



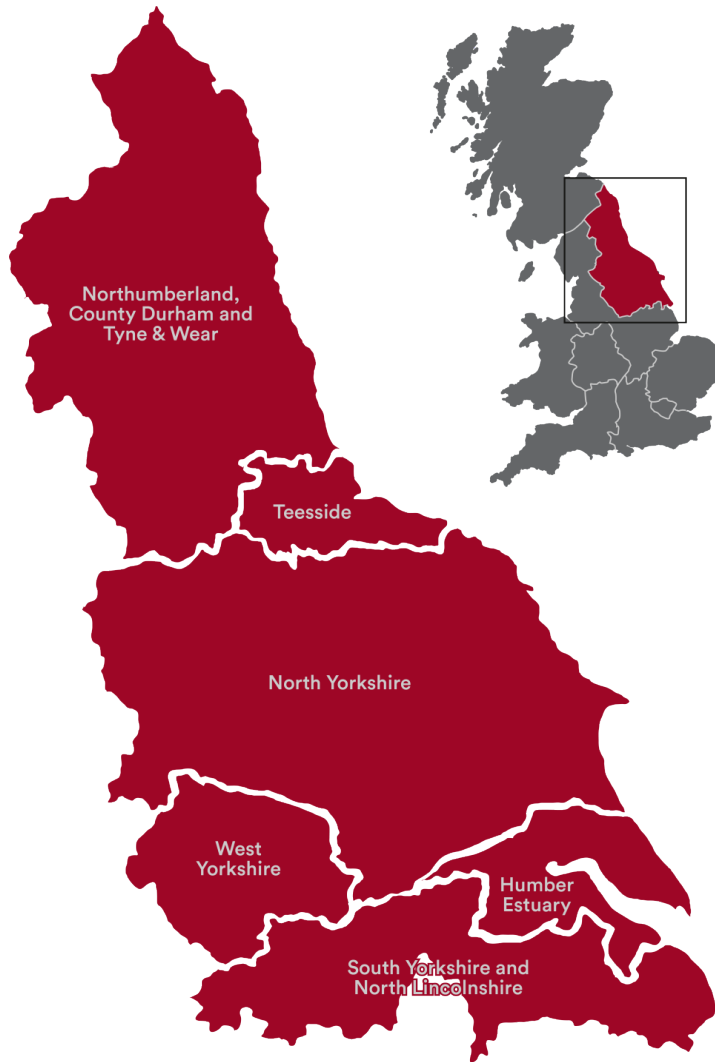
# Northern Powergrid

Enabling regional decarbonisation

**Lizzie Boyes**  
Local System Planning Engineer

**01/12/2023**

# Northern Powergrid



- Northern Powergrid is responsible for the **electricity distribution network** in the North East, Yorkshire and northern Lincolnshire.
- We **move** electricity from where it's generated to homes and businesses.
- We are the enabler of a **net zero** society.
- **We are a regulated utility business** and therefore, we plan ahead of time in business plan cycles.
- We are in the first year of our new business plan period where we are **delivering around £3bn of investment** (2023 to 2028 – Electricity Distribution 2, ED2)

# What we do for our customers

- Facilitate growth and decarbonisation
- Plan for and invest in a safe and reliable network
- Provide connections to the network
- Support vulnerable customers and communities
- Minimise our impact on the cost of living and doing business in our region



