SP Electricity North West

Environment Report

2025/26



Contents

1. Executive Summary 3
2. Business Carbon Footprint 9
3. Sulphur Hexafluoride & Other Insulation and Interruption Gases 11
4. Electricity Distribution Losses 13
5. Embodied Carbon 16
6. Supply Chain Management 17
7. Sustainable Resource Use & Waste 18
8. Visual Amenity 19
9. Noise Pollution 21
10. Polychlorinated biphenyls (PCBs) 22
11. Biodiversity and Natural Capital 23
12. Oil Filled Cables 25
13. Wider Environmental & Other Activity 26
14. Appendix 27
15. Glossary 28

1. Executive Summary

SP Electricity North West is dedicated to achieving the highest standards of environmental performance, not only by minimising the environmental risks created by our activities, but also through targeted investment in outputs that deliver a positive environmental impact.

We are determined to play our part in enabling the UK's transition to a Net Zero carbon future and the social economic and environmental benefits that this will bring. This desire influences both our asset investment plans and the investments we make in measures to reduce our own carbon footprint.



1.1 Our Business/Who We Are

We operate an electricity distribution network delivering power to five million people with 13,000km of overhead lines, over 47,000km of underground cables, almost 84,000 items of switchgear and more than 35,000 transformers. We do this through a workforce of more than 2,000 people, a large contractor workforce, a fleet of over 1,000 commercial vehicles, trailers and items of mobile plant, and 16 depot and office sites. Consequently, our activities create risks, impacts and opportunities with regards to their impact on the environment.

The environmental aspects we manage include those associated with holdings of electrical insulating oil, waste management, vehicle emissions, holdings of sulphur hexafluoride gas (SF_6) and work in environmentally sensitive areas.

We have opportunities to minimise resource use and reduce waste to landfill. As the electricity distribution network operator for the North West of England we have a key role to play in enabling the transition of our region to a zero carbon economy, supporting the UK as a whole and our region in meeting its climate change targets.



Our network covers some of the most beautiful scenery within the UK and some of the areas make the maintenance of our assets challenging due to the rural locations and distances that are covered. We have a duty to maintain the network as well as to protect and improve the environment we operate in, including;

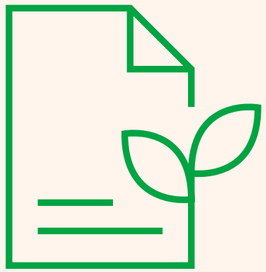
- Ensuring environmental planning is considered through all our design, planning and construction phases;
- Reduction of our carbon footprint;
- Protecting National Landscapes;
- Continuing to improve distribution losses;
- Reducing SF_6 emissions and oil leaks; and
- Using innovation and stakeholder engagement to reduce our environmental impact.

1.2 Purpose of the Report

It is important to us that customers and other stakeholders have a clear understanding of how we endeavour to minimise any adverse impact that our activities might have on the environment and how we are taking advantage of opportunities to play our part in the transition to a Net Zero carbon economy.

The purpose of this report is to provide details on the progress we have made in the third year of the RIIO-ED2 period (this is the price control period set by Ofgem from 2023-2028) in terms of our overall strategic environmental objectives and meeting the environmental targets we set out in our RIIO-ED2 business plan.

In parallel with delivering a reliable and safe network, we have continued our commitment to leading the North West to Net Zero. Collaboration is pivotal to our approach and working with our customers and stakeholders will ensure we provide the best support to our communities.



We are ensuring our network is fit for the future by creating a low carbon network, by developing the technology and systems, and preserving biodiversity and ecosystems by driving down our carbon emissions.

To reflect our environmental aims, we encapsulated our ambition in the Environmental Action Plan for RIIO-ED2. Delivery is tracked against 21 goals with seven focussed on our Net Zero ambition and 14 on wider environmental aspects. The table below sets out these goals and provides a summary of progress against those commitments in 2025/26, together with our forecast delivery across ED2.

The purpose of this report is to provide details on the progress we have made in the third year of the RIIO-ED2 period



SP Electricity North West

Table 1: Environmental Action Plan goals and progress in 2025/26

Delivery Programme	EAP Goal No.	EAP Action Plan Goals	Expected Benefit/key milestones	25/26	ED2 target
Carbon emissions	1	Become a leader in the reduction of carbon emissions and achieve Net Zero by 2038	Decarbonisation road map has been developed combining Science-based target reduction of 63% by 2035 and Net Zero ambition by 2038	G	G
	2	Adopt Science-based targets to help limit global warming to 1.5ºC above pre-industrial levels	Science-based target validated using baseline data from 2019/20	G	G
	3	Take responsibility for our major suppliers' scope 3 emissions and include them in our Science-based targets	Included in recalibrated Science-based targets and will continue to be monitored on monthly basis	G	G
	4	Manage our electricity distribution losses and achieve reductions of 8GWh by the end of RIIO-ED2	Low loss replacement transformer programme is on track for reduction target achieving 1.66 GWh reduction.	G	G
Network investment	5	Maintain a leakage rate of less than 0.3 % of our total bank of sulphur hexafluoride equipment	SF_6 leakage increased during the year to 0.34% of our SF_6 bank, primarily associated with 6.6/11 kV assets. Further detail is provided in the SF_6 section.	R	G
	6	Baseline the embodied carbon within new projects by the end of 2024/25 and set reduction targets	Major projects have been baselined for embodied carbon for 2025/26, with approach shared with suppliers to increase performance	G	G
	15	Maintain a leakage rate of less than 25,000 litres per year of oil	Programme developed to track and improve response time to oil leakage from fluid filled cables to minimise environmental impact with 5,550 litres lost in year.	G	G
	16	Remove overhead lines from National Parks and National Landscapes	Overhead lines asset replacement plan in place with stakeholder engagement ongoing with 3.5km removed.	G	G
Operational response	17	Take action to reduce noise pollution	Continue to work with our customers to reduce the impact of our operations on local amenity. We are exploring alternative generator options to reduce noise impact	G	G
	18	Phase out the use of diesel and petrol vehicles which produce emissions of NOx and other air pollutants	We continue to decarbonise our fleet, progressively replacing petrol and diesel vehicles with electric and lower-emission alternatives to reduce NOx and other air pollutants.	G	G
	19	Remove equipment contaminated by polychlorinated biphenyls from our network by the end of 2025	PCB removal programme substantially complete, with one remaining pole-mounted transformer scheduled for replacement in November 2026. See the PCB section for further detail.	R	G

