

Distribution System Operation Conference

26 March 2026



Welcome & introduction to the day

Paul Auckland
Head of Economic
Regulation & DSO, SP ENW



For those here in person:

- There are no planned fire drills
- Please use the QR codes on your tables to submit questions at any time for our Q&A sessions – and also to respond to our quick polls
- Please put your phones on silent
- Toilets are to the right of the bar

For those joining us online:

- Please mute yourself during presentations
- Please turn your camera off
- Please don't use AI note-taking

We are recording today's event and will also be taking photos so if you're not comfortable with this, please let a member of the SP Electricity North West team know as soon as possible.

How to interact with us today

Scan QR to answer polls



Agenda and speaker bios



Scan to submit your questions



Please give us your feedback



Agenda

Time	Item	Speaker
10.00 – 10.05am	Welcome and introduction to the day	Paul Auckland
10.05 – 10.20am	Working in partnership with our stakeholders	Andrew McIntosh
10.20 – 10.35am	GB Energy and our local power plan	Helen Seagrave
10.35 – 10.50am	Working together to deliver GM 2038	Dan Griffiths
10.50 – 11.05am	SP ENW and tRESP collaboration	Melanie Taylor
11.05 – 11.25am	Q&A	All
11.25 – 11.40am	Break	
11.40 – 11.50am	DSO and SP ENW	Steph Trubshaw
11.50 – 12.00pm	DSO for good	Katherine Horne
12.00 – 12.10pm	Forecasting and coordinated network development	Christos Kaloudas
12.10 – 12.20pm	Active network management & flexibility	Paul George
12.20 – 12.30pm	Data and insights for action	Dan Wilson
12.30 – 12.40pm	Supporting local authorities	Lynn Tracey
12.40 – 1.00pm	Q&A	All
1.00 – 1.45pm	Lunch	
1.45 – 2.30pm	Break out session one	All
2.30 – 3.15pm	Break out session two	All
3.15 – 3.30pm	Close	Paul Auckland
3.30 – 5.00pm	Canapes and drinks	

Meet our speakers



Paul Auckland

Head of Economic Regulation
& DSO, SP ENW



Andrew McIntosh

Director for Sustainable Growth and
Infrastructure, Greater Manchester
Combined Authority



Helen Seagrave

Director of Local Energy,
Great British Energy



Dan Griffiths

Head of Low Carbon, Greater
Manchester Combined Authority



Melanie Taylor

Head of Regional Energy
Strategic Planning, NESO



Stephanie Trubshaw

Chief Operating Officer,
SP ENW



Katherine Horne

Social DSO Manager, SP ENW



Christos Kaloudas

Capacity Strategy Manager,
SP ENW



Paul George

DSO Commercial Lead,
SP ENW



Dan Wilson

Asset Analytics Manager,
SP ENW



Lynn Tracey

Stakeholder Engagement
Manager, SP ENW



Working in partnership with our stakeholders

Andrew McIntosh
Director for Sustainable Growth and Infrastructure, GMCA



SP ENW DSO Conference

26 March 2026

Collaborating

Empowering

Delivering



A thriving city
region where
everyone can
live a good life.

Bolton
Bury
Manchester
Oldham
Rochdale

Salford
Stockport
Tameside
Trafford
Wigan

together
we are

**GREATER
MANCHESTER**

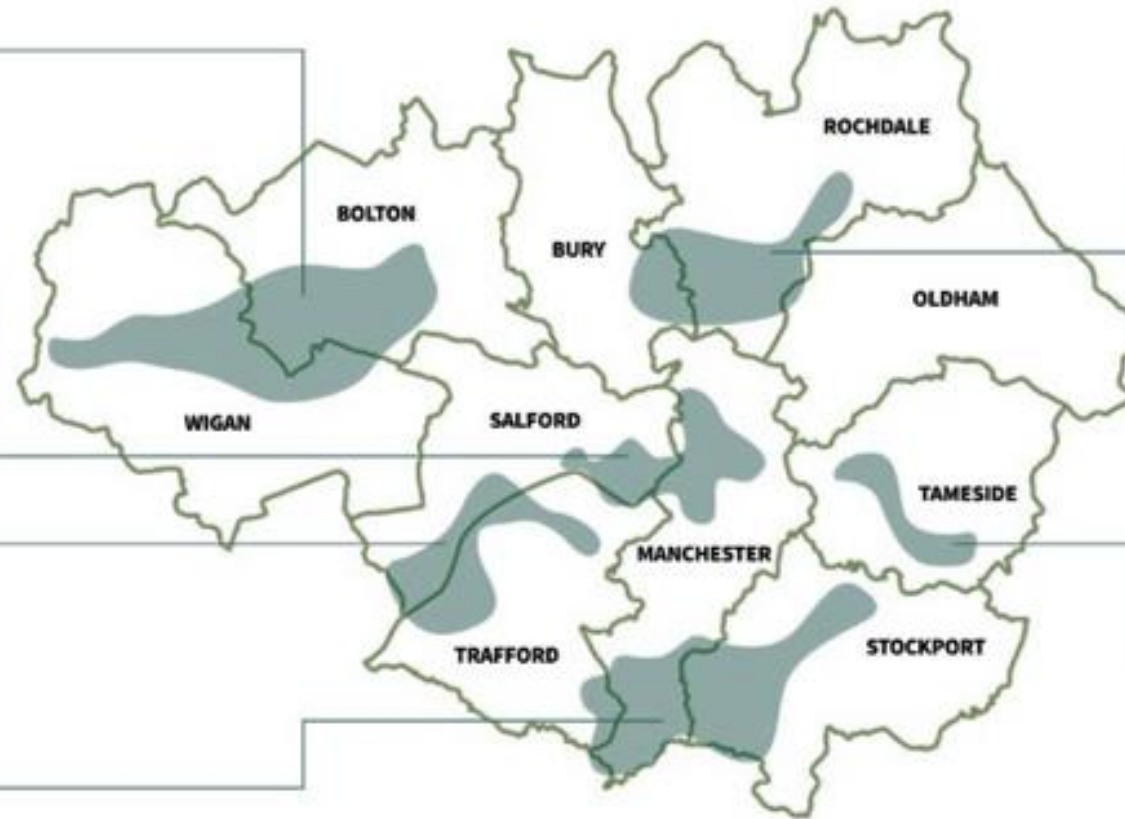
Integrated Pipeline - Growth Locations

NorthFold – 12,600 new homes with access to green space, town centre transformation projects and a new Health Innovation Campus linked to the Royal Bolton Hospital.

Central Growth Cluster – driving the next phase of city centre growth in Manchester and Salford, creating new homes and 90,000 new jobs.

Western Gateway – including the transformative Old Trafford Regeneration project, New Carrington, Trafford Waters, as well as capitalising on Port Salford's connectivity to link new employment sites to the world.

Airport and Southern Growth Corridor – leveraging Manchester Airport's international connectivity and continuing the regeneration of Stockport and Wythenshawe town centres.



North East Growth Corridor – with the potential for 28,000 new homes, the corridor also includes Atom Valley, a Mayoral Development Zone driving growth and innovation in advanced materials and manufacturing, and the Northern Gateway, where there's the opportunity for 1.2m square metres of employment space.

Eastern Growth Cluster – linking key development opportunities of Ashton Moss, St. Petersfield and Ashton Town Centre, building on the creation of Ashton's Mayoral Development Zone. This Growth Cluster also covers the area known as the Hyde Growth Triangle which consists of Hyde Town Centre, Godley Green and Hattersley.

GM Good Growth Fund

Utilising the flexibility of the Integrated Settlement, GM have pulled together £1bn of funding that can be blended together to fund key priority growth schemes.

GM Good Growth Fund officially launched November 2025

Further investment in March 2026

Mayor Andy Burnham unveils plan to pioneer new model of economic growth with £1bn GM Good Growth Fund



together we are **GREATER MANCHESTER** Bolton Bury Manchester Oldham Rochdale Salford Stockport Tameside Trafford Wigan

The DSO Stakeholder Panel

Purpose: to oversee and guide the scope and pace of the company's transition to DSO, provide insight and strategic guidance, share expertise and offer constructive challenge

- First of its kind, proposed in RIIO-ED2 business plan in response to request from stakeholders
- At the heart of SP ENW's engagement structure since July 2023
- Key element of the company's overall engagement strategy
- Represents a diverse range of stakeholder groups – local authorities, businesses, community organisations, network operators and industry experts
- Comprised of an individual chair and up to 12 representatives from a range of specific, relevant stakeholder categories
- Meets six times a year
- Enables the company to work collaboratively with its stakeholders and ensure that its DSO activities are efficient, reliable and aligned to the region's decarbonisation goals

Meet the panel



Andrew McIntosh
Director for Sustainable Growth
and Infrastructure, GMCA



Greg Dodd, Regulation and
Strategic Planning Director at
Northern Gas Networks



Jonathan Edwards, Director of
Environment & Planning at
Lancashire County Council



Matt Fawcett, Energy Systems
Lead at Carbon Co-op



Kate Gilmartin, CEO British
Hydropower Association



Daniel Heery
Founder of Cybermoor



James Johnson, Head of
Regional Programme for the
North West Net Zero Hub



Meriel Laikin, Head of
Development at Masdar
Arlington Energy



Craig Morley
Energy Manager at Bruntwood



James Shaw-Stewart, Head of
Silicon Sands at Blackpool
Council

Key areas where panel has had impact

In its first three years, the panel has had, and continues to have, a direct influence on key DSO activities and publications

- DSO strategy
- Operating model and governance
- KPIs and benefits measurement
- Flexibility strategy
- Load-re-opener
- ODMF
- Flexibility procurement
- Social DSO fund
- DSO data consultation
- Accessibility of DFES
- DNOA report
- Independent LAEP review

What's next?

The panel will continue to guide, oversee and challenge the activities of the SP ENW DSO team – its strategy, policies and deliverables

Key themes for the coming year include:

- Ongoing evolution and delivery of SP ENW's social DSO and flexibility strategies
- An increased role for the panel in the governance and delivery of the social DSO fund
- Greater focus on conflicts oversight, looking more broadly at strategic as well as operational conflicts of interest
- Support during the development of the RIIO-ED3 business plan
- Continued involvement in stakeholder engagement to ensure that the voices of the diverse stakeholders of the North West are represented

We look forward to continuing our work with SP ENW, providing review, challenge, oversight and guidance as we work together towards a fair and inclusive net zero carbon future

GB Energy and our local power plan

Helen Seagrave
Director of Local Energy
Great British Energy



About GBE

We are a publicly owned energy champion, delivering clean and secure energy for the UK. Crucially, whilst we are wholly owned by DESNZ, we are **operationally independent**.

Backup by **£8.3 billion** of revenue across both GBE and GBE Nuclear.

Still in set-up phase, having received Royal Assent in May 2025.

We will deliver over **15GW** in energy generation and storage capacity, and leverage **£15 billion** in private finance.

Catalyse the just transition, supporting over **10,000 jobs** across areas with a traditional oil and gas economy.

Support over **1,000 local and community energy projects** backed by up to £1 billion of investment.

Delivering **energy, engineered in the UK** across our three priority areas: local, offshore energy and onshore energy.



Our activity

GBE's roles

Energy developer

- ✦ Develop clean energy assets from inception, owning and operating assets for the taxpayer.

Strategic investor

- ✦ Target projects where GBE can de-risk and attract wider capital.

Market coordinator

- ✦ Include capability support to community and local energy groups and market-shaping initiatives.



Clean

Secure

Yours

GBE Local



Enable the rollout of a new era of

community and local energy projects across the UK in the near term, whilst developing longer-term, scalable models

Onshore Energy



Unlocking the energy potential of

public land, as well as private, and investing strategically to deliver on the UK's **flexibility** and grid stability needs.

Offshore Energy



Boosting jobs and growth in Scotland and

the Celtic Sea by **unlocking** the next frontier in offshore wind: deeper waters.

Supply chain – energy, engineered in the UK



Underpinning our clean energy deployment with a comprehensive, complementary supply chain program to **unlock industrial opportunities** in the energy transition and to ensure the UK develops enduring capabilities in clean energy technologies.

GBE – Local Power Plan

Our vision is:

By 2030, every community in the UK will have the opportunity to benefit from, and own, a local energy project.

1. Power communities: support over 1,000 local and community energy projects, boosting shared ownership
2. Catalyse the development of scalable, self-sustaining business models for community energy organisations
3. Act as a sector leader, market maker and strategic investor, drive innovation to deliver benefits to communities
4. Help more communities access the benefits of local and community energy, by developing tools to help new communities get involved with community energy

Local Power Plan

February 2026





GBE Local Energy Platform

Thank you

Any questions?



Working together to deliver GM 2038

Dan Griffiths
Head of Low Carbon
GMCA

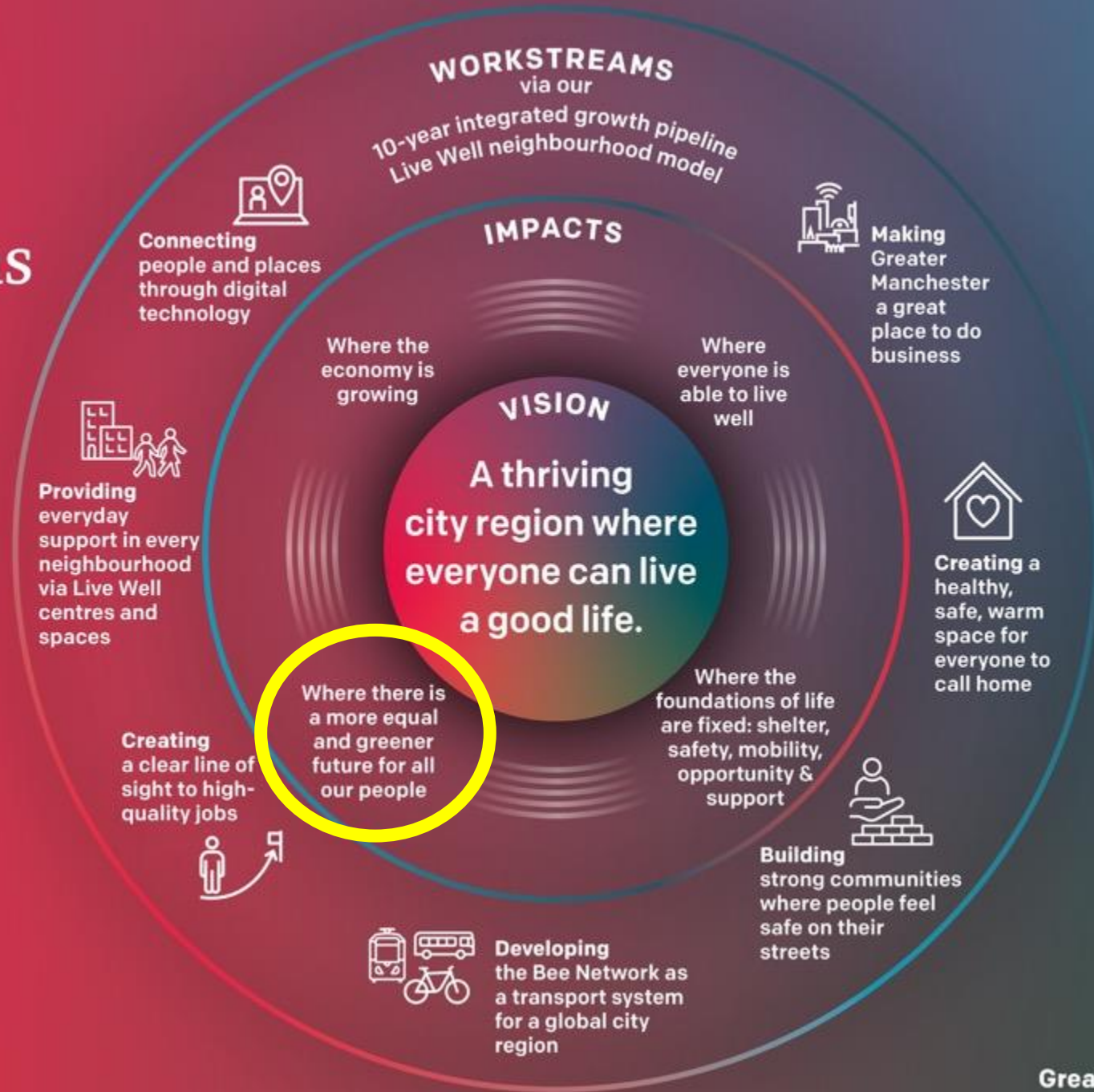


together
we are

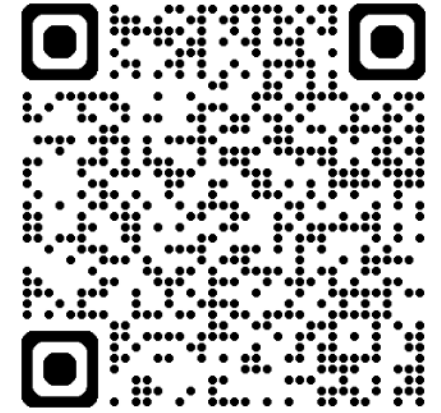
**GREATER
MANCHESTER**

Collaborative working: SP ENW and
Greater Manchester Combined Authority –
Working together to deliver GM 2038

Together we
are creating
the conditions
for people
to thrive.



