance. During 2024/25 we have participated in the Gas Environment Group, later evolved into the Gas Collaboration Group, where we share environmental best practice across different topics such as embodied carbon and biodiversity. Additionally, we have increased our supply chain engagement sessions and delivered workshops on carbon management and biodiversity.

Measure / metric: Stakeholder engagement and internal capabilities

Milestones:

- Workshops delivered with supply chain
- Industry collaboration group



Status: On track



Fully embed sustainability in decision making

Description: Carbon pricing is influencing decisions and whole life costing is assessed in the decision-making process.

Benefit: Leadership for change

Status update: We are committed continuously reviewing our processes and operational lifecycle to embed or improve our sustainability approach in decision making.

Key sustainability drivers—including environmental impact, climate change, and decarbonisation—are already integrated into our investment decision-making framework.

Our formal Environmental Assessments (FEAs) are designed to identify potential environmental aspects and impacts across the entire project lifecycle, from initial design through to decommissioning.

In addition, we are strengthening our sustainable procurement practices to drive supply chain engagement.

Measure/metric: A clear framework for the different decision-making points

Milestones:

- Sustainability drivers embedded in key decision making processes

Our commitments in action continued



Status: On track



Implement the ISO 20400 sustainable-sourcing process

Description: Alignment to ISO20400 Sustainable Procurement Guidance Standard

Benefit: Responsible asset use

Status update: In 2024/25 we undertook a full ISO 20400 self-assessment which showed strong performance in Fundamentals, Governance, and Integration of sustainability supported by leadership commitment, clear procurement objectives and reporting, and supply chain training. We have developed a detailed action plan focused on mapping our high risk procurement categories and developing a Sustainable Procurement Strategy by the end of RIIO-T2.

Measure/metric: Aligning to ISO20400 Guidance, # categories strategies considering sustainability

Milestones:

- ISO20400 self assessment completed and action plan in place



Status: On track



Work with contractors to measure the proportion of recycled materials used on construction projects

Description: We will set a target during the RIIO-T2 period to increase from this baseline.

Benefit: Responsible asset use

Status update: We have implemented the Carbon Interface Tool (CIT) for our major projects. The tool is designed to measure both embodied carbon and the proportion of materials used in construction against its origin. Over the past year, we have delivered three workshops with our supply chain to upskill contractors in using the CIT effectively, with more sessions planned for 2025/26. While the methodology is in place further collaboration from our supply chain and contractors is required before we can establish a reliable baseline we can work towards.

As we continue to engage with our supply chain, our A66 pipeline diversion project reused 1,500t of sandstone that was excavated from shafts as pipe bedding.

Measure/metric: Baseline and measure to be established

Milestones:

- Upskilling workshops delivered with contractors



Status: Off track



Reduce the waste intensity of our construction projects year-on-year

Description: We will continue to collect and measure our waste volumes to set a baseline. We will target the most waste intensive aspects of our project and work to identify opportunities for reduction.

Benefit: Responsible asset use

Status update: Last year we established a baseline following review of the data available to use from recent years. The target was set at 35 tonnes/£100,000 by the end of RIIO-T2. In 2024/25, our waste intensity was 44 tonnes/£100,000 based on 23 reporting projects. Although the latest intensity is higher than previous year, our reporting capabilities have also improved. Over the past few years we have almost doubled the number of projects reporting waste data from 13 in 2021/22 to 23 in 2024/25. We have worked hard to improve our contractor's engagement and reporting by making site waste management plans mandatory, as well as providing training. We expect the quality of our waste data to keep improving and to provide a better picture of our performance.

Measure/metric: Target to be set during RIIO-T2 period, baseline data dependent

Milestones:

- Improved quality of waste data and increase of reporting projects.
- Waste intensity data monitored against baseline

Our commitments in action continued



Status: On track



Reduce office waste by 20%

Description: Continue to roll out existing programmes to all sites

Benefit: Responsible asset use

Status update: In 2024/25, we reviewed the baseline for this target and confirmed that this data only applies to our portion of waste from National Grid House (our head office). The 2019/20 baseline was 54.6t. In 2024/25, our portion of waste was 22.43t, a reduction of 58.92% from our 2019/20 baseline.

The portion of waste is based on a % calculated by National Grid. This percentage represents 19.4% and is taken from the total waste produced for the building.

Performance trends: 22.43 tonnes of waste were produced in 2024/25 for the office site in scope for this target.

Measure/metric: Waste in tonnes, % reduction for office sites

Milestones:

- Engagement with landlord on waste reduction initiatives



Status: In progress



On construction projects, we will achieve zero waste to landfill and we will increase recycling and reuse materials by 2026

Description: We will achieve zero waste to landfill and set a target on recycling rates using 2020/21 data to set a baseline, applicable to waste that can be diverted from landfill in accordance with the carbon trust standard

Benefit: Responsible asset use

Status update: In 2023/24, 2.9% of construction waste—based on data from 18 projects—was sent to landfill, with the remainder diverted or recycled. In 2024/25, this figure fell to 0.5%, based on 23 reporting projects (some with multiple sites). This improvement reflects enhanced waste management practices and stronger engagement across the business in reducing landfill impact. We will continue to engage with contractors to further reduce the waste we send to landfill.