Table 1: Environmental Action Plan goals and progress in 2025/26 (continued)

Delivery Programme	EAP Goal No.	EAP Action Plan Goals	Expected Benefit/key milestones	25/26	ED2 target
Supply chain	8	Enhance environmental management standards through our supplier code and target at least 80% of our supply chain to meet this code	We have identified our top 20 supply chain partners to work in a collaborative environment and are continuing to push performance with our supply chain partners. There is more work to be done in this area but are focussing on where we will be by the end of RIIO-ED2.	G	G
	9	To be responsible consumers of resources and reduce the amount of waste produced by the end of RIIO-ED2	We are working across our supply chain to reduce the impact on resources and embed circular economy principles.	G	G
	10	Divert 95% of our waste away from landfill by the end of 2025 and reuse or recycle 70% of our waste by the end of RIIO-ED2	We were able to divert 99% of our waste from landfill and reuse and recycle 85%.	G	G
	11	Reuse and recycle at least 85% of waste excavated for installation and repair	We are continuing work across the industry to ensure compliance with the Material Classification Protocol to reflect the work being done across the utility sector on how to comply with guidance.	G	G
	12	To be responsible consumers of water and reduce the water consumption per colleague during RIIO-ED2	This forms parts of our wider decarbonisation plans as we continue to reduce our consumption from our estate.	G	G
Biodiversity	13	Adopt an appropriate tool to assess changes in natural capital from different options for network projects	Natural capital tool developed and in use for biodiversity programme to baseline our estate and track biodiversity enhancements.	G	G
	14	Enhance biodiversity and natural capital across 100 sites during RIIO-ED2 and plant 10,000 trees per year	100 sites (predominantly substations) identified and being actively managed to improve biodiversity and planted 10,594 trees in 2025/26.	G	G
Training	7	Achieve the Carbon Literacy gold standard	We are expanding online environmental training and engagement to maximise colleague coverage and strengthen environmental awareness across the organisation.	A	A
	20	Train more colleagues on the requirements of our Environmental Permits for oil recycling through a CMS to reduce risks of environmental harm	Programme developed to identify key areas for training development and on track for delivery in RIIO-ED2 with a focus on compliance with PCB legislation to all operational teams and contractor partners	G	G
	21	Provide training to our wider leadership team to enhance environmental awareness	Environment and sustainability communications plan developed to target training, supported with awareness bulletins	G	G

Review of progress against EAP commitments and focus for 2026

We continue to make good progress against our environmental action plan goals with most goals assessed as on track.

For those goals that are classified as amber or red we have plans in place to ensure progress by the end of this regulatory price control period. In summary these goals are:

Goal 5 – Maintain SF_6 leakage below 0.3% of our total bank. We continue to take proactive steps to address leakage, particularly from 6.6/11 kV assets, alongside progressing SF_6-free alternatives through future investment. See Section 3 for further detail.

Goal 7 – We will increase the use and accessibility of online environmental training, enabling broader participation and supporting continued engagement across the organisation.

Goal 19 – The programme is substantially complete. Since the end of the reporting year, six further pole-mounted transformers have been replaced, leaving only one outstanding. This is scheduled for replacement in November 2026, with completion delayed due to access constraints.

1.3 How we manage our environmental and energy performance

We are committed to achieving excellence in environmental and energy management performance, minimising any adverse impacts our operations might have and fulfilling our obligation to improve the environment that we operate in. This is critical for us to drive continuous improvement in our environmental and sustainability performance. This commitment is secured by undertaking the following measures:

- Implement and maintain a robust environmental management system that is certified to ISO 14001 (the international standard for environmental management systems) and an energy management system, which is certified to ISO 50001 (the international standard for energy management);
- Identify the environmental and energy-using aspects associated with our activities, looking for opportunities to reduce energy usage and implementing solutions to improve our performance;
- Comply with all applicable environment and energy management law and other relevant requirements and, where possible, exceed them;
- Integrate environmental performance and energy management considerations into business as usual processes including the setting and reviewing of objectives and targets;
- Operate and maintain systems of work that minimise adverse environmental impacts and seek to minimise energy usage whilst delivering beneficial impacts;
- Inform, instruct, train, supervise and equip people to identify and minimise adverse environmental impacts, maximise energy management opportunities and deliver beneficial impacts;
- Make environmental and energy management performance a priority in the selection of suppliers of goods and services;
- Manage the waste generated by our activities according to the principles of reduction, re-use and recycling;
- Minimise the carbon footprint of our business and actively contribute to the low carbon economy;
- Manage our business operations to prevent pollution and wasteful use of energy;
- Maximise the sustainability of natural resources used in our activities; and
- Develop and promote a culture of continuous improvement regarding environmental and energy management performance.

To deliver this policy commitment we work to an environment strategy that is based on:

- Management of identified environmental risks and opportunities;
- A clear understanding and visibility throughout the business of environmental aspects and impacts;
- Targeted investment and expenditure in environmental control measures;
- Strong corporate governance and performance management;
- Continuous learning and improvement; and
- A systematic approach to environmental management.



1.4 Role of Stakeholders in Environmental Management

Working in partnership with a range of other stakeholders, including national and local government, utilities, charities, community energy, suppliers and regulators, we are committed to enabling Net Zero for the North West. This includes activities to drive down our own operational business carbon emissions, as well as those associated with the distribution network and to support our colleagues, business customers and partners to lower theirs.

We meet regularly with our regional partners, including the Greater Manchester Combined Authority, Lancashire County Council, Cumberland Council and Westmorland and Furness Council, and also with local stakeholders such as representatives of Protected Landscapes (National Parks and National Landscapes) to discuss visual amenity in Designated Areas. Through this process our stakeholders play a key role in shaping our environmental strategy and investment priorities.

