



Annual Report and Accounts 2023 to 2024

Sustainability report

ORR has different environment and sustainability duties for rail and road, and the industries are subject to different goals and legislation. We are also subject to sustainability and reporting duties as a public authority through the Greening Government Commitments.

We regularly meet with statutory environmental bodies across England, Wales and Scotland and contribute to industry forums (such as the rail working group on weather resilience) to understand the key sustainability challenges for the industries we regulate, and potential ways to address them.

In December 2023 we were invited by Defra to contribute to the fourth adaptation reporting process and have engaged early on this. We will review our approach to regulating for extreme weather resilience and adaptation, in order to complete our report by the end of 2024.

Following the 2022 refresh of our sustainable development policy statement and environmental guidance for all railway licence holders, we have conducted a review of industry compliance against their licence requirements on environment. We will work with industry to secure any necessary improvements in the coming year.

Holding Network Rail to account

We have continued to have an increased focus on environmental sustainability across the national rail network, to ensure it is on track to meet key legislative requirements for decarbonisation, biodiversity and environmental improvement. We have used the 2023 periodic review (PR23) process over the last year to set wider and more robust environmental outcomes to monitor and hold Network Rail to account over the next five-year control period (CP7). These cover carbon

emissions, biodiversity and air quality.

Carbon emissions

In January 2024 we published the results of our independent reporter review of Network Rail's regional forecasts of the scope 1 and 2 carbon emissions measure. While we welcomed the setting of targets for CP7, we recommended that Network Rail could go further, particularly regarding accelerating the rollout of zero-emissions vehicles and developing more stretching carbon reduction targets for the coming five years. It is important that Network Rail addresses these recommendations in a robust action plan, and we will be monitoring implementation of this throughout CP7.

Our PR23 final determination now means that Network Rail will be required to report scope 3 and infrastructure carbon emissions to the regulator for the first time. Network Rail Scotland has provided its forecast and trajectories for reducing scope 3 emissions during CP7. Whole life infrastructure carbon (WLIC) emissions forecasts for England and Wales will also be provided before the start of the second year of the control period. We will work closely with Network Rail to ensure that reporting processes are put into place in a timely manner. This will build upon the work we have undertaken this year with Network Rail to improve scope 1 and 2 emissions data capture, assurance and governance.

Biodiversity

This is the first time that a metric on biodiversity has been adopted as part of the periodic review process and reflects the growing recognition of the importance of the railway estate as a habitat for nature. While information on how Network Rail will achieve this metric is limited at present, good examples of current activities are being provided at regional meetings and we will look for these to increase, alongside evidence of adoption of more nature-based solutions.

We have also provided feedback on Network Rail's second state of nature report. We would like to see more consistency in reporting and explaining biodiversity trends across all regions, the adoption of a 'biodiversity accounting' approach, and more specific references to medium-term targets for the end of CP7.

Following our independent reporter review of Network Rail's lineside vegetation management practices last year, we have been working with their engineering teams to monitor implementation of the recommendations. We have seen signs of positive progress around governance, expanding

resources, exploiting partnerships with external organisations and training. We will look for evidence of improved performance targets and stronger governance of habitat management plans through next year.

Circular Economy

This is also the first time we have required Network Rail to set a metric for circular economy performance as part of the periodic review process. We have agreed for Network Rail to report performance in this area through a headline metric reporting the proportion of waste that is reused, with additional assurance measures covering other waste management routes, non-virgin materials in key products, and updating of standards and procurement contracts. We are also keen to see Network Rail progress ways over the next 12 months to report how increased circularity delivers financial efficiency savings.

Air quality at stations

We continue to work with the Department for Transport to ensure the specific requirements for Network Rail to produce air quality management plans for priority stations, and to work in partnership with train operators are put in place as soon as possible.

Weather resilience and climate change adaptation

The CP7 final determination also included an important new metric for Network Rail on weather resilience, as part of its asset sustainability measures. This progresses the work on weather resilience and climate change adaptation (WRCCAs) plans introduced by the Network Rail regions during CP6. Extreme weather continues to be a challenge for the railway and there were several named storms causing disruption in 2023. As part of the PR23 process, we have therefore been working with Network Rail to improve their WRCCA plans, in particular taking on the recommendations from our 2021 review and ensuring that the plans are aligned with Network Rail's strategic business plans. The new weather resilience metric will help us monitor delivery of this during CP7.

