

▷ DSO

Electricity Futures Series

Regional Ambitions

16th November 2023

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Introducing National Grid DSO

Ben Godfrey

Director Distribution System Operator
National Grid Electricity Distribution

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Welcome and housekeeping



- ◇ There will be three presentations followed by discussions in breakout rooms.
 - Please mute yourselves during the presentations
 - Please turn on your cameras during the discussions – if your internet allows
- ◇ We will be recording the main presentations but not the discussions. Independent note-takers will be noting your feedback during the discussions, which will be recorded anonymously
- ◇ We will be taking some photos and screenshots. If you are not comfortable being in a photo, please send a message in the chat to Vincent Luxmoore
- ◇ If you have any questions during the presentations, please ask these in the chat. Alternatively, there is a Q&A session at the end where you will be able to ask our panel

Agenda

10:00 Welcome and introduction

10:15 Breakout session 1

10:30 Working with local and regional stakeholders

10:45 Breakout session 2

11:05 External presentations: Bristol City Council, Midlands Net Zero Hub & Welsh Government

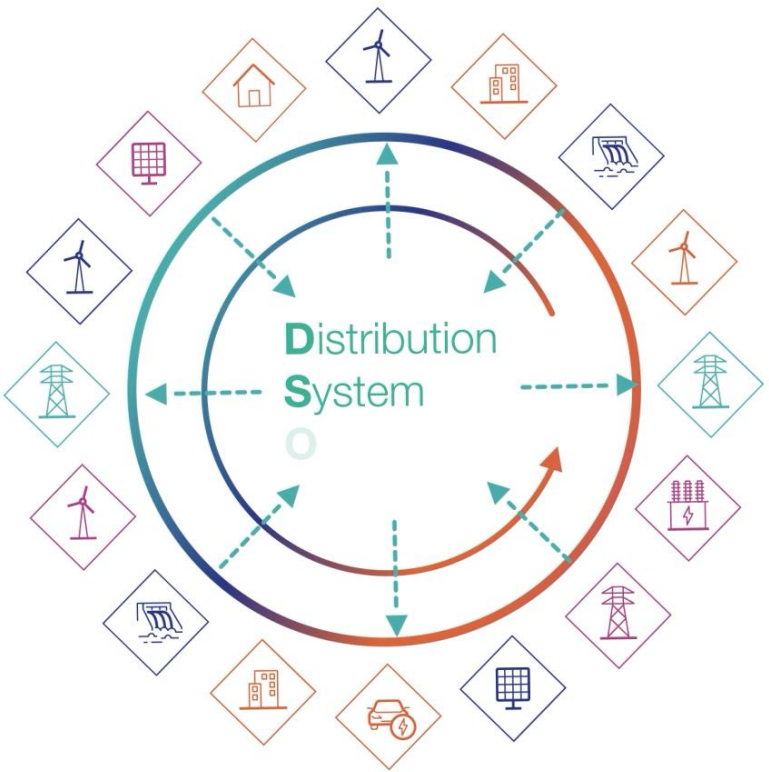
11:20 Coffee break

11:30 Looking to the future

11:45 Breakout discussion 3

12:10 Q&A discussion

12:30 Close



Welcome to Electricity Futures



Shaping the Future Together

19th September
QEII Westminster




Supporting Regional Ambitions

16th November
Virtual



Governance for Net Zero

31st January
Institute of Engineering & Technology, London



Ensuring Continued Success

28th March
Battersea Power Station

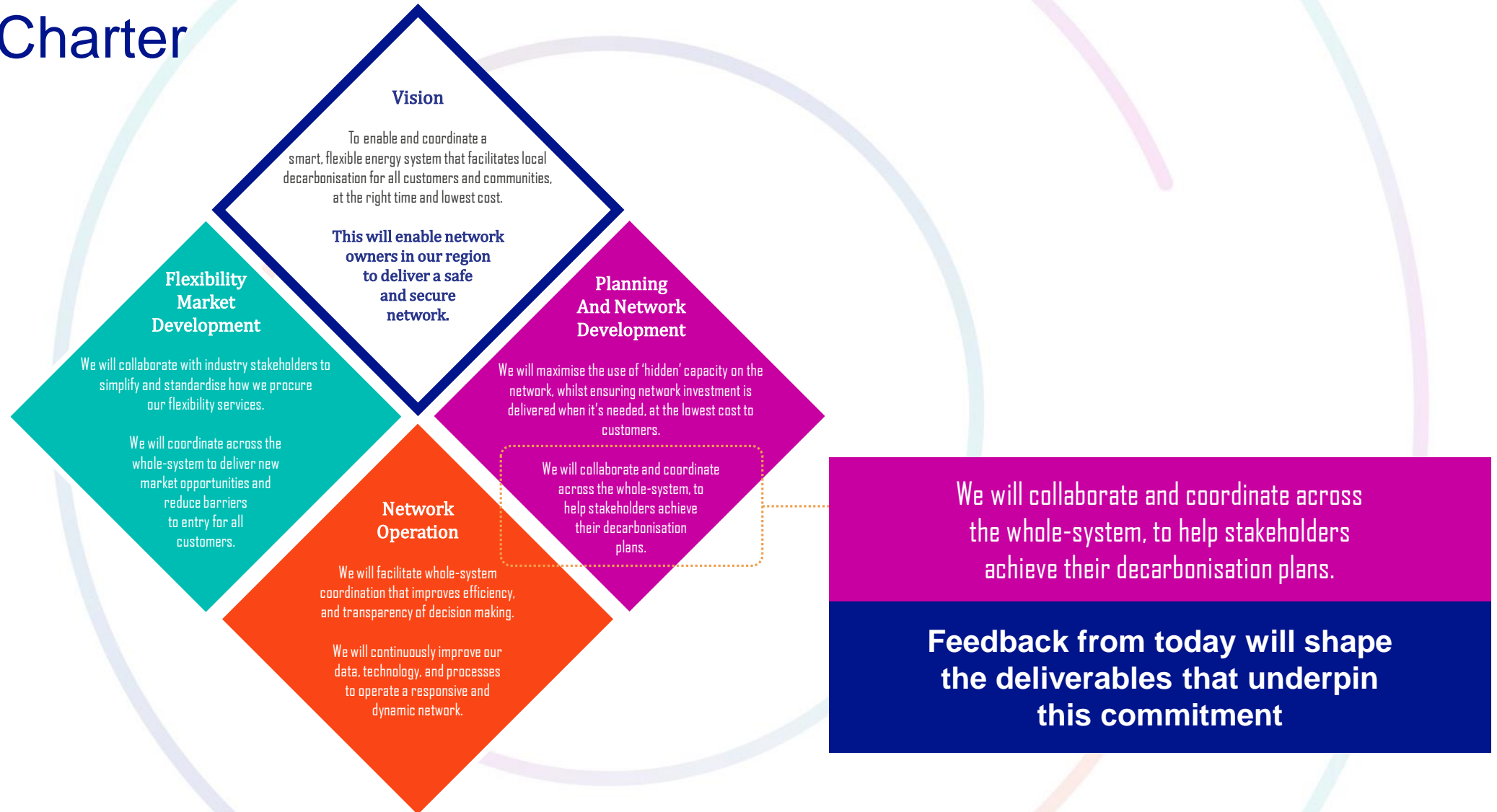
Purpose

1 Understand your views on how we currently coordinate across local area energy planning

2 Identify your requirements in the future so we can evolve the approach we offer