We have a stakeholder engagement strategy that includes working with several advisory panels. These are made up of stakeholders who are subject matter experts and represent our communities. One of our panels, the Environment and Sustainability Advisory Panel, focuses on environment and sustainability challenges; ensuring our network can adapt to future challenges.

Read more about how we are making the North West's electricity network ready for the future:

future energy

Details of our stakeholder engagement practices and how customers and stakeholders can get involved can be found via the following link:

Engaging with our stakeholders



2. Business Carbon Footprint

We have committed to minimise the carbon footprint of our business and actively contribute to the transition to a zero carbon economy. Our carbon footprint is a measure of the impact our business has on the environment through our emissions of greenhouse gases.

Our carbon footprint is aligned to the Science-based Target initiative (SBTi) for 2025/26 reporting onwards. We aim to reduce our carbon emissions by 63% by 2035 relative to a 2019/20 baseline.

During 2025/26, we continued to deliver improvements in operational energy and fuel efficiency through investment in our fleet and buildings. Measures included reducing vehicle weights, promoting efficient driving, installing more energy efficient building equipment and commissioning a 55kW roof-mounted solar PV system at our Preston depot. All electricity generated by the solar installation was utilised on site, helping to reduce imported electricity and Scope 2 emissions. Combined with continued employee engagement on energy efficiency, these measures supported a 7% year-on-year reduction in depot electricity consumption.

Our Science-based target trajectory to 2035 is based on action-driven changes to reduce our emissions; beyond 2035 we will consider carbon offsetting to meet our 2038 Net Zero target.

Our total emissions in 2025/26 were 16,805 tCO_2e against a target of 17,250 tCO_2e. A breakdown by source is provided in Table 2 below. We continued to decarbonise our mobile generator fleet, with 41% of generator fuel supplied by HVO/biofuel during 2025/26. We are also exploring fully electric and hybrid solutions where practicable to further reduce emissions.

Our approach to scope 3 emissions are focused on increasing the number of GHG emission indicators we monitor, whilst enhancing the data quality to further support reductions. As part of our SBTi commitment, fuel and energy related activities and commuting will be tracked as part of our GHG emissions going forward. Environmental Action Plan goal 8, aims to enhance environmental management standards through our supplier code and target at least 80% of our supply chain to comply. As part of this process, we are developing our environmental and energy management standards with our supply chain, supported by the Supply Chain Sustainability School membership.



Table 2: Business Carbon Footprint detail

	25/26 tCO_2e	24/25 tCO_2e
Scope 1		
Operational transport	4,726	4,453
Fugitive emissions	1,447	1,460
Fuel combustion	213	137
TOTAL	**6,387**	**6,050**
Scope 2		
Buildings energy usage	2,999	3,593
TOTAL	**2,999**	**3,593**
Scope 3		
Contractor Transport Fuel	1,459	1,452
Company/Lease, Personal Cars	655	679
Rail	16	10
Air	20	75
Generator Fuel[1]	1,813	2,576
Commuting	994	955
Upstream Fuel and Transport (Well-to-Tank)	1,370	1,309
T&D and WTT Purchased Electricity	1,092	1,183
TOTAL	**7,420**	**8,239**
Business Carbon Footprint (excl. losses)	**16,805**	**17,882**
Electrical losses	269,310	328,413
Business Carbon Footprint (incl. losses)	**286,115**	**346,295**

[1] Our biogenic emissions (outside of scopes) associated with HVO use in generators was 1,199.8 tonnes CO_2e.



3. Sulphur Hexafluoride & Other Insulation and Interruption Gases

SF_6 is a gas with excellent electrical insulation and other properties, which have led to its widespread use in electrical switchgear and in several other industrial applications. In recent years, there has been growing concern over any SF_6 that releases into the atmosphere because of its identification as a potent greenhouse gas. It has been highlighted that SF_6 is 23,500 times more potent than CO_2 as a greenhouse gas.

In terms of our strategy to address the risk associated with SF_6, we contribute to the overall UK electricity transmission and distribution industry in supporting Government initiatives to ensure the implementation of robust policies for the control and use of SF_6. The European Electricity Industries have also agreed a set of actions to reduce emissions of the gas to the atmosphere with manufacturers of electrical equipment. Leakage rates are being reduced in cooperation with power equipment manufacturers under a programme of continuous improvement.

Our current policy is to continue to install modern SF_6 equipment with low leakage rates and leakage monitoring systems, whilst exploring the development of SF_6-free alternatives with manufacturers. Over the RIIO-ED2 period we plan to maintain a leakage rate of less than 0.3% of the mass in service to 2028.

We have a total of 18,403 kg of SF_6 inside 11,181 assets. By weight, more than half of the SF_6 on our network is in 132kV equipment, although these assets make up less than 2% of our switchgear asset base. The reported SF_6 bank increased compared with the previous year, reflecting both the installation of new 6.6/11 kV switchgear and improved completeness of our asset data following the identification of a GSP that had not previously been included in the total.

Our SF_6 leakage for the year was 60.49kg, with 6.6/11kV assets contributing 94% of this total. This represents a leakage rate of 0.34% of the total SF_6 bank, outside our annual leakage limit rate of 0.3%. This includes top ups and losses assessed from recovered gas from decommissioned plant.

Pole-mounted assets containing SF_6 remain a key source of losses across our network. In 2025/26, 46% of reported SF_6 leakage was associated with losses identified through the disposal of these assets. As the remaining SF_6 within a unit is accounted for as a loss when the asset is disposed of, reported losses associated with disposal can increase in years where a greater number of these assets are removed from the network. An SF_6-free replacement solution has now been identified and will form part of future investment plans, supporting the continued reduction of SF_6 emissions from our network.

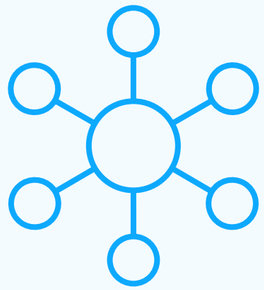
Leakage rates are being reduced in cooperation with power equipment manufacturers under a programme of continuous improvement

We continue to utilise a specialist contractor who collects SF_6 containing gear removed from the network, recovers and safely disposes the gas by recycling wherever possible and disposal by high temperature incineration.

