

February 2025

# Cross Party Group on Renewable Energy and Energy Efficiency

# Introductions

**Lauren Logan – Head of Transmission Regulation & Policy, SP Energy Networks**

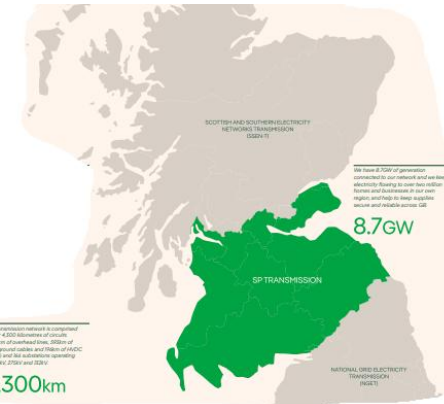
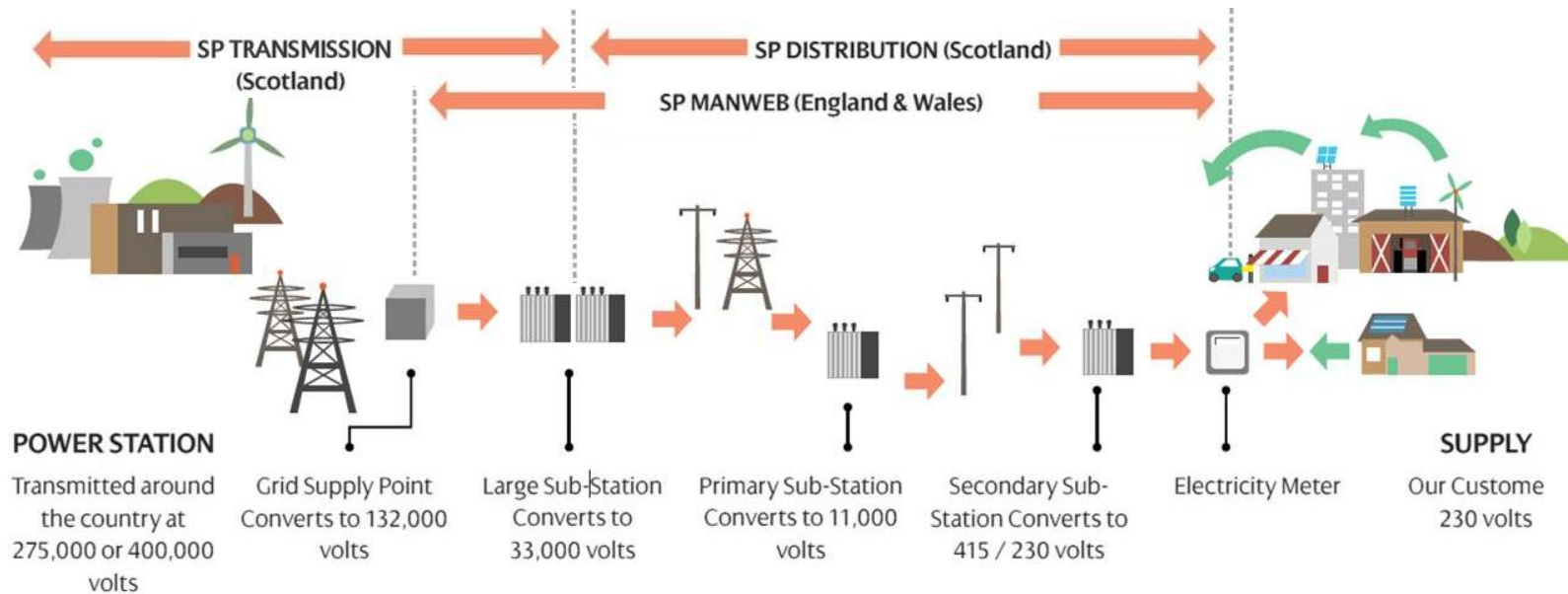
**Phil Henderson – Director of Government Affairs, ScottishPower**

# Who are SP Energy Networks?

SP Energy Networks is part of the Scottish Power Group.