Greater Manchester Strategy – 2025-2035



A thriving city region where everyone can live a good life

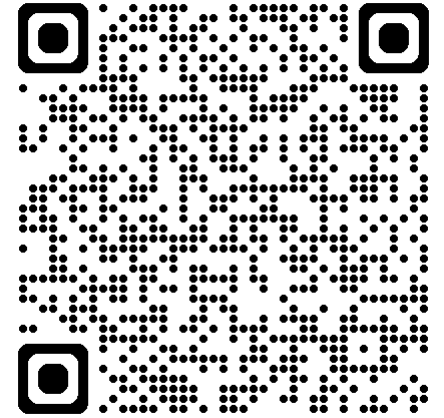
- Where the **economy** is growing
- Where there is a more **equal and greener future** for all our people
- Where everyone is able to **live well**
- Where the **foundations of life are fixed**: shelter, safety, mobility, opportunity & support

Seven workstreams to lead delivery

- Healthy home for all
- Safe and strong communities
- A transport system for a global city region
- A clear line of sight to high-quality jobs
- Everyday support in every neighbourhood
- A great place to do business
- Digitally connected places and people



Greater Manchester's Five-Year Environment Plan



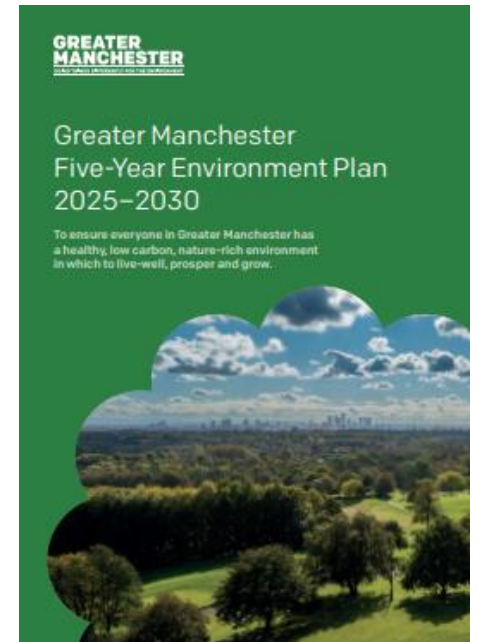
To ensure everyone in Greater Manchester has a healthy, low carbon, nature-rich environment in which to live-well, prosper and grow.

Aim 1: Our energy infrastructure is smart, flexible and fit for a low carbon future

1. Increase renewable energy generation and energy storage installed
2. Increase the resilience, capacity and flexibility of the electricity network and its users
- 3. Increase the number, generation capacity and level of operational heat networks**
4. Increase installed capacity and use of low carbon hydrogen

Aim 2: Our buildings are sustainable and energy efficient

5. Increase the number of homes retrofitted
5. Increase the number of public and commercial buildings retrofitted
6. Increase the number of low carbon heating systems installed
7. Ensure all new developments are net zero carbon and sustainable



Overview



Strong collaboration through:

- Forward plan on priorities (set out in a Terms of Reference)
- Local Area Energy Planning
- Strategic Infrastructure Board
- Bi-weekly meetings
- Consultation support and data sharing
- Stakeholder events

Local Energy Planning

Retrofit Analysis



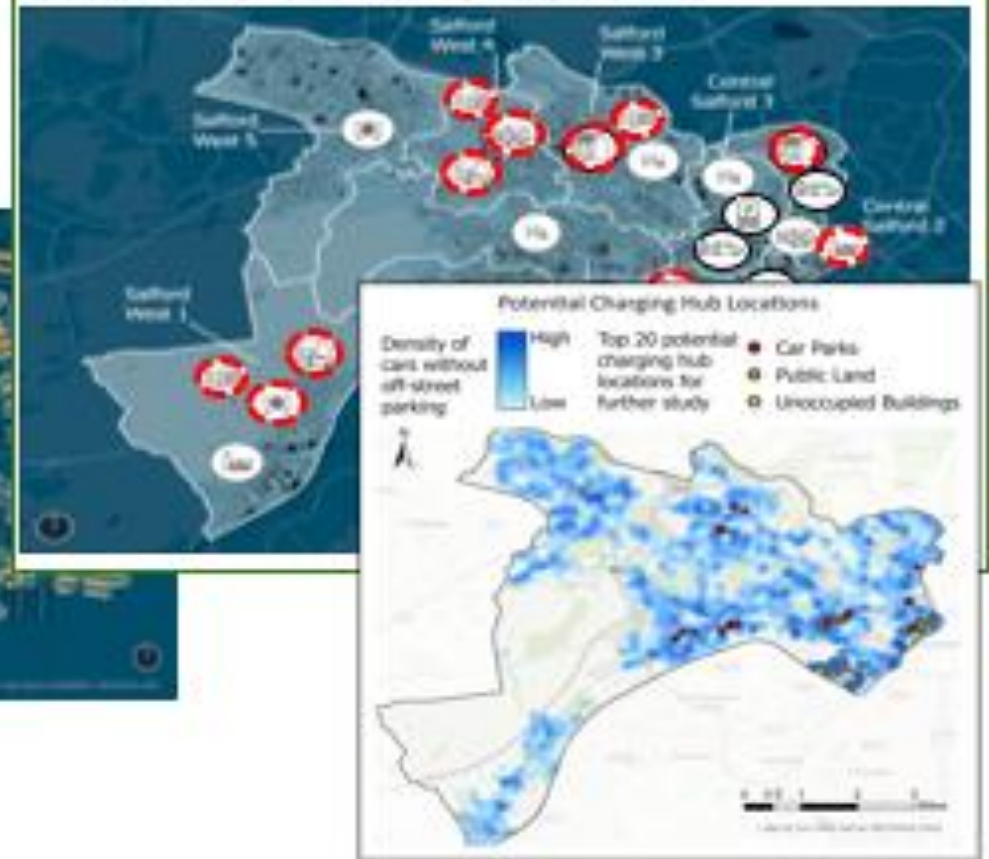
Energy networks



Solar PV and EV density by 2038 Salford west 4



Priority Areas for demonstration and scale



Bi-weekly meetings

- Shared energy planning spreadsheet
- Standing agenda including:
 - Strategic development priorities/growth zones (from integrated pipeline)
 - Issues to escalate (e.g. connections)
 - Heat networks
 - Digital maps/tools
 - NESO engagement
 - Strategic Infrastructure Board



Consultation support and data sharing

- Exchange of data for network and development planning
- Support with tRESP/RESP input and wider NESO engagement
- Support with related consultations e.g. Ofgem consultations and ED2 Re-openers
- Collaborative Street Works Incentive with Cadent via GD3



Stakeholder events

- Forum to strengthen joint working and engagement with wider organisation
- Opportunities for aligning network planning with our Greater Manchester Strategy priorities e.g. Regional Stakeholder Event on ED3 business planning
- Enables open and transparent collaboration

Going forward



Continued collaboration to support delivery of the Integrated Pipeline and Good Growth agenda.

Further develop approach to Local Area Energy Planning.

tRESP to RESP coordination.

Support Local for Power and Community Energy.

Opportunities for flexibility and Smart Local Energy Systems.

together
we are

**GREATER
MANCHESTER**

Thank you



tRESP



Melanie Taylor
Head of RESP Regions (North)
NESO



Agenda

1. tRESP Overview
2. Design of tRESP
3. Delivery of tRESP
4. Next steps

Public

tRESP Overview

Transitional RESP (tRESP) Overview

DNOs and Ofgem collaborated with NESO to develop transitional RESPs and regional investment pathways that ensure reliable, affordable electricity and align network investments with regulatory expectations ahead of Full RESP implementation in 2028

What is tRESP?

1. Serves as a **transitional bridge** to Full RESP
2. Focuses on supporting **electricity DNO (Distribution Network Operator) business plans**
3. **Provides greater consistency, and drives increased network investment** through DNO business plans

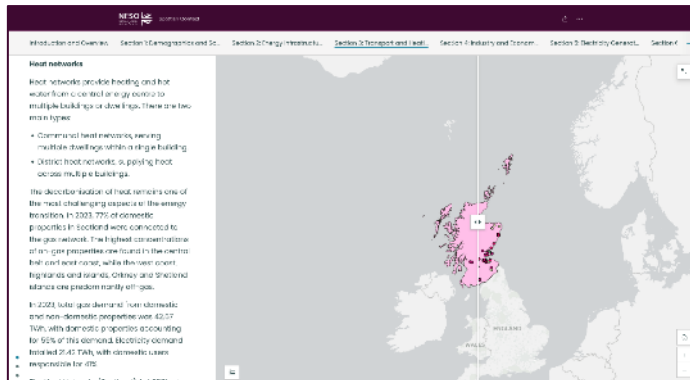
Why now?

1. **Urgent change**: Energy sector transformation and CP30 demand immediate action
2. **Unlocking value sooner**: Full RESP won't be ready until 2028
3. **DNO business planning dates are fixed** (2028-2033) and require input now
4. **Early customer and stakeholder engagement to integrate national and regional needs** within energy planning



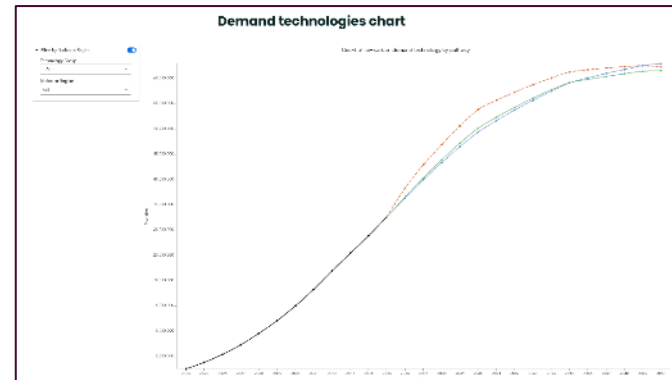
Transitional RESP (tRESP) Executive Summary

The three tRESP components:



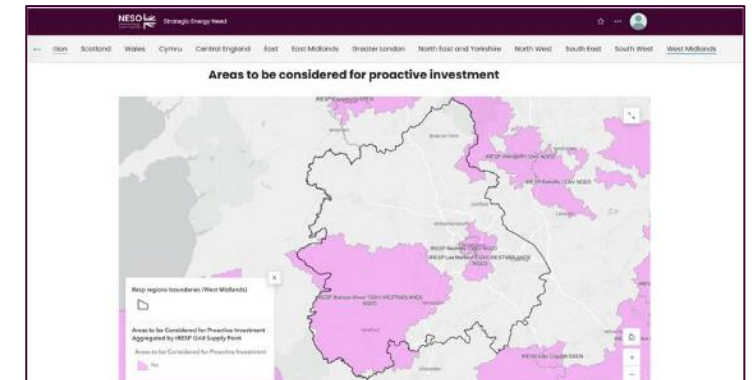
Nations and Regions Contexts

Our digital output for Nations and Regions Contexts provides a consistent view across key energy topics relevant to electricity distribution network planning for each nation and region.



Pathways and CPAs

Our Pathways and Consistent Planning Assumptions set a consistent, strategic direction from which electricity DNOs will plan their networks.



Strategic Energy Need

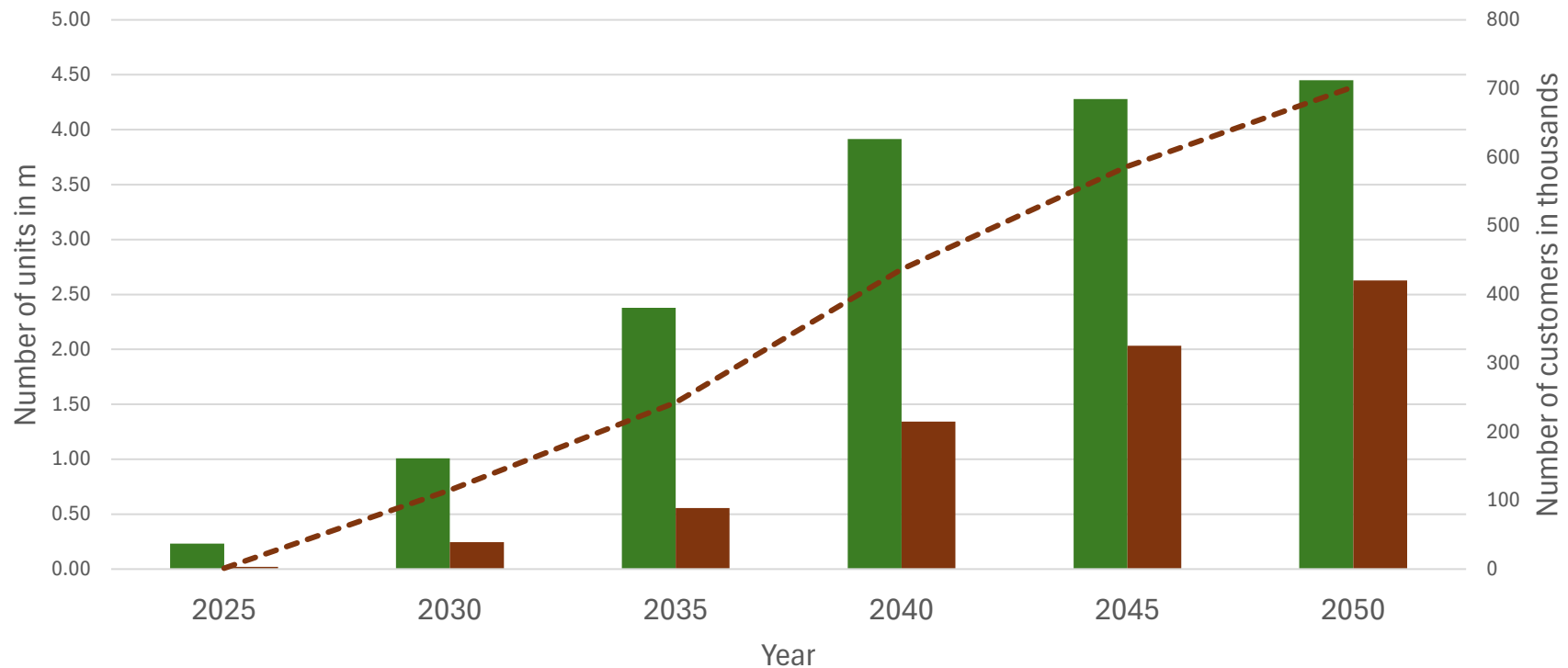
Strategic Energy Need maps out geographic areas where we have identified there is a strategic approach required to electricity network investment, ahead of certain need.

