EMPOWERING COMMUNITIES, ENABLING GROWTH – STRATEGIC ENERGY PLANNING IN DISTRIBUTION

May 2025

Scottish & Southern Electricity Networks

OUR STRATEGIC PLANNING PROCESS – A VIEW TO 2050

Making decisions today in light of long-term and whole system needs.

Forecasting needs

Create strategic plan

Develop detailed options

Deliver projects

- Forecast demand and generation to 2050

- Translate forecasts into network capacity needs
- High level optioneering

- Develop and evaluate detailed options to address capacity needs

- Move projects to site related works
- Deliver required outcomes

Quantitative and spatial stakeholder insights re-incorporated annually

Coordination with stakeholders to ensure plans remain fit-for-purpose and delivery proceeds smoothly

CO-CREATION: SPATIAL AND NETWORK PLANS
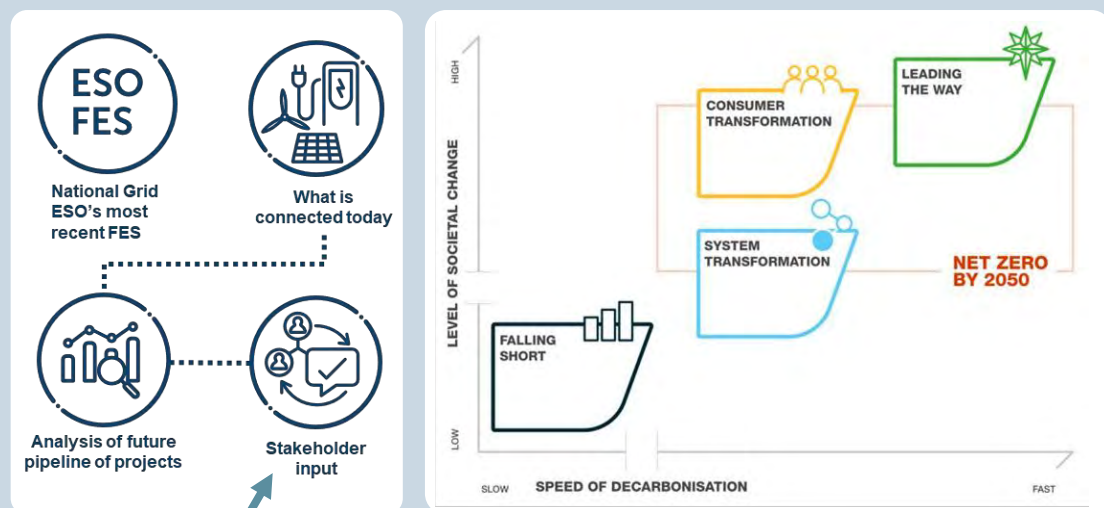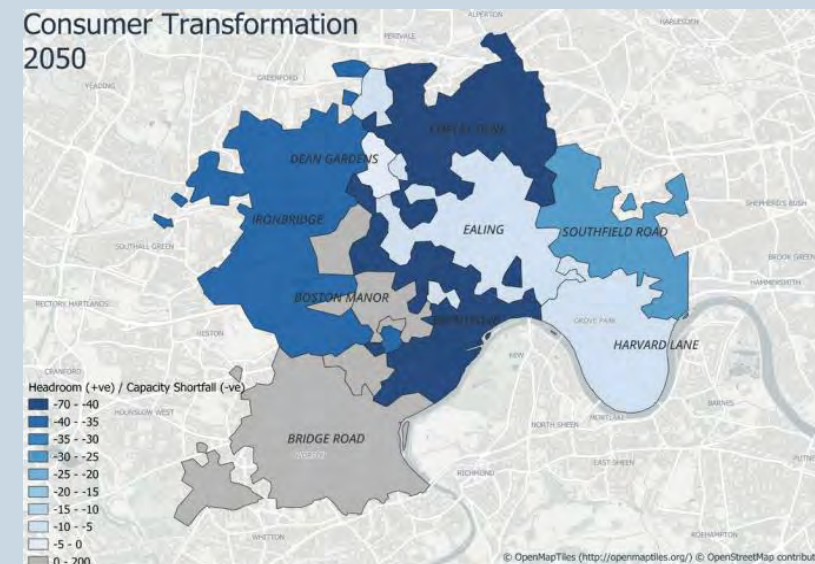
Forecasting needs

