

Electricity  
Distribution

# Connections: Virtual

28<sup>th</sup> January 2025

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# Agenda

- 1. Local Electric Vehicle Infrastructure Fund (LEVI)**
- 2. Distribution System Operator (DSO)**
- 3. Ofgem End-to-End Connections Review**
- 4. Connections Reform**
- 5. Q&A**

**Electricity  
Distribution**

# **Local Electric Vehicle Infrastructure Fund (LEVI)**

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# NGED's LEVI Portal is live

<https://connections.nationalgrid.co.uk/levi-portal/>

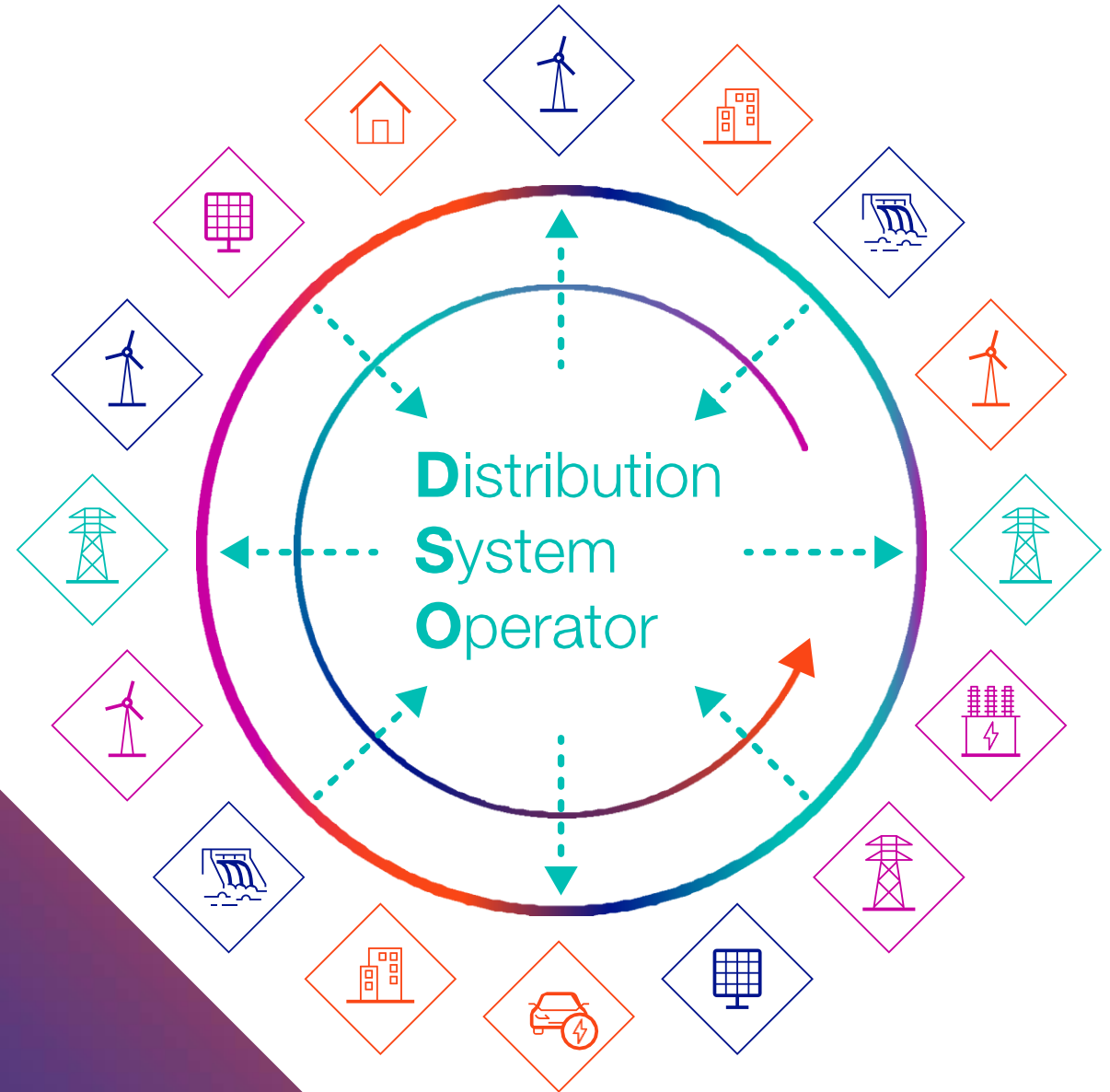
- Check out the portal for a range of information about the connections process for low voltage on-street EV charging programmes.
- The portal hosts data on average costs of connection, and sets out what tools to use at different stages of the process:

Stage in process	1. Planning Local Authority develops and submits to Gov	2. Tender ITT Preparation by LAs and Bidding Preparation by CPOs	3. Implementation Charge Point Operator with contract to deliver infrastructure
Relevant NGED tools & services	Budget Estimate Tool for site specific information on costs	Budget Estimate Tool for site specific information on costs	Connections Surgery to confirm and refine sites and inform applications
	NGED's published average and example costs of connections	NGED's average and example costs of connections	Online batch application or bulk notification
	Connections surgery to identify or refine potential sites and understand trade offs		Batched, itemised quotation or bulk confirmation of notification

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## Distribution Future Energy Scenarios (DFES)

