

Bringing energy to your door

Regional Stakeholder event

Greater Manchester

November 2024













Mentimeter

Go to www.menti.com Enter code 53 44 09 7



Or use QR code

- There are no planned fire drills
- National Grid Transmission are here to collaborate on the day's themes
- Mentimeter Poll: What type of stakeholder are you? What regions do you represent? How often do you engage with us?
 What topics are you interested in?

We have a photographer here today, if you are not comfortable with your image being captured, please make a member of Electricity North West aware.

Agenda



















Who we are and what we do

Investment & delivery

Political change & energy policies

Stakeholder Advisory Panel interview

Environment & biodiversity

Innovation

Consumers in vulnerable circumstance

Roundtable discussion

Welcome

Q&A

Break



Q&A, Lunch & networking

Go to
www.menti.com
Enter code
25 71 16 0

There will be plenty of opportunities to ask questions throughout today, if you have a question during a presentation, please submit via Mentimeter:

Pelectricity north west Bringing energy to your door

Speaking today



Ben Grunfeld
Strategy & Growth Director,
Electricity North West



Jonathan Booth
Head of Asset Management,
Electricity North West



Vincent Cranny
Head of Capital Delivery
Programme,
Electricity North West



Oliver Smith
Press & Public Affairs Manager,
Electricity North West



Elise Wilson Chair, Economic Growth Panel



Todd Holden
Chair, Environment &
Sustainability Advisory Panel



Ben Scott
Environmental Manager,
Electricity North West



Richard Mosson Biodiversity Manager, Electricity North West



Neil McClymont Head of Innovation, Electricity North West



Helen Seagrave
Community Energy Manager,
Electricity North West



Sam Loukes
Head of Customer Inclusion,
Electricity North West



Who we are and what we do



Ben Grunfeld Strategy and Growth Director









Here for the North West



- We're the North West's power network.
- Our overhead lines, underground cables and substations bring power to 5 million people in
 2.4m homes and businesses.
- We invest billions of pounds in the region focusing on key areas of safety; reliability; customer service and net zero.
- Regulated by Ofgem and engage stakeholders to develop our five-year business plans.





Number of

customers 2.4m



lines 12,519km



Underground

cables 44,872km



Total network length **57,415km**

Submarine cables 23km

Stakeholder engagement



Stakeholder engagement is very important to us:

- Identifies opportunities to improve services and deliver greater value to our customers
- Helps us better understand our region and our customers' needs
- Manage uncertainty and risk
- Aids collaboration and shared learning and influence
- Informs our decisions
- Helps drive our current activity and future business planning
- Helps inform our regulator and affects our investment
- Critical to our current RIIO-ED2 Business Plan and future RIIO-ED3 Business Plan

Helps us to help you and support the region





Bringing energy to your door

Investment & delivery

What's the plan and how are we going to deliver it?

Jonathan Booth
Head of Asset Management
jonathan.booth@enwl.co.uk

Vinny Cranny Head of Capital Delivery

vincent.cranny@enwl.co.uk









Snapshot of our current business plan (2023-2028)



Our investment in numbers

OVER £2bn

we'll invest over £2bn in the network from now to 2028

we aim to **OVER** increase our customer service scores

20%

we aim to keep power flowing by reducing customers' time without power by 20%

OVER

we'll invest more than £1m per day into the network

18,000

we developed our plans with input from over 18,000 customers and stakeholders

£123

Our part of your electricity bill will remain low (around £120 per year)

Network

We will remain one of the world's most reliable networks, reducing the number of power cuts and the average time people are without power by 20%

Net Zero

We will drive the transition towards local Net Zero targets, through distribution system operation, following a path to making our own operations Net Zero by 2038



We will deliver at least a 9/10 level of customer service and provide additional support to electricity users in vulnerable circumstances and fuel poverty

What's the plan? – RIIO-ED2 Strategy

黄圆黄黄

- Our investment plan for 2023 2028 delivers our three key goals supported by a range of clearly identified commitments
- This plan was co-created with stakeholders and customers to reflect their needs and requirements of us
- We report our delivery against these commitments every year

Business plan commitments report

- Some of the funding for the plan has to be applied for within period and stakeholder support is proving vital to this
- We are also starting our planning for the 2028 – 2033 plan and your input will be fundamental to this

Vision: Leading the North West to Net Zero

We will drive the transition towards local Net Zero targets, through distribution system operation, following a path to making our own operations Net Zero by 2038



- Our network will not be a barrier to connecting EV chargers or other low carbon technologies
- Enabling climate change targets to be met efficiently through flexible distribution system operation and innovation
- A fair and inclusive energy transition with measures to ensure no one is left behind
- Joined-up whole systems benefits through customer and stakeholder partnerships

We will remain one of the world's most reliable networks, reducing the number of power cuts and the average time people are without power by 20%



Primary benefits of our plan

- We will have no 'worst-served' customers by Ofgem's broader definition, by 2028
 - 6. Customers will experience less time without power than ever before
- The network will be resilient with particular focus on network resilience, workforce resilience and cyber resilience

We will deliver at least a 9/10 level of customer service and provide additional support to electricity users in vulnerable circumstances and fuel poverty



- Quality customer service with customer and stakeholder input into our ongoing plans
- Extra help for those who need it, when they need it
- Innovation and efficiency at the heart of our plan giving customers the lowest possible bills

Our £2bn investment in the North West

Driving to Net Zero – the network impacts

The last three years have seen unprecedented requests for new connections, especially in the major generation sector

- We have seen a ten-fold increase in the capacity of new connections joining the pipeline each year - from just under 400MW in 2020 to more than 4GW this year alone.
- The current pipeline of major connections is ~8.7GW, with approximately 1.7GW in Cumbria.
- The industry is looking to address current connection lead-times and ENWL are supporting Government, Ofgem, the ESO, National Grid, the ENA and DNO's to reform the connections process
 - Ofgem's Connection Action Plan
 - ESO's Five Point Plan and Connections Reform
 - ENA and DNO's <u>Three Point Plan</u>
- Moving towards an approach that, if projects are 'shovel ready', they can move up the connection queue in certain situations.