3 Discuss the value of working together, and what this can achieve as we accelerate towards net zero

Our DSO Charter



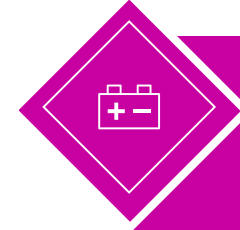
Improving connections to our network



**Reforming the
distribution network
connections queue**



**Changing how
Transmission
and Distribution
networks coordinate
connections**



**New contractual
options for our
storage customers**

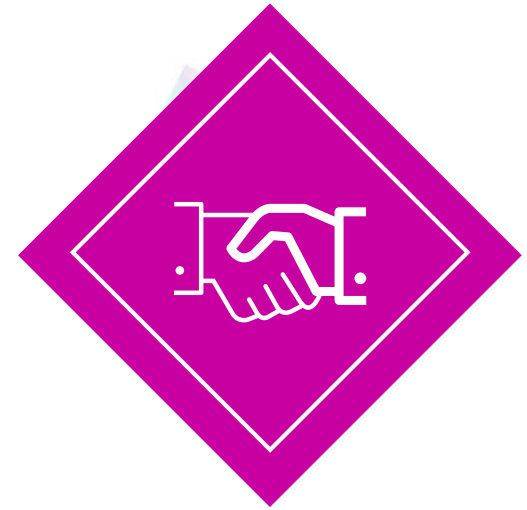
Our approach for today and beyond



Listen



Collaborate



Enable

We will collaborate and coordinate across the whole-system, to help stakeholders achieve their decarbonisation plans.



Introductions

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Electronic voting

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Working with Local and Regional Stakeholders

Hayley Burden

Head of DSO Strategy and Stakeholder Engagement

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We commit to actively supporting Local Authorities with their Local Area Energy Plans (LAEP)

- ▶ Providing points of contact for regular engagement to support Local Authorities, along with review and feedback of plans
- ▶ Providing useful datasets and information sources which can aid Local Area Energy Planning
- ▶ Commitment to incorporate Local Area Energy Plan (LAEP) outputs into Distribution System Operator (DSO) led strategic planning process

Our dedicated team

We have established a dedicated team of Strategic Engagement officers focussed on supporting your LAEPs and decarbonisation plans.



Since April 2023 we've delivered 153 Net Zero surgeries across 91 Local Authorities

Why is Local Area Energy Planning important?



Local Area Energy Planning is a data driven and whole energy system, evidence-based approach that sets out to identify the most effective route for the local area to contribute towards meeting national and local targets for decarbonisation.