Oliver Spink  
Head of System Planning





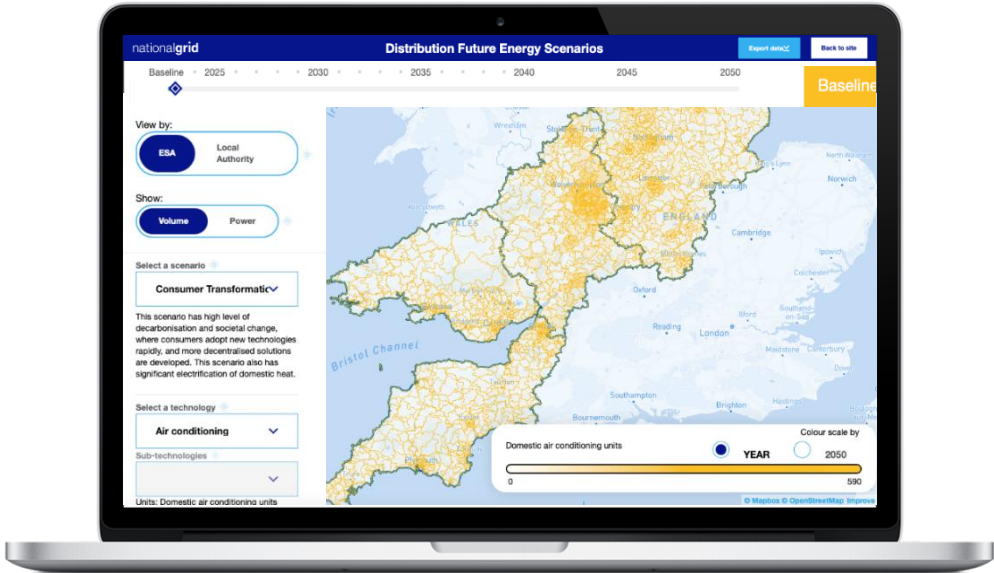
# Introduction to DFES

The Distribution Future Energy Scenarios (DFES) outline a range of credible futures for connections to the distribution network.

DFES makes use of the Future Energy Scenarios (FES) framework. This framework is consistent with other distribution network operators and the National Energy System Operator (NESO).

The local stakeholder-informed DFES projections encompass potential changes in distributed generation, electricity storage and demand, including electrified heat and transport.

National Grid Electricity Distribution (NGED) works with Regen to undertake DFES analysis out to 2050 for all four of its licence areas on an annual cycle.