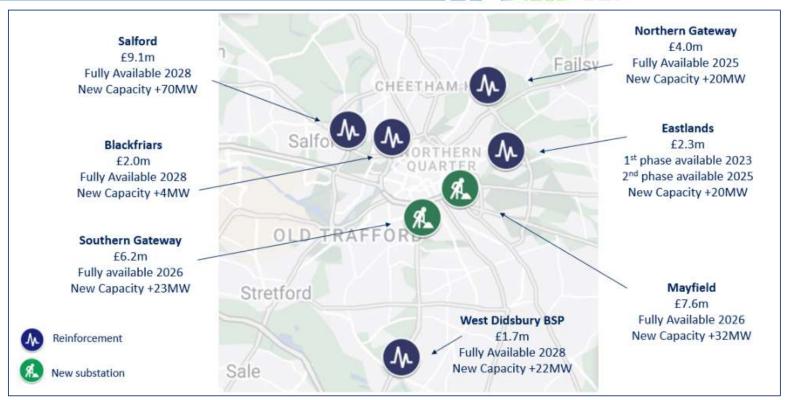


ED2 investment in Manchester – increasing capacity



Central Manchester Plan

- Seven load-related (reinforcement) projects in the central Manchester area
- These create 91MVA of additional BSP capacity and 98MVA of Primary capacity
- This boosts the available network capacity in the Manchester region and addresses shortfalls at existing sites



Upgrading strategic capacity

- Upgrades to South Heywood (£7m) and Wigan (£6m) substations
- New generation connections
 - £29m to facilitate new renewable generation at Tunstead Quarry (Buxton) and Tritax (St. Helens)

ED2 investment in Manchester- reliability and resilience



Numerous programmes to replace assets across Manchester to improve reliability including:

- Upgrading National Grid Connections
 - £30m upgrade of the South Manchester substation to replace original equipment and secure enhanced capacity. Complete 2030.
- Oil-filled cable replacement £28m to replace legacy cables posing an environmental risk
 - £18m Whitegate Greenhill (Oldham)
 - £10m Agecroft Frederick Rd (Salford)
 - Following completion of South Manchester substation upgrade, we will replace the South Manchester – Stretford oil-filled cables (estimated ~£20m, completion 2030)



ED2 investment in North West – innovation



Smart Street

Using innovative voltage control technology, Smart Street will enable our networks and customers' appliances to perform more efficiently and make it easier for low carbon technologies to connect to the electricity network in the future. Improving energy efficiency and reducing bills for 250,000 customers.

f64m

Savings up to **£70**

per year

Customers Impacted **250,000**

LineSIGHT

Faults on rural networks can sometimes cause overhead power lines to hang low whilst remaining live, which also creates a public safety hazard. New technology developed by Electricity North West will enable the detection of damaged equipment earlier and help us to pinpoint the location of faults, enabling more efficient despatch of repair crews.

Investment

£46m

Overhead Line Impacted 800km

Estimated Completion March 2028

CLASS

Our award-winning CLASS project uses innovative voltage control to reduce demand for electricity without customers noticing a difference to their service. CLASS (Customer Load Active System Services) is a low-cost solution which uses voltage control to manage electricity consumption at peak times. By installing cutting edge 'voltage controllers' in our substations we could save customers in the North West around £100 million over the next 25 years

CLASS revenue shared with customers

50%

North West customer savings

£100m

Fully installed and operational

Dig, Fix and Go

A bespoke incentive mechanism that aims to drive a transformational change to reduce the disruption our emergency street works cause to our customers and stakeholders. This is a proposal formed and led by our customer and stakeholder feedback. Reducing disruption by accelerating emergency street works to below 5 days on average.

Investmen annually

£5m

Average duration emergency street works

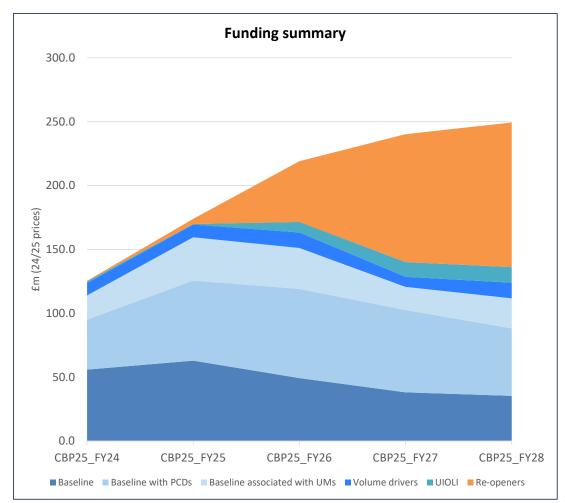
5.8 days

1 day reduction benefit per year £21m

Our investment programme - overall five-year view



- Our current view of the capital investment plan totals £1bn over the five years
- This increases significantly through the five years
- There are a range of funding types and the plan relies on successful applications to Ofgem for further funding through a series of specific 're-openers'
- Next major re-opener opportunity in January – Load-Related Re-opener
- Storm Arwen outcome
- 75% secured funding; 25% requires future applications to secure
- Engagement is key to successful delivery



Manchester We're delivering! £3.8m £1.4m £1.9m £3.3m £0.8m Littleborough **Bolton** Rochdale **Moss Nook** Golborne 9 completed Transformer **Transformer** 4.2km oil-filled Circuit upgrades for **Substation** upgrade replacement replacement cable replacement capacity On site 2024 Completed 2023 Completed 2023 On site 2024 On site 2024 on site Bury Bolton Shaw Royton £7.7m £5.2m £5.6m Farnworth Westhoughton Wigan Oldham South Manchester Enterprise Zone Prestwich Rochdale **Bolton** M60 Flood protection New substation Substation upgrade Ashton-Under-Lyne Manchester Including: Completed 2022 Completed 2024 On site 2024 Urmston Denton Glossop Stockport Romiley 20km of oil-filled £5.1m £2.7m £2.1m Marple Warrington Altrincham cable replaced Radcliffe **Piccadilly Stuart Street** Substation upgrade Substation upgrade Circuit transfers for capacity Wilmslow 3 transformers On site 2024 Completed 2022 Completed 2022 Lower Knutsford Bollington Nether replacements Alderley £2.7m £2.3m £1.8m A5377 £1.1m £1.4m Maccle