Our recycling rate in 2024/25 was 47.7% which is below our target of 83%. To support progress, we have strengthened engagement with contractors and have made site waste management plans mandatory for all major projects. This has led to improved availability and quality of waste data, as well as more detailed reporting of waste streams.

During our A66 pipeline diversion project, 3,000t of aggregate were recycled either off-site or reused on site by another highways project.

Performance trends: In 2024/25, based on 23 projects, 47.7% was recycled, 51.8% was diverted from landfill and 0.5% was sent to landfill.

Measure/metric: % waste recycled target for end of RIIO-T2 = 83%

Milestones:

- Waste management plans mandatory for major projects
- Increased number of projects reporting waste data

Our commitments in action continued



Status: On track



Identify opportunities to pilot and implement circular economy principles

Description: Analyse current projects for their circularity and refine to create circular or semi-circular processes where possible. Draft a Circular Economy Framework for National Gas aligned to industry standard.

Benefit: Responsible asset use

Status update: Circular economy is a model of production and consumption that involves keeping existing materials in use for as long as possible by a range of methods including reusing and recycling them. We are continuing to assess ways in which we can improve reuse and implementation of circular economy principles within the business. We have developed our first Circular Economy Strategy guide in parallel with research into potential pilot initiatives. This strategy highlights existing circular case studies within National Gas and introduces a pilot decision matrix designed to assess future ideas based on their impact, implementation complexity, operational feasibility, cost, and long-term potential.

Measure/metric: Develop a circular economy metric for next price control period and identify pilots

Milestones:

- Analysis of current processes, identify areas for circular economy integration
- Four new pilot projects have been identified as candidates for trial during the next regulatory control period.



Status: Off track



Address 74 redundant assets, asset groups or sites in RIIO-T2 in line with Price Control Deliverable (PCD)

Description: Prioritise highest risk outputs. Decommission where assets are redundant, repurpose where possible and leave pipelines purged and filled with nitrogen.

Benefit: Responsible asset use

Status update: 6 outputs were decommissioned/disconnected in 2024/25.

As disclosed in our Regulatory Reporting Pack (RRP), some of the outputs expected to be delivered during RIIO-T2 are no longer progressing due to changes in customer requirements or site circumstances. We will provide the final number of redundant outputs delivered during RIIO-T2 in our next year's AER.

Measure/metric: Measured through a price control deliverable on the identified assets, asset groups or sites.

Milestones:

- Delivery in line with PCD



Status: Off track



Recycle 60% of our office waste by 2026

Description: Continue to increase the amount of office waste we recycle at National Grid House.

Benefit: Responsible asset use

Status update: In 2024/25, we reviewed the baseline for our office waste target and confirmed only our head office was in scope. This data, along with our office recycling rate is recorded within our environmental scorecard, submitted to Ofgem in the RRP.

This year, our head office at National Grid House achieved a 42% recycling rate, falling short of our 60% target. As tenants in a shared building, we contribute approximately 19.4% of the total waste. However, we are actively collaborating with landlord-led initiatives to improve recycling, including the introduction of single-stream bins, food waste bins, and enhanced signage.

Performance trends: In 2024/25, 42% of our office waste was recycled.

Measure/metric: % of waste recycled

Milestones:

- Engagement with the landlord to support waste reduction initiatives
- Monitor landlord waste reduction plans

Our commitments in action continued



Status: On track



Reduce water use in our offices by 20%

Description: Implement a water reduction programme at all office sites owned and operated by National Gas.

Benefit: Responsible asset use

Status update: ADSM have continued working across our sites to ensure water savings wherever possible. From the revenue generated by water savings, 1% is donated to water.org, a not-for-profit organisation working to bring water and better sanitation to worldwide communities. In the Annual Sustainable Water Report (2024/25), as produced by ADSM for National Gas Transmission and Metering, this water conservation revenue has provided 7,300 individuals access to safe water.

Performance trends: We set a baseline figure for water use in our 2019/20 financial year of 7,380m3. Our office water usage for our last financial year (2024/25) was 2,648m3 (a 64% decrease from 2019).

Measure/metric: % water usage

Milestones:

- Collaboration with landlord to support the water conservation programme, including supply chain engagement and water usage monitoring.



Status: On track



Assess and report on our risk from climate change on our assets

Description: Actively assess risks from climate change.

Benefit: Responsible asset use

Status update: In the last 12 months we have undertaken climate change risk assessments for our environmental regulator permitted installations in England, Wales and Scotland. In addition, we have submitted our fourth round Adaptation Reporting Power (ARP) report to the Department of Environment and Rural Affairs (DEFRA). These outputs have informed the development of NGTs first climate resilience strategy and the climate adaptation investments included in the RIIO-GT3 business plan submission. They have also been used in NGTs latest Climate Financial Disclosure (CFD) in relation to physical climate risk in 2024/25 Annual Report and Accounts.

Measure/metric: Production of climate change risk assessment mitigation plan, implementation of risk mitigation strategies.

Milestones:

- ARP report submitted to DEFRA (This can be viewed [here](#)).
- RIIO-GT3 Climate Resilience Strategy (This can be viewed [here](#)).
- 2024/25 National Gas Annual Report and Accounts ([find it here](#)).



Status: On track



Extend the life of equipment where appropriate by refurbishing it

Description: Refurbish equipment where possible over 2019/20 baseline then target the most waste intensive parts of our work and work with our supply chain to reduce waste in these areas.