Distribution future energy scenarios regional information



Distribution future energy scenarios map



## Distribution Future Energy Scenarios Map

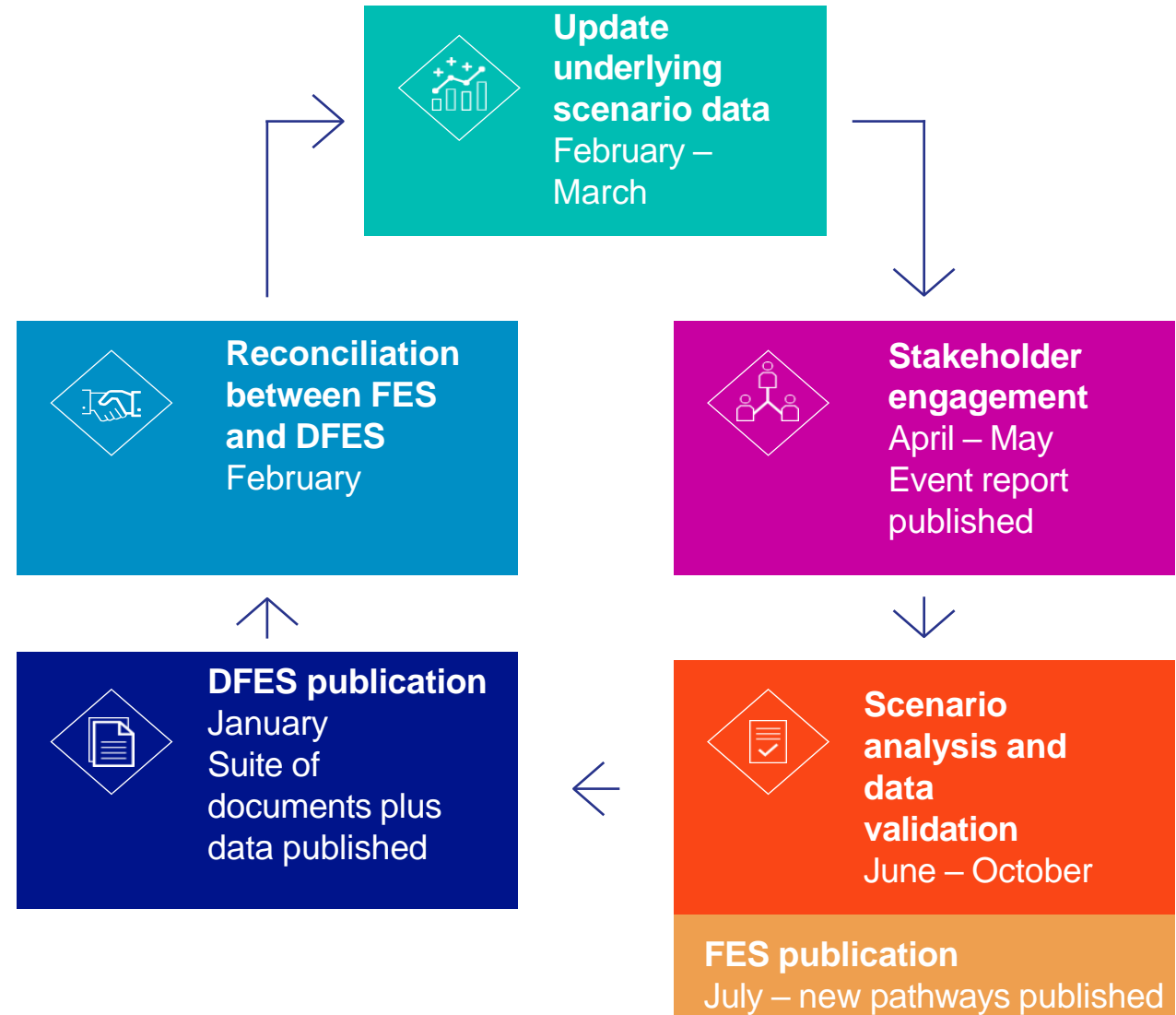
# The DFES process

Each year the DFES follows a process that incorporates key industry data and inputs.

Key overarching assumptions are published as part of the FES framework for each of the four scenarios. These are considered and applied in the DFES.

Additional local and regional assumptions are made by Regen and NGED. This includes analysis of the pipeline of projects in NGED's license areas (many of which hold accepted connection offers) and regional stakeholder and project developer engagement.

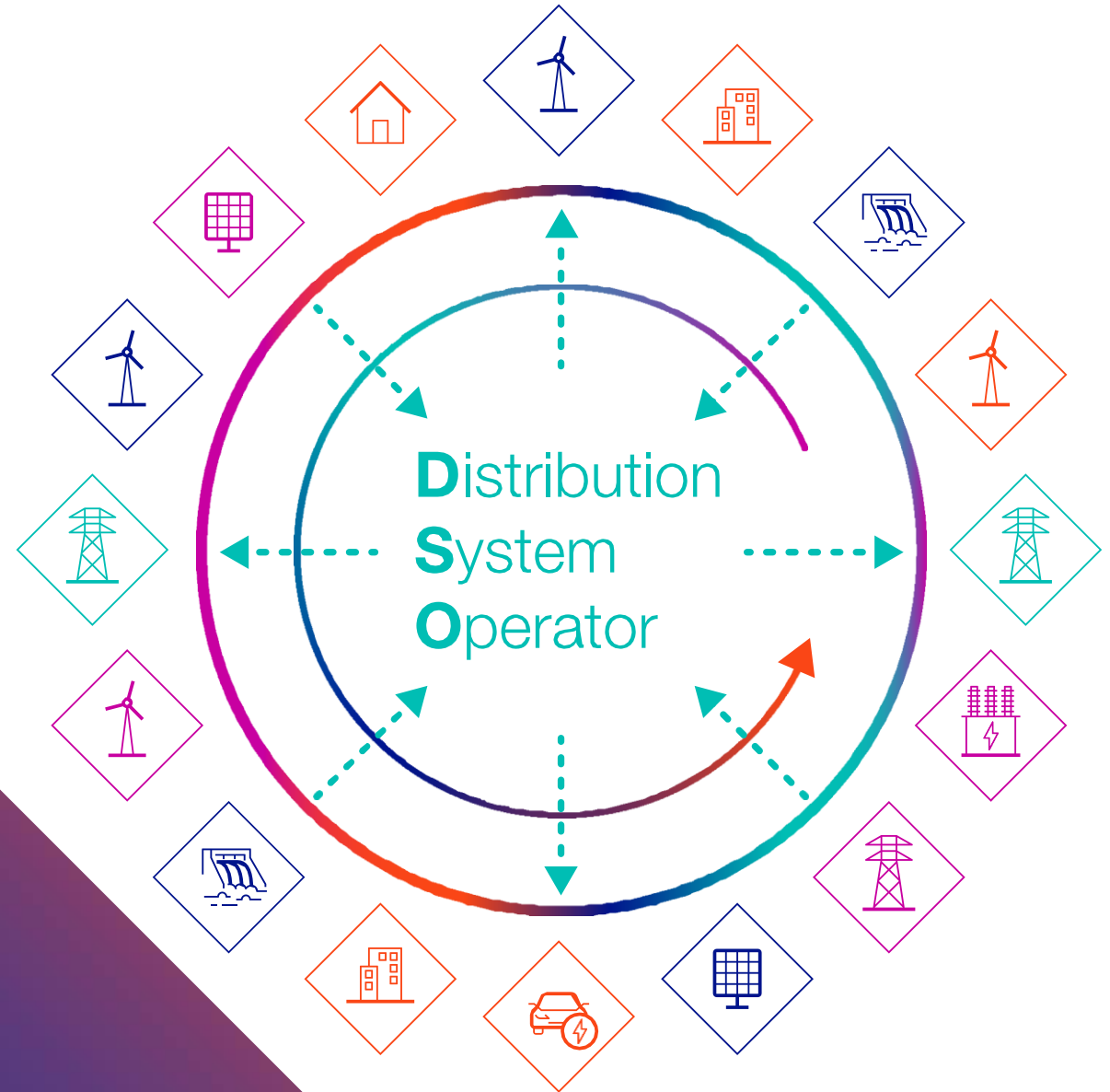
Renewable energy resources, building stock and socio-economic factors for each local area are also key factors in the regional analysis that informs the DFES.