Stockport

Transformer

replacement

On site 2024

4 substation

upgrades

Eastlands

Substation upgrade

for capacity

On site 2024

Handforth

12.6km oil-filled

cable replacement

Completed 2024

Stockport

2.4km oil-filled

cable replacement

Completed 2024

Macclesfield

Transformer

replacement

Completed 2024

Delivery strategy



To ensure the delivery of the ED2 programme, ENW is transforming its network investment programme management capabilities

The creation of a single Capital Delivery function, including a governing Programme Management Organisation (PMO)

Changing of the supply chain procurement process

Improving community engagement

Delivery strategy - Governed project management process



Stage A
Initiation Needs

Stage B
Concept & definition

Stage C Full approval

Stage D Delivery Stage E Handover

Purpose and outputs

Intervention raised & acknowledged

Project execution strategically outlined

Project team appointed

Planning funds secured

Project management plan produced

Project nominated for board reviews

Risk register initiated

Level 2 programme developed

Quality plan initiated

Spend profile created

Optioneering

CHIME updated

Procurement defined & contracts awarded

Project performance report

Defined cost & duration as an output from the C&D phase

Programme risk register and cost profile should be used to decide Go No-go Mobilisation plan

Designer CDM documents prepared

Change log produced

Construction phase plan produced

Detailed design

Construction

Full P6 programme baselined & agreed

Electrical commissioning

CDM Health & Safety file prepared

Post project review

Improving community engagement

- Managing communications activity related to our investment programme
- Developing tailored communications plans for each project, ensuring appropriate stakeholder and customer engagement from councils and MPs to businesses and the local media
- Working with designers to ensure consistent use of marketing materials including signage, banners, and other collateral relating to our investment programme and individual projects
- Work closely with planning and operational teams to understand and plan communications activity to support our work throughout the North West
- Develop specific webpages for projects as required



- Arrange photography and video as appropriate to the needs of each project as well as bringing other creative ideas to the table to promote our work
- Work with the customer team to understand customer satisfaction impacts of communications activity to ensure continuous improvement

Changing of our supply chain procurement process



Pre-Award

- Pre-market engagement
- Open tenders
- Driving improvement and lowering
- the cost of delivery
- Seeking variations to our specifications
 challenge us
- Data led, supportive negotiations
- Looking to reward partners that share risk with us
- Looking to commit to work volumes where possible

Post-Award

- Supplier development
- Strategic relationship management
- Partnership approach accountable ELT and shared challenges
- Work with partners to guarantee work packages and give our supply chain the confidence to invest in their resources



Bringing energy to your door

Political change & energy policies

Oliver Smith

Press & Public Affairs Manager

oliver.smith@enwl.co.uk





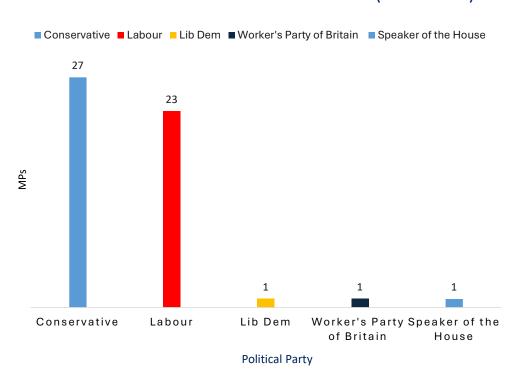




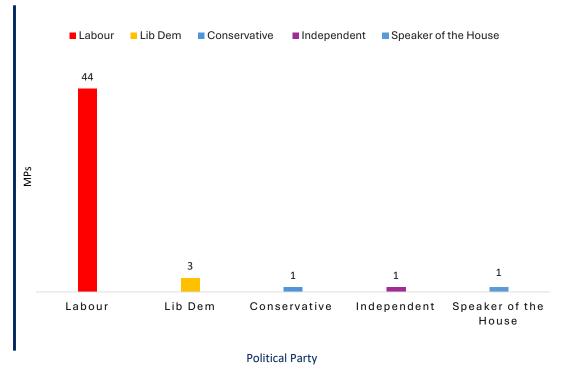
Scale of change in North West



MPs in ENWL area before election (June 2024)



MPs in ENWL area after election (July 2024)



Scale of change in the North West





Deputy Prime Minister @AngelaRayner

Angela Rayner Ashton under Lyne



Jonathan Reynolds Business and Trade Secretary @jreynoldsMP

Stalybridge and Hyde

10% of all of Labour's MPs are now in the North West.

Four of the 25 MPs in the new Cabinet (15%) are North West (Greater Manchester) MPs.



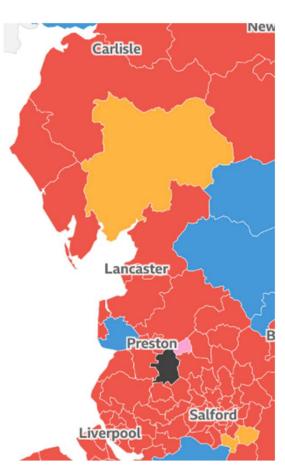
Lucy Powell Leader of the Commons @LucyMPowell

Manchester Central



Lisa Nandy Culture Secretary @lisanandy

Wigan



Black = speaker Pink = independent The two large blue areas to the east are 99% out of area and not included in our count of 51 MPs.

Government priorities: Mission driven



Labour's Manifesto set out the Prime Minister's intention to create new 'mission boards' to deliver his five main pledges.

