

# RIIO-T3 Business Plan

January 2025

nationalgrid



# Thank you for joining

## Housekeeping

- Please note that this session will be recorded
- Please add your questions via Q&A function for our dedicated session at the end of the talk – 30 minutes Q&A
- Questions and Answers supported by Environmental, Connections, Responsible Business, Whole System and Finance leads.  
Email: [PathwaytoNZ@nationalgrid.com](mailto:PathwaytoNZ@nationalgrid.com)

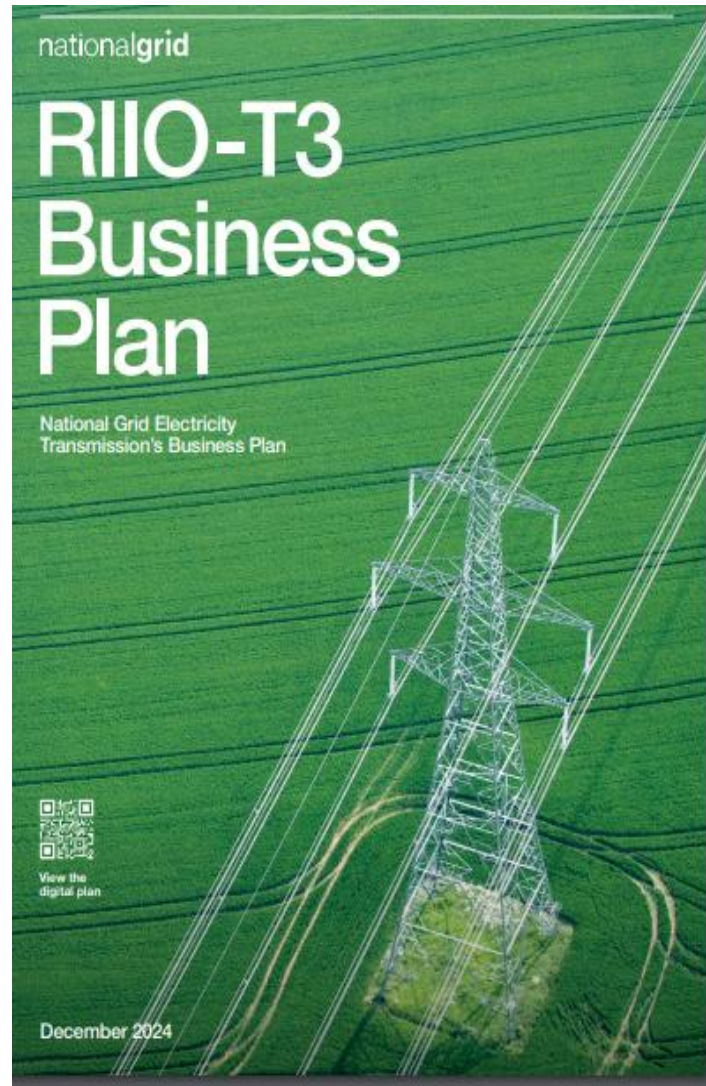
**We will be holding a couple of polls during the session today.**

## Agenda

|   |         |
|---|---------|
| Introduction  | 5 mins  |
| Overview of our plan  | 20 mins |
| Deliver the grid of tomorrow, today                               | 5 mins  |
| Do the right thing for consumers, communities and the environment | 5 mins  |
| Transform the way we work   | 5 mins  |
| Next steps  | 5 mins  |
| Questions and Answers   | 30 mins |

# Icebreaker

Which of the following statements reflects you the best?