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## Flexibility Tender

Helen Sawdon  
Head of DSO Operations





# Flexibility Market Tender Results

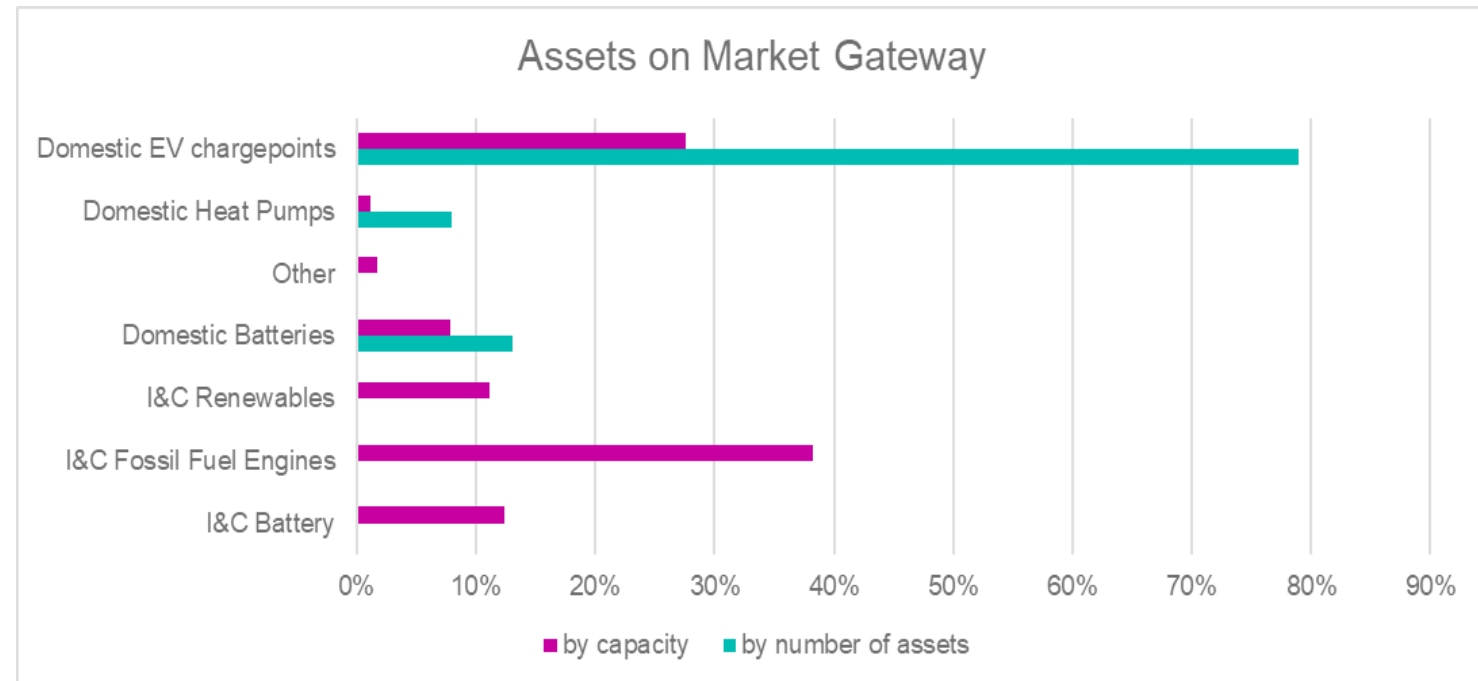
We procure for our flexibility needs across two timescales; Long-Term and Short-Term. Our Long-Term Procurement closed on the 20th January.

Our Long-Term needs are procured annually each Autumn for flex identified for delivery from the following April.

Procuring in the Long-Term allows us to assess if we can contract with the flexibility volumes we need to address known network constraints, enabling investment decisions on network re-inforcement deferral. Having these services secured ahead of time gives us certainty that a baseline level of flexibility will be there if we need it in real-time.

In the last year we have seen significant growth of assets registered through our Market Gateway platform.

The total number has doubled from 75,000 assets last financial year (April 2023-March 2024) to over 154,000 to date.



# Flexibility Market Tender Results

## Distribution flexibility is an attractive market for participation

Participation in our market opportunities has increased. This Long-Term Procurement Round We saw responses from 8 FSPs across 536 locations where we need Flexibility.