- Inspired by UCL academic Mariana Mazzucato, Starmer has adopted her mission-driven theory and aims to put this into practice.
- The new mission delivery boards will be formed of cross-departmental panels and tasked with progress on each of the five missions
- Each board will be chaired personally by Sir Keir Starmer and are expected to draw on private sector expertise

'Mission Control' for clean power by 2030

- To be led by Chris Stark, former Chief Executive of the Climate Change Committee
- Tasked with delivering the clean power mission by 2030
- Mission Control will be a 'one-stop shop', bringing together a top team of industry experts and cross-departmental officials, including Ofgem, National Grid and the Electricity System Operator

Mission-driven government

1) Kickstart economic growth

to secure the highest sustained growth in the G7 – with good jobs and productivity growth in every part of the country making everyone, not just a few, better off.

2) Make Britain a clean energy superpower

to cut bills, create jobs and deliver security with cheaper, zero-carbon electricity by 2030, accelerating to net zero.

3) Take back our streets

by halving serious violent crime and raising confidence in the police and criminal justice system to its highest levels.

4) Break down barriers to opportunity

by reforming our childcare and education systems, to make sure there is no class ceiling on the ambitions of young people in Britain.

5) Build an NHS fit for the future

that is there when people need it; with fewer lives lost to the biggest killers; in a fairer Britain, where everyone lives well for longer.

Labour energy plans



%Labour

'Make Britain a Clean Energy Superpower'

- Create Great British Energy, backed by £8.3 billion over the next Parliament.
 - GB energy will partner with industry & trade unions, co-invest in leading technologies, help support capital-intensive projects and deploy local energy.
- Bring forward a new Energy Independence Act, deliver clean power by 2030 but maintain strategic reserve of gas.
- Establish a National Wealth Fund, with £7.3 billion over the next Parliament.
- Restore the 2030 phase-out date for new cars with internal combustion engines and insulate homes with \pounds 6.6 billion for the Warm Homes Plan.

On devolution:

- Establish a new requirement for Local Growth Plans, and deliver greater powers for local areas, including on transport, skills and planning.
- Establish a new Council of the Nations and Regions (including Mayors of Combined Authorities).

Infrastructure:

- Develop a ten-year infrastructure strategy, aligned with regional development priorities and new Industrial Strategy Council.
- Work with industry to upgrade our national transmission infrastructure and rewire Britain.
- Create a National Infrastructure & Service
 Transformation Authority (NISTA) to set strategic infrastructure priorities.

Regulation:

- Strengthen the regulator to ensure it can hold companies to account.
- Create a new Regulatory Innovation Office.
- Work with Ofgem to reduce standing charges.
- Deploy more distributed production capacity via the Local Power Plan.

The Government's energy mission

'Make Britain a Clean Energy Superpower'

- Deliver a zero-carbon electricity system by 2030 and set up GB Energy to drive forward investment in clean energy; backed by £8.3 bn over next Parliament.
- GB Energy Bill introduced. GB Energy will:
 - Take action to drive forward clean energy deployment, including, but not limited to, investing in new technologies and partnering with the private sector.
 - Invest in, own, manage and operate energy projects.
 - Support decarbonisation through energy efficiency measures (e.g. co-locational generation).

Other relevant commitments towards the 2030 target:

- Insulate homes with £6.6 billion for the Warm Homes Plan via grants & low interest loans to support investment in insulation technologies, delivered in partnership with combined authorities.
- Restore the 2030 phase-out date for new cars with internal combustion engines and accelerate the roll out of EV charge points.
- Deliver **NESO** as a system architect, with a key role in developing regional plans.

Further than the above, **key (and tricky) questions remain around the future of REMA, e.g., national vs zonal pricing.**

Key takeaways:

Government is already acting at pace towards delivery of its 2030 target:

- Ended the de facto ban on onshore wind
- Consented three large-scale solar farms
- Established Mission Control, led by Chris Stark
- Progressed GB Energy Bill, with Juergen Mair CBE (vice-chair of NPP) appointed as Chair of GB Energy
- Announced GB Energy partnership with Crown Estate

GB Energy will also be the delivery vehicle for the **Local Power Plan,** with £3.3bn available to:

- Provide low interest loans and grants towards smallscale clean energy projects.
- Support local and combined authorities, and community energy groups by providing commercial, technical and project-planning assistance.
- Work with local leaders and devolved government to ensure **delivery of local benefits.**

Green Growth



Energy & Infrastructure

Energy policy emerging as a policy bright spot for Govt, with swift action on energy praised, including in the PM's conference speech.

- NESO launched on 1 October & tasked with setting out initial roadmap to 2030. As part of this, NESO is seeking input on:
 - ESO's working definition of clean power.
 - The demand and supply mixes that can achieve clean power.
 - Transmission network reinforcements, trade-offs between the needs of the consumer, the environment and communities, and clean power system.
 - Policy and enablers.
- Planning & Infrastructure Bill expected on 30 October but now reportedly delayed until January 2025.
 - Still waiting for detail on National Infrastructure and Service Transformation Authority (NISTA), Connections Action Plan, & Strategic Spatial Energy Plan.
- GB Energy to be headquartered in Aberdeen:
 - Reflection of Govt's commitment to a fair transition & need to deliver for Scotland.
 - GB Energy Bill now at Committee Stage first evidence sessions on 8 October & 10 October.
- Action on insulation & Warm Homes Plan:
 - Government consulting on extending energy efficiency standards for social housing requirement for at least a C energy performance rating by 2030

Key takeaways:

2030 clean power target is the driving force of Government's energy policy

- NESO's initial view to 2030 will be key in setting out how feasible the target is, what this might look like, and what barriers need to be addressed.
- NESO seeking views on definition of clean power indicates potential flexibility around target:
 - 5 per cent of unabated gas to be allowed as part of the target
- Questions around GB Energy remain founding statement clarified what GB aims to achieve but not how.
 - Line by line examination of the Bill has commenced.
 - Committee Members include Polly Billington MP, Josh MacAlister MP & Andrew Bowie MP.