Figure source: National Grid ESO Future Energy Scenarios 2023

LAEPs provide us crucial insight on the timing and scale of net zero ambition, which we use to understand long-term network needs.
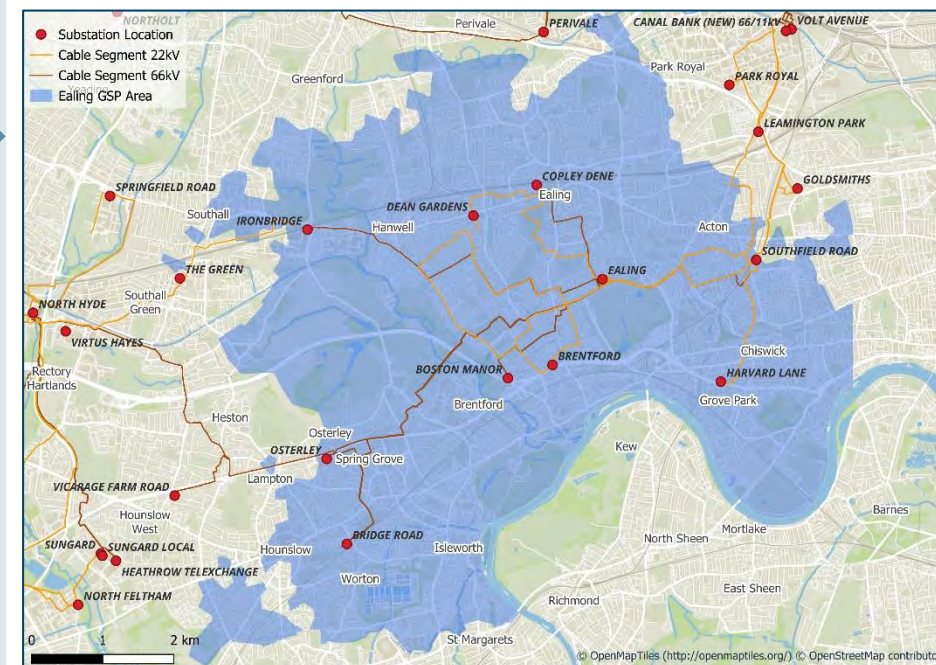
Create strategic plan

SDPs play back to our stakeholders how their local development translates into network capacity needs.

Consultations and annual updates ensure ongoing coordination with stakeholders and refinement of our plans as circumstances evolve.

STRATEGIC DEVELOPMENT PLANS OVERVIEW

Strategic Development Plans form a key milestone in our strategic development process.
They translate insights into our plans, providing blueprints for our detailed development process.

