

# Contents

ENWL: Who we are	3
Green Financing Framework	4
Allocation Report	7
Impact Report	8
External Assurance	12

## ENWL: Who we are

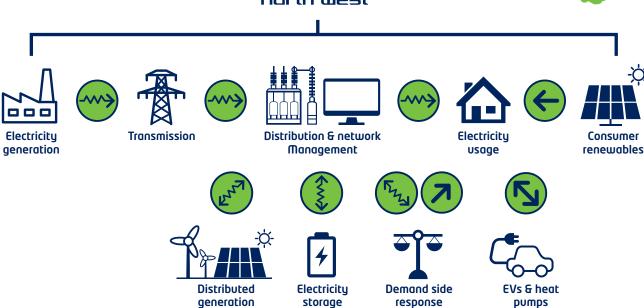
We are the electricity distributor for the North West of England delivering power to approximately 5 million customers at 2.4 million domestic and industrial locations.

Our electricity distribution network includes over 13,000km of overhead lines and c.47,000km of underground cables. We build, operate, and maintain our network through a workforce of c.2,300 employees and a large contractor workforce.

Electricity North West is fundamental to the Net Zero transition, managing power flows from a range of sources in a wider whole system as we move away from fossil fuels towards electricity for heating and transport.







We are currently delivering our business plan for the 5 year period from 1 April 2023 to 31 March 2028. Our plan is to lead the North West to Net Zero by investing in the operation, maintenance, and upgrading of the region's electricity network to enable our customers to move away from fossil fuels to clean, green electricity to power their cars, heating, and businesses.

Our long-term vision is to achieve net zero for our own business by 2038, in line with the aims of our regional stakeholders in the North West.

We are delighted to have issued our inaugural green bond in January 2023, and consider sustainable financing to be a key element of our financing and business strategy for the future.



# Green Financing Framework

ENWL's Green Financing Framework was published in September 2022. It is aligned to the Green Bond Principles published by the International Capital Market Association (ICMA) in June 2021 as well as the Green Loan Principles issued by the Loan Market Association (LMA) in January 2021. Sustainable business assurance provider DNV have confirmed that the Green Financing Framework aligns to these Principles.

### ENWL's Green Financing Framework □

The Framework sets out our plans for investment to decarbonise our network and reduce the environmental impacts of our activities. It governs the use of proceeds of any green bonds or green loans issued by the business (collectively 'Green Debt Instruments' or 'GDIs') to finance or refinance Eligible Green Projects.

We have established a Sustainable Financing Committee, that meets at least annually, which will provide governance and oversight over our sustainable financing activities and to:

- Review and monitor the eligibility of green projects;
- Monitor the allocation of GDI proceeds to Eligible Green Projects;
- · Monitor the management of unallocated proceeds;
- Monitor the environmental impact of investments and Key Performance Indicators ('KPIs'); and
- · Review and approve annual impact reports.

# UN Sustainable Development Goals and EU Taxonomy

The Framework is aligned to the relevant United Nations Sustainable Development Goals (UN SDGs) and the EU's classification of environmentally sustainable economic activities as per the EU Taxonomy Delegated Acts (EU Taxonomy).



ICMA/LMA Eligible Green Projects category	ENWL Environmental KPI	Contribution to the UN Sustainable Development Goals	Contribution to the EU Taxonomy
Renewable Energy	Additional capacity of renewable energy connected (MW) Number of EV charging points connected	Target 7.2: By 2030, substantially increase the share of renewable energy in the global energy mix  Target 13.2: Integrate climate change measures into policies, strategies and planning.	Environmental objective: Climate Change Mitigation  Substantial contribution to climate change mitigation (1.a): generating, transmitting, storing, distributing or using renewable energy in line with Directive (EU) 2018/2001, including through using innovative technology with a potential for significant future savings or through necessary reinforcement or extension of the grid Selected economic activity: Transmission and distribution of electricity
Energy Efficiency	Electrical losses prevented (GWh)	Target 7.3: By 2030, double the global rate of improvement in energy efficiency  Target 9.4: By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies	Environmental objective: Climate Change Mitigation  Substantial contribution to climate change mitigation (1.b): Improving energy efficiency, except for power generation activities that are referred to in Article 19(3))  Selected economic activity: Transmission and distribution of electricity
Pollution Prevention & Control	Oil Leakage (litres)	Target 12.4: By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil	Environmental objective: Pollution prevention and control  Selected economic activity: Transmission and distribution of electricity
Green Buildings		Target 11.6: By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management	Environmental objective: Climate Change Mitigation  Substantial contribution to climate change mitigation (1.b): Improving energy efficiency except for power generation activities that are referred to in Article 19(3))  Selected economic activity: Construction and renovation of new buildings