Our role is to maintain, operate and invest in our network to secure a safe, reliable, and economic service for current and future consumers.

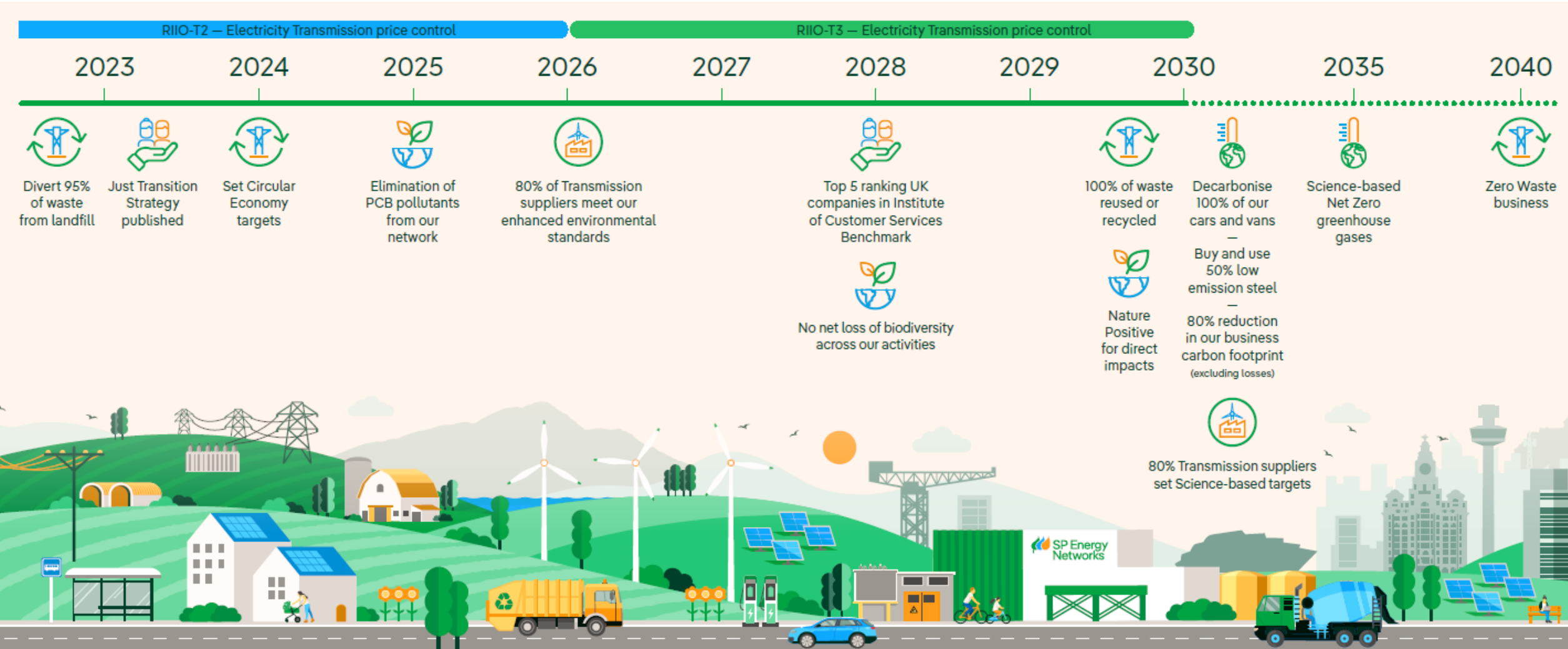
We transport electricity to homes and businesses as a **Distribution and Transmission Network Operator**.



# RIIO-T3 – what is it and why it's important?

- RIIO – Revenue= Innovation + Incentives + Outputs
- As a regulated business, our business has 5 year business planning cycle

The roadmap below shows our sustainability goals and targets on our journey to 2040.