Public

tRESP Pathways for the North West

Pathways delivered the projected adoption of key electrical energy demand technologies to 2050, across the RESP nations and regions.

Low Carbon Technologies (Demand)



- Electric Vehicles (m)
- Domestic Heat pumps (m)
- Domestic Customers Supplied By Heat Networks (thousands)

Expected deployment for the North West

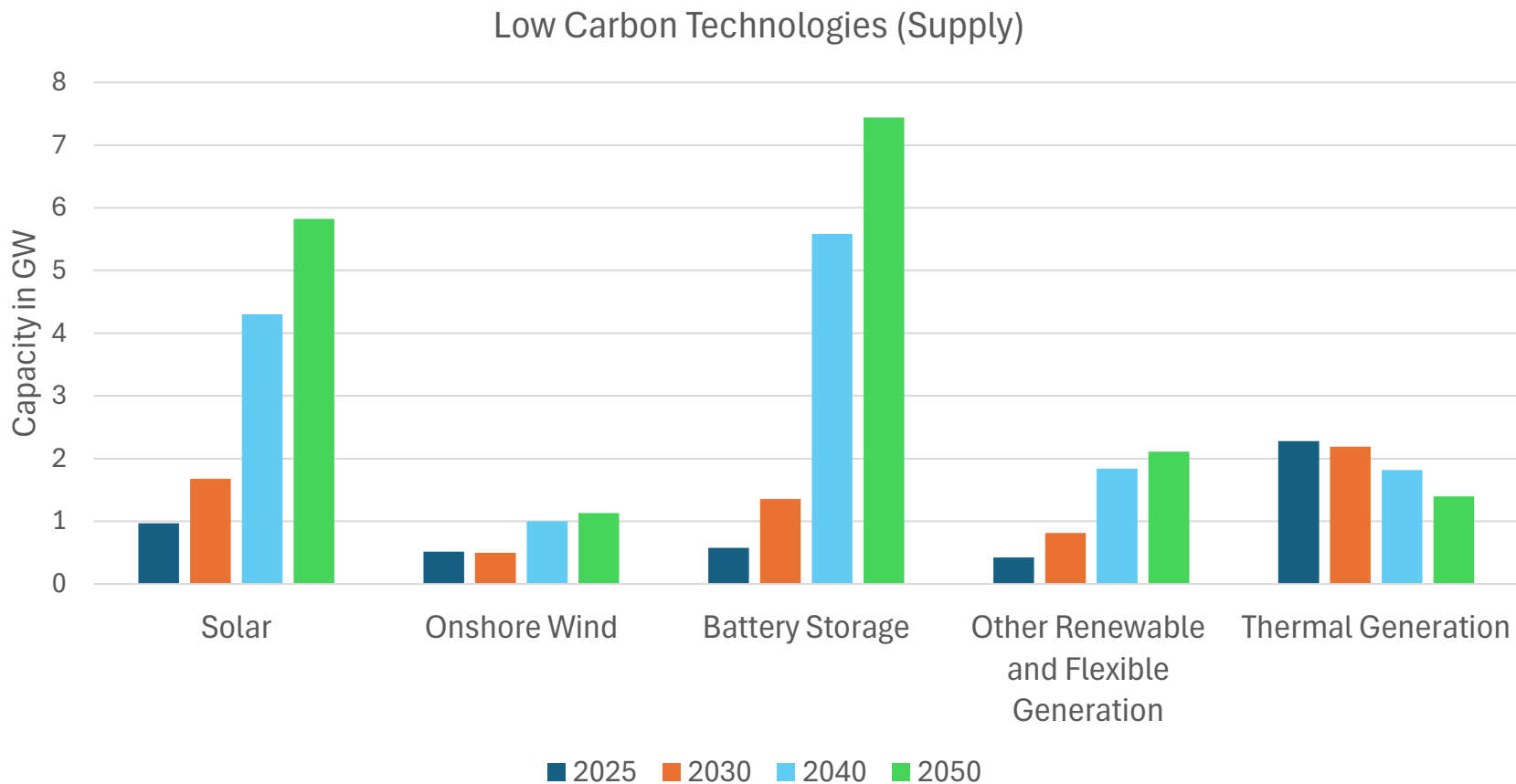
Deployment in 2050 in the **North West** translates to **4.5m electric vehicles, 2.6m domestic heat pumps, and 700k domestic customers supplied by heat-pump supplied heat networks.**



Public

tRESP Pathways for the North West

Pathways delivered the projected adoption of key electrical energy supply technologies to 2050, across the RESP nations and regions.



Expected deployment for the North West

For the **North West**, this translates to **13 GW additional generation and storage** from 2025. From this, **7 GW onshore wind and solar deployment** by 2050, including **small installations** by the same year. **Battery deployment** is expected at around **7.4 GW** in 2050.



SEN in the North West

17 GSP areas to be considered for proactive investment, supporting 3.4 GW of additional network capacity by 2034.

Top 5 GSPs in the North West to be considered for proactive investment by capacity:

Grid Supply Point area	Future related additional capacity required in GW	Drivers of related additional capacity
Capenhurst	1.09 GW	Industrial decarbonisation
Kearsley 123KV	0.57 GW	Commercial development, housing and motorway service area (MSA)
Penwortham West Stanah	0.57 GW	Social Infrastructure, Commercial Development, MSA and data centres.
Harker Hutton	0.28 GW	Industrial decarbonisation and MSA
Carrington Fiddlers Ferry	0.12 GW	Industrial decarbonisation, housing, commercial development and MSA



How SP ENW helped shape our outputs

Nations and Regions Contexts

In July 2025 we shared our **draft Nations and Regions Context with SP ENW** (and other DNOs) to capture early feedback ahead of consultation, drawing on SP ENW's regional insight.

Pathways and CPAs

In July 2025 we shared our **draft Pathways with SP ENW** (and other DNOs) to capture early feedback ahead of consultation.

SP ENW shared with NESO their draft DFES data submissions to shape the final tRESP Pathways.

Strategic Energy Need

SP ENW provided a significant response to the RFI process, representing many regional needs now captured in our outputs.

We held two workshops with SP ENW; **validating data and outcomes**.

Worked with SP ENW to **agree an enhanced data sharing approach** for SEN, including DSO contact details in all outcome communications.

Regular Engagement

Regular bilateral engagement between SP ENW and NESO at a working and senior leadership level ensured both practical and strategic alignment throughout tRESP, including post-publication.

Structured, regular (DNO-wide) technical working groups enabled detailed discussion and constructive feedback to be captured throughout the programme.

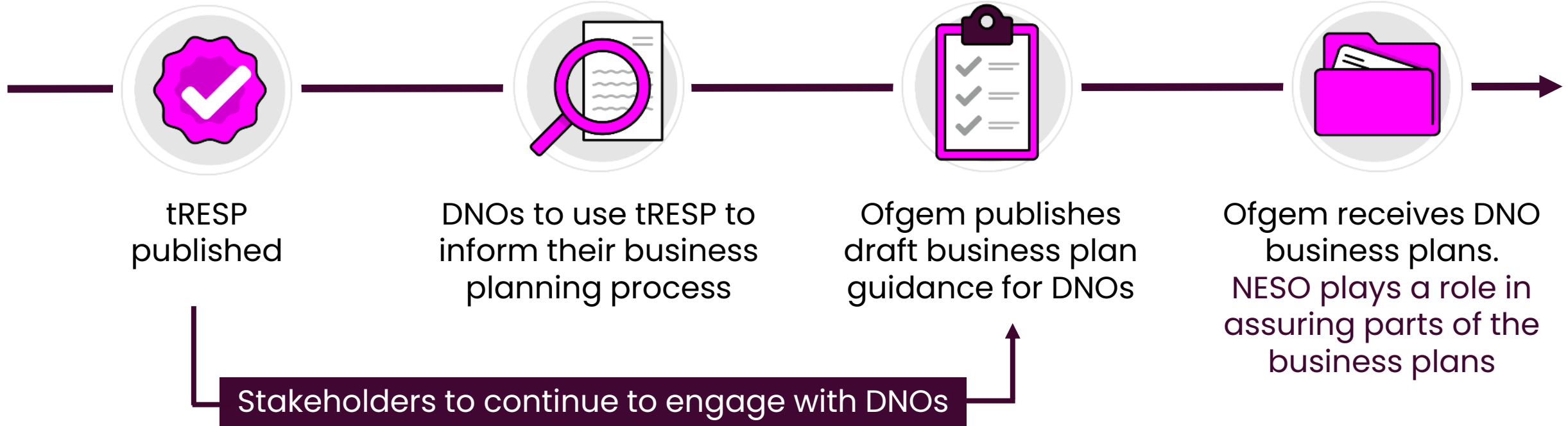
Given our shared stakeholders, RESP have been regular attendees and presenters at SP ENW events.

Public

Next steps

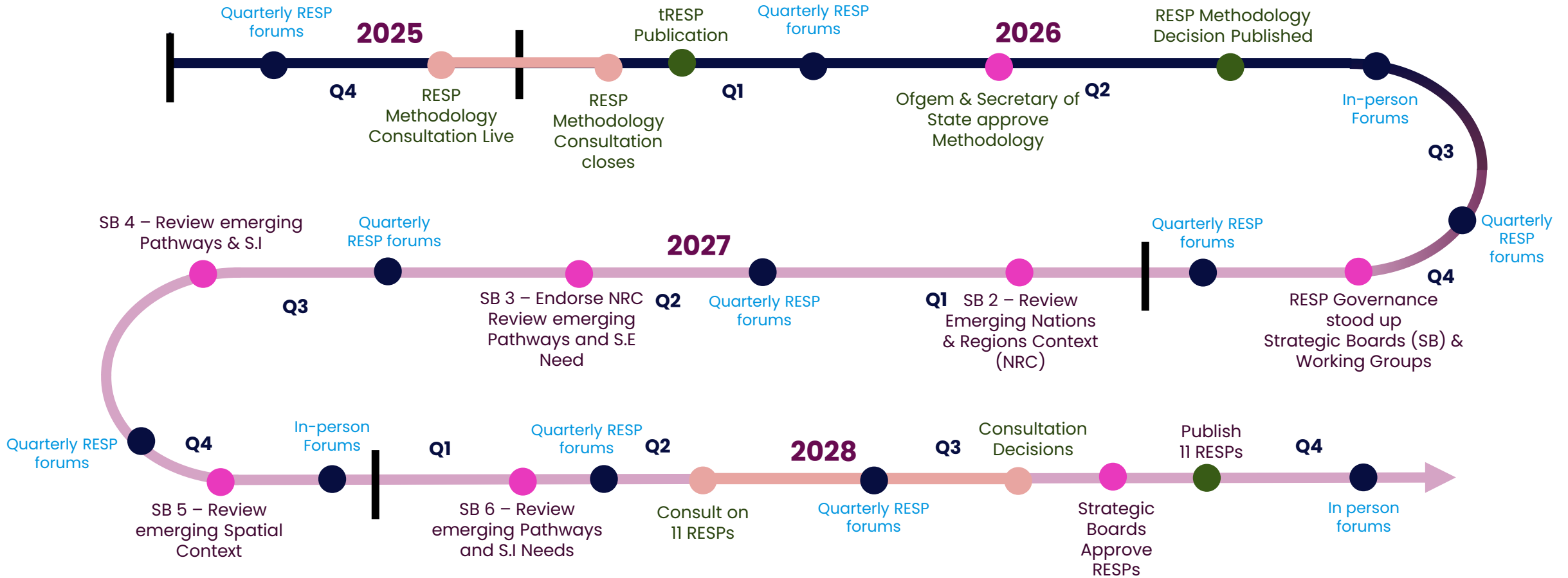
What happens next?

2026



Regular engagement between SP ENW and the North West RESP team will be maintained throughout the business planning process

RESP Roadmap - 2028



Key:

- SEP publications
- Quarterly Forums
- RESP Governance
- RESP Consultations

Thank you!

Any questions?



Q&A





Break





DSO and SP Electricity North West

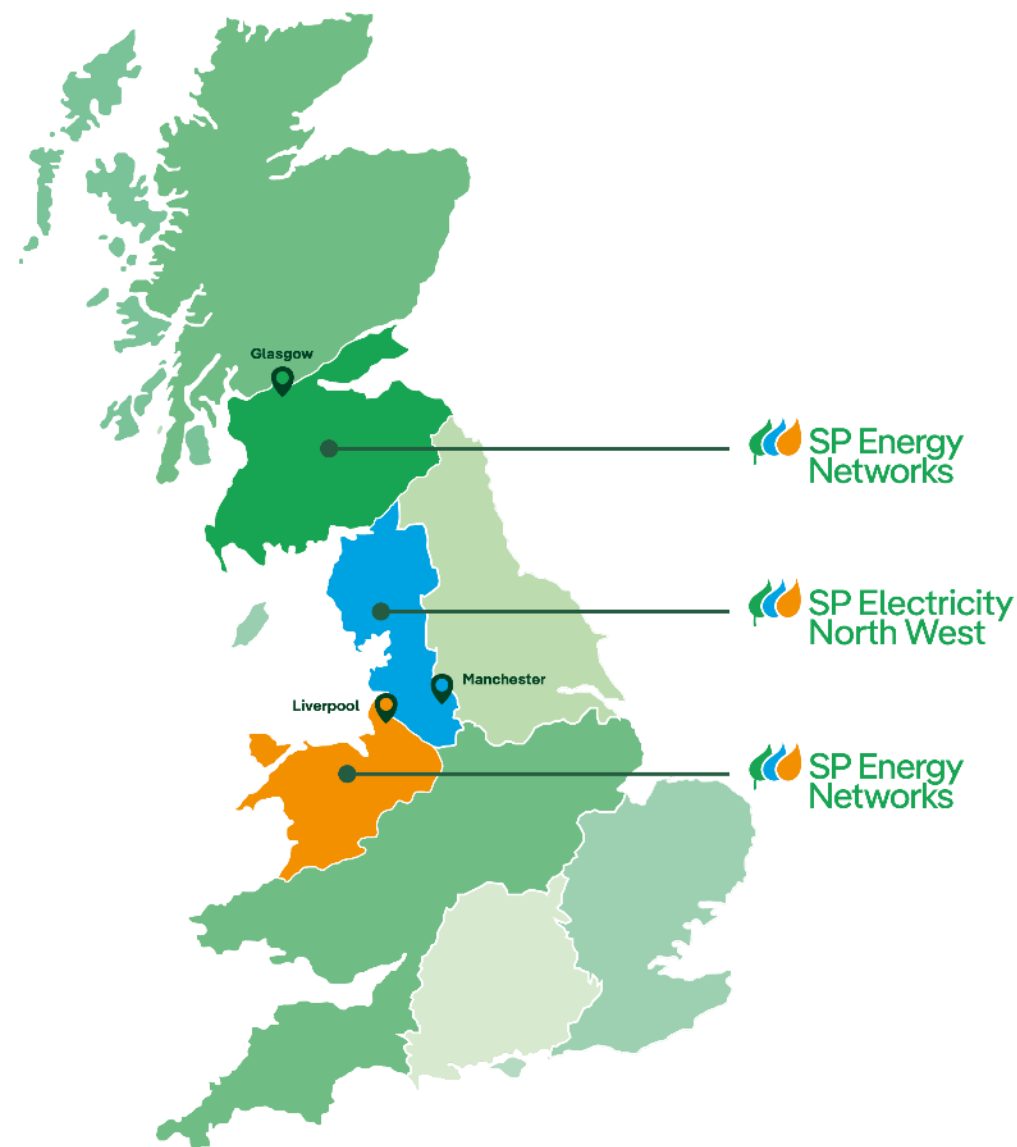
Stephanie Trubshaw
Chief Operating Officer
SP Electricity North West



SP Electricity North West (SP ENW) is now owned by ScottishPower, along with three other regulated electricity network businesses in the UK.