# Providing Connections: Growth and Decarbonisation across our region

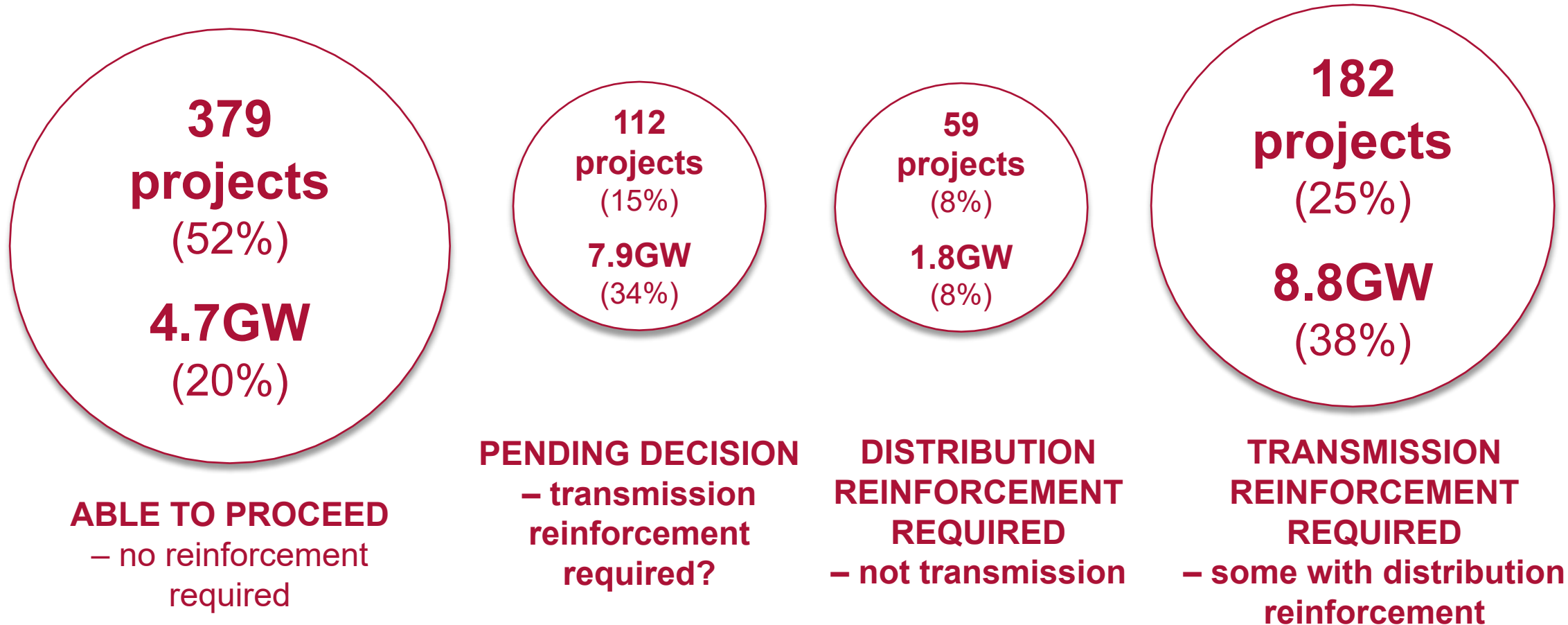
- We treat all applicants equally
  - We will make a connection offer to anyone that applies for a connection to our network
  - The connection queue does not favour any type of applicant over another
  - Government policy influences technology uptakes, we are technology agnostic
- We are speeding up and reducing the cost of some customer connections
  - Time limited curtailable connections can allow connection before completion of necessary reinforcement works
  - Flexible connection agreements can avoid reinforcement requirements where appropriate, and when customers want one