- GB electricity grid needs the biggest rewiring ever seen.
- It is estimated that **consumption will increase 50% by 2036 and more than double by 2050.**
- SP Energy Networks are taking a pragmatic approach:
  - Upgrading lines and substations making them fit for the next 100 years
  - Getting the most out of existing assets by uprating the voltage of current lines and utilising smart technology.
  - Offshore options are being developed with a number of subsea cables in development to bolster the system.



# RIIO-T3 delivering CP30 and economic growth

Our RIIO-T3 business plan sets out our ambition to meet net zero, boost the GB economy, meet CP30 targets and protect GB consumers

- SP Energy Networks has committed **£10.6bn plan** to deliver the critical electricity infrastructure, **connecting 19GW to the grid**, leading to a **£167 saving per household every year by 2030** (SPT's part of the bill will be **£12.07**)
- This plan will deliver new and upgraded transmission infrastructure in central and southern Scotland, including:
  - 12 new major transmission substations,
  - 450km of upgraded existing circuits,
  - 87km of upgraded overhead lines
  - 35km of underground cables – all to help increase capacity on the GB transmission grid to meet demand.
- Independent economic analysis shows that SP Energy Networks T3 could create sustained **economic benefit to the UK of around £2bn per annum**.
- SP Energy Networks plans to double its transmission workforce.
- Secure and resilient supply – Maintain current reliability at 99.999%



# How we will deliver

<p>New FTE roles, (majority relating to project delivery)</p> <p>INFRASTRUCTURE</p> <p>1,422</p>	<p>Increase in in-house training capacity with a new training centre</p> <p>VALUE</p> <p>x2</p>	<p>Value of contractual framework with strategic partners</p> <p>VALUE</p> <p>£5.3bn</p>	<p>Our organisation, workforce and supply chain</p>
<p>Fund proposed to support clean energy ambitions of local communities</p> <p>SERVICE</p> <p>£20m</p>	<p>Globally recognised stakeholder engagement standards</p> <p>VALUE</p> <p>AA1000</p>	<p>Three distinct engagement themes (infrastructure delivery, communities and connections)</p> <p>SERVICE</p> <p>3</p>	<p>Engaging with our stakeholders and supporting communities</p>
<p>Investment in our data and digitalisation programme</p> <p>VALUE</p> <p>£94m</p>	<p>Four pillars for improvement to meet the intensity of RIIO-T3</p> <p>INFRASTRUCTURE</p> <p>4</p>	<p>Excellence against all 11 principles of Data Best Practice</p> <p>RESILIENCE</p> <p>11</p>	<p>Embedding digitalisation and becoming a data-driven organisation</p>
<p>Innovation deployed in BAU</p> <p>INFRASTRUCTURE</p> <p>&gt;£380m</p>	<p>Funding for 3 out of every 4 projects to explore experimental innovation</p> <p>RESILIENCE</p> <p>&gt;75%</p>	<p>Exploring higher risk innovation</p> <p>VALUE</p> <p>&gt;£22m</p>	<p>Nurturing and deploying innovation</p>
<p>Carbon footprint reduction relative to 2018/19</p> <p>VALUE</p> <p>66%</p>	<p>All waste reused or recycled</p> <p>VALUE</p> <p>100%</p>	<p>Supply chain with greenhouse gas emissions reduction target</p> <p>INFRASTRUCTURE</p> <p>80%</p>	<p>Being a sustainable, responsible business</p>





SP Energy  
Networks





**Scottish & Southern**  
Electricity Networks



# ABOUT SSEN DISTRIBUTION

One of six DNOs in Great Britain, our electricity distribution network delivers power to over 3.9 million homes and businesses across the diverse and unique geographies of the north of Scotland and central southern England.



In line with our purpose and vision, we recognise our critical role in delivering a net zero future at a local and regional level and accelerate progress in the Government missions to **kickstart economic growth** and **make Britain a clean energy superpower**.