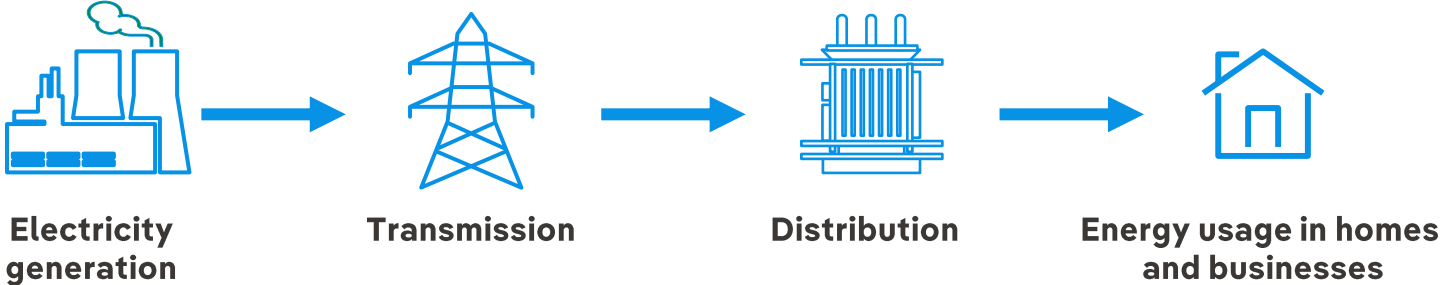
Together we keep electricity flowing to more than **12 million people** across more than **172,000 kilometres.**

It's a role that puts us right at the heart of the UK clean power green growth ambitions to reduce carbon emissions.

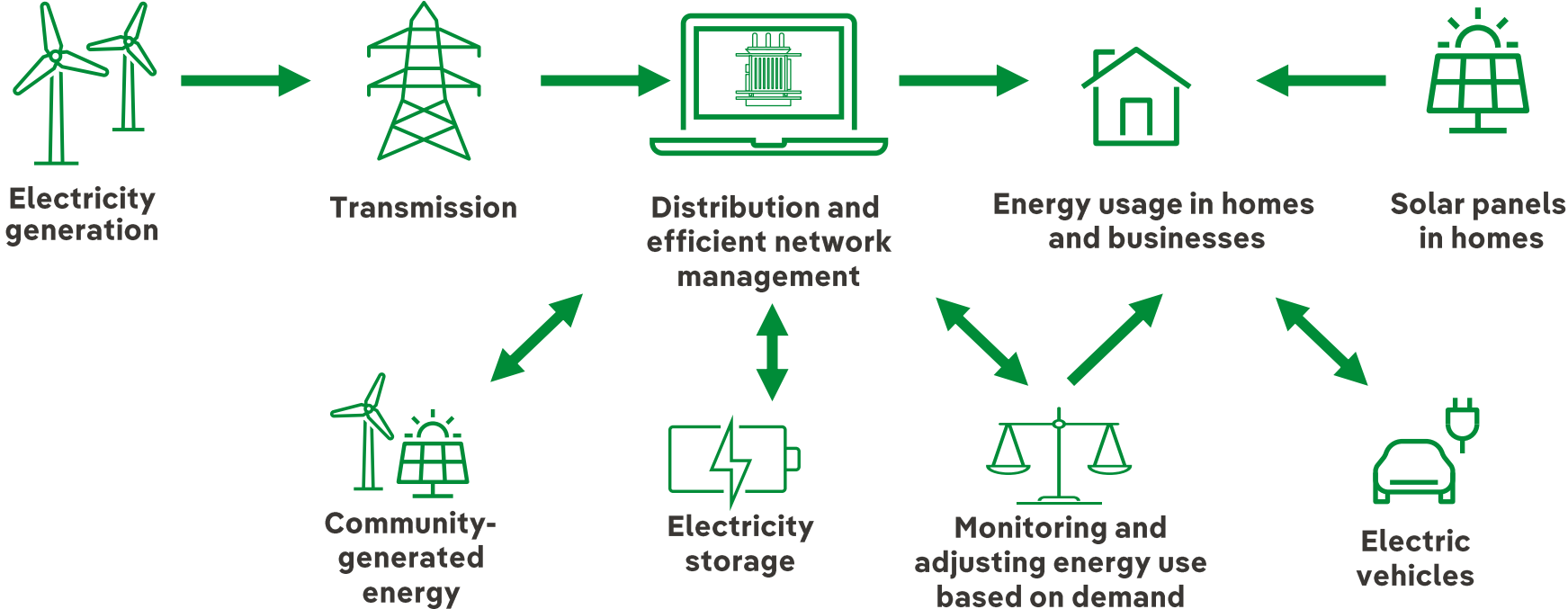


The way electricity is generated, stored, transported and traded is changing

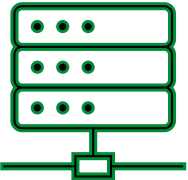
How we used to manage the network



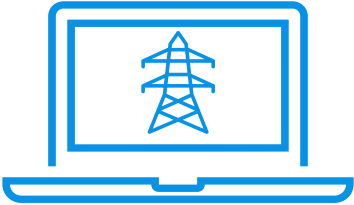
How the network increasingly looks today



The systems and processes needed to prepare our business and our stakeholders for a more sustainable energy future. Understanding how electricity is used and where to help us plan for the network's future needs, meet growing demand while keeping everything running smoothly.



Connections, planning & network development



Network operation



Market development



Inclusive flexibility services



Take Charge



EV charging support



Renewable energy



Smart Street Rural



Social DSO Fund

Reduction in reinforcement costs by **20%** at extra high voltage (EHV) levels and **33%** at high voltage (HV) levels through co-ordinated network development

For every **£1** of network cost savings we deliver for connected customers we deliver nearly **£3** of benefits to the wider energy system and society

130,000 homes benefiting from Smart Street with **£50c.** per home per year energy bill savings annually

Accelerated generation customers by six years and demand by four years through **flexible connections**

Social DSO Fund seeing **£3.34** of wider societal benefits for every **£1** invested into community energy groups and businesses

Despatched **8,736 MWh** of flexibility – more than double the previous year

First ANM connection accelerated connection date by up to **5 years** and stopped the customer facing **50% restriction of their import capacity** for most of the day

We're delivering major upgrades across Greater Manchester, Cumbria and Lancashire and working closely with regional authorities to drive economic growth, support high-value job creation and accelerate decarbonisation.

Keeping Greater Manchester moving

We've supported Greater Manchester to roll out 300+ electric buses, with plans in place to expand this to 1000 by 2030.



Unlocking Samlesbury Enterprise Zone



We invested £7.5 million in a new substation and network upgrades to unlock vital capacity at Samlesbury EZ which is expected to attract over £20bn of investment.

Delivering the Cumbria Ring

Our biggest ever investment in Cumbria to upgrade 154km of overhead lines and build a new 132kV substation at Harker.

- Unlocking 230MW of new capacity
- Enabling major clean energy projects
- Accelerating low carbon transport and heating



RIIO-ED3



We are planning our distribution network to meet long-term decarbonisation.

Increased rate of investment expected in RIIO-ED3 to meet net zero and CP2030, with ca. 120 engineering justification papers (EJPs), and development of future network blueprints.

Clean Power 2030



We are facilitating distribution connections that are first ready, and needed, by 2030.

Working to an ambitious timeline to implement **Connections Reform** with NESO and Ofgem, ensuring viable projects are not stuck behind those not progressing in the queue.

RESP



We are working with NESO to enable Regional Energy Strategic Plans.

Engaging with our customers and stakeholders to understand their needs, developing our granular range of DFES forecasts and undertaking detailed network planning.

Informing and supporting whole-system cross-vector optioneering to deliver net zero.

DSO for good

making the energy
transition work for
everyone

Katherine Horne
Social DSO Manager
SP Electricity North West

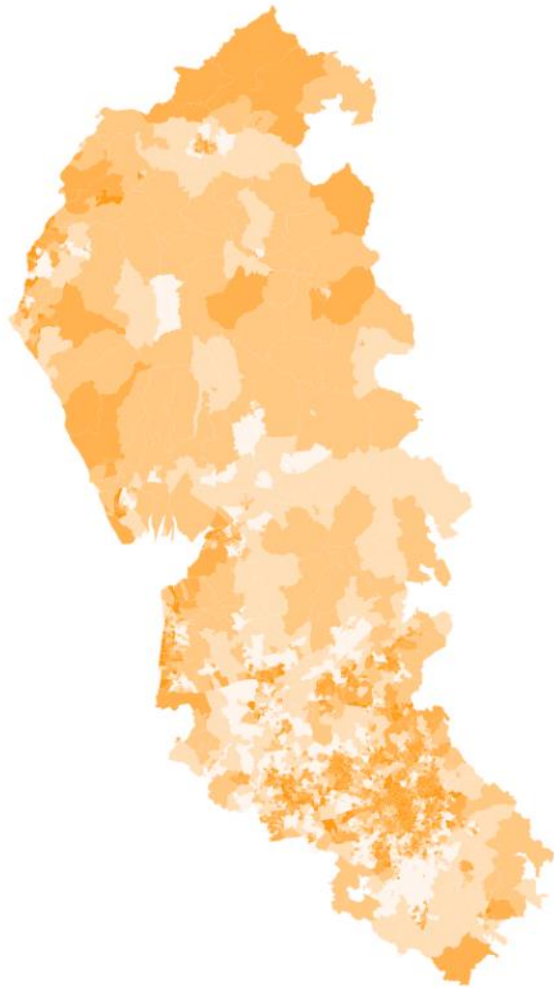


DSO for Good

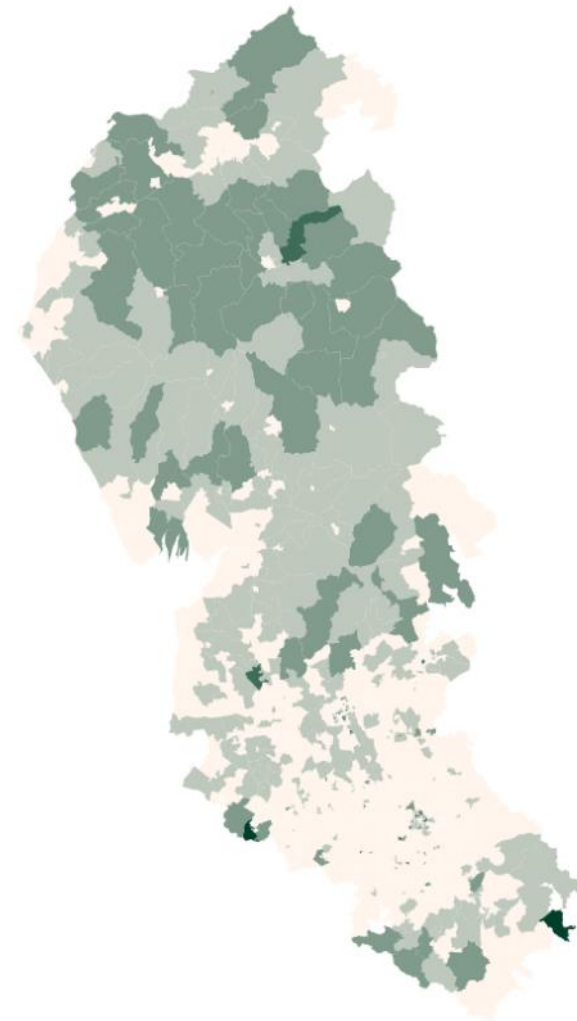
Social DSO – Working with our stakeholders.