Strategic Development Plans

Insight gathering → **Strategic analysis** → **Recommendations**

Stakeholder insights

DFES

Works in progress

Needs analysis

Spatial plan development

Options to resolve

DNOA process

Policy considerations
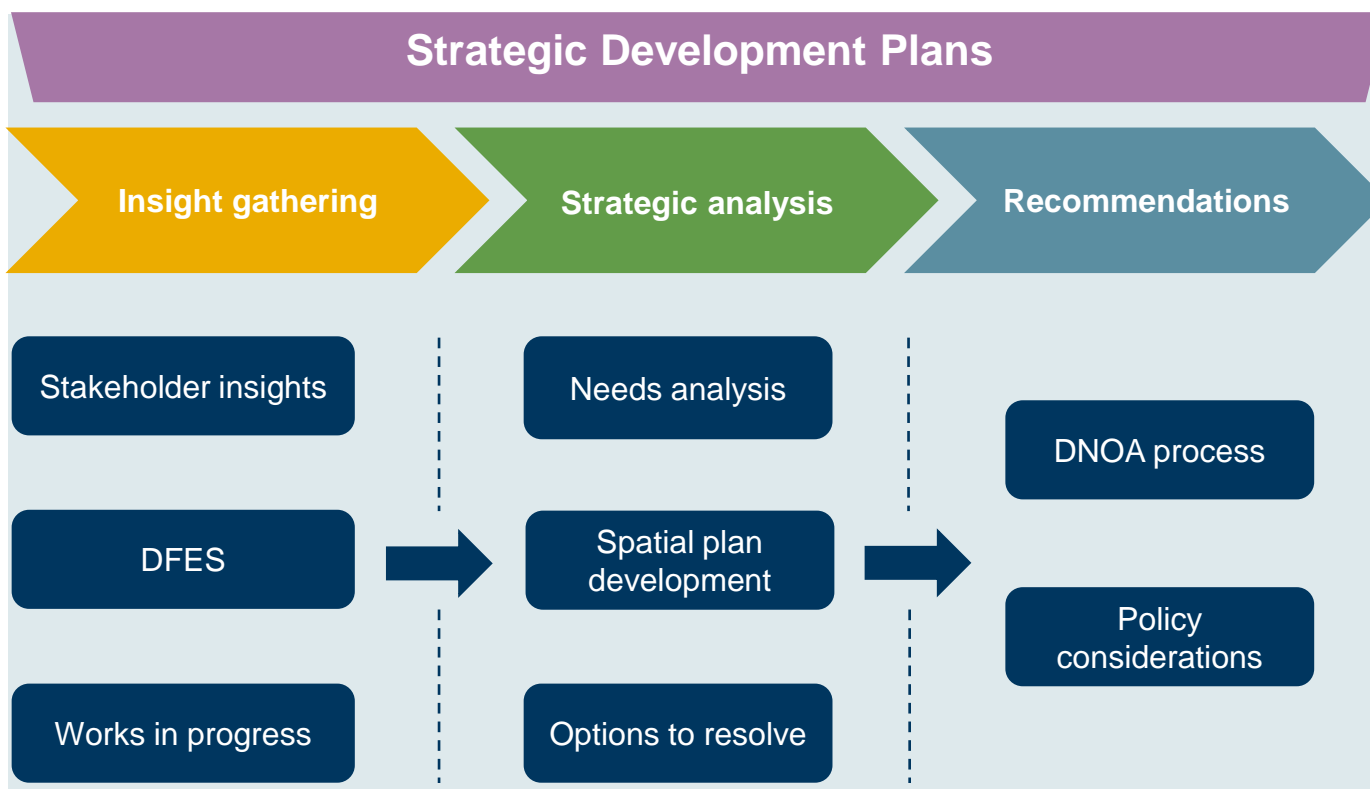
STRATEGIC ANALYSIS – SPATIAL PLANS AND OPTIONS TO RESOLVE

It is important to understand system needs both on an asset-by-asset basis but also how demand and generation may grow spatially across our two licence areas.

This provides the dual benefits of:

- Identifying assets where flexibility or reinforcement is required

- Understanding spatial trends and accounting for this in strategic planning
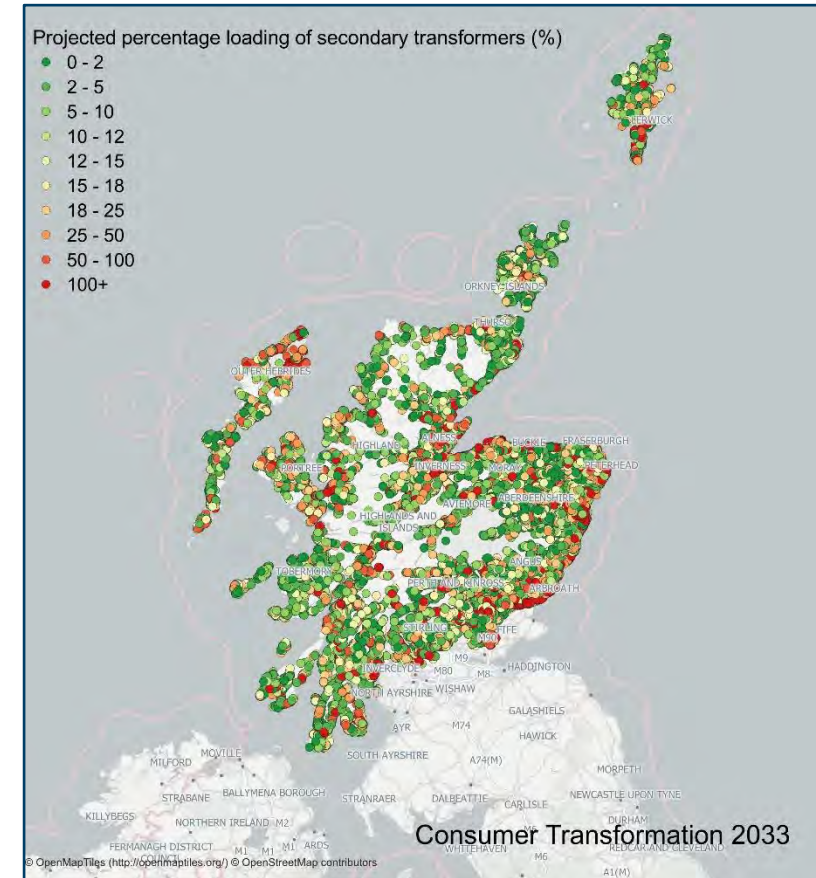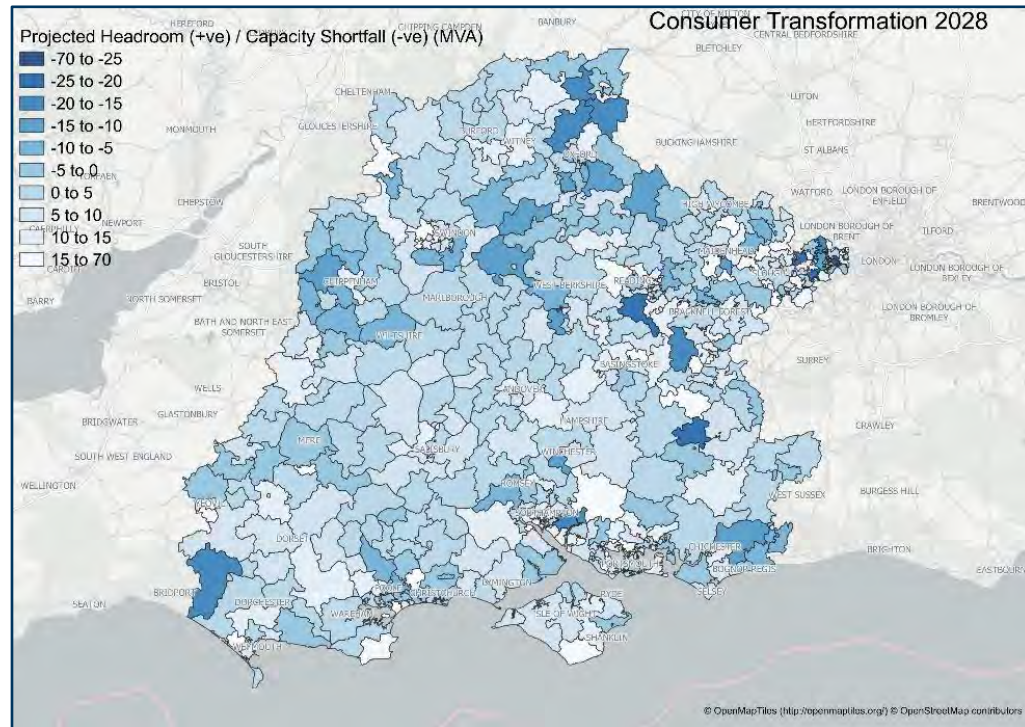
LOCAL ENERGY NET ZERO ACCELERATOR (LENZA)