## Market competition is driving additional customer savings to the cost of operating the system

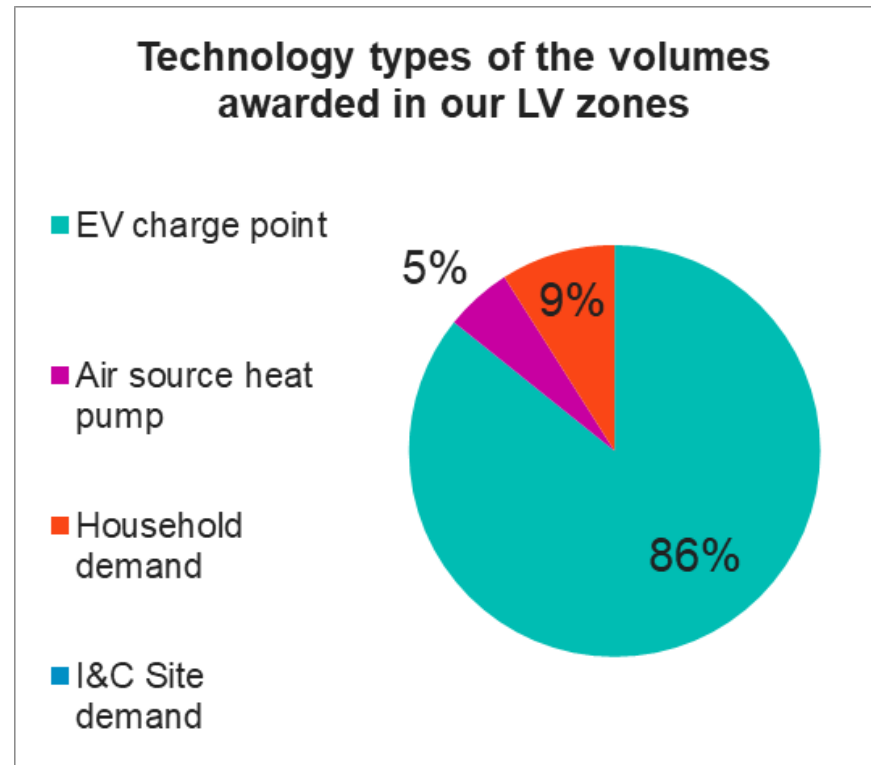
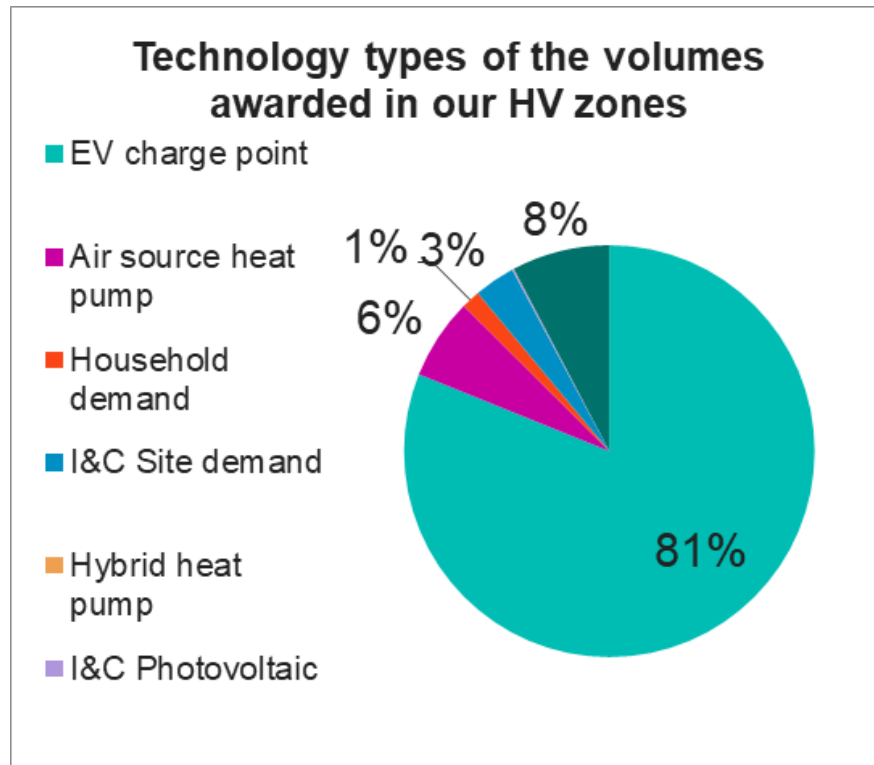
The increase in assets and participation has driven competition. This helps to reduce the cost of the flexibility we awarded, 34% and 18% lower respectively across our High Voltage (HV) and Low Voltage (LV) zones from published ceiling prices. This drives increased value for end consumers and compares to less than 1% in our last Long Term procurement round.

	<u>HV zones</u> Scheduled Availability, Operational Utilisation – Day Ahead	<u>LV zones</u> Scheduled Utilisation – Settlement Periods
Flexibility Zones Tendered	63	744
Flexibility Zones awarded	52	473
Availability Tendered (GWh)	213	4.3
Availability procured (GWh)	18.76	1.1
Savings enabled by competition	34%	18%

# Flexibility Market Tender Results

## Our flexibility is delivered by clean, low carbon sources

93% and 91% of the volume accepted across the HV and LV zones respectively was from domestic low carbon assets. These present a much lower carbon intensity than larger fossil fuel-based assets.



# Flexibility Market Tender Results

## There are more opportunities for flexibility providers to access value

Whilst we are seeing growth in flexibility volumes, and the emergence of competition, there remains a number of zones with needs unmet. These will be picked up in our weekly Short Term market, where we'll award utilisation the week prior to delivery.

In FY26 we expect to need:

**3-6GWh of Utilisation**

**£1-3m of Potential Utilisation Value**

The actual utilisation volumes we require will be informed by our closer to real-time short term network load forecasting, and we'll seek to economically balanced utilisation across the Long Term availability we've secured and the Short Term market.