Local Area Energy Planning aids us in delivering a distribution network fit for the future that facilitates local decarbonisation.



Information and data from the LAEP helps us to identify when and where to invest in the network to ensure the network is available when our customers need it.

What do we do with the information from a Local Area Energy Plan?

Strategic Investment Process



Forecasting



The **Distribution Future Energy Scenarios (DFES)** identify how customers will use our network in future

Network Impact Assessment



The **Network Development Plan (NDP)** uses forecasts to analyse and identify future network constraints

Optioneering



The **Distribution Network Options Assessment (DNOA)** outlines how we plan to invest in our network to solve constraints

The importance of sharing data

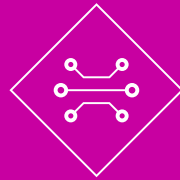
By sharing data we can take a whole system approach to Local Area Energy Planning and Network Planning.

NGED data

- Network capacity map
- Network information
- Low Carbon Technology (LCT) notifications
- Distribution Future Energy Scenarios
- Embedded capacity register



**Helps inform
Local Area
Energy Plans**



**Helps to us to
strategically plan and
build a distribution
network**

Local Authority data

- Local Area Energy plan or in the absence of this Local plans and insight
- Local Authority complete DFES questionnaire

Website updates

We are updating our website to make our data more accessible but what more can we do to improve our data?

Local Area Energy Planning (LAEP)

- Data and Resources
- Interface Road Map
- Scope
- Contact us

Contact us

Emergency information
0800 6783 105

General contact enquiries
0800 096 3080

Local Area Energy Plans (LAEPs) Data and Resources

We have uploaded a number of datasets to our Connected Data Portal to support key stakeholders such as Local Authorities in creating Local Area Energy Plans (LAEPs).