SSEN (Distribution) network data

Renewable potential data

Building data

Gas network data
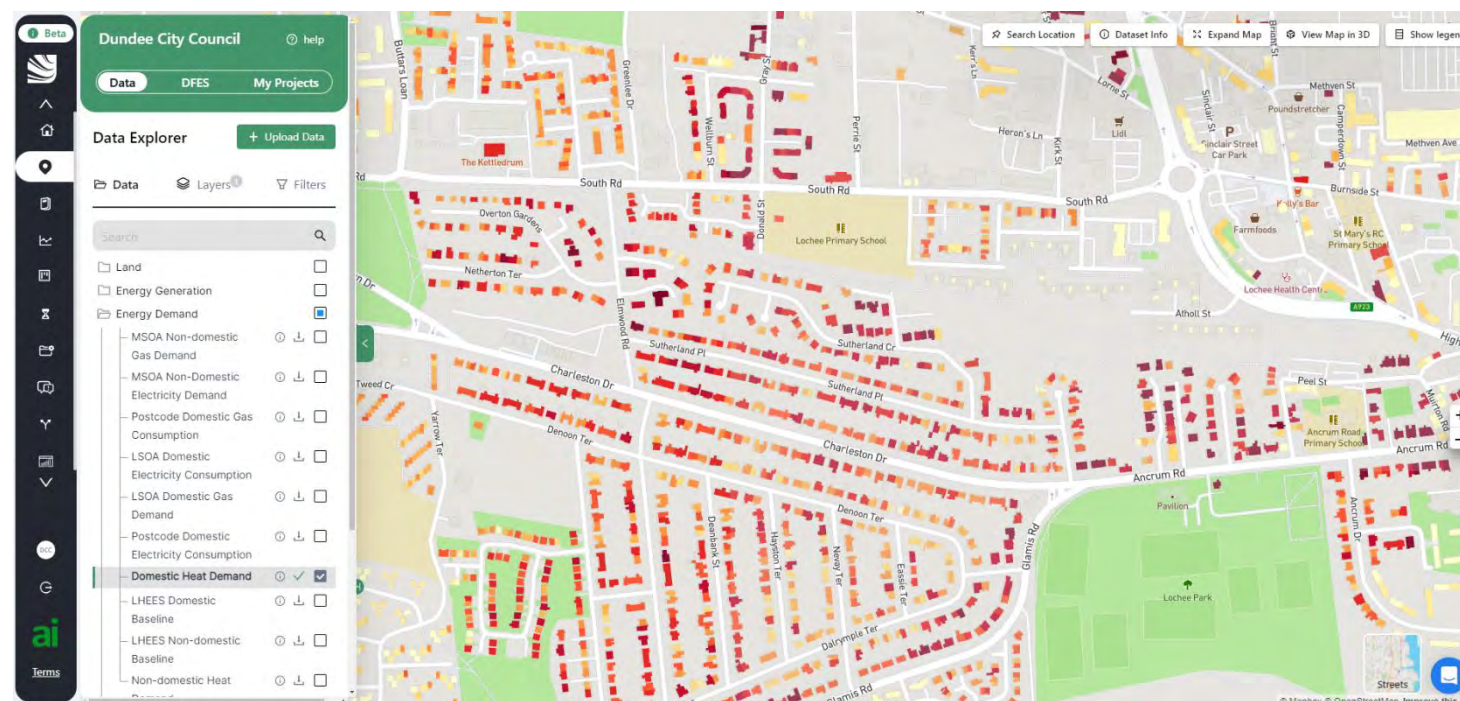
Local Area Energy Plans

REGIONAL ENERGY STRATEGIC PLANNING

Public

Regional Energy Strategic Plans (RESP)

Why?

To achieve local and national net zero targets we need:

1. **To accelerate electricity network investment** – enable heat & transport decarbonisation

2. **Consistency** – same approach for all network companies

3. **Whole system** – joined-up plan for all aspects of energy system

Where? (proposed)

Map A1 – Ofgem's preferred GB RESP settlement

Who? (proposed)

Ofgem – defining role

NESO – delivering role

Strategic Boards & Working Groups

Local authorities:
England: CAs, CCs, unitaries
Scotland & Wales: unitaries

Networks: DNOs & GDNs

Other local actors: relevant to energy system & spatial planning

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EMPOWERING COMMUNITIES, ENABLING GROWTH

Emerging Thinking for ED3

Scottish & Southern Electricity Networks | Powering our community

WHAT IS 'EMPOWERING COMMUNITIES, ENABLING GROWTH'?

- It **situates our ED3 approach in long-term thinking** about how Distribution facilitates the government's missions for economic growth and net-zero, and long-term disruptive trends like climate change, technological change and growing deliverability challenges.

- It **begins a conversation with our customers -** and stakeholders and invites you to engage with us on our plans.