Benefit: Responsible asset use

Status update: To date, we have refurbished 3,916 assets during RIIO-T2. These assets fall under key Asset Health themes, including cabs, civils, compressors, electrical systems, pipelines, plant & equipment, and valves. This work aligns with our 2022/23 asset health programme, which plays a critical role in managing the risks associated with an ageing asset base and in reducing our environmental impact through refurbishment.

Looking ahead to RIIO-GT3, we have proposed a refurbishment baseline, which is currently awaiting approval. The final figure will be published in next year's Annual Environmental Report (AER).

Measure/metric: #refurbished assets / Establish a baseline and target. Work with our supply chain to reduce waste in these areas.

Milestones:

- Refurbishment baseline proposed for RIIO-GT3

Case study: Repurposing assets

FutureGrid Phase 1

In March 2024 the FutureGrid hydrogen test facility reached a major milestone with the successful completion of Phase 1 operations. Using decommissioned assets from across the National Transmission System (NTS) – some with over 30 years of service – the facility tested hydrogen and hydrogen–natural gas blends under real-world conditions. Results confirmed that repurposing existing infrastructure for hydrogen is both technically feasible and safe, offering significant cost and environmental benefits for a future UK hydrogen backbone.

FutureGrid Phase 2: Deblending for transport

Following the completion of Phase 1, FutureGrid Phase 2 is trialling advanced gas separation technology to extract hydrogen from natural gas blends at high flow rates, using the unique capabilities of the FutureGrid test facility. This is combined with an electrochemical compression and purification system that produces hydrogen at pressures and purity levels suitable for fuel cell vehicles.

The project has completed site works, with the Hydrogen Refuelling Station commissioned and already used to refuel two Toyota Mirai vehicles operating on site. The hydrogen purification and compression system has been built, tested, and is ready to be delivered to site. The hydrogen separation system is still being built and will follow once complete. By using the existing FutureGrid infrastructure, the project has saved over £5 million compared to building a bespoke test facility.

In parallel, the project is mapping hydrogen refuelling demand along the National Transmission System (NTS), focusing on hard-to-electrify transport sectors such as rail, freight, buses, aviation, and maritime. This ensures deployment is targeted where hydrogen can deliver the greatest economic and environmental impact, supporting the UK's net zero ambitions.

FutureGrid Carbon

In April 2025 funding was awarded for the FutureGrid Carbon project. The project will kick-off in September 2025 and will repurpose the FutureGrid test facility to examine the ability of the NTS to transport pressurised gaseous-phase carbon dioxide.

The HyNTS FutureGrid NIC project at DNV's Spadeadam Test and Research Centre



More information about the FutureGrid test facility can be found in our [Innovation Annual Summary](#).

Environmental commitments continued

RIIO-T2 output delivery incentives (ODIs)

The table below provides a summary of our ODIs as disclosed in our RRP. These are agreed with Ofgem to encourage improvement beyond the existing commitments in our EAP. The environmental ODIs cover the measurable parts of our EAP and the existing Greenhouse Gas Emissions (GHG) incentive.

Environmental Incentive	Baseline levels	Performance				% difference 2024/25 level to baseline level
		2021/22	2022/23	2023/24	2024/25	
Operational transport emissions (tCO ₂ e) (% change)	1,748 (2021 forecast)	1751	1797	1743	1,896 (operational fleet including EVs)	8%
Business mileage (tCO ₂ e) (% change)	1,608 (2019/20)	606	741	850	776	- 52%
Percentage of recycled operational and office waste (%)	-	34%	41%	51%	50%	NA
Office waste generated in tonnes (% change)	54.60 (2019/20)	40	64	75	22.43t	-58.9%
Office water use in m ³ (% change)	7,380 (2019/20)	1,699	3,910	3,124	2,648m ³	- 64.1%
Environmental value of non-operational land (£m) (% change)	32.92 (2020/21)	£0.7m	£1.5m	£1.0m	£1.1m	3.4%

Decarbonisation

As a business, our fundamental purpose is to deliver a clean energy future for everyone, while operating a resilient and reliable network.

Our network is already being tested by climate change and extreme weather, both of which add additional pressures and challenges to the way in which we operate the network and manage our assets. This is becoming of increasing focus as we conduct our climate risk assessments for our compressor stations. Adapting to climate change now and reducing the impact of our operations on the environment are crucial if we are to succeed in meeting our business purpose.

National Gas continues to focus on its own greenhouse gas emissions and look for ways to reduce them. As summarised on page 13, we have developed a bespoke decarbonisation strategy and glidepath to net zero to inform how we will reduce our emissions. We continue to explore the feasibility of converting the NTS to carry hydrogen as a greener alternative to natural gas, investigate the capability of our existing assets to transport carbon dioxide and facilitate biomethane connections.

The following table shows the number of enquiries received, the capacity of connections and the actual flow of biomethane and other green-gas connections to the transmission system. There has been an increase of 1 new biomethane site over the past year of RIIO-T2. However, there are in the region of 53 biomethane projects that have formally contacted National Gas considering a connection to the NTS, with c20 further projects we are aware of that could be suitable for the NTS. We will continue to update with any formal progress in next year’s report.