The need – why Social DSO matters more now than ever



Source: English Indices of Deprivation 2025 (IMD) – Ministry of Housing, Communities & Local Government / ONS Geography



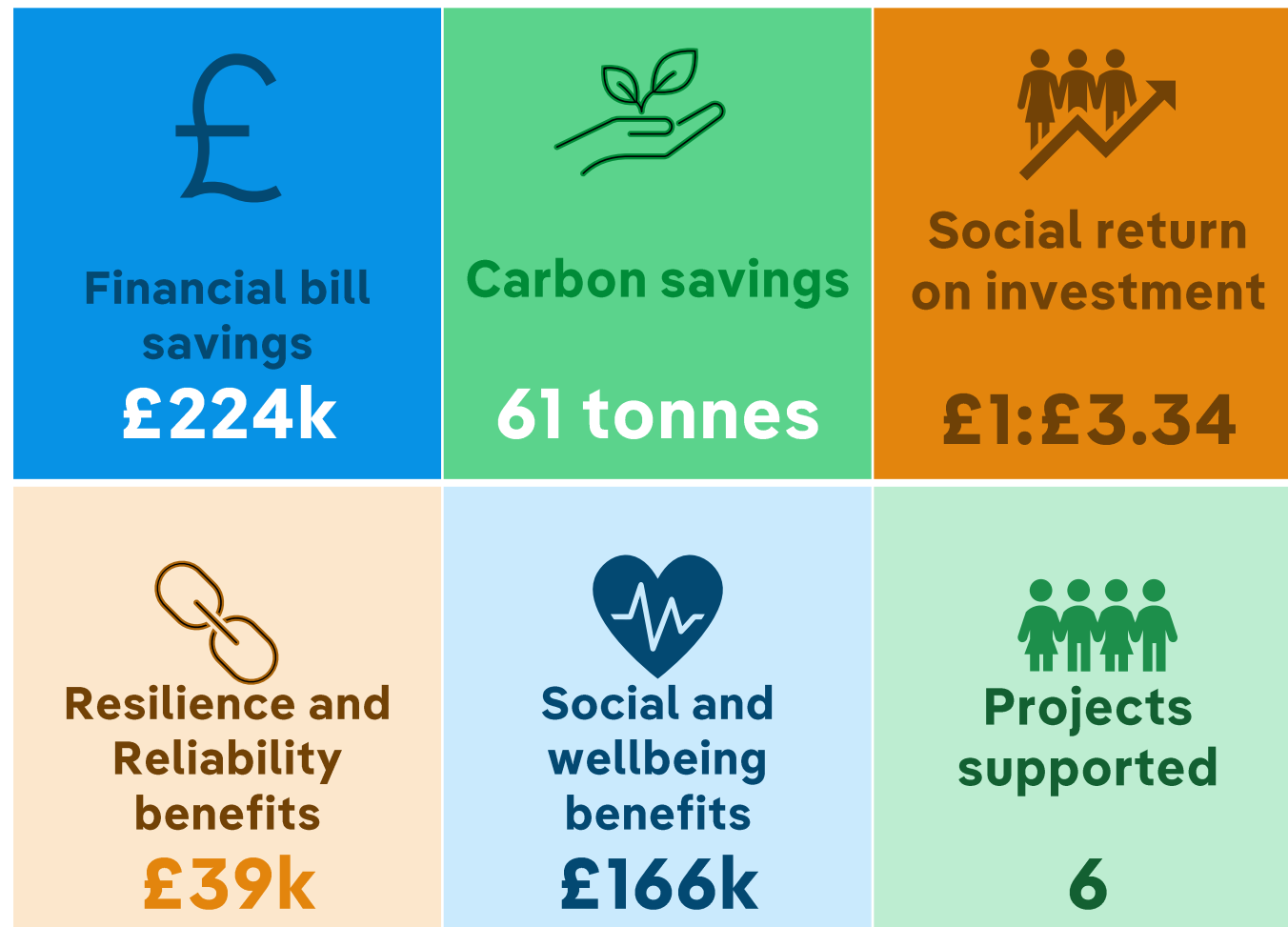
Source: MCS Certified Installation Database (MCS Data) & SP ENW (Internal Network Data)

What we've done – One year of Social DSO

Our Social DSO Goals.....	What we delivered.....
1 Make timely investments that support regional and national net zero targets	Developed our enhanced Social CBA to help us value the wider social impact of our investments.
2 Make decisions that maximise social, environmental and economic benefit in the North West.	Smart Street delivers £50 savings/yr per household, reaching 130,000 households. Social DSO help with decision-making, ensuring investments drive wider benefits.
3 Promote broader sharing of net zero benefits by supporting clean energy investments, sustainability and climate projects in vulnerable communities	Social DSO Fund launched – 6 projects / £110,000 invested – installing solar and battery across School, NHS, village halls and a community swimming pool.
4 Increase participation in the energy transition, extending beyond the usual groups to include those at risk of being left behind.	Piloted Empower : training for Local Authorities, Launched the LCT Readiness toolkit , Widening participation to local flexibility market, Funding enhancements to Take Charge through Net Zero training.
5 Work collaboratively to increase system efficiency, using smart technology and partnerships to maximise clean renewable energy when it is available.	Launched partnership with EnergyCloud Foundation , to use surplus renewable energy to provide free hot water to households in fuel poverty.

Delivering wider social benefits

- Modelling and calculations consistent with HMT Green Book guidance.
- Initial modelling to include the Social DSO Fund only.
- Captures wider impacts: direct bill savings, carbon savings, health and wellbeing, community resilience.



Notes:

*Data relates to the Social DSO Fund only.

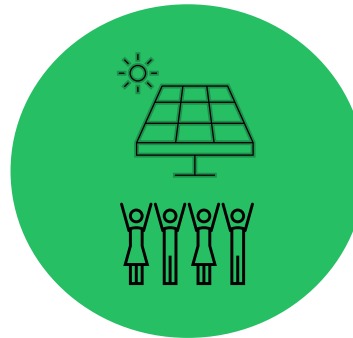
1



Smart + Fair network innovation

Scaling smart street rural and developing community-led decarbonisation through Net Zero Terrace phase 2.

2



Grow local capability and community power

Expanding the Social DSO Fund and widening Local Authority and community energy capacity building.

3



Unlock participation and shared benefits

Opening community access to flexibility markets and scaling partnerships like EnergyCloud to deliver social benefits.

Final messages:

- Inequality is shaping the energy transition.
- Year one has proven Social DSO works.
- To scale we need to embed fairness, inclusion and shared benefit.
- **How can we work together to lower barriers, widen participation, and make the transition accessible for everyone we serve?**



Forecasting and coordinated network development

Christos Kaloudas
Capacity Strategy Lead
SP Electricity North West



Security of supply

- Avoid overloaded and capacity exceeding assets
- Lead times for network reinforcement works require prediction of capacity issues
- Capacity release via flexibility services require signposting of future requirements

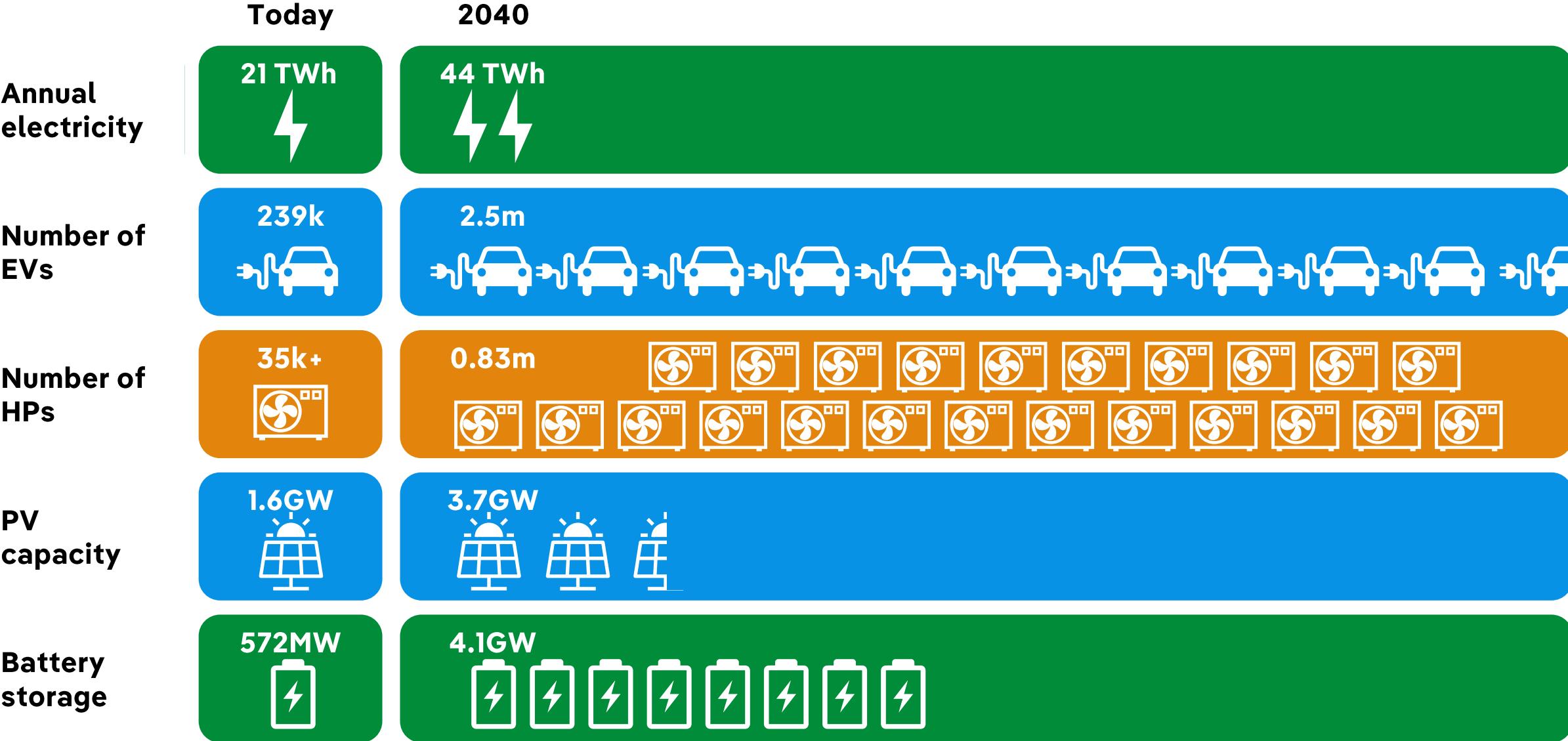
Economic network development

- Avoid stranded assets
- Avoid piecemeal network expansion (reactive to connections activity)
- Release capacity where & when needed

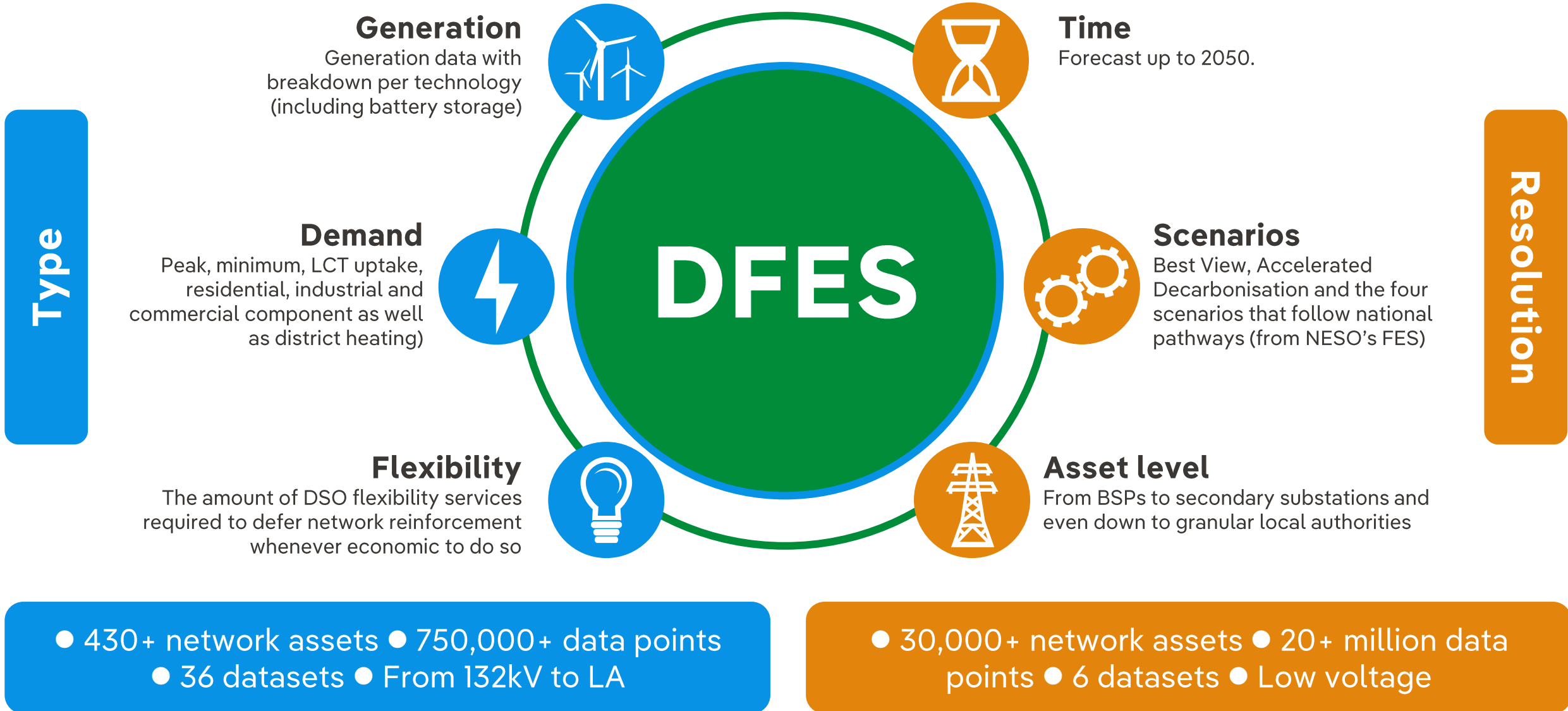
Stakeholder plans & whole system optimisation

- Supporting NESO's regional energy strategic plans (RESP) and whole system optimisation
- Supporting local stakeholder plans (incl. LAEPs and local economic growth)

A day in our region in 2040



Our Distribution Future Electricity Scenarios (DFES)



Our DSO forecasting – use of best data, insights & models



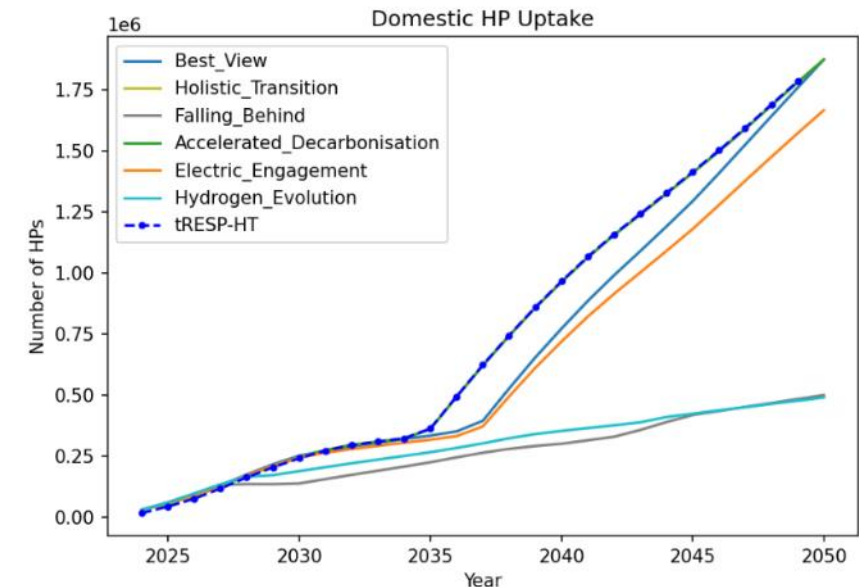
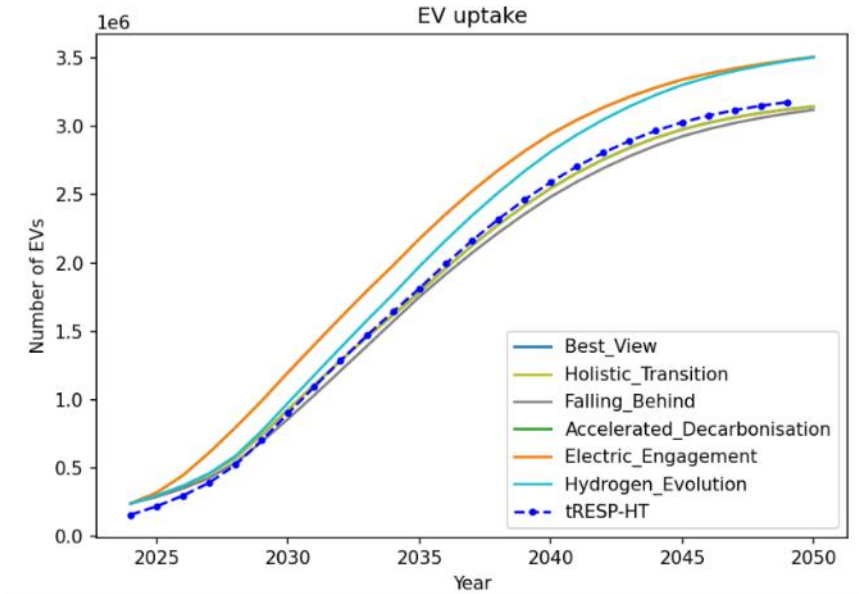
High certainty in electrification of transport