ICMA/LMA Eligible Green Projects category	ENWL Environmental KPI	Contribution to the UN Sustainable Development Goals	Contribution to the EU Taxonomy
Climate Change Adaption	Sites flood protected	Target 13.1: Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries	Environmental objective: Climate Change Adaptation  Substantial contribution to climate change adaptation (1.a): adaptive solutions that substantively reduce the (risk of) adverse impact of the current and expected future climate on that economic activity itself, without increasing the risk of an adverse impact on other people, nature and assets  Selected economic activity: Transmission and distribution of electricity
Environmentally Sustainable Management of Living Resources and Land Use	Number of trees planted	Target 15a: Mobilise and significantly increase from all sources financial resources to conserve and sustainably use biodiversity and ecosystems	Environmental objective: Protection and restoration of biodiversity and ecosystems  Selected economic activity: Transmission and distribution of electricity
Clean Transportation		Target 11.2: By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all improving road safety, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.	Environmental objective: Climate Change Mitigation  Substantial contribution to climate change mitigation (1.c): Increasing clean or climate-neutral mobility  Selected economic activity: Transmission and distribution of electricity



# **Allocation Report**

The group's first Green Bond was issued by ENW Finance Plc in January 2023. This report is the first ENWL Green Bond Allocation and Impact Report. The allocation of bond proceeds to Eligible Green Projects is described below. In the next section, some of the key environmental impacts are highlighted.

ISSUANCE	£425m 2032 bond
ISSUER	ENW Finance plc
AMOUNT	GBP 425m
SETTLEMENT DATE	24/01/2023
MATURITY	24/11/2032
COUPON	4.893%
ISIN	XS2526885442
ALLOCATED	GBP 420.4m
UNALLOCATED	GBP 4.6m



	Amount of Eligible Green Projects <sup>1</sup>				ts¹
	FY21 £m	FY22 £m	FY23 £m	FY24 £m	Total £m
Eligible Green Projects Category					
Renewable Energy	28.1	35.5	78.3	30.5	172.4
Energy Efficiency	39.6	34.2	40.0	52.4	166.1
Pollution Prevention & Control	12.9	10.6	19.3	21.9	64.7
Green Buildings	1.0	0.4	0.3	0.4	2.0
Climate Change Adaption	1.6	0.6	0.7	1.5	4.5
Environmentally Sustainable Management	2.4	2.3	2.0	1.3	8.0
Clean Transportation	0.5	0.4	1.0	0.9	2.7
Total Amount of Eligible Green Projects	86.1	84.1	141.5	108.8	420.4
Total Allocated Amount					420.4
Green Bond Proceeds					425.0
Unallocated Bond Proceeds					4.6

<sup>&</sup>lt;sup>1</sup> Financial Years run from 1 April to 31 March.



## **Impact Report**

For a full view of ENWL's environmental impact, we encourage readers to refer to our annual Environment Report, available on our website <a href="Mercel-2">here</a>. The Environment Report includes case studies and analysis across all areas of environmental impact.

This section highlights a small sample of the positive environmental benefits delivered by the company's recent investment.

### Renewable Energy

#### **Supporting Customers to Net Zero**

As part of our commitment to supporting customers reach their net zero targets, we want to ensure that communities have the support they need to reduce, manage, generate and purchase their own energy. Over the past four years we have seen the number of community energy groups in the region almost double. Our aim is to support community and local energy schemes to help deliver a just energy transition.

# Additional Capacity of Renewable Energy Connected

The drive towards a
Net-Zero economy relies
on connecting much more
renewable generation
and LCT to the network
quickly and without the need
for expensive and disruptive
network reinforcement.

...what is certain is that electricity forms a critical part of the UK's net zero strategy

Our key challenge is to provide the capacity to allow customers to adopt these technologies whenever they wish to. While much uncertainty exists around the future technology mix, what is certain is that electricity forms a critical part of the UK's net zero strategy and our plan is designed to be flexible to meet that demand in an efficient and timely manner.

KPI: We have enabled the connection of 70.1MW of renewable generation capacity to our network since FY21:

	Units	FY21	FY22	FY23	FY24	Total
Additional capacity of renewable energy connected	MW	6.9	6.2	19.9	37.1	70.1

#### **EV Charging Points Connected**

Over the next 20 years, we expect demand for electricity to increase significantly (up to double) as we move our reliance away from fossil fuels and more people adopt electric vehicles. We will ensure that network capacity is there and it's increasingly important that we support our customers transition to a Net-Zero economy by connecting Low Carbon Technologies (LCTs) such as renewable energy, heat pumps and electric vehicles (EV) to our network.