Connection enquiries

Biomethane connections	Unit	RIIO-T2 to date
Enquiries	Number	53
Connections	Number	2
Capacity connected	SCMH	0.672MSCM/day
Average monthly flow rate	SCMH	0.021311 MSCM/hr
Volume of biomethane injected	GWh	67.51168

Other green gas

Enquiries	Number	Non recorded
Connections	Number	Non recorded
Capacity connected	SCMH	Non recorded

Case study: Multiple gas detection

Building on the foundations laid in Phase 1, Phase 2 of the Multi-Gas Detection project advances National Gas’s commitment to innovation in emissions monitoring and supports our transition to net zero operations. This phase focuses on enhancing hydrogen detection capabilities through further testing of existing sensor performance and exploration of emerging technologies. It also aims to facilitate the rollout of methane emissions monitoring by better quantifying the benefits of continuous fugitive emission detection.

The project continues to utilise Nevada Nano sensor arrays at both Bacton and FutureGrid as benchmarks for evaluating new technologies. At Bacton, the emphasis is on quantifying methane emissions reductions achieved through early leak detection, while the FutureGrid installation remains active to collect additional hydrogen data. This data is critical for refining localisation and quantification algorithms and for deepening our understanding of hydrogen leak behaviour relative to methane.

Phase 2 also includes rigorous testing and evaluation of personal hydrogen monitors, such as clip-on sensors, which serve as the last line of defence for operational staff. Testing conducted by the National Physical Laboratory will ensure these devices meet required safety standards, delivering both safety and environmental benefits to National Gas Transmission and the wider hydrogen industry.

In addition, the project incorporates a continuous market survey of hydrogen and methane monitoring technologies. Given the developmental nature of the hydrogen sector and the absence of a clear technological leader in fugitive leak detection, this survey ensures we remain informed of advancements and can make strategic decisions for RIIO-GT3 pilot deployments.

Phase 2 aims to deliver validated, cost-effective, and scalable solutions for emissions monitoring—supporting net zero operations both on today’s network and the network of the future.

Case study: Project Union

Project Union is a pioneering project led by National Gas Transmission (NGT), which will create a hydrogen transmission backbone for the UK, facilitating the transport of 100% hydrogen by the mid-2030's. This backbone will consist of approximately 2000km of pipelines, through a mixture of repurposing of existing pipelines and new build, connecting strategic production and storage locations with key users, such as Industrial Clusters, power stations and hydrogen towns around the country. Project Union will support market growth, enable low carbon hydrogen to grow from fragmented initial stages to a highly integrated, competitive, transparent, and liquid end state with the scope to optimise export and import opportunities to Europe.

A regional approach to development for the hydrogen transmission backbone has been implemented, starting with Project Union: East Coast, connecting Teesside to Humber. As the first section of Project Union requires sufficient production capabilities, storage capacity, network connectivity and concentrated demand, which the East Coast region fulfils.

We will provide a progress update on Project Union and East Coast Hydrogen in our next year's report.

Case study: National Gas Services (NGS)

NGS is upgrading its recompression fleet with four state-of-the-art LMF P-Pack 600 units—marking a major step forward in pipeline maintenance and emissions reduction across the National Transmission System (NTS). Two of the units have been delivered to our Ambergate facilities while the remaining two are being built.

These new units significantly outperform older models, offering a much wider operational range—from 94 barg down to below 1 barg. In contrast, previous units could only operate down to 7 barg, limiting their ability to handle low-pressure gas. This expanded capability allows for the safe reinjection of low-pressure gas into live pipelines, enabling the reduction of at least 90% of greenhouse gas (GHG) pipeline venting emissions that older units were unable to recompress.

As a result, the new fleet will play a key role in reducing methane emissions, improving efficiency, and enhancing overall network performance.

How we define our emissions

For our Business Carbon Footprint (BCF), our data sources include direct measurements from invoices and emission monitoring reports, modelled data using industry methodology and National Gas specific measurements.

We are always looking to improve our carbon accounting, whether reviewing emission sources, seeking data that was not previously available or maturing our methodology. We recognise the importance of our BCF being as complete as possible, particularly as we monitor our emissions in line with the reductions required to meet our net zero target.

Scope 1 and 2 emissions – (BCF)

Scope 1 emissions cover the Greenhouse Gas (GHG) emissions that a company makes directly — for example while running boilers and vehicles which are not electrically powered.

Scope 2 emissions are the emissions a company makes indirectly – like the electricity or energy it buys for heating and cooling buildings which is being produced on its behalf.

Our current BCF related target is to reduce our Scope 1 and 2 emissions by 21% by 2030/31 from a 2022/23 baseline of 481 ktCO₂e as per our net zero glidepath. Most of our BCF is made up of the emissions from compressor fuel combustion and compressor venting. In the last financial year (2024/25), these two emission categories accounted for ~61% of our overall Scope 1 and 2 emissions, as reported within our RRP submission to Ofgem. We are committed to reducing our emissions, while ensuring resilience and security of supply.

A key component to delivering the net zero commitment is reducing methane emissions from our operations. NGT submitted a funding request to support methane emission reduction in 2023. In March 2024, funding was secured for the Methane Emission Reduction Campaign (MERC). This comprises of three themes:

1. Expansion of fugitive emission detection and repair (LDAR) programme and establishment of a measurement-based fugitive emission baseline.
2. Combined Gas Recompression and Zero Loss seals (CMT) trials for the compressor fleet to reduce compressor venting.
3. Mobile Recompression Units – new mobile recompression capability to reduce pipeline and PIG trap venting.