## OUR NETWORK AT A GLANCE

Over **3.9 million** homes and businesses

More than customers **1m** on our Priority Services Register

Over **128,000km** of overhead lines and underground cables

**460km** subsea cables powering island communities

Over **4,400** employees across the country





# OUR NORTH OF SCOTLAND LICENCE AREA



Underground cables  
**18,943km**



Overhead lines  
**30,209km**



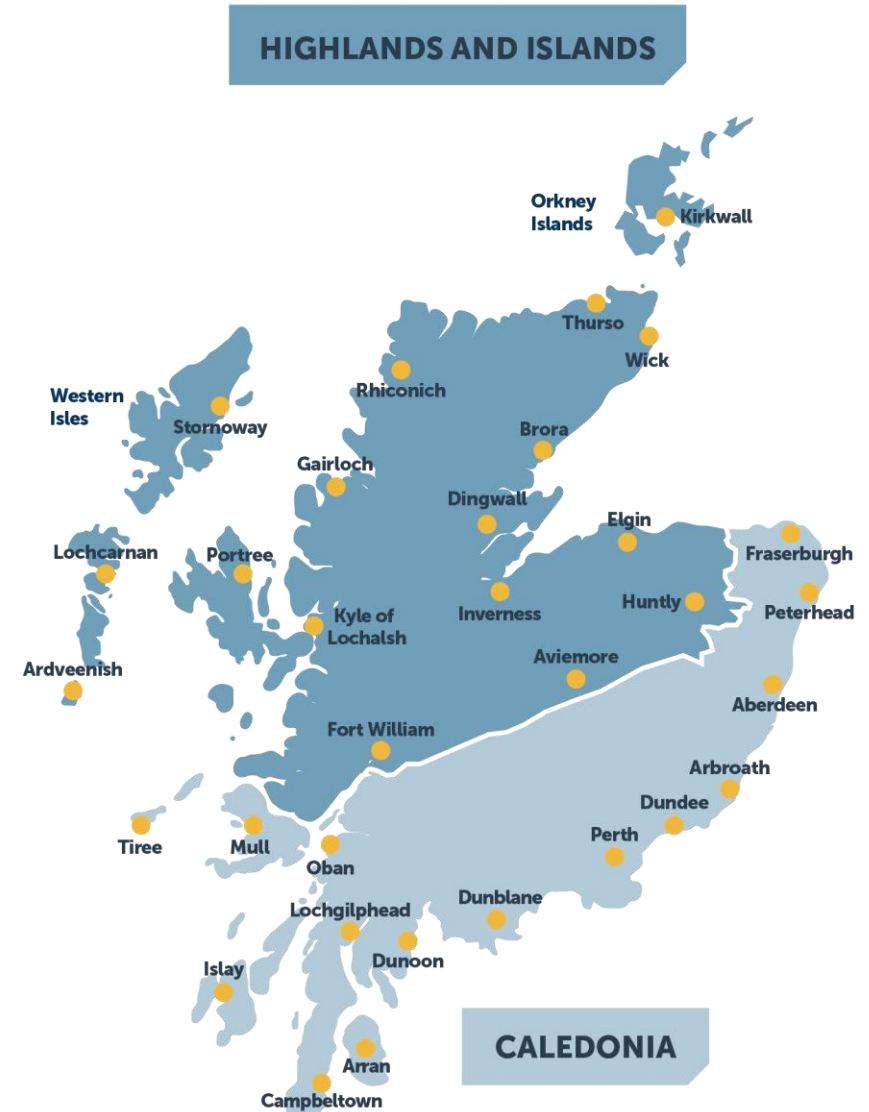
Customers  
**797,655**



PSR customers  
**198,743**



Island communities  
**60 islands; 111 subsea cables**





# DRIVERS FOR CONNECTIONS REFORM

- We have an oversubscribed Transmission queue in GB. There is vastly more in the queue than needed for 2050 net zero targets.

- Connection dates offered for Transmission capacity now likely to be late 2030s/early 2040s.