Green Growth



Devolution tied into Growth

Conference made clear the Government's commitment to delivering on devolution:

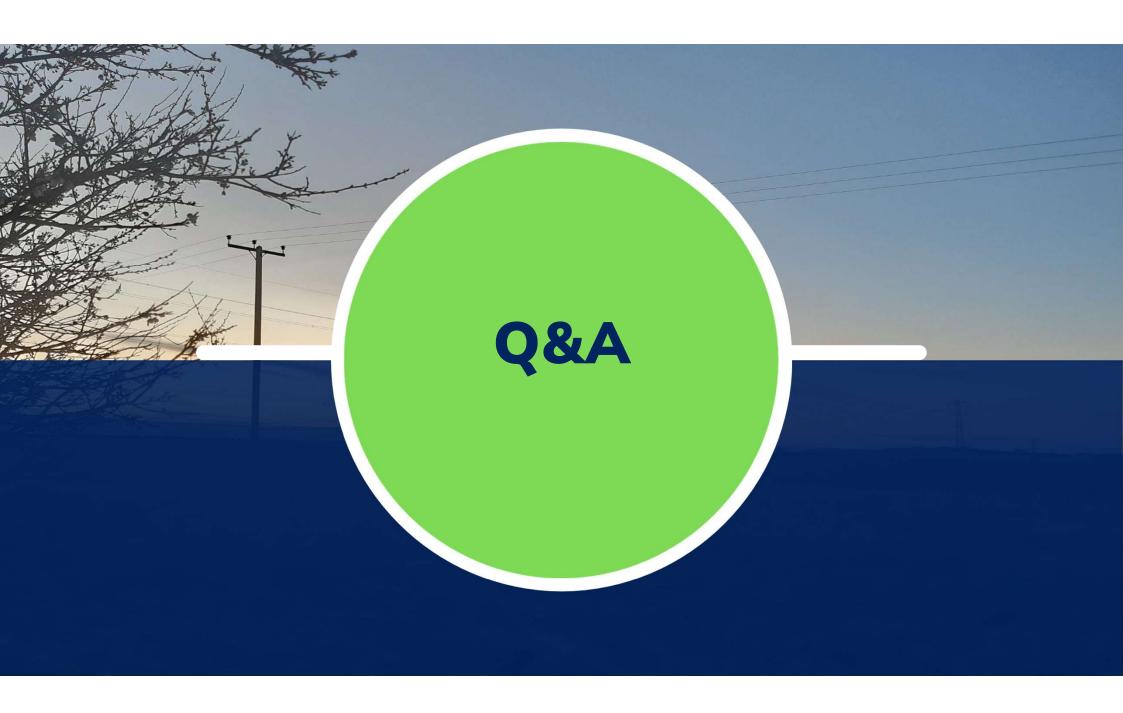
- Wave of devolution deals expected in May:
 - Regional Mayors in Greater Lincolnshire, Hull & East Yorkshire (May 2025)
 - Combined County Authorities in Devon & Torbay and Lancashire (Early 2024)
- Ambition for all parts of England to be covered by mayoral devolution, but priority is on first 'completing devolution in the North'.
- Existing mayors to develop Local Growth Plans to help drive regional growth.
- English Devolution Bill unlikely to be published before spring 2025 eventual.
- Moving forward with Mayors' Investment zones funding released investment zones for advanced manufacturing in the West Midlands and life sciences in West Yorkshire.
- New industrial Strategy announced by Chancellor to have a regional focus initial consultation expected on 30 October alongside Budget, with final Strategy in Spring.

"Devolution underpins our national mission to deliver economic growth for everyone, everywhere, raising living standards across the UK"

Key takeaways:

- Devolution is core to Government's growth strategy and interlinked with plans for reindustrialisation and attracting investment.
- Devolving post-16 skills, employment support, strategic planning, transport & housing.
- GMCA and WMCA held as models for devolution.
- "Greater Manchester, one of the places where devolution has existed for the longest and the powers are deepest, has been one of the UK's fastest growing areas over the last 20 years."
 MHCLG

Deputy Prime Minister & SoS for MHCLG Angela Rayner MP





Bringing energy to your door

Stakeholder advisory panel Chair interview

Elise Wilson Chair, Economic Growth Advisory Panel

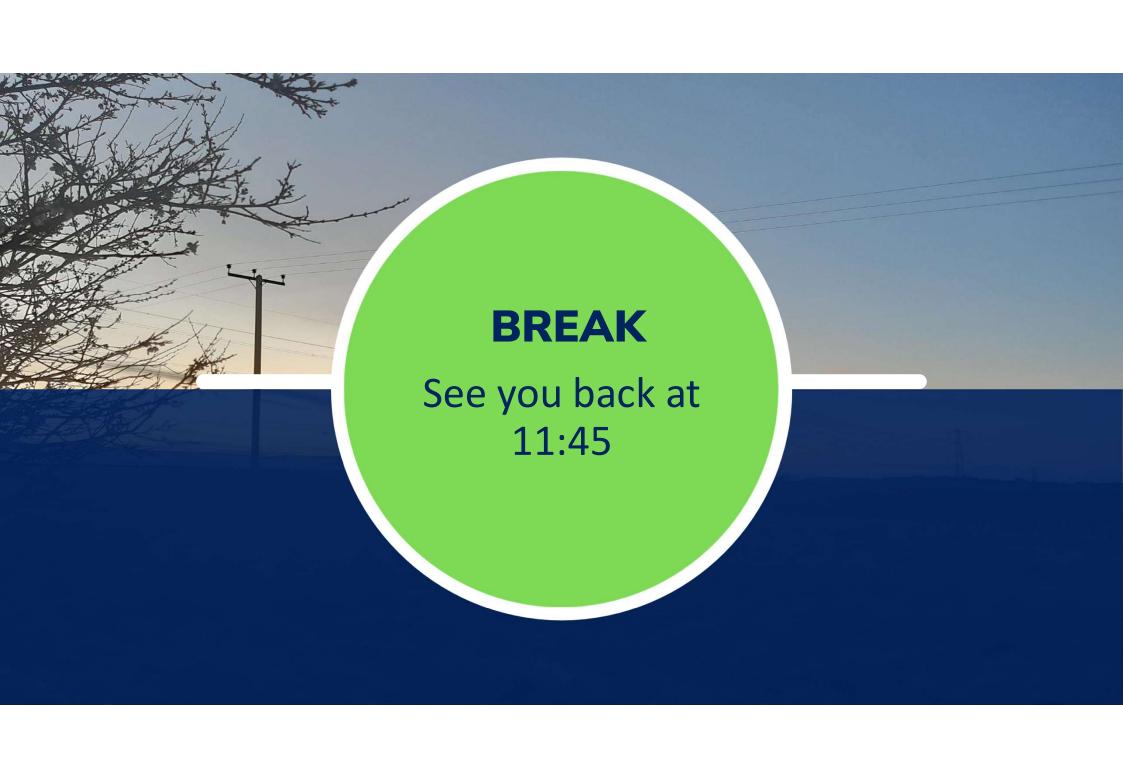
Todd Holden Chair, Environment & Sustainability Advisory Panel