The regulatory landscape for SF_6 continues to evolve, with the EU introducing phased restrictions on F-gases in new electrical switchgear. Although these requirements do not currently apply directly in Great Britain, we continue to monitor developments and reflect the transition to SF_6-free technologies in our future asset and investment planning. The table below summarises the relevant EU restriction dates:

Table 3: SF_6 Restriction Dates

Network – Voltage level	EU Restriction Date
Distribution (6.6/11kV)	1 January 2026
145kV	1 January 2028
33kV	1 January 2030



We continue to support the industry transition away from SF_6, including through our leadership of the ENA SF_6 Working Group.

As part of our transition away from SF_6, we continue to develop and deploy alternative technologies across our higher-voltage network. Following the successful trial of a g³ (C4FN) live tank circuit breaker at our Ulverston 132kV substation, we are progressing with wider deployment.

For 132kV switchgear, our strategy is to use non-SF_6 technologies at joint sites, aligning with National Grid Electricity Transmission's (NGET's) approach, while continuing to work with suppliers to accelerate the deployment of SF_6-free solutions.

We continue to support the industry transition away from SF_6, including through our leadership of the ENA SF_6 Working Group. Our strategy is evolving in response to regulatory developments, with a focus on future compliance, industry collaboration and the long-term replacement of SF_6 assets with sustainable alternatives.



4. Electricity Distribution Losses

When electricity is generated, not all the electrical energy which flows through the power network reaches the customer. This is because power networks use some of the energy in the process of transporting the electricity to customers.

In the broadest sense, distribution network losses are the difference between the electrical energy entering the distribution network, and the electrical energy that leaves it. Some losses are associated with the technical characteristics of the electricity network ('technical' losses), whilst other losses are related to measurement and billing issues ('non-technical' losses).

Losses cost customers money and contribute to carbon emissions. They can be reduced in various ways, but these measures also cost money. We act on behalf of our customers to determine the appropriate balance between spending money on reducing losses and saving money for customers by lowering the energy lost during transportation.

The overall level of losses is influenced to a greater extent by electricity usage i.e. the more electricity consumed, the more power is transmitted and distributed and the more losses are reported. This movement in losses is reflected in the total losses associated with our network.

In 2025/26 losses were 1,521 GWh or the equivalent of 269,310 tCO_2e. This was a decrease of 70 GWh from 2024/25 which, together with a change in the UK government electricity conversion factor, equated to an equivalent decrease of 12,356 tCO_2e.

We proactively target losses reduction, and our strategy is to continually review the options for reducing the losses on our network. We have examined the potential for reductions through the application of various alternative investment strategies during the RIIO-ED2 period and are adopting as policy only those strategies that deliver clear positive benefits for our customers.

We also plan to maintain and expand our activities to investigate and minimise non-technical losses, such as theft, while continuing to establish a more reliable reporting baseline for losses within RIIO-ED2.

We proactively target losses reduction, and our strategy is to continually review the options for reducing the losses on our network

As a result, the cumulative reduced-losses saving reported to date has been revised downwards compared with the previously stated figure. However, this updated value is supported by a more robust evidence base, reflecting enhanced understanding, greater business challenge, and a more comprehensive review of the associated benefits and savings.

As part of this strategy, we are implementing several priorities for reducing both technical and non-technical losses summarised in Table 4 below.

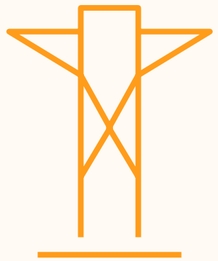


Table 4: Losses Strategy Summary

Investment	Actions	
Technical losses		
Distribution transformers (ground-mounted)	Replace old (pre-1990) large, ground-mounted, secondary network transformers with capacities of 800kVA and 1000kVA with lower loss EU Eco design	Proactive
Primary transformers	When installation or replacement required, replace with lower loss EU Eco design	Opportunistic
Grid transformers	When installation or replacement required, determine best type to reduce losses with all new transformers compatible with lower loss EU Eco design	Opportunistic
Distribution transformers (pole-mounted)	When installation or replacement of larger 200kVA pole-mounted secondary network transformers required, replace with lower loss EU Eco design	Opportunistic
Cables (high voltage and low voltage)	Install large cross section cables (300mm²) at both HV and LV as standard	Opportunistic
Non-technical losses		
Transactional theft	Continue to work alongside suppliers to help reduce transactional theft	Proactive
	Monitor / share best practice with other DNOs	Proactive
Theft in conveyance	Develop our theft in conveyance services	Proactive
	Contribute to the development of the National Revenue Protection Code of Practice	Proactive
	Increase number of investigations undertaken	Proactive
	Monitor / share best practice with other DNOs	Proactive
Unmetered supplies	Undertake regular audits of unmetered supply inventory	Proactive
Network Innovation Strategy		
Ofgem Innovation Funding	Review and analyse the details of the innovation projects	Proactive

Our losses strategy can be found at the following link: electrical losses (enwl.co.uk)

Table 5: Summary of Losses Costs and Benefits from Activities in RIIO-ED2

Programme/ project title	Regulatory Reporting Year 2025/26			RIIO-ED2
	Distribution Losses – Justified Costs	Reduced Losses*	Reduced Emissions Associated with Losses	Cumulative reduced losses to date
	£m	GWh	tCO_2e	GWh
Standardise use of 300mm² HV cable	0.66	2.83	500.91	4.77
Standardise use of 300mm² LV cable	1.01	1.20	212.40	2.45
Proactive replacement of pre-1990 1000kVA transformers	0.61	0.23	40.71	0.68
Proactive replacement of pre-1990 800kVA transformers	1.38	1.43	253.11	2.06
Opportunistic primary transformer replacement	0.19	0.07	12.39	0.11
Opportunistic 200kVA pole mounted transformer replacement	0.32	0.30	53.10	0.85
Relevant theft of electricity action	0.10	0.77	136.29	2.35
Total	**4.27**	**6.83**	**1208.91**	**13.28**

Table 6: Summary of Losses Activity in 2025/26

Programme / project title	Description of unit	Volumes in 2025/26
Standardise use of 300mm² HV cable	km of cable	84
Standardise use of 300mm² LV cable	km of cable	58
Proactive replacement of pre-1990 1000kVA transformers	Transformers	19
Proactive replacement of pre-1990 800kVA transformers	Transformers	43
Opportunistic primary transformer replacement	Transformers	4
Opportunistic 200kVA pole mounted transformer replacement	Transformers	59
Relevant theft of electricity	Theft cases identified	198

* In accordance with Ofgem's methodology the reduced losses for each initiative are deferred by a year, as they may have been implemented part way through that reporting year.

