



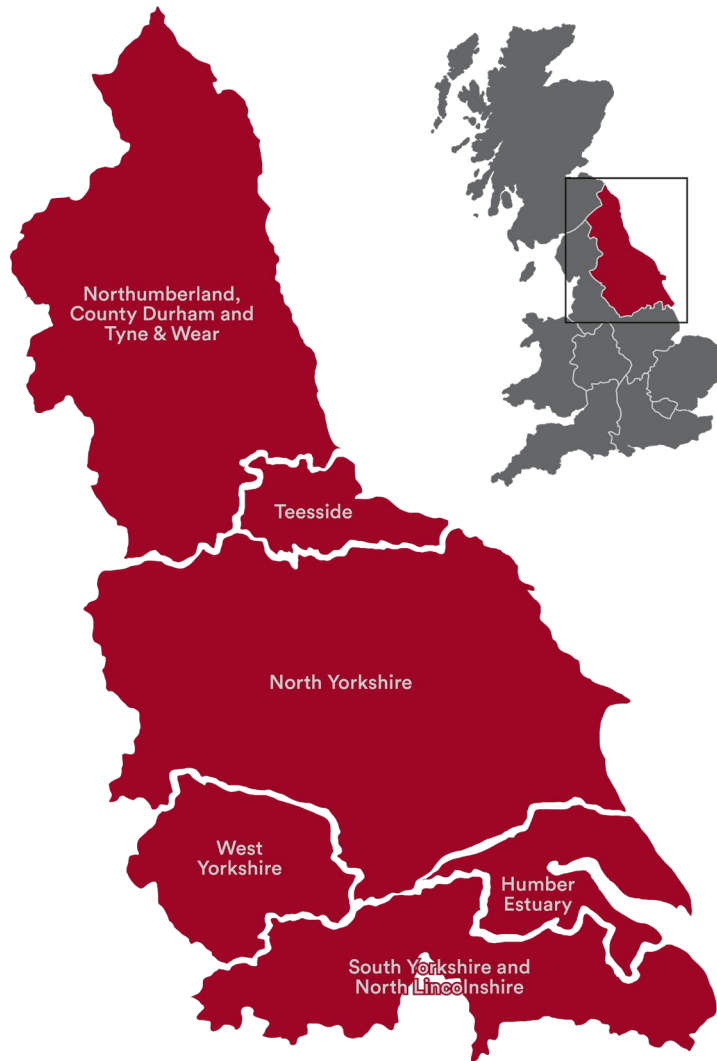
# Northern Powergrid

Enabling regional decarbonisation

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# 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 second 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



# 30 GW IN OUR CONNECTIONS PIPELINE

Network is ready  
to connect  
381 Projects  
(45%)