Head	Connected Data Portal	Visualised Data	Reports	Local Authority tailored reports
Connected Sites	Embedded Capacity Register - Dataset	-	-	-
Powerline Sites	Embedded Capacity Register - Dataset	-	-	-
Network Capacity Map	Embedded Network Capacity Map - Dataset	Network Capacity Map	-	-
Network Monitoring Data	Demand - Groups - Connected Data Portal	-	-	-
Distribution Future Energy Scenarios (DFES)	Distribution Future Energy Scenarios (DFES) - Dataset - Connected Data Portal	Distribution Future Energy Scenarios (DFES) map	Distribution Future Energy Scenarios (DFES) Reports	See below for Local Authority Distribution Future Energy Scenarios (DFES) Reports
Network Healthcheck Report	Download	-	Network Development Plan	Body Meter
Network Development Plan	-	-	-	-

Local Area Energy Planning (LAEP)

- Data and Resources
- Interface Road Map
- Scope
- Contact us

Contact us

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Local Area Energy Plans (LAEPs) Interface Road Map

When developing Local Area Energy Plans (LAEPs), we need to be informed at a number of stages to ensure that we incorporate these plans into our network planning. Please use the road map below for guidance on key contact stages within the Local Area Energy Plans (LAEPs) process.

Another key input into the Distribution Future Energy Scenarios (DFES) process is the Local Development Plans (LDPs) published by Local Authorities. We utilise the Local Development Plans (LDPs) when forecasting the location and scale of future developments, so please ensure that we are informed of any updates by contacting us at nged.energyplanning@nationalgrid.co.uk.

Local Area Energy Plan Scoping

Local Area Energy Plan Development

Local Area Energy Plan Publishing

Local Area Energy Plan Implemented

1. Get in touch

We can assist in providing an understanding of the electricity distribution network including distribution future energy scenarios, processes, timescales, technical considerations and possible network constraints, which can help in the development of Local Area Energy Plans (LAEPs).

If you would like to discuss your strategic energy planning with one of our Strategic Engagement Officers us please book a Net Zero surgery by contacting us at nged.energyplanning@nationalgrid.co.uk

2. Stay in touch

We will support Local Authorities developing Local Area Energy Plans (LAEPs) through providing the required data and network knowledge.

3. Provide us with your concepts

Providing us with the output from the Local Area Energy Plans (LAEPs) in advance of the delivery target will allow network investment to be carried out ahead of time.

4. Connect

Connect the planned Local Area Energy Plans (LAEPs) projects with no delays or capacity restrictions.



Breakout discussions

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Feedback

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Electronic voting

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Guest Speakers

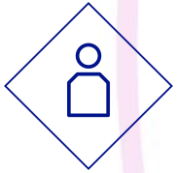
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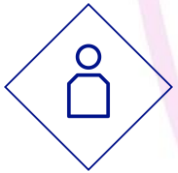
Guest speakers



Emily White Bristol City Council



Michael Gallagher Midlands Net Zero Hub



Huw Lewis Welsh Government

Bristol City Council

Approach to decarbonisation

Emily White, Senior Climate Change Officer



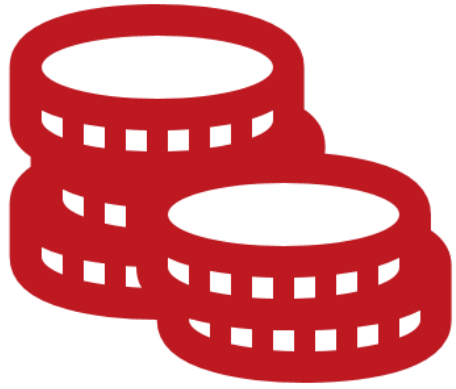
Where are we now?