5. Embodied Carbon

Embodied carbon relates to the amount of emissions associated with materials and construction throughout the whole lifecycle of an infrastructure project.

In line with our Environmental Action Plan, we are reporting on the embodied carbon values for Major Projects completed in 2025/26. The report details embodied carbon for components of the project that contribute to greater than 1% of total carbon for that project.

The embodied carbon values per project are for the Design Stage using estimated quantities, volumes, weights and typical Embodied Carbon Factors. As our ED2 contracts and frameworks are being renewed, we are including the requirement for the contractor to provide 'As Manufactured' and 'As Built' embodied carbon reporting, for example embodied carbon reporting is now included in our Overhead Line Towers Installation Framework. Our experience is that larger manufacturers and contractors are already reporting on embodied carbon for other companies and are knowledgeable with embodied carbon reporting. However smaller companies, especially local civil companies, will often first experience embodied carbon reporting on our projects.

Manufacturer / supplier Embodied Carbon Factors are used if they are available and have been supplied to SP ENW. If not available, factors are based on the Inventory of Carbon and Energy (ICE) for materials and civil items. Electrical items values are based on NGED's ALPACA project values where applicable or the Inventory of Carbon and Energy values for individual material types.

For cable laying projects, a standard make up for trench profiles per road type has been used. Profile depths are as follows:

- Type 1&2 - 100mm (Tarmac layer), 180mm (Concrete layer), 210mm (MOT Sub base stone), 210mm (Backfill layer) and 200mm (Sand layer).
- Type 3&4 – 100mm (Tarmac layer), 50mm (Concrete layer), 275mm (MOT Sub base stone), 275mm (Backfill layer) and 200mm (Sand Layer.)

The embodied carbon reports are for Cradle to Practical Completion (modules A1 to A5).

For the transport to site module (A4) assumptions are made on the source being Local, National, European or Global. The factors used are based on the factors published by Institution of Structural Engineers and UK Government GHG Conversion Factors for Company Reporting.



The construction phase (A5) is broken down into actual construction (A5a) and construction waste (A5w). For Civil Construction the Embodied Carbon values are based on estimated cost of the works. Waste is based on physical weight of material quantities. The factors for converting these values to A5 and A5W are based on the factors published by Institution of Structural Engineers. Waste covers any material removed from site for disposal.

We are trialling new low embodied carbon products such as Eco Cement and building components such as roof tiles. We will continue to trial products, where applicable, in preparation of our embodied carbon reductions plans which will be published later in ED2.

6. Supply Chain Management

We have published our supply chain charter to provide supply chain partners with an understanding of our expectations regarding responsible supply chain practices. The charter is subject to annual review.

We set high standards for our suppliers, particularly concerning compliance with our strict health and safety, quality, ethical standards (modern slavery and real living wage), environmental capabilities, diversity and inclusion strategy. All these areas are carried out in conjunction with our responsibility frameworks.

We aim for most of our suppliers to be registered with the Achilles' Utility Vendor Database, which is the utility industry pre-qualification system used across the UK. We use the system for most of our procurement exercises, working closely with key buying organisations in the sector. This community helps utilities achieve the highest standards of supply chain assurance. In the year we have used Achilles Analytics to provide greater insight into the environmental, social, governance and financial standing of our key suppliers.

Our framework tender process has developed around our responsible business process from incorporating key environmental and Modern Slavery requirements to Real Living Wage and diversity and inclusion. The business continues to embrace and build on its environmental reporting. We know that there will be more to be done with our supply chain partners. To ensure we influence the wider value chain and to reduce associated emissions, we have used credible knowledge experts to help ascertain the emission hotspots in our supply chain. It is apparent that our scope 3 emissions do not cross the threshold for automatic inclusion in our Science-based targets process, however we have included them based on our ambition to be a leader for Net Zero in the North West.

In addition to conducting Carbon Literacy training for all tier 1 suppliers, contractors and customer partners, we have asked our contractors to complete our 'Switched on to Vulnerability' training that looks to understand vulnerability, giving them the skill and knowledge to enable them to spot the signs of vulnerability and take appropriate action. We have strengthened our approach to diversity and inclusion through the establishment of supplier roundtables and continue to work on mitigating the risk of modern slavery within our supply base.



7. Sustainable Resource Use & Waste

Our commitment is to minimise waste across our operations through sustainable practices, resource efficiency and innovative solutions that reduce our environmental impact.

We generate waste from a range of our activities and sources, including office and depot activities, asset replacement and network maintenance. This includes anything from paper, plastic, metal and oil through to hazardous materials. It is our responsibility to recycle and dispose of this waste responsibly.

In 2025/26, we generated 5,603 tonnes of waste, with 99% diverted from landfill, exceeding our 95% target, and 85% reused or recycled, ahead of our 70% RIIO-ED2 target. This demonstrates continued strong performance in reducing waste and keeping materials in productive use.

Our Central Oil Reprocessing Department (CORD) continues to support the circular use of insulating oil across our network.

The full breakdown of waste generated is provided below:

Table 7: Waste composition

Waste breakdown	
Hazardous waste	2,021 tonnes
Non-Hazardous waste	3,582 tonnes
Total	**5,603 tonnes**

Our Central Oil Reprocessing Department (CORD) continues to support the circular use of insulating oil across our network. In 2025/26, we recycled 911,250 litres of oil at our own facility, 186,750 litres more than the previous year. Used oil from our network is reprocessed for reuse, with 98% of the oil processed recovered and returned to the network, reducing the need for virgin oil and helping to extend the operational life of our assets.