As a key part of our responsibility to lead the North West to zero carbon we will help our customers move to electric vehicles. The government has brought forward to 2030 the date by which the sale of new pure petrol and diesel vehicles will be banned. We will facilitate the uptake in electric vehicles by providing a free connection for EV charging posts at domestic properties where these can be installed.

KPI: We have enabled the connection of 24,151 EV charging points to our network since FY21:

	Units	FY21	FY22	FY23	FY24	Total
EV Charging Points connected	Number	2,520	3,791	9,999	7,841	24,151

The EV charging point connections include the expansion of EV charging at our offices and depots, enabling the decarbonisation of our fleet and enabling our staff to decarbonise their transport.

## **Energy Efficiency**

#### **Electrical Losses Prevented**

We are committed to reducing losses on our network through a number of initiatives which are detailed in our Losses Strategy<sup>2</sup>. Technical losses are the energy used up in the transportation of power for distribution networks. Cables, overhead lines and transformers used to transfer or distribute electricity to and from customers have resistance and therefore use up electrical power, usually through getting hot. Investment to reduce technical losses has a direct environmental benefit in improving energy efficiency.

As part of our ongoing connection, asset replacement and reinforcement activities, we have installed or replaced a significant number of transformers. Our current policy ensures that new transformers installed on our network

are low loss units and comply with, or exceed, the energy efficiency standards required by the European Commission (EU). Our investment to reduce technical losses also includes opportunistic LV and HV cable replacement, and the reduction in losses through the use of larger lines and cables can be significant.

KPI: Electrical Losses on our network have been reduced by the following amounts each year since FY21:

	Units	FY21	FY22	FY23	FY24	Total
Electrical Losses Prevented	GWh	3.5	2.5	1.6	3.6	11.1

#### **Pollution Prevention**

# Leakage Reductions From Fluid Filled Cables (actual volumes)

Some of our largest cables are of an historical design and insulated with mineral oil. This is an effective electrical insulator but physical damage to the cables or deterioration over time can result in some of the oil being lost to the environment.

We committed in our RIIO-ED1 business plan to maintain a leakage rate of less than 30,000 litres per year by 2023. For RIIO-ED2, our commitment is to maintain leakage below 25,000 litres per year between 2024 and 2028. We have established an Oil Filled Cable Management Group to track progress against our planned asset replacement programme for all oil-filled cables by 2040. This includes identifying innovative approaches to managing oil loss from our circuits but also ensuring that we maintain electrical supply to our customers.

Our oil recycling facility at Blackburn continues to play a significant part in managing our environmental impacts by

allowing us to minimise the use of raw materials and disposal of waste oil. This process increases the lifespan of our assets as we have better control of the quality of oil and reduces our reliance on virgin oil, which saves our customers money and reduces our environmental impact.

Our facility continues to be one of a kind within our industry, and reuses 97% of our oil. This year we also introduced our new oil processing unit. The unit is self-contained and enables us to process and regenerate recovered oil on site, improving our efficiency and further reducing our impact on the environment.

KPI: Oil Losses since FY21 have been consistently below the target of 30,000l/yr in FY21-FY23 and 25,000l/yr in FY24:

	Units	FY21	FY22	FY23	FY24	Total
Oil losses	Litres	16,998	13,266	13,217	17,545	61,026

#### **Transformer Regeneration**

Transformers are key items of electrical equipment that transform electricity from one operating voltage to another and are usually insulated with mineral oil. We have been implementing transformer regeneration approaches as an alternative to traditional asset replacement. The regeneration activities are being undertaken on those assets which are categorised as 'end of life' due to their condition. Regeneration activities are also being undertaken on those transformers categorised as 'mid-life' in order to determine the optimum point in a transformer's life cycle to implement oil regeneration activities to further extend the life of the asset.

The environmental benefits result from extending the life of an existing transformer and its oil therefore reducing the requirement for disposal of and/or recycling of used oil and scrapping of the transformer. The full costs and benefits are claimed within the year of completion.

https://www.enwl.co.uk/future-energy/distribution-system-operation/electrical-losses



## **Green Buildings and Clean Transportation**

Ongoing investment reduces the carbon footprint of our buildings, with refurbishment targeted on the installation of more energy efficient equipment such as LED lighting across our offices, installing heat pumps in our Workington site. Ongoing promotion of energy reduction behaviour with our employees is driving down the electricity usage of our buildings. Meanwhile the roll-out of EV charging points on our sites enables our employees to choose low carbon transport options and enables parts of our vehicle fleet to transition to EVs.