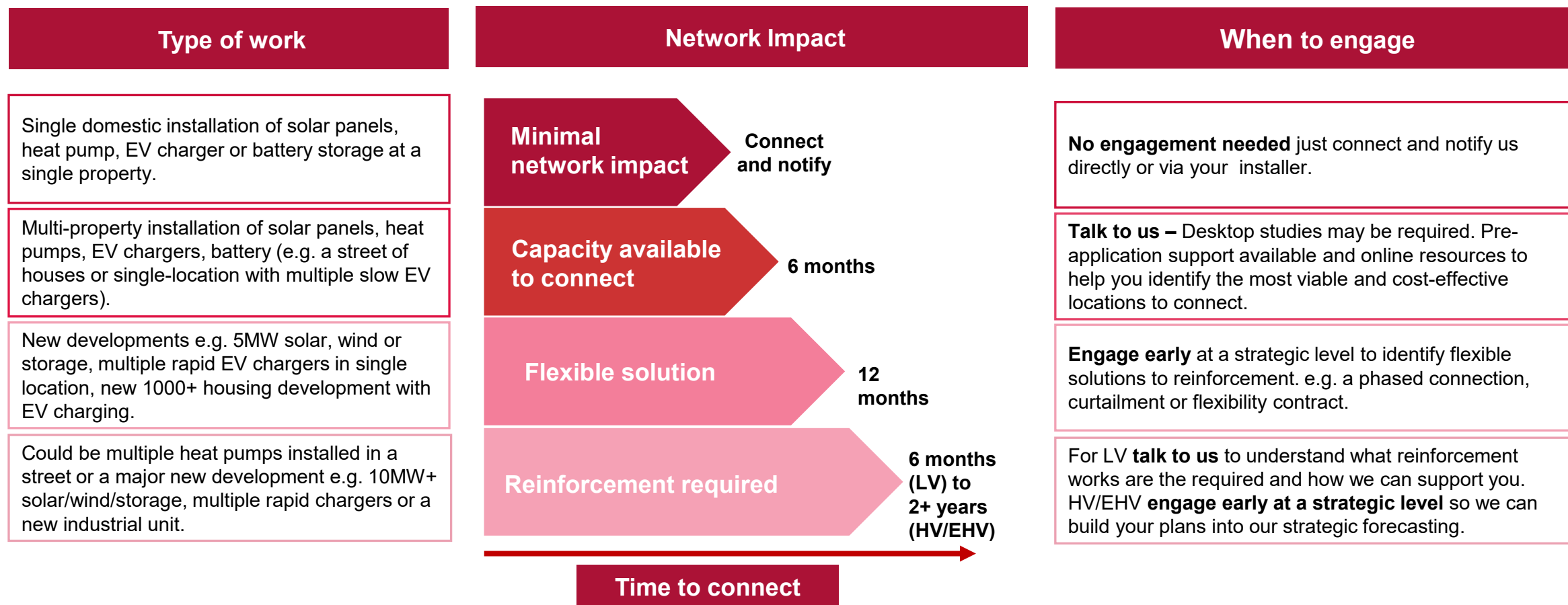
DNO  
reinforcement  
required  
55 Projects  
(6%)

Transmission  
reinforcement  
– under review  
227 Projects  
(27%)

Transmission  
reinforcement  
required  
186 Projects  
(22%)

>1 MVA customer projects across North East and Yorkshire

# Providing Connections: Timescales



# Providing Connection: Costs to connect

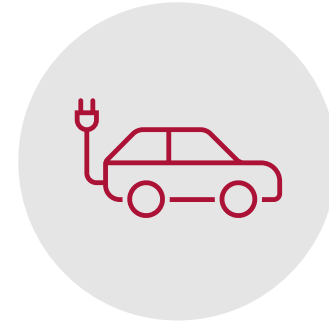
- Our prices are regulated by Ofgem and are required to be reflective of real cost
- Competition in connections: independent connection providers and independent distribution network operators
- Connections charges
  - Single use assets: connectee pays
  - Reinforcement costs: reduced under April 2023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