A strategy for a carbon neutral, climate resilient Bristol by 2030



Challenges & learning



Funding



Collaboration



Community
Engagement





Llywodraeth Cymru
Welsh Government

Huw Lewis

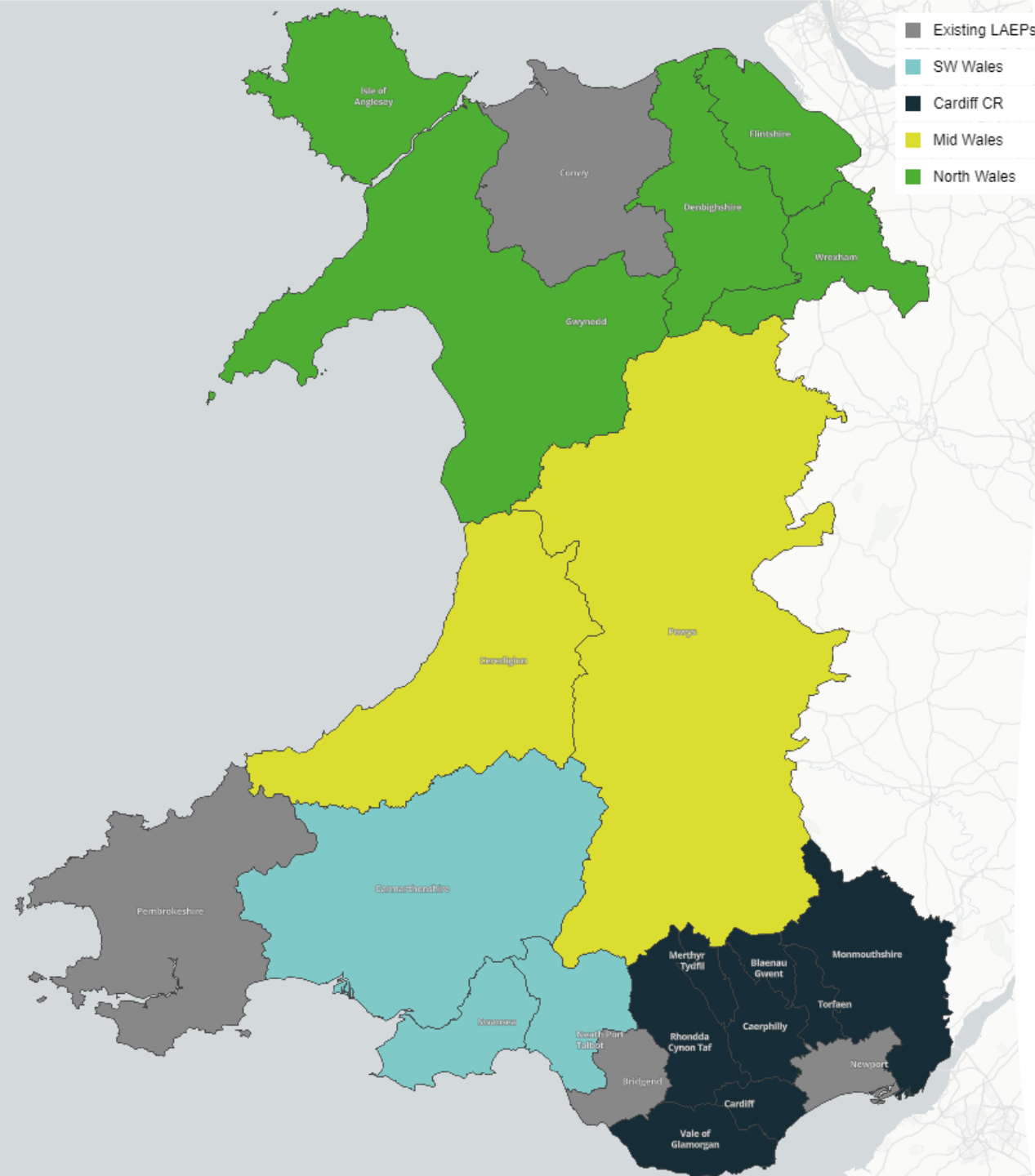
Programme Lead - LAEP



Llywodraeth Cymru
Welsh Government

Part of Wales's planned approach to the energy transition

Assessing the future demands we will need to meet, the renewable resource needed to meet this demand, and then the implications this has for our grid infrastructure.



22 Local Authorities in Wales 4 Economic Regions

Delivery Partners

- Arup-Carbon Trust
- Energy Systems Catapult
- City Science

Regional Resource Teams

Stakeholder Engagement

- Local authority is lead organisation
- DNO is a primary stakeholder



Llywodraeth Cymru
Welsh Government

- Aggregate LAEP outputs and develop a National Energy Plan
- Develop a delivery framework to support Local Authorities to implement the plans
- Review and refresh the plans

National Grid

Michael Gallagher
Head of Midlands Net Zero Hub



Who are the Midlands Net Zero Hub

- One of five Net Zero Hubs Funded by the Department of Energy Security and Net Zero
- Nottingham City Council are the accountable body for the Midlands Net Zero Hub

The Hub:

- Supports organisations identify and develop local net zero and energy strategies and projects.
- Works with Local Enterprise Partnerships (LEPs) and Local Authorities to improve capacity and capability on the journey to reaching net zero.
- Enables public sector organisations to develop and finance local decarbonisation projects, supporting our partners to transform energy systems across the region.