Reprocessed oil also provides a financial benefit, costing approximately £0.97 per litre compared with £1.80 per litre for new oil, helping to reduce costs for our customers.



8. Visual Amenity



There are three National Parks and four National Landscapes, collectively known as Designated Areas, either wholly or partially within our region. These are:

- Lake District National Park
- Peak District National Park
- Yorkshire Dales National Park
- Arnside and Silverdale, Cumbria
- Forest of Bowland, Lancashire
- North Pennines, Cumbria
- Solway Coast, Cumbria

We have a programme of undergrounding overhead lines for visual amenity benefits in Designated Areas and we have worked closely with regional partners to ensure its success since its inception in 2005. As part of our wider stakeholder engagement plan, we meet annually with representatives from the above Designated Areas to share information on the individual programmes of work in each of the areas and current topics of interest. Each of the Designated Area statutory body representatives, together with Friends of the Lake District and Friends of the Peak District, meet with SP ENW planners on a regular basis to identify the lines to be undergrounded in their area and to ensure programmes are progressed.

Our investments have also been leveraged by regional partners to deliver greater environmental value and secure additional funding from other sources. This includes £7.9m of National Lottery funding for a range of landscape improvement programmes in two of the Designated Areas above.

In RIIO-ED2, we are continuing our undergrounding programme and were pleased to secure funding for its continuation in the RIIO-ED2 Final Determination from Ofgem.

Tables 8–10 provide an overview of schemes completed in 2025/26 and planned for delivery during 2026/27 and the remainder of ED2.

Table 8: Visual Amenity Planned Projects Completed 2025/26

Designated Area	Scheme Delivery 2025/26	Overhead Line Removed (km)	Underground Cable Installed (km)	Total Expenditure (£)
Lake District National Park	Thompson Ground Hawkshead Hill	1.20	0.20	£265,249
Lake District National Park	Meathop - Ulpha Sluice	1.40	1.80	£292,564
Yorkshire Dales National Park	Clapham Station	0.90	1.50	£349,840
Total		**3.50**	**3.50**	**£907,653**

Table 9: Visual Amenity Planned Projects 2026/27

Designated Area	Scheme Delivery 2026/27	Overhead Line to be Removed (km)	Underground Cable to be Installed (km)	Total Scheme Value (£)
Yorkshire Dales National Park	Asby Scar Newbiggin On Lune	2.16	3.22	£613,339
North Pennines National Landscape	Forest Head	4.10	3.90	£754,358
Total		**6.26**	**7.12**	**£1,367,697**

Table 10: Visual Amenity Planned for the Remainder of ED2

Designated Area	Scheme Delivery Remainder of ED2	Overhead Line to be Removed (km)	Underground Cable to be Installed (km)	Total Scheme Value (£)
Lake District National Park	Ulverston-Coniston	6.04	6.00	£2,000,000
Yorkshire Dales National Park	Haberwain Crosby Ravensworth	1.60	1.60	£243,000
Peak District National Park	Jenkin Chapel Macclesfield	0.90	1.00	£215,530
North Pennines National Landscape	Hartside Café	2.97	3.40	£993,920
Lake District National Park	Blawith and Torver Common	4.61	4.60	£1,084,078
Lake District National Park	High Newton Reservoirs	1.20	1.20	£269,000
Lake District National Park	Blindcrake	3.23	3.40	£768,060
Total		**20.55**	**21.20**	**£5,573,588**



9. Noise Pollution

We received 21 noise-related complaints in 2025/26 compared to 17 in the previous year.

The complaints in the year were related to substation noise, which were dealt with through our customer service processes. We investigate any complaints and look to rectify the situation as soon as we can which may include using different types of hybrid generator options that reduce operational noise.





10. Polychlorinated biphenyls (PCBs)

Polychlorinated biphenyls (PCBs) are a group of artificially manufactured organic chemicals that have been recognised as posing a threat to the environment due to their toxicity, persistence and tendency to bioaccumulate.

We (and our predecessor companies) never sourced PCB-filled transformers but some contamination has occurred due to cross contamination in the manufacturing process. Generally, PCBs were used in electrical equipment as an alternative insulating fluid where fire resistance properties were required. Although the use of PCBs has been reduced since the 1970s when legislation first sought to control their use and supply, it is recognised that PCBs in existing equipment can pose a threat to the environment.

All transformers (and some other network assets) manufactured before 1987 could be PCB-contaminated and are registered annually with the Environment Agency. We have worked with the Environment Agency to either test or statistically determine the PCB content of all this apparatus and dispose of items that are PCB contaminated by 31 December 2025 (as legislation required PCB-contaminated equipment to be removed by this date).

We recycle insulating oil from our network at our oil recycling facility in Blackburn. Prior to receiving oil from our network assets, the oil is tested in our own laboratory to establish its suitability for reprocessing. This looks at several parameters, including its PCB concentration. Although legislation allows for PCB concentrations of up to 50ppm, if our testing shows PCB concentration to be above 10ppm, the oil is not reprocessed to avoid the build-up of PCBs in our oil stocks.



Following testing of insulating oil from a network asset, if the PCB concentration is above 50ppm, the equipment will be replaced and the PCB-contaminated oil disposed of via high temperature incineration which destroys the chemicals. All PCB-contaminated equipment will be sent to authorised treatment facilities where the oil will be recovered and the metal components sent for recycling.

We continue to track progress against our PCB replacement programme and update our asset register annually in line with Environment Agency requirements. Significant progress has been made in identifying and addressing potentially PCB-contaminated equipment through a combination of in-situ testing and statistical assessment. At the end of 2025/26, seven units remained identified for replacement. Since the end of the reporting year, six of these units have been replaced, leaving only one outstanding at the date of report publication. The remaining unit is scheduled for replacement in November 2026, with completion delayed due to access constraints.

The ENA and EA have adopted a National Statistical model referenced above which allows transformers to be classified by potential PCB contamination. The model is available here;

PCB Cloud Statistical Model (Registration Required) energynetworks.org

11. Biodiversity and Natural Capital

Enhancing biodiversity and supporting nature recovery remain central to our environmental ambitions, and we continue to make progress in improving biodiversity across our estate.