Bringing energy to your door

Environment & biodiversity

Ben Scott
Environmental Manager
ben.scott@enwl.co.uk

Richard Mosson
Biodiversity Manager
richard.mosson@enwl.co.uk









Environment Action Plan





Environment Action Plan Goals





Goal 1: Become a leader in the reduction of carbon emissions and achieve Net Zero carbon by 2038



Goal 8: Enhance environmental management standards through our supplier code and target at least 80% of our supply chain to meet this code



Goal 15: Maintain a leakage rate of less than 25,000 litres per year



Goal 2: Adopt science-based targets to help limit global warming to 1.5 °C degrees above pre-industrial levels



Goal 9: To be responsible consumers of resources and reduce the amount of waste produced by the end of RIIO-ED2



Goal 16: Remove overhead lines from national parks and areas of outstanding natural beauty



Goal 3: Take responsibility for our major scope 3 emissions and include them in our science-based targets



Goal 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



Goal 17: Take action to reduce noise collution:



Goal 4: Manage our electricity distribution losses and achieve reductions of BGWh per year throughout RIIO-ED2



Goal 11: Reuse and recycle at least 85% of waste excavated for installation and repair



Goal 18: Phase out the use of cless and petrol vehicles which produce emissions of NOx and other air pollutants



Goal 5: Maintain a leakage rate of less than 0.3% for our total bank of sulphur bexaftuoride equipment



Goal 12: To be responsible consumers of water and reduce the water consumption per colleague during RIIO-ED2



Goal 19: Remove equipment contaminated by polychlorinated biphenyls from our network by the end of 2025



Goal 6: Baseline the embodied carbon within new projects by the end of 2023/24 and set reduction targets



Goal 13: Adopt an appropriate tool to assess changes in natural capital from different options for network projects



Goal 20: Train more colleagues on the requirements of our Environmental Permits for oil recycling through a CMS to reduce risks of environmental harm



Goal 7: Achieve the Carbon Literacy gold standard



Goal 14: Enhance biodiversity and natural capital across 100 sites during RIIO-ED2 and plant 10,000 trees per year



Goal 21: Provide training to our wider leadership team to enhance environmental awareness Perfluorocarbon tracers (PFT) tagging programme has tagged over 25,000 metres of underground cable in Greater Manchester



What is PFT
The PFT is introduced into
the system in controlled
concentrations of a few
parts per million during the
routine pumping process.
This is often referred as
"tagging" the circuit. As the
leak continues, the PFT
leaches out with the cable
oil or gas at the leak
location.

Environmental Action Plan key metrics (EAP commitments)



200			ELT Owner: Paul Killilea SLT Owner: Alan Taylor						
Goal		Area	Sep-24	Current YTD	EAP targets	Prior year actual	RAG Quarter	RAG YTD	ED2 Target*
Environment Action Plan	Becoming Net Zero	Carbon emissions (tCO2e)	1,139	8,378	18,615	13,999	G	G	15,313
		No. of depots converted to Carbon Neutral	0	0	1	-	G	G	1 pa
		Reduction in losses from the network (GWh)	0.36	0.63	8*	1.06GWh	G	G	8 GWh
		SF6 leakage rate	0.00%	0.15%	0.3%	0.17%	G	G	0.30%
	Looking After Our Natural Environment	Percentage of waste diverted from Landfill	97%	96%	95%	96.00%	G	G	95% (End of 2025)
		Percentage of waste reused and recycled	71%	68%	70%	43%	Α	Α	70%
		Percentage of waste excavated reused for installation/repair	81%	81%	85%*	80%	А	А	85%
		Maximum Oil filled cable leakage (litres)	1,140	4,905	25,000	17,545	G	G	125,000
		No. of biodiverse sites	100	100	100	100	G	G	100
		Trees planted	0	1,170	10,000	10,000	G	G	50,000
		PCB Contaminated Equipment (No. of pieces)	37	190	1,634	504	G	G	Nil (End of 2025)

^{*}ED2 Target assumed to be the end of ED2 unless stated otherwise



Summary

Waste reuse and recycling rates tracking in improved direction.
Quarterly updates for losses and excavated waste now available.
Note both targets are for the end of ED2, low loss transformer replacement programme on track expected to deliver FY25 target of 60 transformers.
Excavated waste recycling rates currently at 81%.

Tree planting target on track for winter planting season.

Regulatory reporting to Ofgem



- Annual publication of environmental commitments
- Requirement of Ofgem licence condition
- Report published highlighting progress against Environmental Action Plan goals



Previous Annual Environment Report submissions:

Environment report (enwl.co.uk)

Content

Collate dataBenchmark with DNOs Internal Review Environment and Sustainability Panel opportunity for input

Publish

- Design
- Review
- Publish

March/April

May-July

July/August

September

31 October

What are we looking at?









- We are working with regulators to minimise the impact of persistent organic pollutants on our network with a focus on a pole mounted transformer replacement and testing programme in the Greater Manchester area.
- Underground cables, sometimes referred to as fluid filled cables, are being targeted for replacement and pro-active tagging to allow leaks to be stopped quickly.
- Circular economy opportunities are reinforced with our oil recycling facility in Blackburn, which allows us to recycle insulating oil for our underground network in Greater Manchester.