Scope	Emission	Category	2023/24 (tCO2e)	2024/25 (tCO ₂ e)
1	Energy consumption (excl electricity)	Energy consumption	397	418
	Transport	Direct commercial vehicles	1748	1903
		Business mileage	528	411
	Fugitive Emissions	Leak detection & repair	5720	6457
		Pipeline & AGI's	26285	25588
	Venting Emissions	Venting (compressor only)	51646	44819
		Pipeline Venting	26343	21076
		PIG Trap Venting	791	542
		NRO Vents	N/A	10
		Gas Using Devices & Maintenance and Inspection Vents	37246	37247
	Other	Incidents with gas release	242	4
	Fuel combustion	Diesel Minor Combustion Plant	277	299
		Natural Gas Compressors	191086	154948
		Natural Gas/Other Minor Combustion Plant	839	747
	Total scope 1	343,149	294,458	
2	Electricity consumption	Electricity consumption	37306	33398
		Fleet & company cars (EVs)	88	139
	Total scope 2	37394	33537	
1 & 2	Total scope 1 & 2	380543	327995	

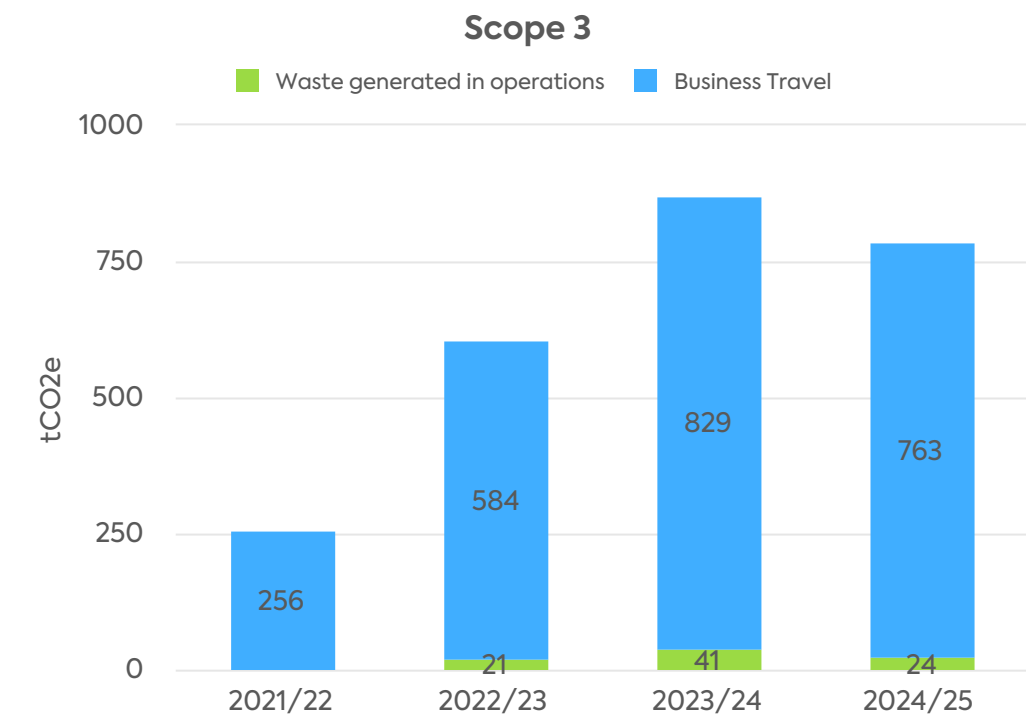
Some data may be revised in following year reporting. Eg. data originating from electricity invoices may be revised due to resolved estimations after year end.

How we define our emissions continued

Scope 3 emissions (as per RRP)

As of Year 4 of the RIIO-T2 period, we continue to report two out of seven relevant Scope 3 GHG Protocol emission categories for our regulated business, namely Category 5 (waste) and Category 6 (business travel). Our Category 5 reporting involves waste generated at our office and operational sites.

Category 6 includes business travel via air, rail, hire cars and in employees’ personal vehicles. To calculate the carbon emissions associated with these activities, the appropriate Department for Energy Security and Net Zero (DESNZ) conversion factors are used. We are continuing to assess how we can collate the information required to report more of our Scope 3 emissions. For example, conducting an employee commuting survey. Category 5 (waste) added from 2022/23. This scope 3 category was not calculated prior to this.



Category as per Ofgem RRP	Methodology and assumptions	Data Source	Confidence in data (completeness and accuracy) RAG status
Purchased goods and services	Continuing to investigate methodology for calculation		Not yet available
Capital goods	Continuing to investigate methodology for calculation		Not yet available
Fuel and energy related activity	As with other scope 3 categories we will continue investigating a calculation methodology for this category		Not yet available
Upstream transportation and distribution	Deemed to not be applicable during Scope 3 applicability screening. This exercise will be repeated if there are any significant business changes likely to impact the categories which are relevant to NGT.		
Waste generated in operations	Tonnes of waste converted to tCO2e using DESNZ current conversion factors	National Waste Contractor Reports for waste totals	Some assumptions required to allow application of available conversion factors
Business travel	This category includes business mileage not already included within Scope 1 and 2 emission reporting, such as travel undertaken via rail, air, hire vehicles and personal vehicles	Internal and external reports that quantify mileage taken (via booking systems or expense entries)	
Employee commuting	We are continuing to collect data on employee commuting via annual surveys, Once data is sufficient and representative, we intend to report this emission source.		Not yet available

How we define our emissions continued

Embodied carbon

The UK Green Building Council defines embodied carbon as ‘the total greenhouse gas emissions (often simplified to ‘carbon’) generated to produce a built asset’. This includes ‘emissions caused by extraction, manufacture/processing, transportation and assembly of every product and element in an ‘asset’. Our internal Carbon Interface Tool (CIT) allows us to record the embodied carbon of our major construction projects. The CIT calculates the carbon footprint of a project, comparing the ‘in design’ figure to the ‘as built’ figure.