Holding National Highways to account

We hold National Highways to account on progress against its commitment to deliver better environmental outcomes on the strategic road network. For the second road period covering April

2020 to March 2025, this includes holding the company to account on its performance against four key indicators: biodiversity, carbon emissions, noise and air quality.

We also track progress against several other environmental performance indicators covering carbon emissions from the supply chain, the condition of cultural heritage assets, water quality and litter.

In July we published our annual assessment of National Highways' performance in 2022-23. We reported that:

- As a result of ORR's challenge and increased engagement, the company had produced a robust biodiversity delivery plan in September 2022. This followed our 2021-22 annual assessment, where we reported that the company was forecasting a biodiversity net loss by 2025. It is now forecasting that it will achieve no net loss of biodiversity by the end of the second road period (RP2), meeting its target.
- National Highways' corporate carbon emissions were worse than expected, and higher than the company projected. Government agreed to adjust National Highways' corporate carbon reduction target due to the carbon intensity of generated electricity being higher than modelled in 2020, when the original target was set. Given this, we will analyse and report on the company's electricity usage for the remainder of RP2.
- National Highways was expecting to mitigate 829 households from noise during the year 2023-24. If this is delivered, the company will have to mitigate 2,508 households in the final year of RP2 to achieve its target. This would be the highest number it has achieved in a single year. We have therefore been challenging National Highways on its programme to accelerate delivery of noise mitigations as part of holding the company to account to achieve its noise target and will continue to do so in the coming business year.
- We are content with the progress that National Highways has made to deliver air quality mitigations on sections of the strategic road network identified by government as having exceeded NO2 limits.

In 2023-24, ORR increased its public engagement by publishing a series of blogs on our work to hold National Highways to account for its environmental performance.

Our next annual assessment is due to be published in summer 2024, when we will report on National Highways' progress against these environmental metrics during 2023-24.

ORR's own environmental strategy

ORR is committed to delivering the 2021-25 Greening Government Commitments (GGCs), which set goals for reducing emissions and resource use in the UK government's estate and operations. In March 2024 we published our first corporate environmental strategy. This sets out the role we can play in our day-to-day operations to help advance the UK's sustainable development goals, the progress we have already made and further practical actions we can take, both as an organisation and as individual employees. It showed that we have already reduced our environmental impacts across several GGC metrics in recent years but that there are opportunities for further savings in the short-term and beyond 2025. Our environmental performance data since the 2017-18 baseline year is reported below.

Compliance statement: climate-related financial disclosures

We have reported on climate-related financial disclosures consistent with HM Treasury's TCFD-aligned disclosure application guidance which interprets and adapts the framework for the UK public sector. ORR has complied with the TCFD recommendations and disclosures around governance (all recommended disclosures) and metrics and target (disclosures (b)). This is in line with central government's TCFD aligned disclosure implementation timetable. We plan to make disclosures for strategy, risk management, and metrics and target disclosures (a) and (c) in future reporting periods in line with the central government implementation timetable.

Board oversight

The ORR board provides oversight of climate-related risks and opportunities in its role in holding to account Network Rail and National Highways. Board governance arrangements are set out in the governance statement. For rail, the board had oversight of the CP7 settlement which included sustainability and biodiversity targets and will monitor delivery of those metrics throughout CP7, in the context of the challenges of climate change and preparation for severe weather events. Throughout the year the board has been kept updated on Network Rail's activities around weather resilience and actions following the Carmont fatal accident derailment. The board also receives monthly reports on National Highways' biodiversity key performance indicators and targets.

During the year the board has discussed ORR's role in improving sustainability, including its current role and remit across both rail and road. Our corporate environmental strategy was developed with one of our non-executive directors who has subject matter expertise and was shared with the board. The strategy is supported by an action plan, against which progress will be monitored and regularly reported to the board.