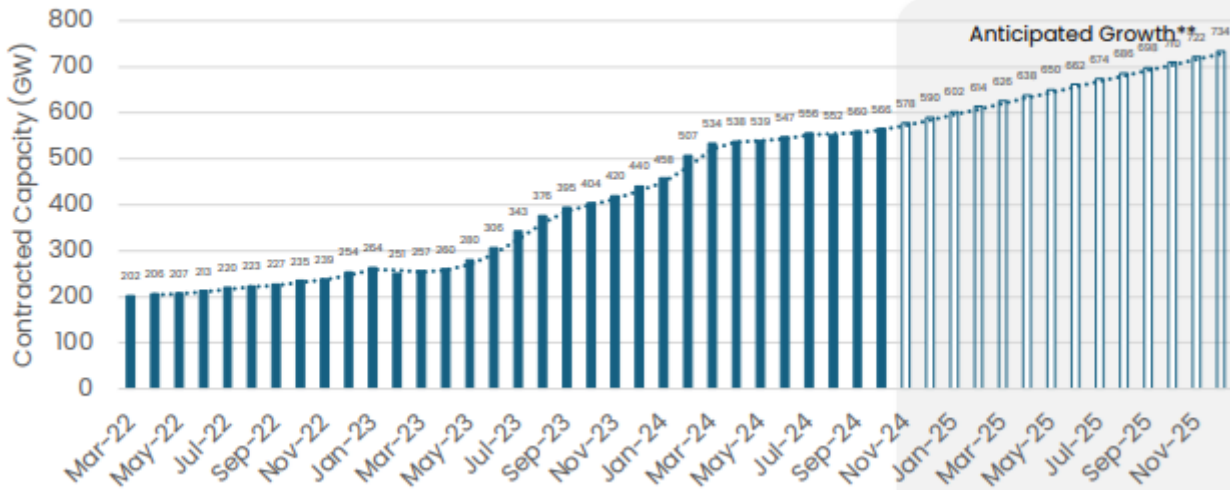
- Some projects ahead in the queue are not progressing and holding up other projects behind in the queue which could progress.

- This risks delivery of Government's Clean Power 2030 targets.

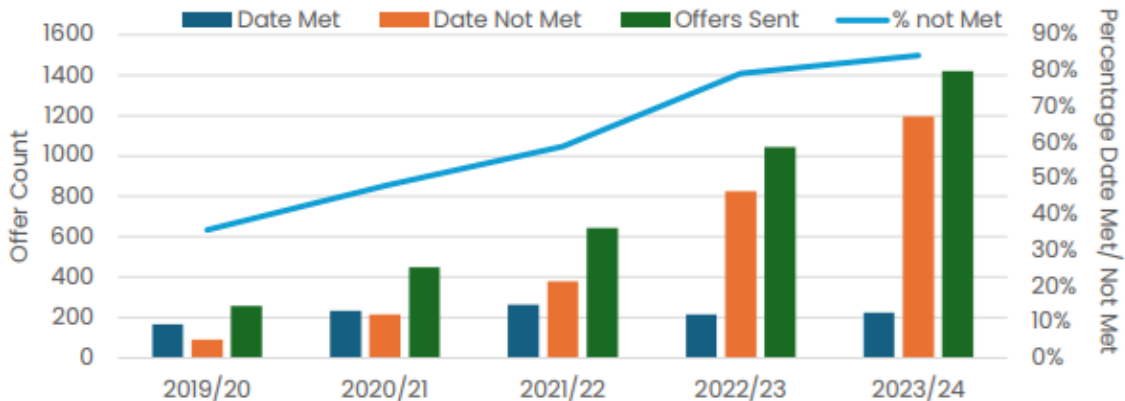
- This affects distribution customers if they have or are applying to install generation or storage that is:

- $\geq 1\text{MW}$  in England & Wales
- $\geq 200\text{kW}$  on Scottish mainland
- $\geq 50\text{kW}$  on Scottish Islands

Transmission Queue - TMO4+ Counterfactual Growth True to assumptions in this section (Dec 24)



Requested Connection Dates Met/ Not Met True to assumptions in this section (Dec 24)





# GB ENERGY: LOCAL POWER PLAN



Since the announcement of the Local Power Plan, we've been working closely with stakeholders, including the DESNZ team to understand the potential impact on the distribution system and how we can support effective delivery.