SITUATING ED3 IN THE LONG TERM

- We see ED3 as **a staging post** on the way to 2050

- Our approach is aligned with **Ofgem's Framework Decision** – and the NIC's review of Distribution networks

- We contextualise our ED3 thinking in **seven long term trends** that are already shaping our work, and our customers' experience

1 Energy transition

2 Climate risk

3 Population change

4 Technology automation

5 Corporate legitimacy

6 Supply chain

7 Consumer participation
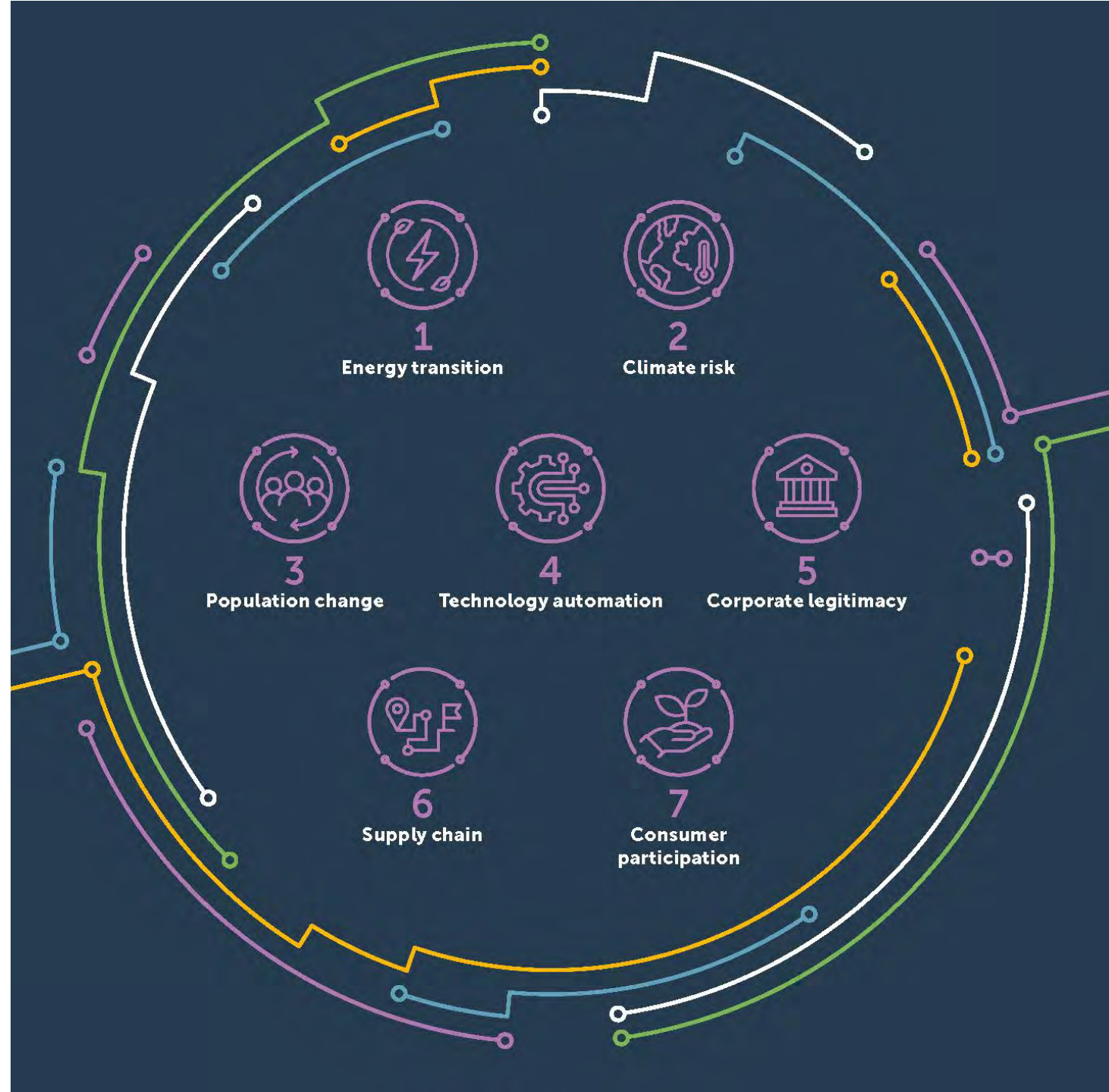
SETTING THREE INITIAL PRIORITIES FOR THE ED3 PERIOD

- Initial priorities are closely aligned to the Government's mission for **economic growth**