We have taken significant steps forward in developing our understanding of the natural capital and habitat value of the SP ENW estate and we are now at an advanced stage where we are effectively delivering novel and proven bespoke management techniques that are providing meaningful biodiversity uplifts throughout our network.

We have made considerable advances in the geo-spatial mapping of our corporate estate and we are in a strong position to now fully understand how we can most effectively enhance biodiversity in the long term that creates the greatest overall positive impact. In addition to developing an initial baseline natural capital monitoring tool we have also created a suite of Nature Based Solution analysis applications that allows site locations to be assessed holistically for their environmental values and then track progress against our Environmental Action Plan goals for biodiversity:

- Goal 13: Adopt an appropriate tool to assess changes in natural capital from different options for network projects, and to monitor the provision of ecosystem services
- Goal 14: Enhance biodiversity and natural capital across 100 sites during RIIO-ED2 and plant 10,000 trees per year

We have made significant progress with the active management programme of 100 of our network sites to improve biodiversity levels across the North West and have planted over 32,000 trees to date on our estate in partnership with Community Forest and River Trusts. To help us target biodiversity enhancement we have created the ultimate version of our Natural Capital Tool, now known as ‘SP EcoNetWorks’ that ensures we have an accurate biodiversity baseline of our estate. These baselines will be monitored continuously throughout the life of the projects to evaluate the efficacy of the biodiversity management practices.

During October 2025 and March 2026, we continued our tree planting programme on our corporate estate and planted 10,594 trees on our landholdings at Peel and Rossall near Blackpool, and Burnley and Nelson. The tree establishment was carried out in conjunction with our partner the Ribble Rivers Trust, which ensured our schemes aligned with the Trust’s landscape catchment objectives.



Through lower-intensity grassland management, woodland improvements and tree planting, we are increasing habitat diversity, with encouraging increases in native flowering species already evident across a number of sites.



As the sites planted in this period were generally much smaller than at our first flagship site at Sandsfield Road, Carlisle planted in 2024, constrained with infrastructure and limited by future network expansion needs, this called for innovative approaches to achieve our commitments. The solution lay in the establishment of extensive hedgerows and high density scrub planting comprised of a wide range of flowering and fruiting native species trees, which will have the beneficial effect of providing effective food and habitat for wildlife and greater linear connectivity to otherwise isolated habitats in the wider landscape.

We continue to make strong progress with our biodiversity uplift programme, enhancing habitats across more than 100 network sites during RIIO-ED2. Through lower-intensity grassland management, woodland improvements and tree planting, we are increasing habitat diversity, with encouraging increases in native flowering species already evident across a number of sites.

The 2025/26 period has also seen exciting developments within our biodiversity baseline, monitoring, reporting and opportunity tools, and we have also completed an Interim report of our greenspace estate managed for nature. The purpose of this is to demonstrate the significant progress against our ED2 Environmental Action Plan biodiversity targets and highlight further opportunities to develop the SP ENW Biodiversity Estates to deliver additional Nature Based Solutions. The interim report accompanies a user-friendly and powerful digital portal and web mapping application, which is the final iteration of our much developed original natural capital and biodiversity baseline tool known as the ‘SP EcoNetWorks’ tool. In addition to technical guides, this portfolio of work undertaken in 2025/26 summarises:

- Biodiversity site case studies with current ecological value surveys;
- Estate natural capital and biodiversity baseline;
- BNG corporate strategic plan;
- Habitat carbon sequestration mapping tool; and
- Nature based solutions opportunities.

The intention of the Interim Report is to not only focus the attention of stakeholders onto the high value and return of the SP ENW biodiversity programme, but in its largest part to influence at an early stage, the goal and direction of travel of biodiversity during ED3, to ensure longevity of habitat management on our estate.

12. Oil Filled Cables

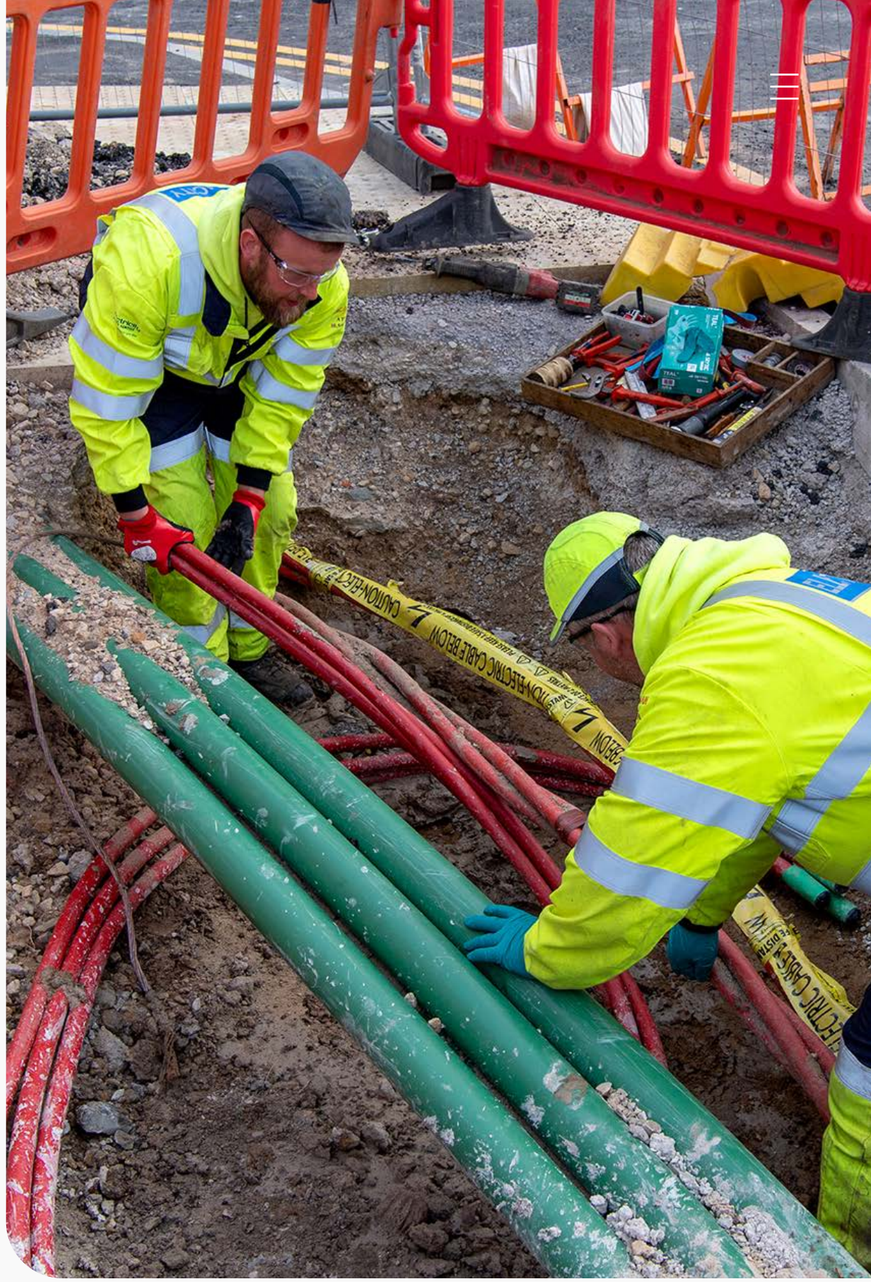
We have used oil-filled cables since the 1960s as part of our extra high-voltage distribution network at 132,000 and 33,000 Volts. At the end of 2025/26, 341.56 km of oil-filled cables remained in service across our network. The fluid acts as an electrical insulator and will be either mineral naphthenic oil, linear alkyl benzene, or a mixture. In all cases the fluids have a low viscosity and colour, not unlike water.