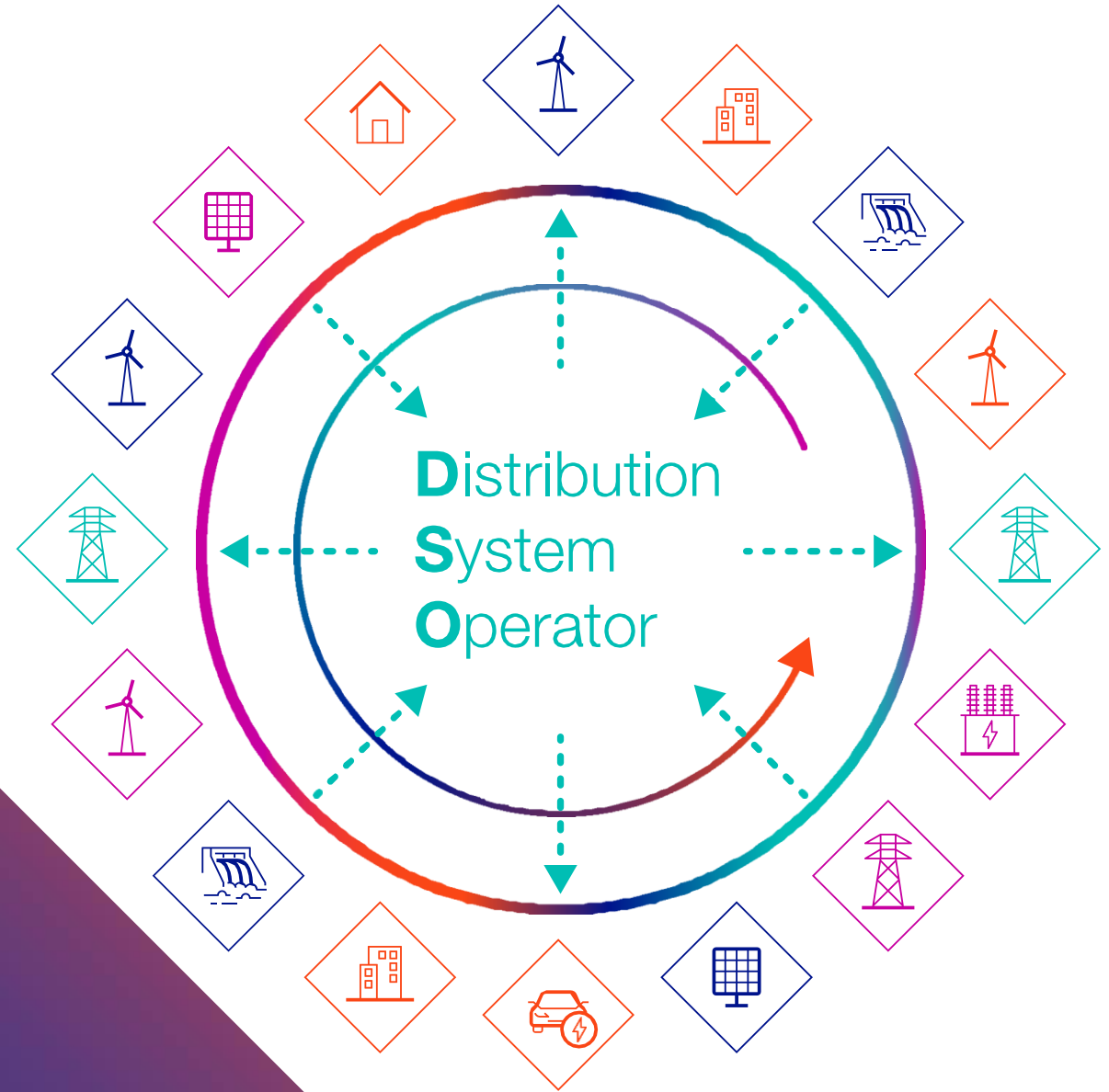
We now publish Utilisation forecasts on a 3 monthly basis to give the Market a better view on the volumes we're likely to seek within the closer to real-time timeframe.

To get involved please get in contact at [NGED.flexiblepower@nationalgrid.co.uk](mailto:NGED.flexiblepower@nationalgrid.co.uk)

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## Data Insight Improvements

**Dave Tuffery**  
Head of System Models and Data



# What is the Long-term Development Statement (LTDS)?

An external data publication to improve the availability of distribution network information

Furnishing developers with sufficient information to carry out initial assessments on network capability

Published at the end of November each year

Available on our website for download

[National Grid - Long term development](#)