- These will act as **'golden threads'** for our business plan, drawing everything together

Our network drives economic growth and enriches the communities and environments we work in

◎ Natural
◎ Financial/Economic
◎ Social

- Customers can easily and quickly connect to our network, enabling the adoption of Low Carbon Technologies and industry decarbonisation

- We provide thousands of green jobs directly and through our supply chain

- We preserve and restore the natural environments that we both impact and depend upon

Our network is agile and digitally enabled, meeting diverse customer and system energy needs

◎ Intellectual
◎ Financial/Economic

- We provide a fair and trusted service to our customers, meeting their diverse and specific needs including through the use of digital tools

- Our customers participate in system-wide flexibility schemes, lowering energy bills – and we provide a smooth, personalised digital experience

- We provide valuable data insights for our customers and stakeholders, ensuring they can maximise the new opportunities a digital energy system offers

Our business and network are resilient in the face of growing challenges, and we efficiently deliver our plans

◎ Manufactured/Assets
◎ Human
◎ Financial/Economic

- Our networks are resilient and reliable for our customers, fit for purpose as we move to one dominant power source – electricity – to power the country

- Our business is resilient to growing supply chain and workforce challenges, efficiently delivering our plans and maximising value for money to our customers

- Our business is financially resilient, able to fund our plans with confidence

PLANNING AN AFFORDABLE AND FAIR TRANSITION

- We **live in the communities we serve** – and so have a deep understanding of the challenges our customers face

- That's why we feel so strongly about the **long-term benefits** of the transition to a clean power system

- But **how we decarbonise** is as important as decarbonisation itself

Why we must decarbonise

Drive economic growth

The green economy is powering economic activity in the UK, achieving a 10.1% growth in value supported since 2023. 22,800 net zero businesses provide 273,000 jobs and a further 951,000 through the supply chain.[1]

Enhance security of supply

Transitioning to a clean power system using UK-produced renewable energy will break our reliance on volatile international energy markets, shielding consumers and businesses from price fluctuations.[2]

Lower whole-system bills

Clean energy will bring down energy bills in the long term as reliance on gas and petrol reduces, helping UK businesses to be more competitive and alleviating fuel poverty. Analysis by our SSEN Transmission company shows consumers' energy costs could reduce by 30% by 2050.[3]

How we must decarbonise

Ensure intergenerational fairness

We have an intergenerational obligation to pass on a clean power energy system that is fit for purpose, reliable, resilient and secure. Spreading the cost of the transition equitably across current and future energy bill payers is the only way to deliver a fair energy transition.

Take a long-term, optimised approach

By anchoring our plans in a long-term vision, we can unlock economies of scale and efficiencies in our delivery, achieving the most efficient cost over time whilst maximising growth opportunities through jobs and our supply chain. We're also ensuring our plans are scalable and able to adjust to the actual pace of decarbonisation – whilst accelerating 'high confidence, low regret' works.

Unlock opportunities for all

We're already working to create opportunities for all to benefit from the transition, for instance, by ensuring that vulnerability is factored into our network planning.[4] We'll build on our existing consumer vulnerability strategy to enhance the support for customers in vulnerable situations.

WHAT DO WE NEED FROM THE REGULATORY/ POLICY FRAMEWORK?

Enable proactive investment

- Enabling/ rewarding long-term investment plans and ensuring costs are equitably spread across generations.
- Developing a framework to articulate the wider value investment will generate.
- Reforming the planning and consenting process, which is no longer fit for purpose.

Cost assessment

- Developing cost methodologies that account for macro-economic uncertainty.
- Recognising that historic costs are an increasingly unreliable predictor of current and future costs.
- Real Price Effects and Ongoing Efficiency must reflect the cost of delivering on the ground.

Deliverability and supply chain

- Need greater long-term certainty to build confidence in the supply chain to increase capacity.
- Need to explore dedicated procurement mechanism building on the Transmission Advanced Procurement Mechanism.

Climate resilience

- Developing an agreed standard of climate resilience.
- Ensuring adequate and certain funding so we can plan and deliver cost-effective resilience measures.

THANK YOU

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Give us feedback

Share your feedback with us here
https://bit.ly/ssened3
or simply scan the QR code

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