Leaks from oil-filled cables can occur for varying reasons including: cable damage by third party excavations; cable damage due to installation failure; failure of ancillary oil equipment such as pipe work, monitoring gauges and oil tanks; and cable joint failure. Whilst only a very small percentage of cables ever develop leaks, a leak can present a significant environmental risk if it is adjacent to a water course or an aquifer.

When leaks are detected, we respond in accordance with requirements, including response times, of the joint Environment Agency and Electricity Companies Operating Code on the Management of Fluid Filled Cable Systems Issue 3, 2013. Our strategy to address leakage from oil-filled cables is to replace them with alternative modern oil-free cabling and to respond quickly to leaks on legacy circuits.

We committed in our RIIO-ED2 business plan to maintain a leakage rate of less than 25,000 litres per year by 2028. In 2024/25 a total of 15,610 litres of oil was lost representing 1.6% of the total oil in service. We improved on this performance in 2025/26 with a leakage rate of 5,550 litres representing 0.6% of the total oil in service. We are committed to the removal of our oil-filled circuits over the longer term and regularly engage with our stakeholders on how we target those replacements.

Our asset management strategy has identified circuits for replacement in both RIIO-ED2 and beyond as part of our long term plan to entirely remove this type of cable from our network by 2045.



13. Wider Environmental & Other Activity

In 2025/26, we maintained our certifications to internationally recognised standards including:

- ISO 45001 (this is an international standard that specifies requirements for an occupational health and safety management system)
- ISO 14001 which covers environmental management systems and demonstrates our internal and external commitment to environmental improvement
- ISO 50001 for energy management systems

Climate resilience

The effects of climate change have led to some dramatic weather patterns in recent years. Storm Desmond in 2015 caused flooding at Lancaster's major substation leaving more than 60,000 customers without power. In 2025/26 we felt the impact of several named storms that had a significant impact on our network. We are committed to making our network more resilient to the potential impact of climate change and improving flood defences to our major substations including 1 in a 1000-year resilience for those serving more than 10,000 customers, in line with the national ETR138 standard.



Engaging with our stakeholders

Stakeholder engagement is critical for how we ensure that we are serving the needs of our customers in the North West. We know that engaging with our stakeholders will deliver better long-term outcomes for us and our region.

We are an integral part of the North West and play a key role in the development and delivery of the ambitions of the region. As the way we live our lives continues to change and the demand on energy increases we know that we need to engage with our stakeholders to help them live their lives, run their businesses and grow in the best way possible to secure a low carbon future.

Our stakeholder advisory panels are an integral part of our Stakeholder Engagement Strategy and are made up of key stakeholder organisations and individuals that provide insight into our stakeholders' priorities and help influence our business decisions.

The Environment and Sustainability Advisory Panel consists of environment and sustainability experts who provide advice, guidance and oversight of our sustainability performance. The panel has an independent chair and the aim of the panel is to inform our decisions on how we manage and alleviate our environmental impact within the region by providing feedback on environmental issues that we should prioritise as a business.

14. Appendix

We have included data on our 2025/26 environmental commitments in the following areas: business carbon footprint, SF_6, electricity distribution losses, supply chain management, resource use and waste, visual amenity, noise pollution, PCB and oil-filled cables in the Annual Environment Report KPI tracker, you can view the data here;

Environment report (enwl.co.uk)

You can access the following documents for 2025/26 on our website on the link:

- 2025/26 Environment and Innovation Reporting Pack
- 2025/26 AER KPI Template ENWL

15. Glossary

Abbreviation	Meaning
BNG	Biodiversity Net Gain
C4FN	C4-fluoronitrile
CMS	Competence Management System
CORD	Central Oil Reprocessing Department
EAP	Environmental Action Plan
ENA	Energy Networks Association
EU	European Union
GMT	Ground Mounted Transformer
GWP	Global Warming Potential
HV	High Voltage
IIG	Insulation and Interruption Gases
kVA	Kilo Volt Ampere (unit of power)
LV	Low Voltage

Abbreviation	Meaning
NGET	National Grid Electricity Transmission
PCB	Polychlorinated biphenyls
PMT	Pole Mounted Transformer
SBTi	Science-based target initiative
SF_6	Sulphur Hexafluoride
tCO_2e	Tonnes Carbon Dioxide equivalent

SP Electricity North West

SP Electricity North West
Borron Street
Portwood
Stockport
SK1 2JD

www.enwl.co.uk

SHK1919