Management's role

The executive team is responsible for managing climate-related risks and opportunities on a day-to-day basis and for delivering our corporate environmental strategy. Executive governance arrangements are set out in the governance statement. Environmental issues impacting the rail and roads sectors are monitored through the Regulation and Policy Committee. The risk that climate change impacts on the rail and roads sectors are more severe than modelled in current and future funding settlements features in our strategic risk register, and the director-level risk owner for this risk is responsible for ensuring that it is actively managed. Delivery of our corporate risk strategy is assigned to a director-level sponsor, and progress against the supporting action plan will be reported to the Executive Committee in advance of to the board.

Metrics and targets

The current Greening Government Commitments framework cover the period 2021 to 2025, and targets are measured against a 2017-18 baseline to be achieved by March 2025. At March 2024 we had made good progress against the GGC targets.

	2017-18 baseline	2023-24	% reduction	GGC headline targets
Emissions from electricity, gas and oil (tonnes CO2)	277	153	45%	Reduce overall greenhouse gas emissions from a 2017-18 baseline

	2017-18 baseline	2023-24	% reduction	GGC headline targets
[1]				
Business travel emissions (tonnes CO2) [2]	256	144	44%	
Domestic flights emissions (tonnes CO2) [2]	56	32	43%	Reduce emissions from domestic business flights by at least 30% from a 2017-18 baseline
Total waste [1] (tonnes)	20	2	90%	Reduce the overall amount of waste generated by 15% from the 2017-18 baseline
Paper use (A4 reams) [2]	2,158	386	82%	Reduce government's paper use by at least 50% from the 2017-18

	2017-18 baseline	2023-24	% reduction	GGC headline targets
				baseline
Water consumption (m3) [1]	2,329	1,332	43%	Reduce water consumption by at least 8% from the 2017-18 baseline

[Note 1] London data for both years, Glasgow data for 2017-18 only.

[Note 2] all offices

In the past year we have continued to gather data where available on our own environmental performance as an organisation and we report this to government through the Department for Transport. We have presented the data as transparently as possible and have noted where it has not been possible to obtain some information. Building-related data is provided only for the offices for which we are leaseholders (our London office and our Glasgow office up to November 2022, when we relocated to government premises). Shared data from Government Property Agency offices in which we are resident (in Bristol, Birmingham and Manchester) is currently incomplete and therefore not provided this year, but we are collecting the data with a view to reporting it as part of the next five-year GGC period. We do not currently receive data for our offices in York or Glasgow, where we are minor occupiers in other government department offices.

Mitigating climate change: working towards Net Zero by 2050

We have made good progress against this headline target and are on track to meet the sub-targets

which are relevant to us.

Greenhouse gas emissions

	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Scope 2: Indirect emissions from the consumption of purchased gas, electricity and oil	277	274	107	24	99	116
Scope 3: Emissions from domestic and international travel	256	169	195	31	77	126
Total emissions	533	443	302	55	176	242

ORR does not have any scope 1 emissions. Scope 3 includes emissions from domestic and international travel. The GGC emissions reduction target applies to domestic business travel only.

For a breakdown of domestic and international travel, see travel data below.

Energy consumption

	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Electricity – non-renewable (KWh)	440,157	480,562	243,175	-	-	-
Electricity – renewable (KWh)	32,261	33,342	103,567	88,734	109,752	110,280
Gas (KWh)	n.a	n.a.	n.a.	n.a.	414,783	509,160
Oil (KWh)	251,016	209,180	66,742	-	-	-
Energy expenditure (£)	83,075	82,709	73,896	75,411	77,007	162,873

n.a = Data not available

Electricity consumption covers the London office and the Glasgow office until November 2022, after which the office relocated to premises where another government department holds the responsibility for reporting. Gas reporting is for the London office only and based on an apportionment of the building. Gas consumption for 2023-24 has increased due to increased occupancy in the building. The figure for total expenditure is for all utilities for the London office

and for Glasgow until November 2022.