Increasing certainty in electrification of heating

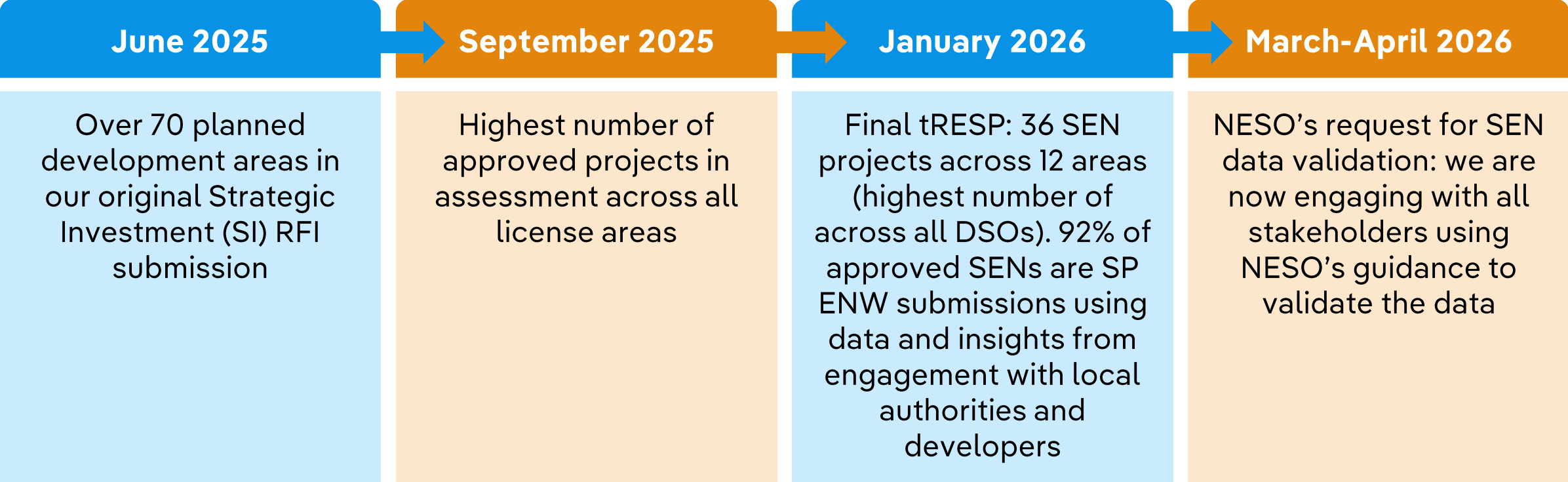
tRESP pathways informed by our DFES. Good alignment highlights NESO's confidence in our forecasts

tRESP Common Planning Assumptions (CPAs) provided for EVs and heat pumps (half-hourly profiles)

Our ED3 business plans (2028-2033 regulatory period) will be based on tRESP (i.e., pathways, CPAs and Strategic Energy Needs)



Projects that the NESO's tRESP process has identified as appropriate for proactive network investment beyond business-as-usual processes



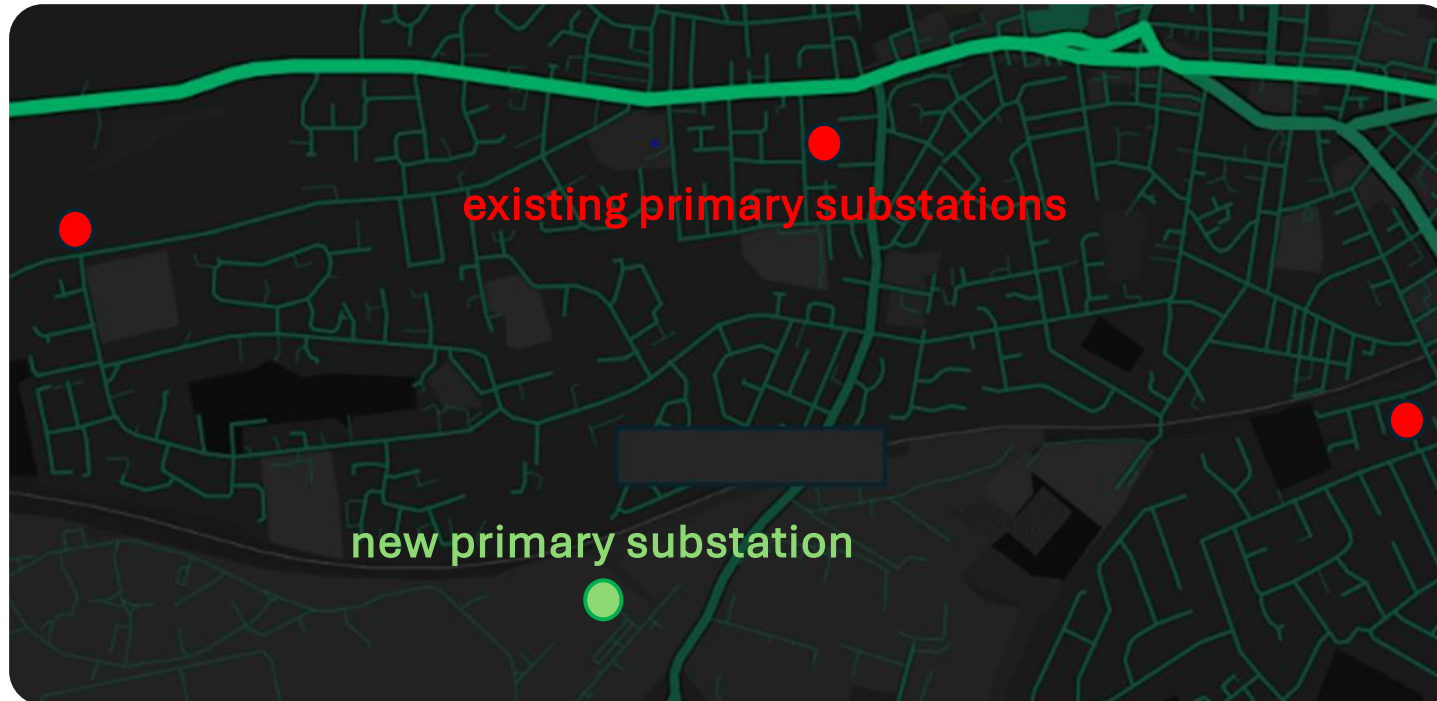
Over 300 smaller planned development areas: we follow a standardised ENA process to identify certainty of projects and consider learning from the NESO tRESP process on SENs to reflect how these projects will be considered in our ED3 business plan

Stakeholder developments modelled in DFES

District heat network (DHN) plans (LA plans / before connection application)
LCT and demand connections growth (connections activity on nearby primary substations)

With DSO forecasting in network planning

- New primary substation (2x32MVA) with new 33 and 11kV cables & switchgear
- Providing 32MVA with just above £6m



Without DSO forecasting (counterfactual)

- Piecemeal expansion driven by individual connections.
- Works at three primary substations (transformers, switchgear, 33kV cables)
- Providing 49MVA with over £11m

Benefits with use of DSO forecasting:

- a) -20% cost per kVA released
- b) reduced reinforcement volumes
- c) Early kick-off of construction works
- d) accelerated capacity release



Active network management & flexibility



Paul George

DSO Commercial Lead

SP Electricity North West

The ANM system is a constraint management system

Connects separate components of a smart grid such as generators, storage devices, controllable demands etc, and **monitors and controls** their operation.



Continually **monitors** all the network constraints in **real time** only **reacts** to network events and alarms caused by a predefined threshold being breached.

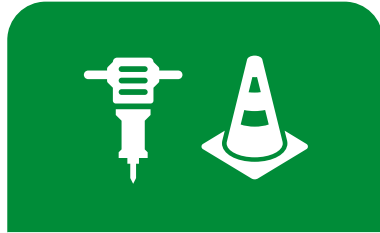


Via automated controls, **changes power flows** using flex assets or **instructs** flexible services or flexible connections with the constraint to temporarily change their power input or output.



ANM Look Ahead: forecasts future network constraints and identifies DER solutions

ANM Real Time: monitors live network conditions to detect constraint violations and manages them in real time



Decreases/
removes the
need for
network
reinforcement



Reduced
disruptions (e.g.
road closures)



Increased
network
utilisation



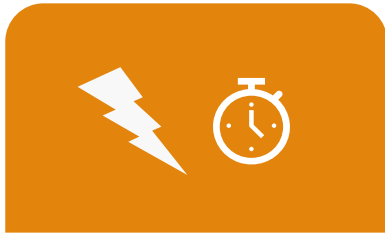
Cheaper bills for
customers
(potentially in
the long-run)



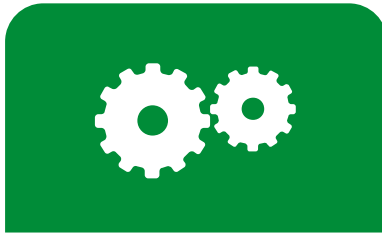
Facilitates the
utilisation of
flexibility
services



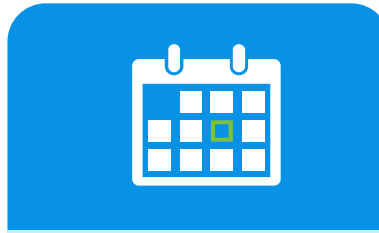
Generates
revenue for
flexibility service
providers



Better quality of
supply (faster
restoration time
during faults/
outages)



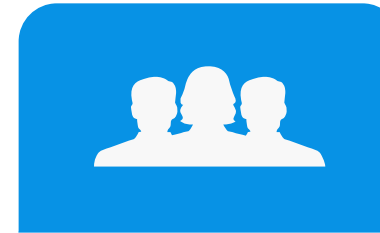
Increased
security of
supply by faster
automated
switching