## **Climate Change Adaption**

#### **Site Flood Protection**

The effects of climate change have led to some dramatic weather patterns in recent years, which have had an adverse impact on our network and our customers.

For example, in 2015, Storm Desmond caused flooding at Lancaster's major substation, cutting power to more than 60,000 customers. We invested £6m to raise key equipment at the substation three metres above the ground, to keep them safe if the site flooded again.

We continue to invest in improving flood defences at our highest voltage substations in line with recommendations from the National Flood Resilience Review<sup>3</sup>, in addition to addressing sites newly identified as at risk based on the latest Environment Agency flooding data.

The current program of investment spans the 5 year price control from FY24 to FY28 and we expect to complete the flood protection of further sites throughout the period.

KPI: Sites flood protected since FY21:

	Units	FY21	FY22	FY23	FY24	Total
Sites flood protected	Number	1	7	3	-	11

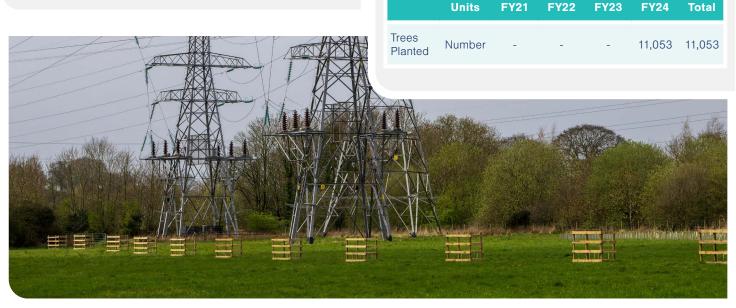
## Environmentally Sustainable Management of Living Natural Resources and Land Use

#### **Trees Planted**

As part of our biodiversity commitments in the Environmental Action Plan, we have committed to plant 50,000 trees within our corporate estate by 2028, equivalent to 10,000 trees per year starting FY24. This objective aims to compensate for the hazardous trees removed from our overhead powerline network during essential cyclical vegetation management, which is undertaken to provide a safe, reliable and continuous electrical supply for our customers. This planting goal also supports our additional Environmental Action Plan biodiversity enhancement objective to increase the natural capital value of our estate through the delivery of ecosystem services such as flood control, carbon sequestration, cleaner air, aesthetic, health and wellbeing improvements and an increase in habitat available for wildlife.

Prior to FY24, we made areas of our corporate estate available for third parties to plant trees. As third parties incurred the cost of the pre-FY23 tree-planting program, we have excluded those from the KPI on the basis they were not delivered through the Green Bond Proceeds.

KPI: trees planted:



<sup>&</sup>lt;sup>3</sup> https://www.gov.uk/government/publications/national-flood-resilience-review

# KPI summary and methodology

The below table summarises the KPIs referenced above. All KPIs reported relate to the activities within Electricity North West Limited in the relevant financial year, which runs from 1st April to 31st March each year.

КРІ	Units	FY21	FY22	FY23	FY24	Definition
		Apr-20 – Mar-21	Apr-21 – Ma	Apr-22 – Mar-23	Apr-23 – Mar-24	
EV chargers connected	Number	2,520	3,791	9,999	7,841	Number of additional EV chargers connected to the network during each financial year
Additional capacity of renewable energy connected	MW	6.9	6.2	19.9	37.1	Additional capacity of renewable generation connected to the network during each financial year
Electrical losses prevented	GWh	3.5	2.5	1.6	3.6	Ongoing reduction in electrical losses as a result of in-year installation of efficient transformers and cables.  Loss calculations are based on transformer resistance values and the difference in calculated loss load factors between old and replacement cable
Oil losses	Litres	16,998	13,266	13,217	17,545	Leaks result in reduced system pressure which triggers alarms for intervention. Each of these is logged in an internal system. The volume of oil used to top up the system is assumed to equal the leakage
Sites flood protected	Number	1	7	3	-	Substations where the level of flood protection is increased to the level determined by national standard ETR138 and our internal policies
Trees planted	Number	-	-	-	11,053	Trees planted during the year which have been funded by the company



## **External Assurance**

DNV has conducted limited assurance over the selected KPIs published in this report as well as over the claims and assertions relating to the allocation of funds under ENWL's Green Financing Framework.

DNV's assurance statement over this impact report is available <u>here</u> <sup>™</sup>.