We have partnered with third party consultants to upskill our teams and contractors on embodied carbon and on the use of the CIT tool for major construction projects. As part of this joint effort, seven CIT tools were completed for major projects during 2024/25. These projects are ongoing and will continue into the remainder of RIIO-T2. Our teams regularly monitor the data provided by contractors to ensure its reliability and accuracy. However, we recognise that estimating embodied carbon can be challenging. The industry still faces gaps in awareness and in the availability of key data, such as the environmental product declarations (EPDs) of materials — information that is essential for calculating the project embodied carbon.

As this area continues to evolve, we are committed to work closely with our supply chain and enhance our team capabilities. This will help us improve the quality of data we collect and gain better insights into the carbon footprint of our designs compared to the final built projects. We have developed the first draft of our Construction Carbon Management Strategy, which will be reviewed and updated to support our goals for the next regulatory period, RIIO-GT3. This strategy will guide our efforts to reduce embodied carbon across our major programmes.

Energy shrinkage and emissions within the NTS

NTS Shrinkage is a gas-industry term describing energy we use to operate the NTS, and other energy lost from the system, that cannot be charged to consumers or allocated to another user.

National Gas Transmission is committed to reducing emissions and progressing towards net zero operations. A key part of this work is addressing shrinkage energy used to operate or lost from the National Transmission System (NTS)—and the resulting emissions.

As the NTS Shrinkage Provider, National Gas procures this energy and manages emissions across three categories:


- Own Use Gas (OUG): Fuel for compressors.
- Calorific Value (CV) Shrinkage: Gas not billable under thermal energy regulations.
- Unaccounted for Gas (UAG): Differences between measured inputs and outputs.

As part of RIIO-T2, National Gas Transmission operates within a shrinkage incentive scheme designed to encourage the minimisation of energy costs associated with running the network. As part of the scheme, our annual gas procurement costs from 2022–2023 onward are assessed against benchmark costs, which are calculated based on forecast volume requirements, the actual volume supplied, and prevailing market gas prices.


The following table provides a breakdown of gas shrinkage in the NTS per gigawatt hour (GWh), which is the quantity of energy produced or consumed by a piece of equipment for one hour at a power level of one gigawatt.

	Unit	2021/22	2022/23	2023/24	2024/25
Compressor fuel usage	GWh	1,139	1,648	1,040	809
Calorific Value Shrinkage	GWh	317	491	443	257
UAG	GWh	2,051	4,655	1,607	1,676
Natural gas vented from all compressors	Tonnes	2,061.2	2,286.6	2,321.9	2,018

National Gas Transmission has undertaken a series of investigations to understand the rise in Unaccounted for Gas (UAG) since 2019. Full details and their current status are provided in the UAGCVS Report (May 2025).



The projects and their status are described in [the UAGCVS Report May 2025](#)



More information about [shrinkage and access to the archive of UAGCV's report](#)

Sustainable procurement, resource use and waste

Sustainable procurement to boost carbon reduction

National Gas is committed to working responsibly to embed sustainability into decision making through our sourcing processes, contract and supplier management. At present, more than 75% of National Gas’s top 50 suppliers have carbon reduction plans in place and moving into RIIO-GT3 this reporting will gradually widen to all suppliers with spend over £250,000.

Our Supplier Code of Conduct (SCOC) sets out our minimum standard of expectations for our supply chain in supporting National Gas to make a positive impact on environmental factors linked to our operations. All suppliers of National Gas are required to comply with our SCOC, which sets out our expectations, values and principles as a responsible business and covers a broad range of requirements from people, communities, environment, and governance.

The SCOC is available on our website, embedded within National Gas Standard Terms & Conditions and into our tender processes. Therefore, by accepting a Purchase Order from National Gas, suppliers in turn accept our SCOC. As part of tender processes, suppliers also receive a copy of our ‘Environmental Sustainability Policy’.

In addition to the SCOC we are making good progress with embedding ISO20400 sustainable procurement principles in our procurement processes.

In 2024-25, a full ISO20400 self-assessment has taken place; National Gas is performing strongly in areas such as Fundamentals, Governance and Integrating Sustainability including strong commitments from top management, clear procurement objectives and reporting metrics, investment in training and guidance across supply chain (both internally and externally). A detailed action plan is in place for 2025 focused on internal and external communication of the National Gas strategy.