Programmes of work

More than £420 million directly secured since October 2018 for Net Zero related activity including:

- Local Capacity Support (Regional Team)
- Public Sector Decarbonisation Team
- Rural Community Energy Fund
- Community Energy Fund
- GHG Skills Training (England)
- HDSTC 1 Skills Training (England)
- HDSTC 2 Skills Training (England)
- Heat Pump / Heat Network training (England)
- Private Rental Sector Minimum Energy Efficiency Standards Enforcement Competition (England & Wales)
- Local Energy Advice Demonstrator
- Local Authority Delivery 2
- Sustainable Warmth Competition
- SHDF 1
- SHDF Wave 2.1
- HUG 2



Programmes of work

Collaboration is key and the regional officers often facilitate local groups in D2N2 for example:

- **D2 Energy Group**
 - Chaired by Derbyshire County Council
- **Environmental Strategy Working Group**
 - Chaired by Chief Executive of Rushcliffe BC with successes including
 - Desktop review of potential of Solar on local leisure centres
 - Green Rewards App
- **Collaboration between the two groups:**
 - Local Area Energy Planning
 - D2N2 Retrofit - £9.8m
 - Fast Followers
 - Local Energy Advice Demonstrator

Delivering Action

- There are a number of actions we are able to crack on and deliver
 - Retrofit, including devolved funding
 - Decarbonisation of the public estate
 - These are things under our direct control
- Adhoc approach to Net Zero is however not the most efficient route to achieve success
- Local Authorities need to be clear on what they can control, what they can influence / enable and what they can support / endorse – but is out of their control
- Local Authorities also need to understand what to take ownership off and what makes sense to work in collaboration with others on at County / Combined Authority level to achieve scale and the benefits that come with this.
- Local Area Energy Planning is seeing as a key aspect of this and the D2N2 region is currently out to procurement for a D2N2 wide local area energy plan, the approach is adapted from the work being done by the Welsh Government.



Coffee Break

15 Minutes

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Looking Forward

Oli Spink

Head of System Planning

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How is the DSO evolving?

1

We are committed to evolving and improving how we collaborate and coordinate the local energy transition across the whole system in partnership with key stakeholders

2

We are taking a more strategic approach to how we design and build our network going forward

3

This approach is based on open and transparent conversations about our network and doing all we can to support our stakeholders achieve their decarbonisation aspirations

The parameters we are working within

Ofgem regulates how much revenue we can earn and what we must deliver to earn it, this is all set out within our Business Plan

RIO-ED2 is our current Business Plan framework and runs from April 2023 for a five-year period

Investing to increase the capacity of our network is funded through bill payers, so it is essential that any investment is efficient and well-justified

Within RIO-ED2, we can request further funding to build more capacity on the network if there is clear evidence that this is required – **this is why it's so important to understand your local energy ambitions**