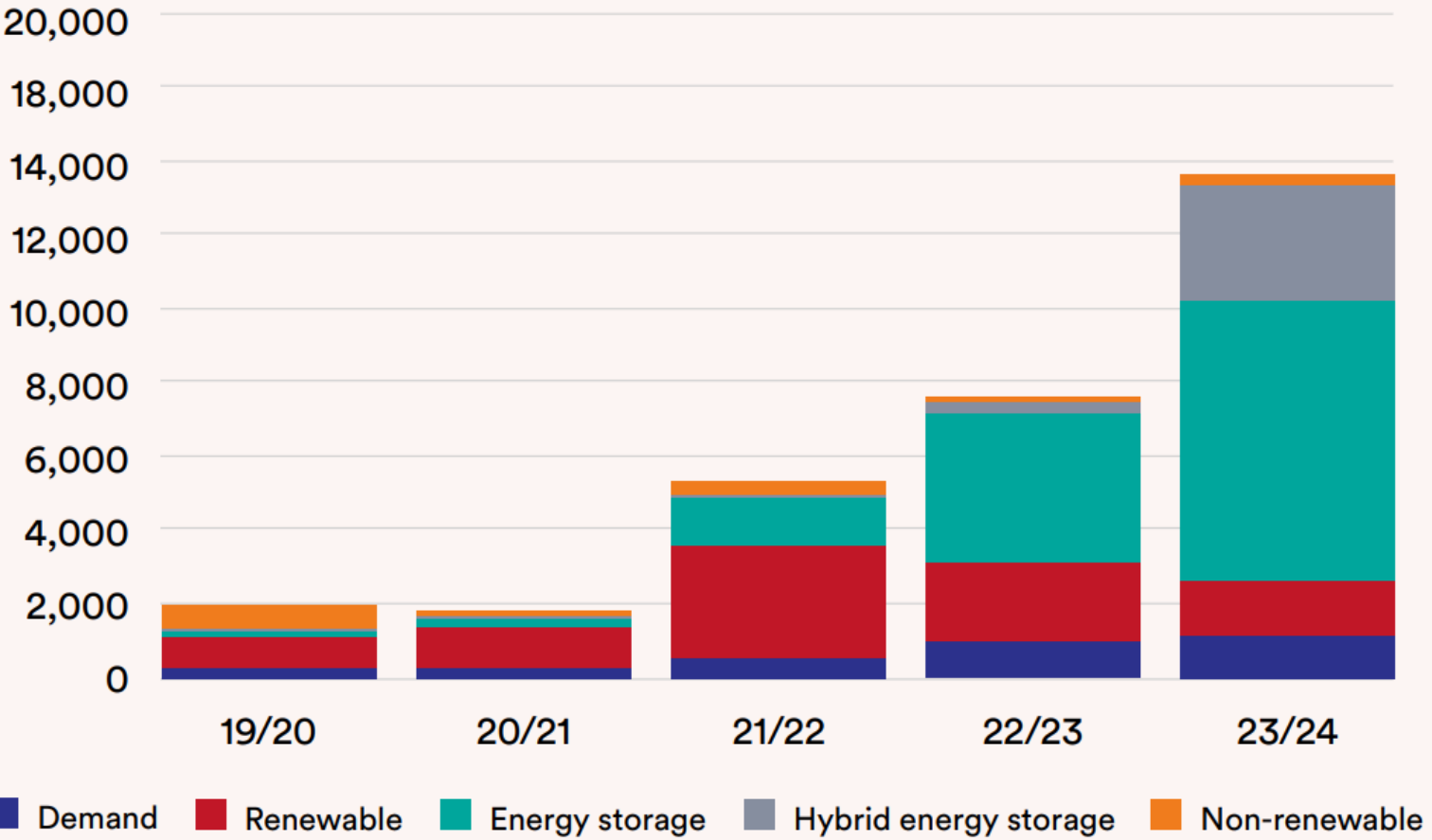


**Thank you**

# Appendix

# APPETITE FOR MAJOR CONNECTIONS IS BOOMING

## Major connections offers accepted - >1MVA



## Connections pipeline



# PROGRESSING MAJOR CONNECTIONS FOR THOSE READY TO PROCEED

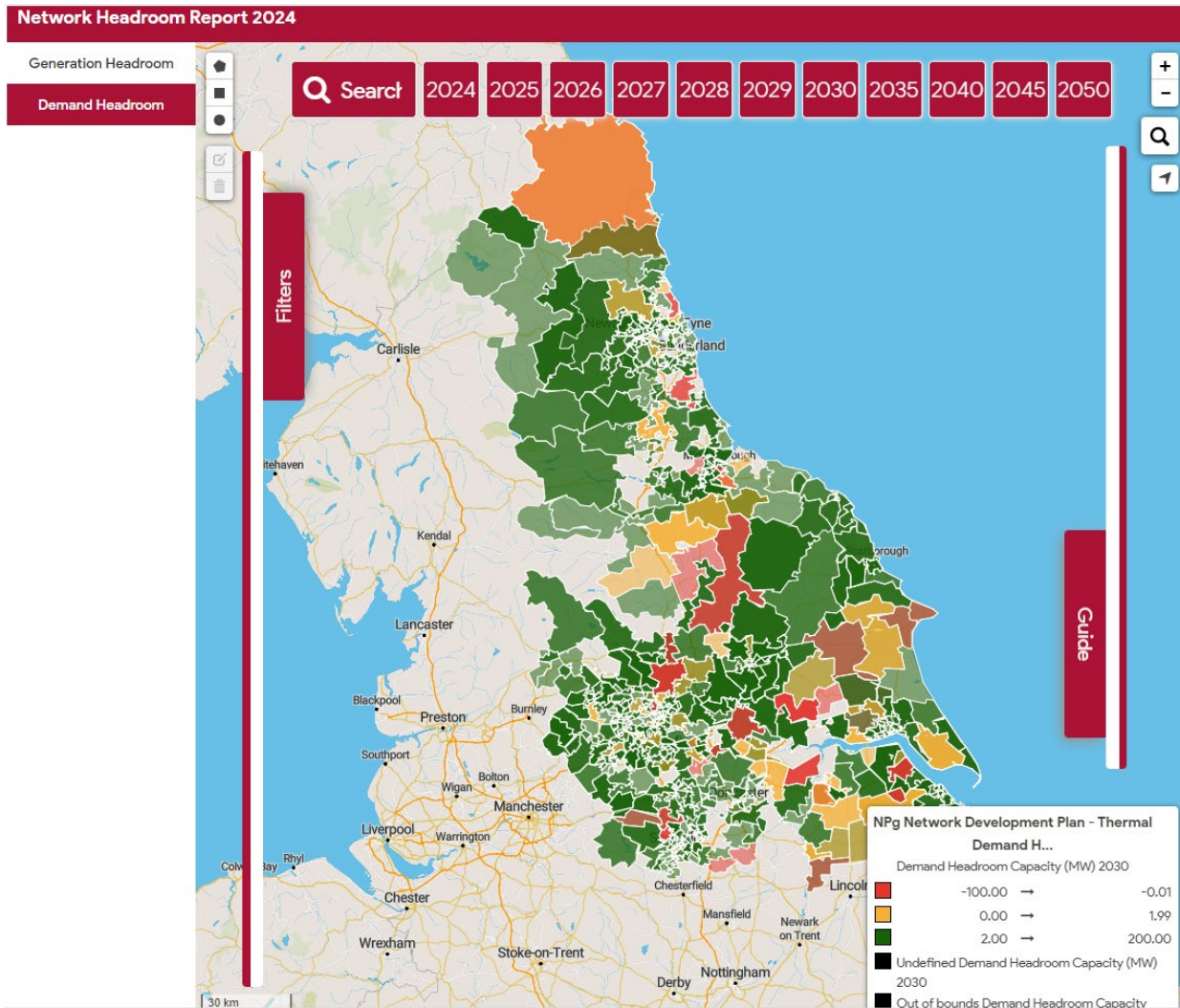
## Providing accelerated connections

- Contacted 90 of the 230 impacted
- Already made 33 offers with typical 6.5 year improvement
- Significant movement in the queue
- Expect ca. 110 to connect

## New policies, right incentives

- Capacity being freed up for those ready to connect
- >200MW from managing milestones
- User commitment and queue access all under scrutiny

# NEW LOAD GROWTH VISUALISATIONS HIGHLIGHTING FUTURE FLEXIBILITY NEEDS



- Network Development Plan sets out network impacts of load growth
- New visualisations use heat map technology
- Users produce different views and access the underlying data

Enhanced  
Forecasting