#	Business Plan commitment	RAG
1	75% of top suppliers with carbon reduction targets	G
2	100% evidence of our top 50 suppliers having implemented Real Living Wage (RLW)	G
3.1	100 suppliers actively engaged through Supply Chain Sustainability School	G
3.2	# 2 Supply Chain Sustainability School forums actively engaged in	G
4.1	# 100 suppliers actively engaged through Supply Chain Sustainability School	G
4.2	# 50 suppliers signed Skilled Accord	R
5.1	ISO 20400 compliant procurement processes	A
5.2	75% of category strategies consider sustainability through formal gated processes	R
6	100% contracted suppliers legally bound to adhere to modern slavery act (MSA)	G
7	25% of onboarded providers of SME/ Diverse background as a % of overall suppliers	A

	2021/22	2022/23	2023/24	2024/25
% of suppliers meeting licensee’s supplier code	% not available	% not available	% not available	% not available
% of suppliers that have their own sustainability metrics or KPIs	% not available (Pre-separation from National Grid)	% not available (Pre-separation from National Grid)	76	82

Sustainable procurement, resource use and waste continued

Efficient use of resources and waste

We recognise that the use of resources, waste and climate change are inherently linked.

That’s why our EAP includes ten targets in relation to using resources responsibly, such as addressing redundant assets, extending the life of our assets, implementing circular economy principles, reducing the quantity of waste and increasing the proportion of recycled materials used on projects.

For an update on the progress already made against these targets, please refer to pages 16-18.

We continue to carry out an appraisal of waste segregation and disposal as part of managing our compliance for the Environmental Permits held at our compressor stations. The appraisal is used to identify trends in types of waste, volumes of waste and areas where we can improve or minimise it. The results of the appraisals are submitted to our environmental regulators for review so they can approve any identified actions.

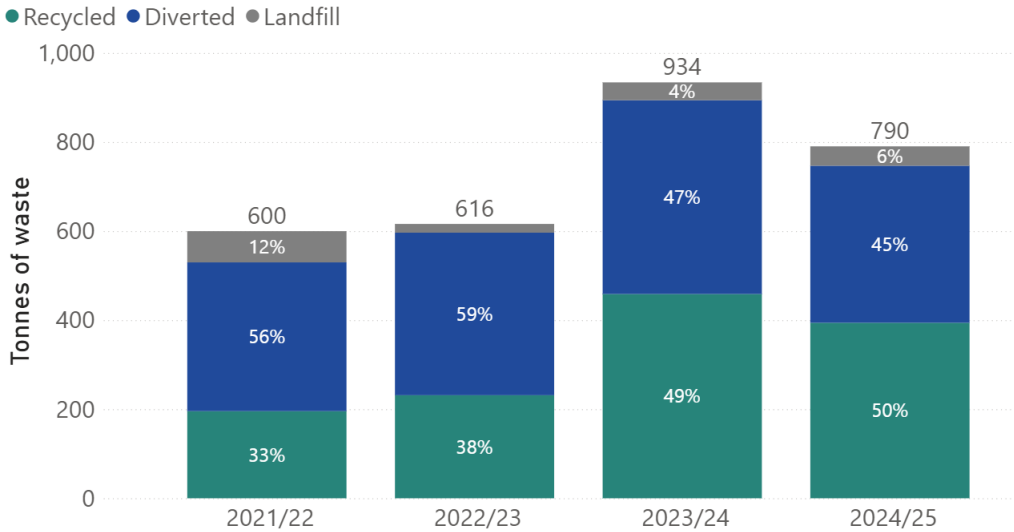
Waste data provided below for transparency. The below waste reflects the waste totals from our office and operational sites as reported for the 2024/25 Regulatory Reporting Pack:

	2021/22	2022/23	2023/24	2024/25
Total metric tonnes of waste*	600	616.1	934	790.4
Office & Operational Recycling Rate (%)	33%	38%	49%	50%

*The office waste data has been restated for all previous years of RIIO-T2 upon review of the baseline.

In 2024/25, we achieved a 15% reduction from both our operational and office waste. This was largely due to a decrease in metal and hazardous waste generation, which had been higher the previous year due to oil tank replacement works. We continue to monitor our waste closely and are working with our waste service providers and office landlord to improve the quality of our data. We are also raising awareness across our sites about better waste management and segregation practices. These efforts aim to continue increasing our recycling rates, which currently stands at 50%.

Waste from Operational and Office sites



Sustainable procurement, resource use and waste continued

Our duty as a responsible landowner

National Gas has a significant landholding, with our area of operational and non-operational land totalling 1,174.75 hectares. Following assessment of all our land in the financial year from 2021 to 2022, we established the total habitat area is 878.16 hectares and we have a baseline of 4,165.61 biodiversity units. Our EAP includes targets for how we intend to put nature first on our land, for example by:

- Ensuring new construction and demolition projects include initiatives to protect and promote biodiversity
- Setting targets to increase the value of natural assets on non-operational land
- Setting a target in relation to environmental education and outreach on major projects.

For an update on the progress already made against these targets, refer to page 8.

Biodiversity

No projects have started and finished so far within the RIIO-T2 period that have triggered planning requirements for Biodiversity Net Gain (BNG). However, our Hatton compressor project committed to deliver BNG across the non-operational areas of the site, to enhance the natural environment, please refer to page 9.

The scope and quality of our data

Data relating to our business carbon footprint, waste and environmental value have been taken from the data submitted in our RRP. We consider our governance process for RRP to be consistent and robust.