## What information does the LTDS include?

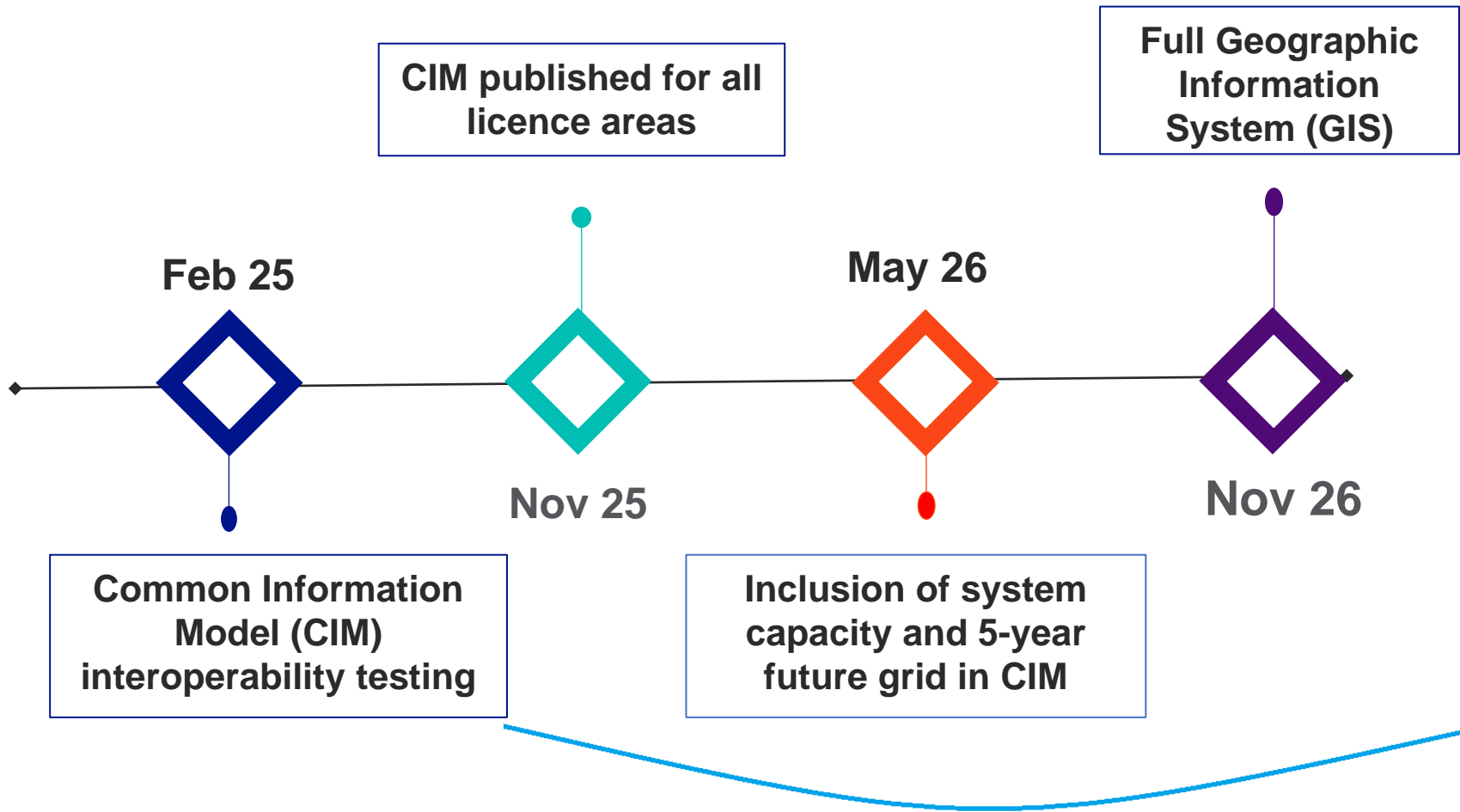
- Circuit data
- Transformer data
- Busbar data
- Network topology
- Network loading
- Fault level data
- Slider diagrams



# LTDS Reform – Need for change

- **NGED have already gone beyond the LTDS requirement through:**
  - Publications of 88 datasets on our Connected Data Portal
  - Trialing releases of Common Information Model (CIM)
- **In April 2024 Ofgem have us a formal direction to reform the LTDS**
- **The reason for this reform are:**
  1. For the **benefits of digitalisation to be realised, data must be standardised and interoperable**, enabling network operators to transfer information effectively and simply to data users
  2. Additional requirement for **grid model data to be provided using the CIM**, a common data standard that will be used for all relevant licensed network data exchanges in the future
  3. Publication of **additional and more granular data**

# Timeline and Engagement



NGED are proactively working with the industry and stakeholders to implement this common standard

Interested in interoperability testing of CIM models?  
*To take part, all you need to do is send an email to [digitalisation@energynetworks.org](mailto:digitalisation@energynetworks.org) with your system of choice.*

# Ofgem's Connections End to End Review

**Cuan Rowlands**

**Connections Strategy and Policy Manager**



# Ofgem's E2E Connections Review is a part consultation/part call for input on proposed changes to the regulatory framework around grid connections

Responses are open to all, including connecting customers at all voltage levels, stakeholders and the public

Interim implementation steps may also be appropriate, ahead of RIIO-ED3 price-control

Objective: Improved quality of service and more timely connection outcomes

13 January 2025

Original deadline, which has since been extended.  
Remained the deadline for the Theme 8 response on RIIO-T3.

Spring 2025

Ofgem's expected response to the initial feedback.  
This will outline a series of firmer proposals.

8 November 2024

Ofgem published E2E Review, covering:

1. Issues Ofgem think are prevalent within the connections process
2. Ofgem's initial proposals on how to address them

12 February 2025

Extended deadline for remaining themes (1-7).  
Final opportunity to respond to the consultation.

# Ofgem have grouped all issues identified into 8 key themes, with a desired goal identified and proposed solutions, captured across 31 questions

## Theme 1: Visibility and accuracy of connections data (3Ps, 7Qs)

- All useful data must be made available transparently to connecting customers and other interested parties in order to inform customer's connection applications

## Theme 2: Improved standards of service across the customer journey (2Ps, 5Qs)

- Connecting customers must receive a high standard of service at all stages of the customer journey, from pre-application to energisation

## Theme 3: Network companies being required to meet connection dates in connection agreements (3Ps, 5Qs)

- There should be proportionate requirements on network companies and NESO to meet agreed customer connections dates in connection agreements, commensurate with those on developers to meet project milestones

## Theme 4: Quality of connection offers and associated documentation (2Ps, 5Qs)

- Network companies and NESO should be suitably required to issue high-quality offers and associated documents and information to connecting customers

## Theme 5: Ambition of connection offers (1P, 3Qs)

- Network companies and NESO should be suitably required to offer connecting customers ambitious connection dates, to ensure they are doing everything possible to expedite connections.