Business travel

	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Domestic travel						
Air (tonnes CO ₂)	56	28	39	1	7	21
Rail/ underground/ tram (tonnes CO ₂)	89	89	98	5	30	54
Car (personal vehicle) (tonnes CO ₂)	88	40	40	22	28	34
Hire car (tonnes CO ₂)	13	4	8	3	11	13
Total domestic travel (tonnes CO₂)	246	161	185	31	76	122

	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
International travel						
Air – short haul (tonnes CO2)	6	8	6	-	1	3
Air – long haul (tonnes CO2)	2	-	4	-	-	1
International rail (tonnes CO2)	2	-	-	-	-	-
Total international travel (tonnes CO2)	10	8	10	-	1	4
Total business travel (tonnes CO2)	256	169	195	31	77	126

	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Expenditure on official business travel (£)	629,267	651,810	784,837	100,104	283,916	522,771
	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Domestic air travel (km)	358,025	210,798	299,279	6,608	81,502	160,347
International air travel						
Short haul – economy (km)	64,314	90,666	75,494	3,396	16,718	29,855
Short haul – business (km)	1,027	-	-	-	-	-
Short haul – first class (km)	463	601	2,956	-	-	880

	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Long haul – economy (km)	-	-	-	2,288	-	9,846
Long haul – premium economy (km)	-	-	35,087	-	-	-
Long haul – business (km)	20,307	-	-	-	-	-
Total international air travel (km)	86,111	91,267	113,537	5,684	16,718	40,581
	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
No. of domestic flights	530	139	564	14	155	311

Business travel is reported for the whole organisation. Greenhouse gas emissions from travel increased in 2021-22 and 2022-23 as more normal travel requirements resumed following the

pandemic. During the year we updated our travel and expenses policy. We introduced a sustainable travel hierarchy, encouraging colleagues to consider public transport first and to choose electric vehicles when hiring a car for business purposes where practical. Air travel can only be considered in specific circumstances.

Minimising waste and promoting resource efficiency

We are on track to meet the sub-targets which are relevant to us.

Waste

	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Non-hazardous recycled (tonnes)	12	11	20	1	3	1
Non-hazardous incinerated/energy from waste (tonnes)	8	7	36	5	7	4
Total waste (tonnes)	20	18	56	6	10	5
Expenditure (£)	5,279	8,125	36,415	1,795	3,242	1,818

n.a = Data not available

Waste figures are for London and Glasgow only. The waste figures include data for the Glasgow office until November 2022, after which the office relocated to premises where another government department holds responsibility for reporting. London waste figures are for a percentage of the building until September 2022, and actual weights for ORR thereafter. Waste collection costs are for London only and are based on an apportionment of the building. We do not have any waste that goes to landfill.

Paper use

	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Paper consumption (A4 reams)	2,158	1,520	995	150	100	355
Expenditure (£)	n.a	n.a	n.a	n.a	n.a	n.a

n.a = Data not available

Paper consumption is for all offices and has decreased significantly since 2017-18. The increase since last year is because of a legal requirement to print hard copies of review notices in relation to PR23.

Reducing our water use

Water

	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Water consumption (m3)	2,329	2,063	866	n.a	971	1,285
Expenditure (£)	5,480	4,820	2,628	1,992	n.a	n.a

n.a = Data not available

Water consumption and expenditure figures are for London only. Most water usage is controlled by the landlord. We will work with our landlords to ensure they implement water-saving measures, such as fixing leaks, auditing appliances and installing sensor taps and low flush toilets. Dishwashers in our London office are controlled by cleaning staff to reduce use.

Procuring sustainable products and services

Sustainable procurement involves the management of internal demand to ensure that only appropriate goods and services are obtained from third parties, selecting suppliers that have appropriate sustainability credentials where relevant to the contract, utilising eTendering and opening up procurements to small and medium enterprises (SMEs). For a large proportion of our common goods and services, we have continued to utilise the Crown Commercial Service (CCS) frameworks where they follow Government Buying Standards. These set out mandatory minimum standards for goods and services such as paper, office equipment, ICT, cleaning products, furniture, construction and fleet.

This year we have included additional sustainability questions in relevant tenders where

proportionate to do so and will continue this approach in the coming year.

Adapting to climate change

We occupy most of our accommodation as sub-tenants of offices, therefore are limited in what is achievable and practical for us. In our corporate sustainability strategy we have committed to developing a climate change risk assessment for our London office, and to contribute to our landlords' efforts in our regional offices.

Reducing environmental impacts from ICT and digital

ORR is predominantly a cloud-based organisation. During the year we have disposed of IT equipment, making use of sustainable organisations to ensure that where possible IT components are reused or recycled.