Unlocking the Local Power Plan:

- Huge opportunity to deliver meaningful community energy projects – Distribution can be an enabler
- 8GW+ new capacity requires major network reinforcement – coordination is critical
- Local Authorities and DNOs must play a key role in strategic planning – aligning with LAEPs

Delivering accelerated and low-cost connections for community energy projects will require:

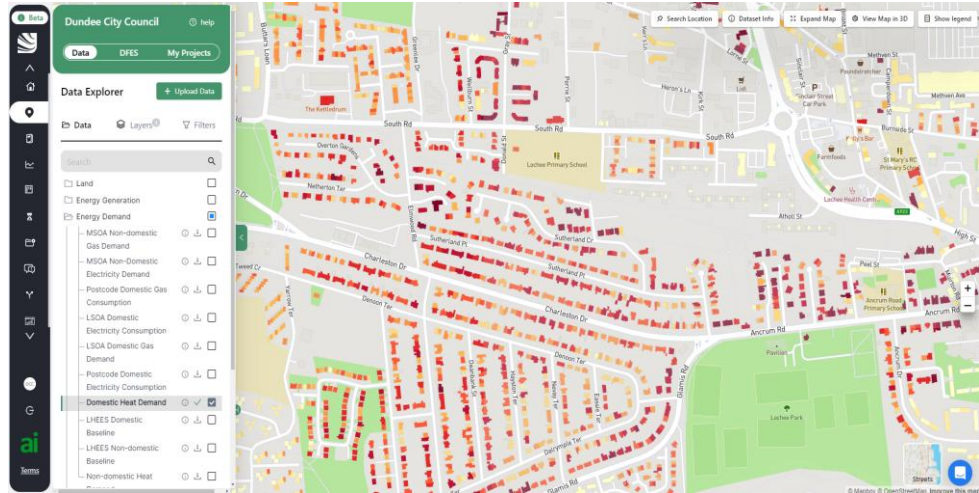
1. Strategic network planning with DNOs to locate community projects where there is existing planned reinforcement / existing capacity.
2. Network data analysis to plan and optimise the balance of demand and generation through the proposed technology mix so that projects can be sited in areas of high demand.

# ●●●● LOCAL ENERGY NET ZERO ACCELERATOR (LENZA)

SSEN is playing an industry-leading role in the development of LAEPs through our geospatial planning tool, LENZA

- Innovative free tool offered to all LAs in 2023; first DNO to do so
- Links network and spatial planning, aiming to accelerate LAEPs
- 90% of SSEN LAs are now using system, with SSEN Net Zero team providing dedicated support to each LA
- LENZA has been called a 'gamechanger' by users but LA capacity still mixed

Electricity and Gas network data  
Renewable potential data  
Building data  
Socio-economic data



Local Area Energy Plans

For local authorities and energy hubs, LENZA helps to:

- Lower barriers to entry for creating a Local Area Energy Plan
- Prioritise decarbonisation plans aligned to network capacity and planned investment
- Accelerate the production of data-driven, digitalised LAEPs

The LENZA tool and LAEP progress helps SSEN to:

- Extend our visibility of how load on our network is likely to evolve
- Channel local insight into our strategic planning and investments
- Advise stakeholders of our plans, and coordinate early and often



# RESILIENCE AND STORM EOWYN RESPONSE

- 92k customers restored
- 95% within 48 hours
- 600+ points of damage to network
- 90+mph wind gusts
- 24.5k calls received
- 467k PowerTrack visits
- 170k PSR pre-warn engagements
- 7,000 meals served to customers
- 9 all-MP and MSP updates
- 142 media coverages
- 115k views of Facebook content
- 70% positive or neutral sentiment on social media