Biodiversity





Introduction



- Our current business environmental targets are determined by the ENWL RIIO-ED2 Environmental Action Plan which is a regulatory requirement of Ofgem
- This plan contains specific goals relating to <u>biodiversity</u> associated with network assets which are:
 - 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'



Our biodiversity commitment in the Greater Manchester area



- Following a review and subsequent digitization of the ENWL greenspace estate under Goal 13, 41 network sites were identified and selected for biodiversity management within the GM area
- This amounts to a total of 14 hectares of our network estate employed for this purpose

Habitat type by %

Grassland
Woodland
Heathland and

Shrub



Enhance biodiversity and natural capital across 100 sites during RIIO-ED2



- Objective to uplift biodiversity unit condition of 100 sites by initiating conservation grassland management and small-scale woodland management within substations and 'legacy' landholdings
- Grassland sites are managed under a traditional hay meadow regime – cuttings to be removed to reduce nutrients levels, discourage competitive grasses and promote floristic diversity to benefit a wider range of pollinators
- Sites dominated by woodland to receive management to improve vertical structure, deadwood and conditions for woodland floor species etc.
- Specialist machinery purchased and in-house conservation team dedicated to project
- Active habitat management began in summer 2023

ENWL 100 network sites biodiversity uplift programme









Plant 10, 000 trees per year during RIIO ED2



- Focus on tree planting sites have so far been predominantly in Cumbria and Lancashire
- Tree planting has already been undertaken on the larger ENWL landholdings in the GM area in partnership with 'City Of Trees'
- Urban nature of the GM region restricts the available area of substation greenspace, and this calls for more novel approaches to tree establishment
- GM sites will likely favour hedgerow establishment and Miyawaki plots and scrub, where electrical infrastructure permits
- We are currently evaluating the most appropriate future tree planting sites and would like to engage with stakeholders and partners in the GM area to increase nature and community connectivity









Future plans for ENWL's biodiversity programme in Greater Manchester



- Long-term opportunities to maximise on site biodiversity
 e.g. wetland creation
- We will boost natural capital and biodiversity value in GM's urban environment – e.g. creating living rooves and walls on suitable electricity network buildings
- We will formalize a business strategy for Biodiversity Net Gain and how ENWL's uplift sites can contribute to this
- We will evaluate the carbon sequestration of our biodiversity sites and how this contributes to our decarbonization goals
- We will maximise exposure to our biodiversity programme through stakeholder engagement
- We will optimise the benefit of our substation and linear infrastructure biodiversity at a landscape scale by working with partners such as Nature North as member of their 'Green Northern Connections' Group









Bringing energy to your door

Innovation

Net Zero Terrace

Neil McClymont Head of Innovation

neil.mcclymont@enwl.co.uk

Helen Seagrave Community Energy Manager

 $\underline{helen.seagrave@enwl.co.uk}$









Snapshot of our current innovation plan (2023-2028)



Innovation Strategy

Innovation Delivery



Network Innovation Allowance ED1

- **31** Projects completed
- 18 Projects transitioned to BAU
- 5 Projects need further follow up

£8 Million of innovation projects to date in ED2

Network Innovation Allowance ED2

- 5 Projects approved
- 3 Projects under review

Over 20 collaborating partners

Strategic Innovation fund ED2

- 8 Projects awarded funding
- 7 Projects completed
- 1 Project in-flight
- 1 Project under review for funding

Direct Stakeholder Support RE100 Project - GMCA

The Problem



10 million terraced homes in UK, ~ 6 million 2/3 bed which have little outdoor space to accommodate an ASHP

Large proportion from 19th and early 20th century with low energy efficiency

Fuel poverty and affordability may be an issue for many householders

Default choice for electrification is electric boilers which will result in higher bills for residents than gas

Electric boilers have to be delivered with whole house retrofit, an additional challenge

Electric boilers put **large additional loads on electricity network** triggering expensive and time consuming reinforcement – significant barrier to Net Zero



Bacup, Rossendale

Net Zero Terrace



Affordable, low carbon energy, healthy warm homes at no upfront cost to consumers Shared ambient loop heat clusters provide opportunity for more efficient community heating

In street bore holes with individual in-home shoebox heat pump

AWARDS * FINALISTS *

UtilityWeek

Homes connected by a 'smart' system to aggregate savings across an energy club. (Smart, Local Energy, System – SLES)

Infrastructure & retrofit debt financed with householders paying back over long term via standing charge











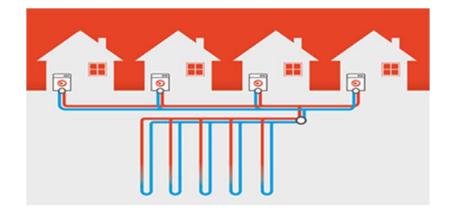














Bringing energy to your door

Consumers in vulnerable circumstance

Sam Loukes
Head of Customer Inclusion
samantha.loukes@enwl.co.uk









Reacting to change ...

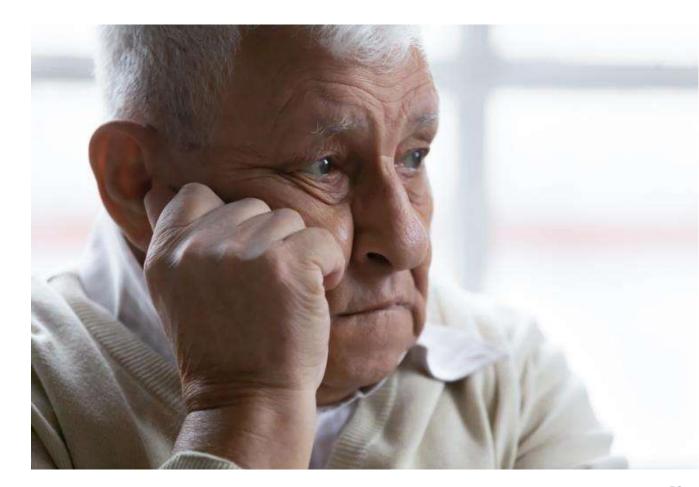


As a responsible business it's important we react and respond to what's happening across the region.