## Theme 6: Minor connections (6Ps, 3Qs)

- Minor connections customers, ie those seeking to make connections at low voltages (such as domestic and small business customers installing heat pumps or Electric Vehicle charge points), should receive a prompt and consistent high standard of service from network companies.

## Theme 7: Provision and guidance for determinations (1P, 3Qs)

- There should be greater clarity and transparency for all parties on the determinations process, including on Ofgem's role in managing complaints and issuing determinations.

## Theme 8: RIIO T3

# Connections Reform

Laura Henry

Senior Connections Strategy and Reform Manager





# Connections | Connections Reform



## NGED's Current Policy Asks

- Championing Gate 1 for Distribution to mirror Transmission & create a level playing field for Transmission & Distribution customers
- Feeding into consultations/forums to ensure there is alignment between the Transmission and Distribution processes
- Leading Energy Network Association (ENA) Strategic Connections Group workstreams on reform to drive change at Distribution Network Owner (DNO) level: Opportunity to lead on reform for the DNO community



## Next steps

- Implementation of the new process within NGED - new reform workgroup created
- Communication with our customers on the new process and what it means for them
- Collaborate with National Energy System Operator (NESO) / Transmission Owners (Tos) /DNOs through the implementation hubs
- Define licence, code & methodology changes needed for DNOs

# Evidence requirements | Customers will need to gather evidence to meet Gate 2 land criteria for existing & new projects >1MW, to access the connections queue

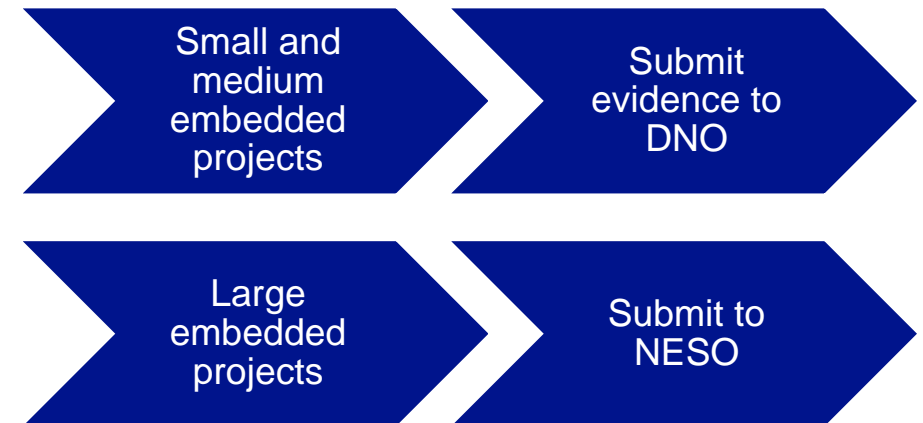
Evidence of Land Rights or DCO Planning Application Submitted

Meet one of the Strategic alignment criteria –  
1. Align with the 2030 pathway or 2035 pathway  
2. Identified as a designated project

Ongoing compliance with Land and planning as well as queue management milestones

## Supporting documents

- ✓ Self Declaration Form
- ✓ Red line boundary
- ✓ Meets the minimum acreage



# Evidence requirements | NGED checks

<u>Gate 2 Evidence</u>		<u>Checks to be carried out by NGED</u>
Verification of Director(s) that signed the Readiness Declaration Letter	→	Verification that the Director, for Limited and plc companies is on Companies House
Secured land rights	→	Either a- <ul style="list-style-type: none"><li>• 3-year option agreement, with evidence of a lease or</li><li>• Evidence of existing ownership, or</li><li>• Existing lease agreement in place for at least 20 years</li></ul>
Red line boundary	→	Including location, size and minimum acreage
Secured Land Rights meet minimum parameters	→	Land needs to meet the minimum acreage as per the NESO guidance
Alignment with 2030 pathway	→	As set out in the Gate 2 Methodology and Connections Network Design Methodology
Designated project status	→	As set out in the Project Designation Methodology

## NESOs Pause | What it means for NGED customers

### Scope

- Applications to NGED can still be made during the pause
  - Above 1MW projects are in scope of the pause and cannot be sent to NESO
  - Embedded demand and projects below 1MW are out of scope of the pause
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### Project Progressions

- Reasonable endeavours to submit Accepted Distribution Offer's to NESO before the 29<sup>th</sup> of January.
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### Two step offers

- DNOs continue to work with NESO to resolve outstanding issues with Modification Offers

# NESOs Security Freeze | What it means for NGEDs customers

## Proposal

As per the communication from NESO on the 15th January 2025, the next two securities periods starting 1st April 2025 and ending 31st March 2026 will be frozen at the September 2024- March 2025 statement amount.

## Benefits for NGED Customers

- **Removes** the uncertainty for projects lodging increased security before the new reformed process
- **Allows** customers to focus on obtaining the evidence needed for Gate 2 rather than obtaining/lodging increased securities
- Securities are subject to **change** when new offers are received, by freezing the amounts now it means that customers can provide the update amount as and when a new offer is made.

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