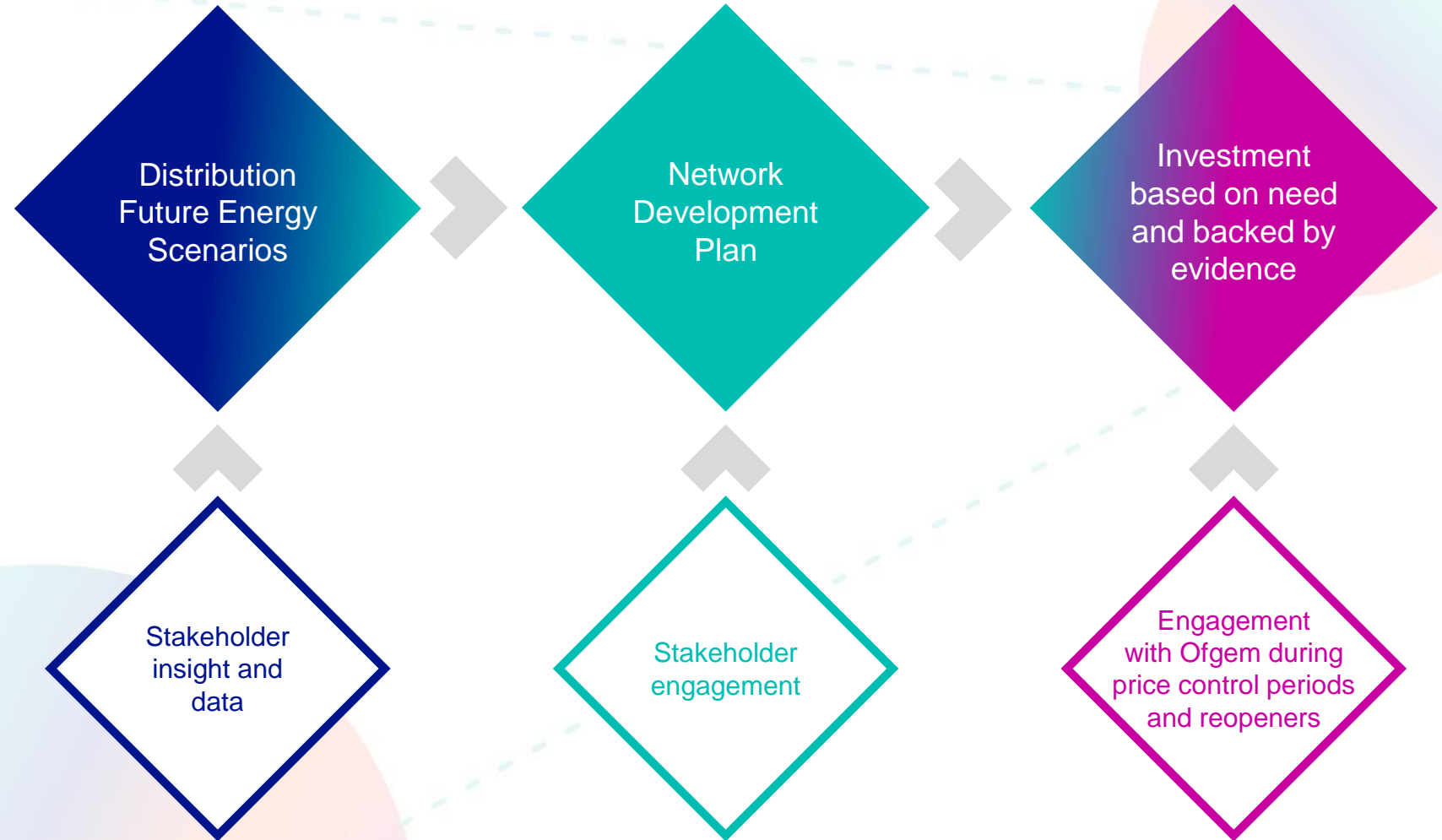
Wider industry changes

- ▶ In March 2023 Ofgem proposed a new industry role called **Regional Energy Strategic Planner** (RESP), which will aim to set the direction for strategic energy planning locally and have a cross-vector, whole energy system focus
- ▶ National Grid have welcomed the opportunity to contribute to the discussion and worked with Ofgem and other networks to understand where Regional Energy Strategic Planners can **further coordinate energy planning**

While the details of the Regional Energy Strategic Planner is established, the DSO will continue to evolve and improve how we **collaborate and coordinate** the local energy transition across the whole system

What we are working towards

- ▶ Strategic investment in our distribution networks that is evidence based
- ▶ Working in collaboration with stakeholders to identify network improvements required for decarbonisation



How can we improve?

Digital tools and support

PRIDE | Planning Regional Infrastructure
in a Digital Environment

ai advanced
infrastructure



West Midlands
Combined Authority

regen 
transforming energy

Greater Cross-Vector Collaboration



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Cadent
Your Gas Network

nationalgrid
Electricity Transmission

Stakeholder Convener





Breakout Discussions

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Feedback

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Q&A

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Electricity Futures Series

Thank you

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