Furthermore, each EAP target and associated data has an accountable manager who provides the annual performance information provided.

During preparation of this AER, we have endeavoured to ensure that:

- The reported data is accurate and meaningful
- The reported data reflects our performance in the last financial year (2024/25) and is consistent with the scope of requirements detailed in the Ofgem guidance – RIIO-T2 Environmental Reporting

The assumptions made regarding our calculation and measurement methods are detailed throughout. We maintain methodology documents internally to enable year on year consistencies.

The content of this report is reviewed and approved by an initial expert signatory, a senior manager and an executive team member prior to publication.

Within this report, we have provided the data and updates to reflect our environmental performance based on knowledge and information available to us at the time of reporting. We strive to have complete, consistent and transparent data in order to inform performance improvements. However, where data is not available or gaps are identified, we will work to address these in the following years.

Reporting boundaries

This report provides data and information for the period 1 April 2024 to 31 March 2025 across National Gas Transmission.

Business Carbon Footprint data is reported based on an operational control reporting boundary.

Data gaps identified	Reason for data gap
The change in biodiversity units from network development projects has not been quantified.	Our Hatton compressor project has recently completed a BNG assessment required to deliver Net Gain. We will provide an update on this section on next year's report.
Percentage of suppliers meeting the licensee's environmental supplier code or equivalent.	Each supplier is legally bound to adhere to our Code of Conduct within our general terms and conditions. We therefore expect all of our suppliers to be meeting the code.
The key materials (maximum of ten) by value and/or mass consumed directly by the company and, where relevant, the supply chain. Licensees should comment on the environmental impact of materials where possible.	The volumes of consumed materials are not yet quantified.

Glossary

Term	Acronym	Description
Annual Environmental Report	AER	Report submitted to Ofgem by licensees to ensure they remain accountable on a yearly basis for implementing their RIIO-T2 EAP Commitments.
Best Available Technology	BAT	National Gas has a legal obligation to ensure that all equipment complies with the requirements of Best Available Techniques. This is a stepwise approach (a simple, standardised method for collecting, analysing and disseminating data) following a defined methodology set out by the UK environmental regulators: the Environment Agency (EA); the Scottish Environment Protection Agency (SEPA); and Natural Resources Wales (NRW).
Biodiversity Net Gain	BNG	An approach to development, and/or land management, that aims to leave the natural environment in a measurably better state than it was before hand.
Calorific Value Shrinkage	CVS	Energy that cannot be billed due to CV capping under application of the Gas (Calculation of Thermal Energy) Regulations 1996 and subsequently amended in 1997.
Carbon Interface Tool	CIT	An internally developed tool to measure the carbon footprint of all schemes.
Environmental Action Plan	EAP	Plan outlining our approach to environmental management and environmental performance during RIIO-T2. The plan was formed from our Business Plan Commitments and consists of specific targets under five pillars, with clear accountabilities and work programmes, that will drive improved environmental performance.
FutureGrid		Part of our HyNTS programme, the project is testing the suitability of the NTS to transport hydrogen by constructing an offline hydrogen test facility, representative of our network, which will be used to test decommissioned assets at a range of different hydrogen concentrations.
HyNTS programme		Hydrogen in the NTS is focused on understanding how we can safely and efficiently transition our network to hydrogen.
Project Union		Project Union involves repurposing parts of the 5,000-mile gas National Transmission System (NTS) to carry 100% hydrogen and provide a low-carbon option for major businesses; ensuring continued security of supply through low-carbon gas storage
ISO 20400		Sustainable sourcing process providing guidance to organisations on integrating sustainability within procurement, as described in ISO 26000.
Methane Emissions Reduction Campaign	MERC	Work programme with Ofgem to implement a plan to reduce methane emissions and increase detection of leaks across the NTS during RIIO-T2.
National Gas Services	NGS	Formerly the pipeline maintenance centre. Specialises in gas pipeline repair, replacement, maintenance and intervention to deliver in-field solutions to a range of emergency and planned projects across the gas pipeline network.
Output Delivery Incentives	ODI	Scorecard agreed with Ofgem to encourage us to improve the environment beyond the existing commitments in our EAP.

RIIO Price Control Framework	RIIO	Revenue = incentives + innovation + outputs. The price control framework for high pressure GT networks which lasts for five years. RIIO-T1 ran from 2013–2021. RIIO-T2 started on 1 April 2021 and runs until 31 March 2026. RIIO-GT3 starts on 1 April 2026 and runs until 31 March 2031.
Science Based Targets initiative	SBTi	The SBTi defines and promotes best practice in science-based target setting. SBTs provide a clearly defined pathway for a business to reduce their greenhouse gas emissions, helping to prevent the worst impacts of climate change and futureproof business growth. Targets are considered ‘science-based’ if they are in line with what the latest climate science deems necessary to meet the goals of the Paris Agreement – limiting global warming to well-below 2°C above pre-industrial levels and pursuing efforts to limit warming to 1.5°C.
Task Force on Climate-related Financial Disclosure	TCFD	Framework for consistent climate-related financial risk disclosures for use by companies, banks and investors in providing information to stakeholders. Created by The Financial Stability Board to improve and increase reporting of climate-related financial information.
Unaccounted for Gas	UAG	This is gas that is lost, or otherwise not accounted for, delivered to or taken off from the NTS. It is one of the components of NTS shrinkage.