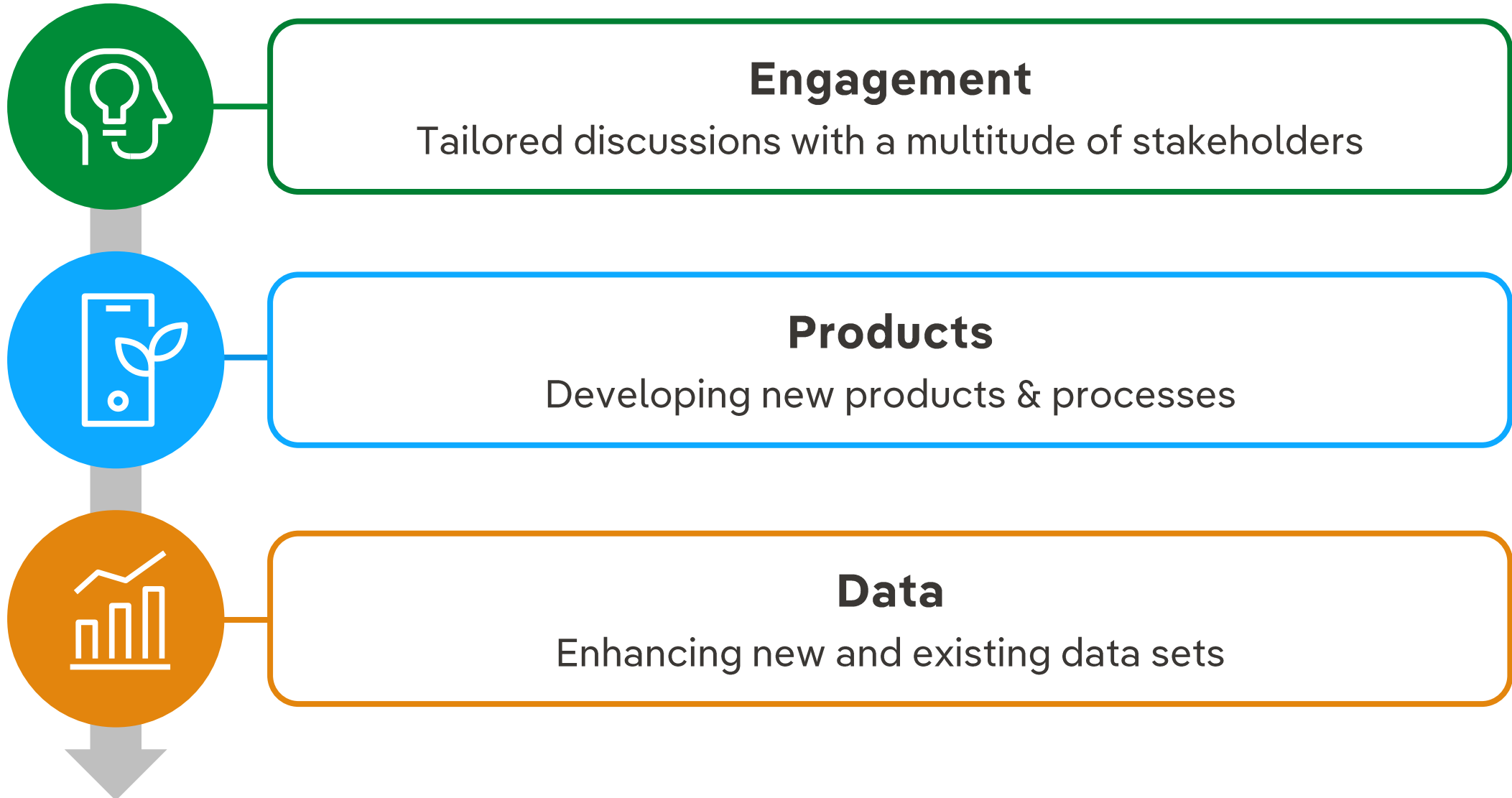
Faster
connections



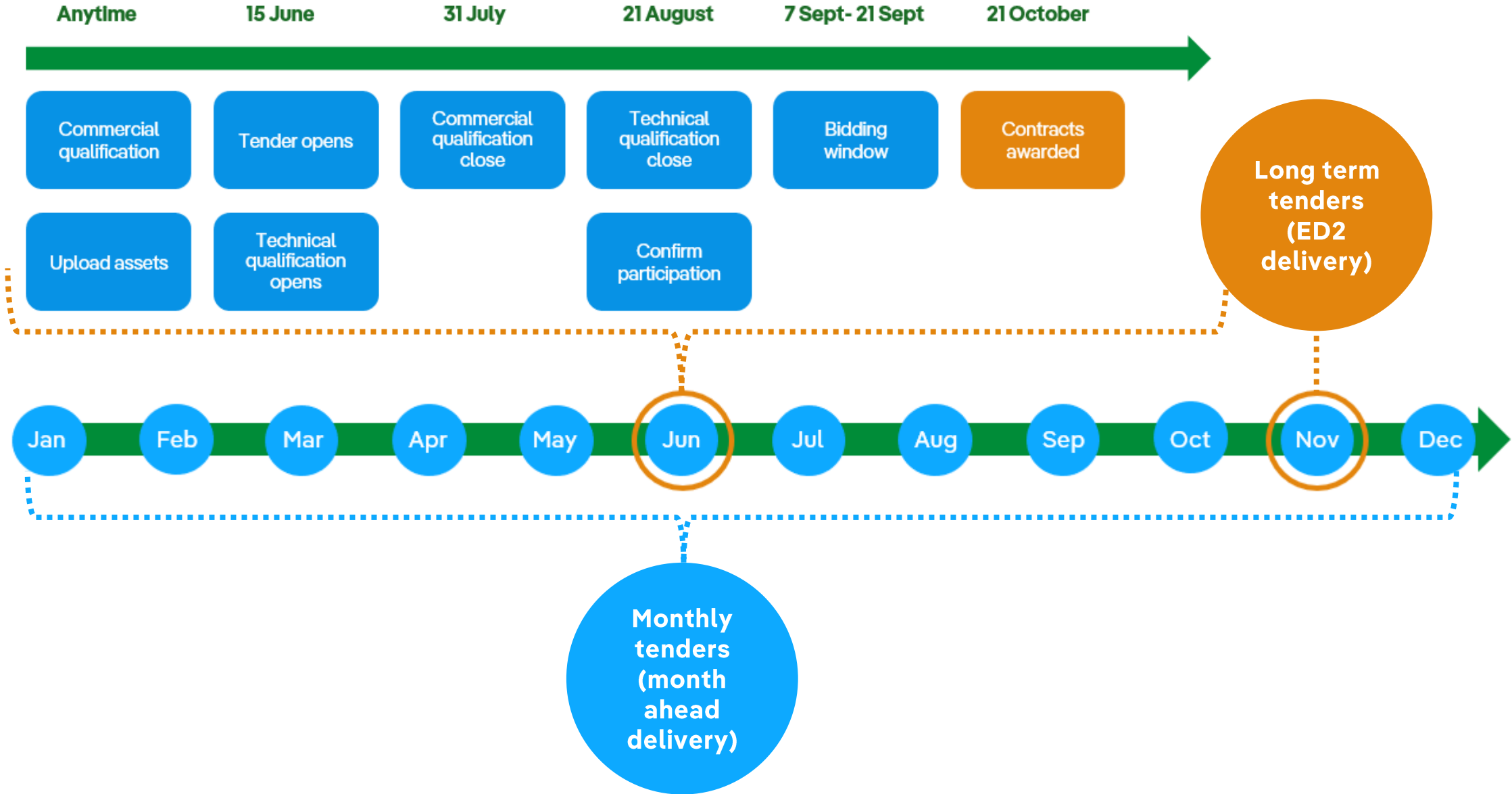
Cheaper
connections –
using existing
capacity of the
network



Facilitates a
market to be
established for
users to trade
energy



2026/27 Flexibility tender structure



Evolving our flexibility data

- Field Descriptions & Overview +
- Tender Process +
- Use Cases +
- FAQ's +
- Helpful Tools +

Monthly View
6 – Month View
Technical Overview

Enter postcode

Voltage Level
-- All voltages --

Service Type
-- All service types --

Days Required
-- All durations --

Service Period
-- All periods --

Ceiling Price Range (£/period)

£0 — £1,000,000

Min

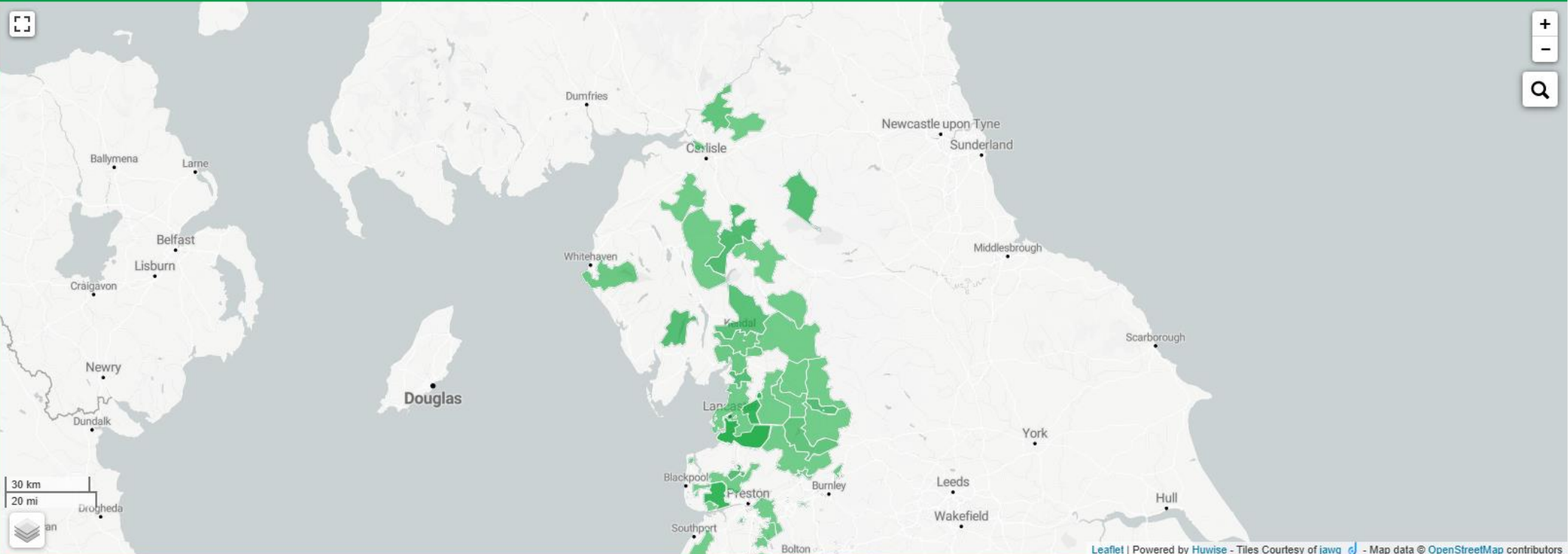
Max

Utilisation Price Range (£/MWh)

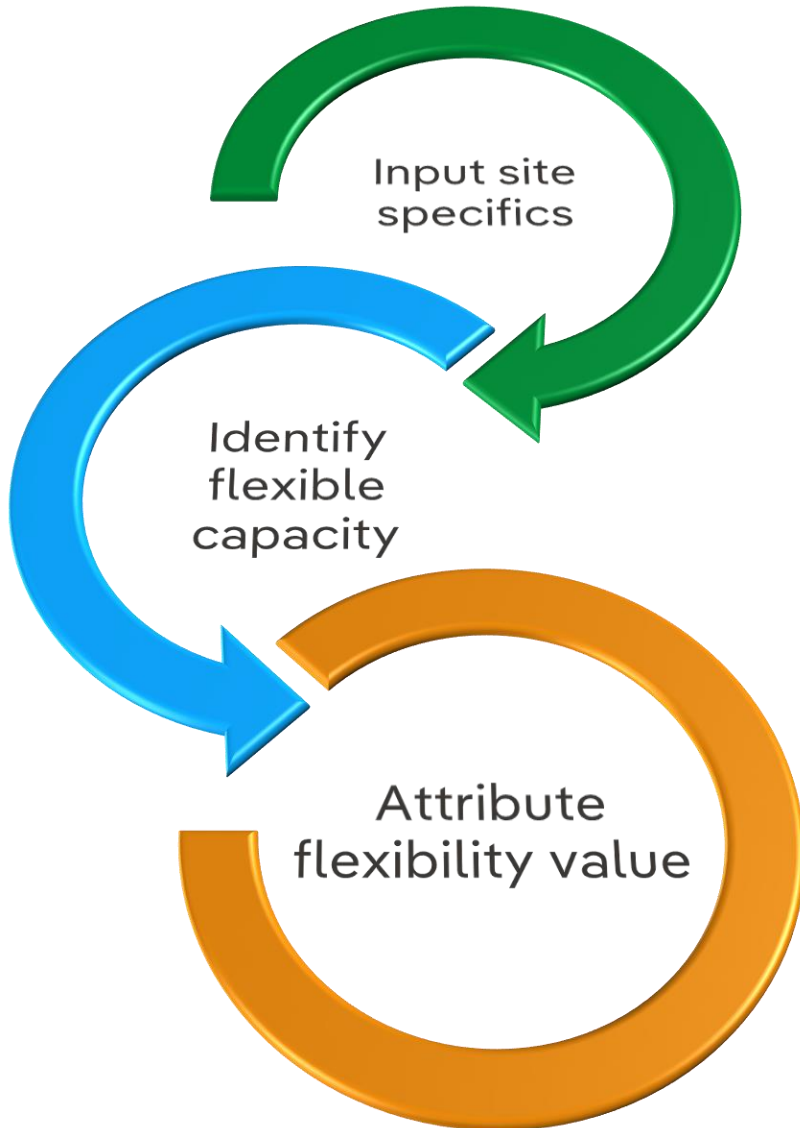
£0/MWh — £1,000/MWh

Min

Max



Location Details									
	Post Codes	Voltage of connection (kV)	Need Type	Maximum requirement (MVA)	Maximum Utilisation Price (£/M...	Ceiling price (£/Period)	Estimated availability hours	Estimated utilisation	
1	FY8 3 ,M1 5 ,M1 6 ,M1 7 ,M11 2 ,M...	0.24/11/33kV	Variable Availability + Operational ...	11.45	0	72293	311	48	
2	FY8 3 ,M1 5 ,M1 6 ,M1 7 ,M11 2 ,M...	0.24/11/33kV	Peak Reduction	23.41	0.80	48188	0	2,562	
3	M31 4 ,M33 2 ,M33 4 ,M33 5 ,M33 ...	0.24/11kV	Variable Availability + Operational ...	1.81	0	25316	36	48	
4	M31 4 ,M33 2 ,M33 4 ,M33 5 ,M33 ...	0.24/11kV	Peak Reduction	1.81	5.88	25316	0	2,379	



- Feed actual consumption data into interactive tool
 - Building profile
 - Total floor area etc.

- Stipulate technology type
 - Installed already or planned
- Identifies potential flexible capacity and energy efficiency savings

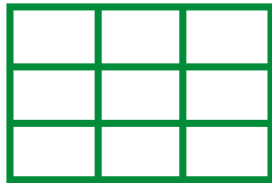
- Aligns output with our Flex tender CMZs
- Links flexible capacity delivered to CMZ revenue
 - Delivers total monetary value/benefits

Data and insights for action

Dan Wilson
Asset Analytics Manager
SP Electricity North West



SP Electricity North West open and shared data



181 datasets (94 open)

- Distribution Future Electricity Scenarios
- Flexibility services maps
- Network capacity
- Historic outage maps
- Low carbon technology readiness
- Datasets roadmap



Dedicated pages

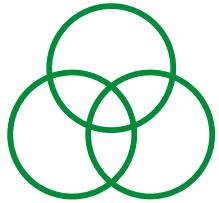
- Distribution Future Electricity Scenarios
- GSP connection queues
- Substation capacity
- Boundary flow



Web tools

- Grid charge planner
- Small scale solar project planner
- Network asset viewer (NAV)

Data sharing is more than uploading a spreadsheet – at SP ENW we show you the big picture



Merging datasets

- Pre-publication, data workflows blend numerous data tables to create the visualisations of datasets
- e.g. DFES, Network Development Plan, GSP queue and capacity heat maps



Dedicated pages

- Dedicated pages combine datasets to maximise the data story
- Persona based page to help you find the most relevant data sets



Truly accessible

- Spatially referenced data set to allow mapping and linking
- Full set of feeding areas polygons
- User interface visualisations to make sense of the data



Continuous improvement

- Ongoing, iterative process
- The way we share data constantly refined

User-friendly tool to visualise the regional implications of future electricity scenarios

Distribution Future Energy Scenarios (DFES) 2025
Electricity North West's potential future scenarios.

Choose a scenario:
Accelerated Decarbonisation
A description goes here

Choose a parameter:
Electric vehicles (number)
Number of registered plug in electric vehicles (pure and hybrid)

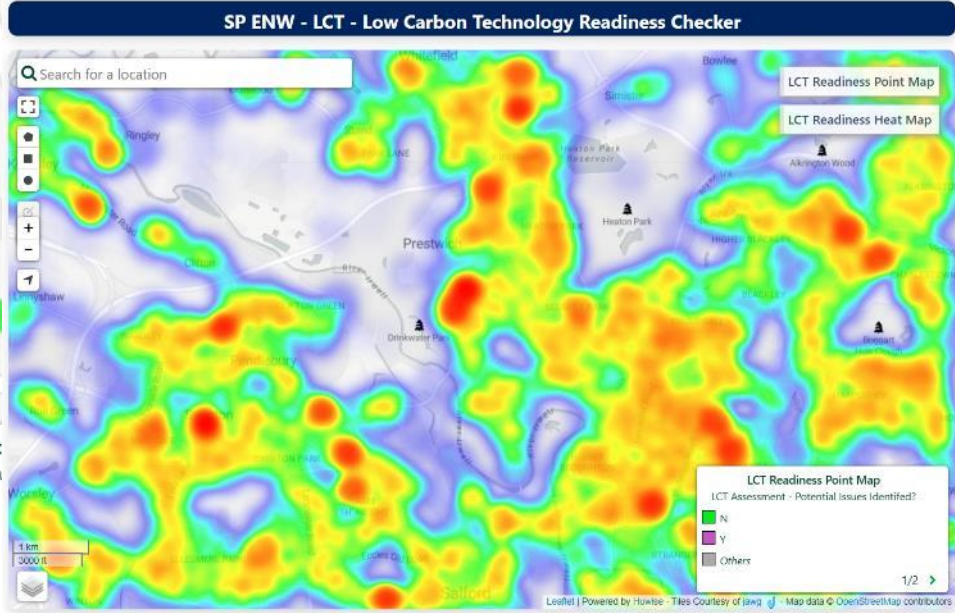
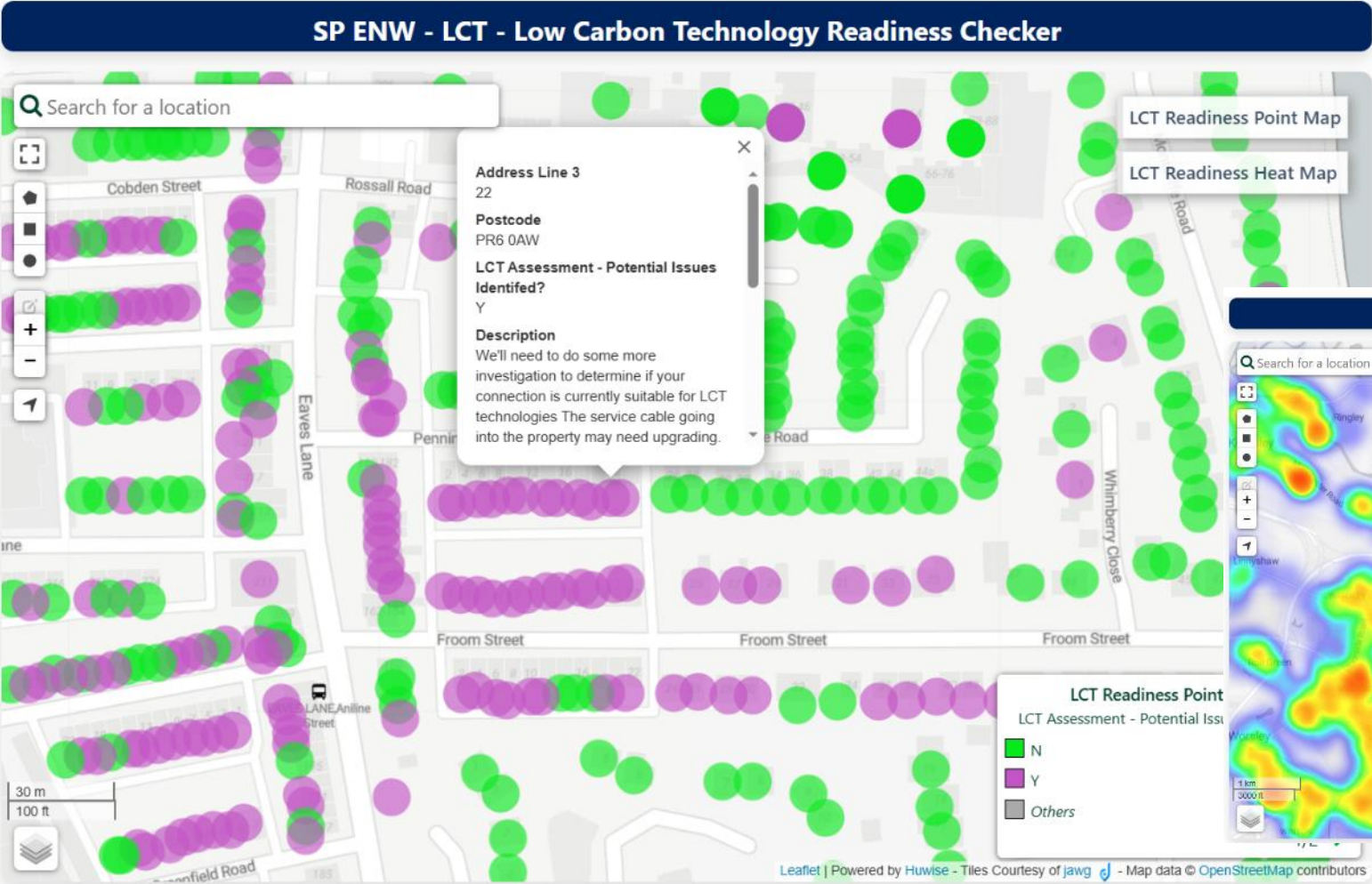
View by:
Primary substations