# Decarbonisation: Meeting the challenge

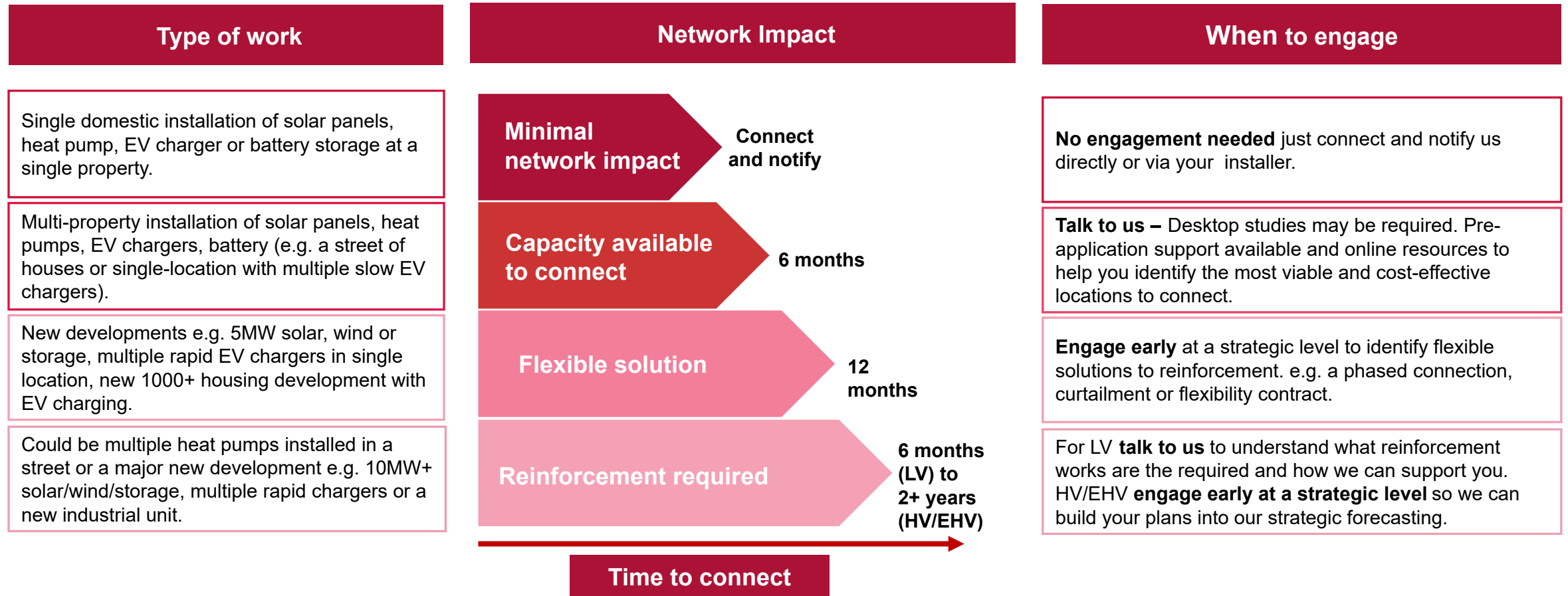
- Flexibility – customers paid to turn up or down
- Community Distribution System Operator project – innovation with customer groups at the local level
- Revising design assumptions – using observation to get more out of existing network
- Low Voltage monitoring and external data – providing visibility
- Network reinforcement and expansion – investing where needed
- Work closely with Local Authorities and other stakeholders coordinating low carbon technology roll outs - a collaborative approach



# Providing Connections: Majority of customers able to connect without the need for reinforcement – 52% of all projects



# Providing Connections: Timescales



# Providing Connection: Costs to connect

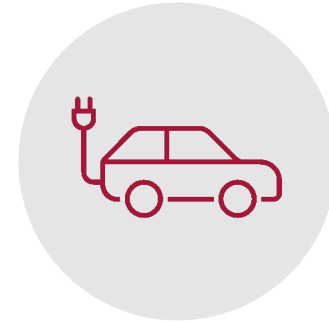
- Our prices are regulated by Ofgem and are required to be reflective of real cost
- Competition in connections: independent connection providers and independent distribution network operators
- Connections charges
  - Single use assets: connectee pays
  - Reinforcement costs: reduced under April 2023 connection charging reforms





# Working with Local Authorities

- Supporting publicly funded decarbonisation schemes including:
  - Local Electric Vehicle Infrastructure
  - Social Housing Decarbonisation Fund
  - Public Sector Decarbonisation Scheme
- Local Area Energy Systems Team
  - Local Authority Portal
  - Collecting local intelligence on future network needs
  - Informing forecasts and network intervention decisions
  - Supporting Local Area Energy Planning
  - Providing education and support in using our network data



**Thank you**