Our goal is to ensure that our customers feels safe and supported.

This may be during a power outage when we can deliver extra care to make a customer more comfortable.

Or it could be providing extra support in communities like we did in the pandemic or more recently as we are seeing the impact of rising energy prices.



Changes to winter fuel payments

★ ■ ★ ★

We heard that in Manchester alone 40,000 local people are missing out on unclaimed benefits of over £368 million in unclaimed benefits every year.

Following the changes made to the Winter Fuel Allowance we adapted our marketing messages immediately to reach out to impacted households and are working closely with local organisations and charities to offer our help.

Opposite is one of our adverts raising awareness of the help we can provide.

This year, Winter Fuel Payments will only be paid to those of state pension age who are also in receipt of certain benefits.

If you are affected by this change or worried about paying your energy bills, Take Charge could help.

Our expert advisors can check your eligibility for certain benefits and advise on other things you can do to help manage your energy costs.

Call us on 0808 169 9924 or visit www.takechargetoday.co.uk



The reality for families unable to afford to power or heat their homes ...



Take Charge can provide support to anyone who's struggling with rising energy costs, for some it can be a lifesaver!

It's important to keep in mind that some customers don't believe they should or could get help and/or have no idea where to ask for it.

That's where our partners come in ... raising awareness could make all the difference ... like in our examples below.



I have no electricity and English isn't my spoken language I can't use the kettle to sterilise my baby's bottle or make up a feed!



My son relies on a nebuliser and it needs to be plugged in, I've run out of credit on my meter.



I'm a single parent and a carer
I would like to know more
about grants to make my
home more energy efficient.



I'm feeling really cold and only using blankets to keep warm because I'm afraid of running up a large bill I can't afford.

Can we work together?





Our customers are at the heart of everything we do.

We know they rely on us to be there for them, no matter what time of day or night it is. And when things don't go according to plan, we've got their backs until everything is back on track...

'Extra Care' is the umbrella term for of all of our support services. These include...



take charge



Our Extra Care register

Practical support and advice for customers who may need extra support before, during or after a power cut.

Take Charge

Empowering customers to take charge of their energy usage and access support through the rising cost of living.

Low Carbon Advice

Explore free, impartial advice on low carbon technologies with GoLowToday.co.uk

Drop us a line at Partnerships@enwl.co.uk

Roundtable discussion







Round table discussion

We would now like to invite you to move around the room to connect with our experts and discuss the topic that interests you most

Growth & investment

Innovation

Environment & biodiversity

Vulnerable customers



Round table discussion

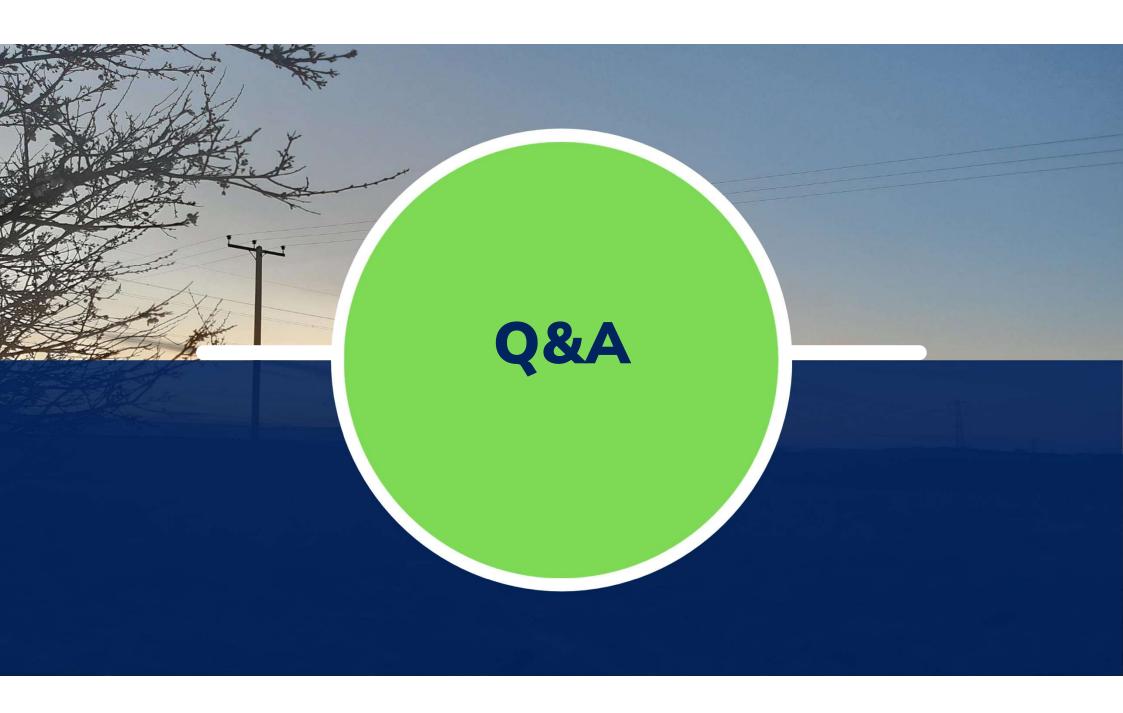
Taking into account what you have heard this morning......

Please discuss and share your thoughts on the following, with a focus on the relevant theme of your table:

Question1 - What is of most interest/importance to you/your organisation in terms of what we are delivering in your region and why?

Question 2 - What challenges and opportunities can you see relating to these key pieces of work that we may not have considered?

Question 3 - What ways can you support/partner with us in this area and how can we best communicate progress to you?



Mentimeter polling – Feedback



We really value your feedback:



- Open web browser
- Head to www.menti.com
- Use the code 66 87 19 5 to access

feedback polling



Thank you for joining today

Together we can achieve more. Stay informed and collaborate with us

Scan the QR code to sign-up to our newsletter



Scan the QR code to visit our events calendar