Select year (2029):
2030 2040 2050

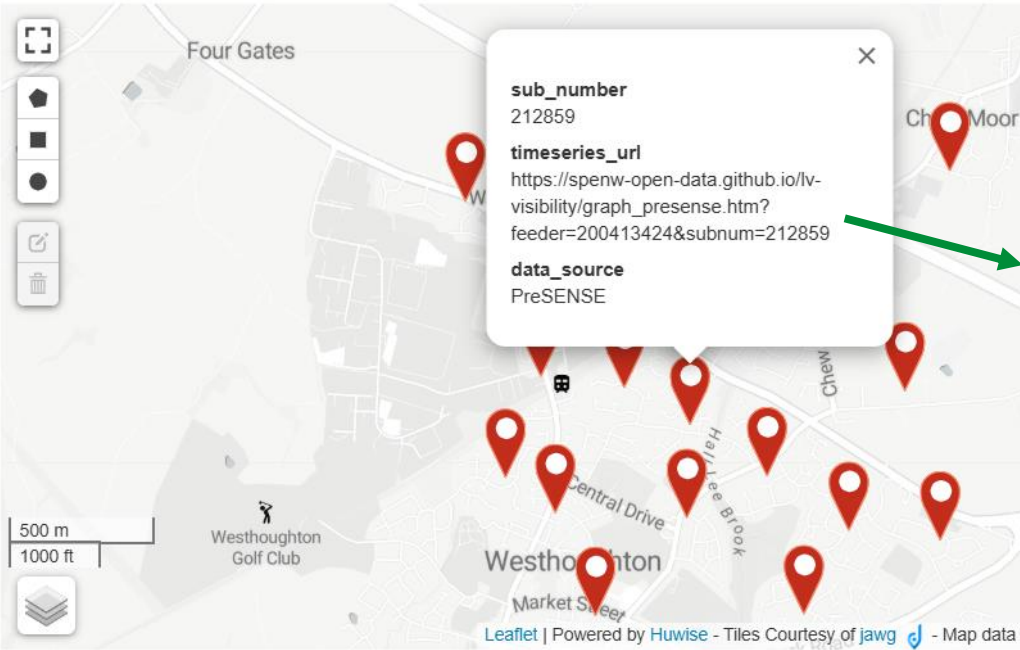
To better show changes in values over time you may wish to change the colour scale.

Map labels: BELFAST, LISBURN, ISLE OF MAN, DUBLIN, Bangor, Chester, LIVERPOOL, Preston, MANCHESTER, Sheffield, Doncaster, LEEDS, YORK, HULL, NEWCASTLE UPON TYNE, Sunderland, Lincoln

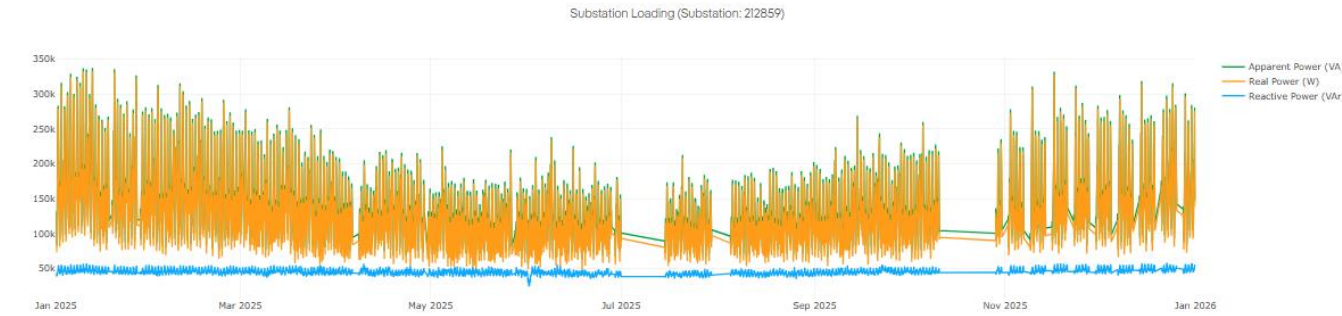
Property-level insight into the readiness of the network to support low carbon technology rollout



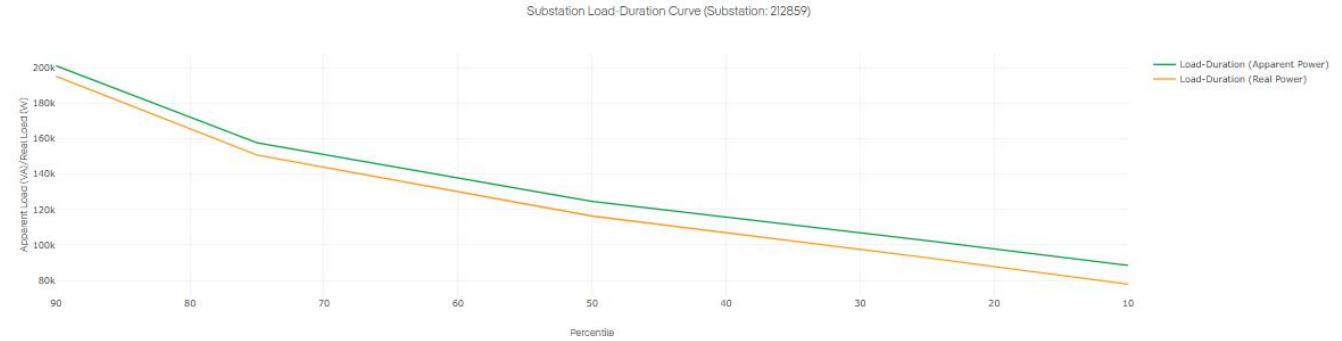
Half-hour granularity substation consumption data to understand load and capacity over time



SP Electricity North West



Download Timeseries Data



Download Load Duration Data

Advanced tools to use our industry-leading connectivity model to plan connections

Index	FID	Feeder	Length (m)	Ducted Length (m)	Conductor Type	Cable/OH Line	Standard	Can be considered as S34 horizontal electrode
82	10847705	1001143CW04	7.91		HV Underground	1001143CW04: Stranded Corrugated Aluminium Sheath	EN 50118-1:09-12	No
83	10847868	1001143CW04	22.07		HV Underground	0.30in2 Aluminium Stranded		
84	10847706	1001143CW04	11.88		HV Underground	0.50in2 Aluminium Stranded		

Backfeed from 1001353CW21 via 1718103SW02 (HEALD GR: F5104 BANFF RD)

Start FID	10569255
Primary Substation	LONGSIGHT 33/6
Circuit	1001353CW21
Resistance of Primary Earth Grid (Ra) ohms	0.0000
Primary S/S 1 hot: (Yes / No / Not applicable to this project)	COLD
Primary S/S EPR (if hot / applicable) volts:	83

[Export To Excel](#)

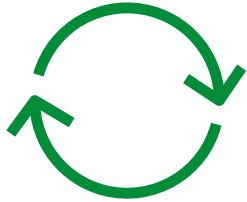
Trace Results

Index	FID	Feeder	Length (m)	Ducted Length (m)	Conductor Type	Cable/OH Line	Standard	Can be considered as S34 horizontal electrode
1 (exit point, POC)	10569255	1001143CW04	211.28		HV Underground	3x1c 300mm2 Aluminium Solid XLPE copper wire screen	BS 7870 - 4:10	No
2	69989832	1001143CW04	2.83		HV Underground	3c 0.15in2 Copper Stranded Paper Insulated Aluminium Sheath	BS 480/6480	Yes

those between the root of the trace and selected feature:

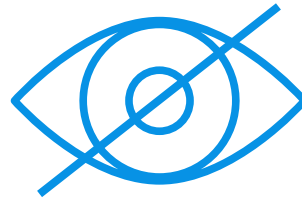
Line Type	Asset Type	Name	Substation
conductor_hv	HV Underground	3x1c 300mm2 Aluminium Solid XLPE copper wire screen	
ie_hv	T trifurcating_Jt		
conductor_hv	HV Underground	3c 0.15in2 Copper Stranded Paper Insulated Aluminium Sheath	
ie_hv	Dividing Box		
th	Fault Making Switch	F43B9 ROPEMAKER CT	HEALD GR 17/1810
ber			HEALD GR 17/1810

The landscape of data-sharing is changing



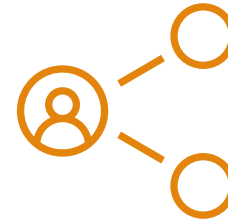
Open as possible

- Published datasets should be as open as possible
- Data portal published under Creative Commons Open licence



Sensitivity of data

- DESNZ and government security bodies issued guidelines on what should/shouldn't be openly shared
- Some data seen as valuable to stakeholders cannot be shared due to sensitivity



Shared licence

- We now have more granular data we can make available to specific authorised parties
- This allows us to share valuable data while limiting the risk

We are continually assessing the data we publish, exploring different ways to format data to add additional value, or visualising it in clearer, innovative ways to make it more accessible

Please get in touch with your comments or suggestions on our data offering, either enhancements for existing datasets or ideas for something completely new

https://electricitynorthwest.opendatasoft.com/pages/contact_us/

Supporting local authorities

Lynn Tracey
Stakeholder Engagement
Manager



Our current support

SP ENW is seen as proactive, visible and responsive. Our current support includes:

- Open data portal
- Regular bilaterals
- Grid charge planner
- Jargon buster
- LAEP+

Future enhancements

We are planning improvements in:

- Non-technical assistance for local authorities unfamiliar with energy planning
- Better engagement coordination
- Clearer guidance on our future plans

The challenge: Local authorities are expected to design and deliver local area energy plans (LAEPs) but our review highlighted knowledge gaps around energy systems and data, a lack of coordination across stakeholders and challenges securing senior buy-in

To accelerate local net zero planning and project delivery, working with Green Economy we have developed 'Empower' – an education programme for local authorities



Aims to overcome barriers to build and deliver LAEPs



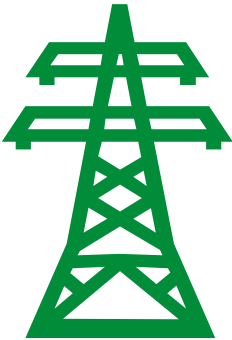
Focus on knowledge gaps and senior buy-in



Three workshop levels depending on LA needs

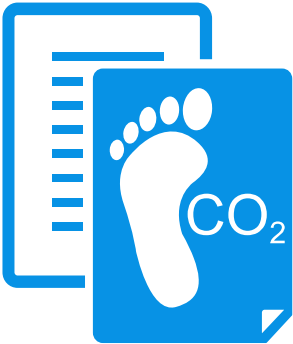
Pilot to be delivered before the end of March 2026
Followed by an impact report with feedback and recommendations for next phases

A structured, scalable education programme with three levels tailored to a local authority's LAEP maturity



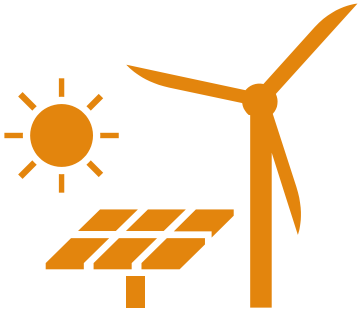
1 - Introduction to energy planning

1.5hr online covering energy basics and role of DSO and LAEP



2 - Build your LAEP (1 day)

For LAs without a LAEP or in the process of delivering one



3 - Deliver your LAEP (1 day)

To help engage key stakeholders and drive forward actions and projects

Local authorities will be better equipped to create and deliver LAEPs

Greater capacity to secure investment and accelerate decarbonisation projects

Stronger engagement with communities, businesses and funders

Improved coordination across regions

Progress against SP ENW commitments

I've found it very interesting and it has greatly improved my knowledge, this being from a very basic level

The training was excellent, struggling to immediately think of improvements

I thought it was excellent. Well paced. Very informative. Good and knowledgeable presenters plus useful to hear from other LAs. Relaxed and friendly. Confidence of 3 stars an improvement from 0 (from me!)

It was great! Came away really enthusiastic about the prospect of a LAEP

Really good session, good to hear from other LAs and have discussions about how others are addressing this. Really helped my understanding for the electricity network and the data page was a revelation

A very comprehensive training session with a good mix of technical information, knowledge sharing and exchange of ideas with colleagues from neighbouring authorities

Excellent training

Stakeholder agreement on:

Is this useful to you?

Can you commit to phase 1 and 2 of the delivery?

Could this be expanded for community and local energy groups?

How can this work better?

What more can we do to support you?



Lunch



**LAEPs and
how we can
work
together**

**Flexibility
and the
future**

**The
importance of
data**

Connections

Social DSO

Innovation

Distribution System Operation Conference

26 March 2026