1. I have fully read your RIIO-T3 Business Plan from your website
2. I have not fully read it yet, but still aim to
3. I have read the sections I'm most interested in
4. I just want the summary version from this webinar
5. None of the above

# 1

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## Overview of our plan





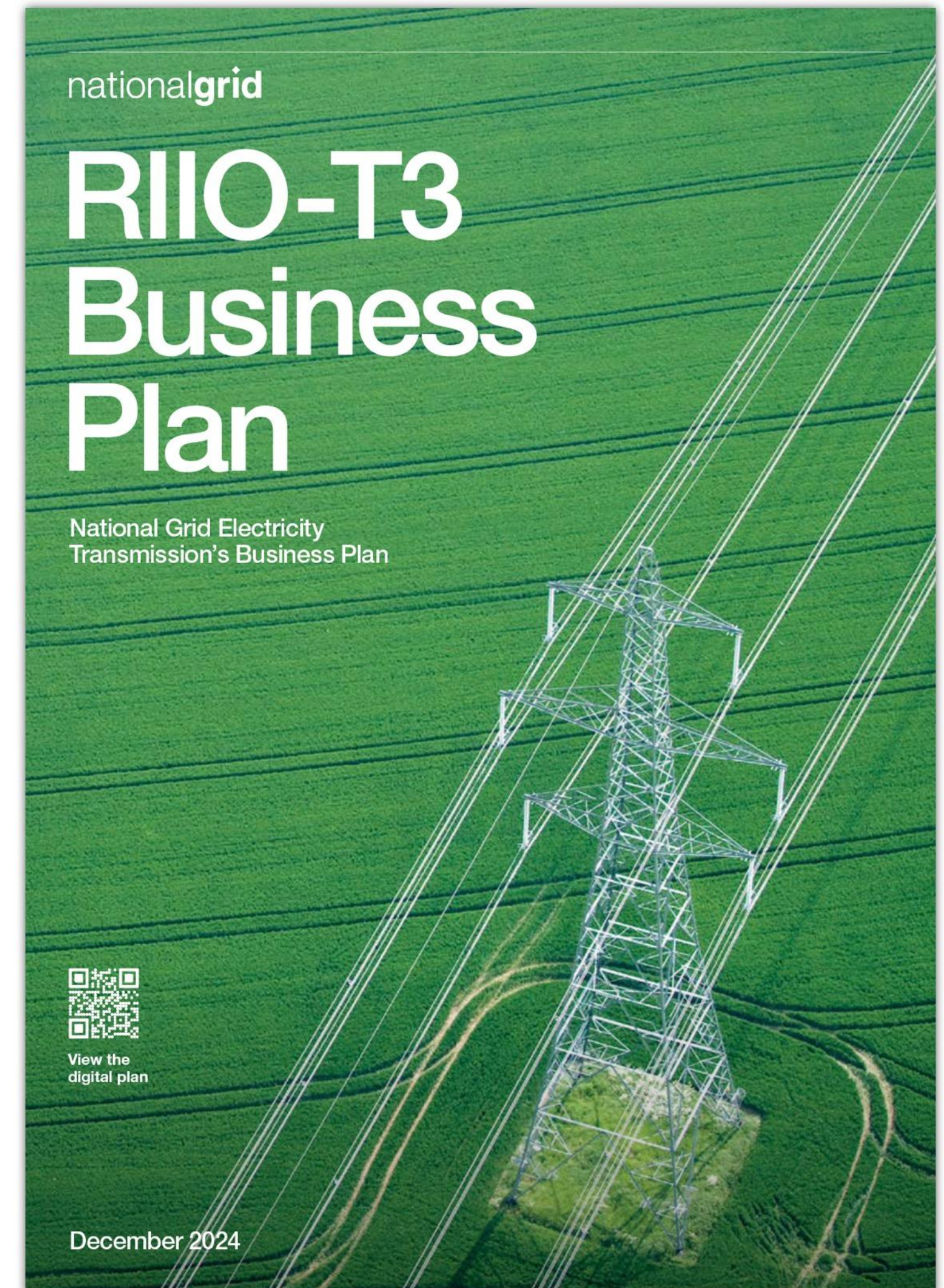
We own and operate  
the transmission network  
that is the backbone  
of electricity system in  
England and Wales

The objective of today's webinar is to set out our business plan for 2026-2031.

Our £35bn business plan was submitted in December 2024 and will now be assessed by Ofgem.

Our plan will nearly double the amount of power we can transfer across England and Wales and more than double the rate of connecting our customers.

We want stakeholders to be involved in the 'call for evidence' that Ofgem has opened as part of the RIIO-T3 price control process and to feel well-informed on what is included in our plan and why.



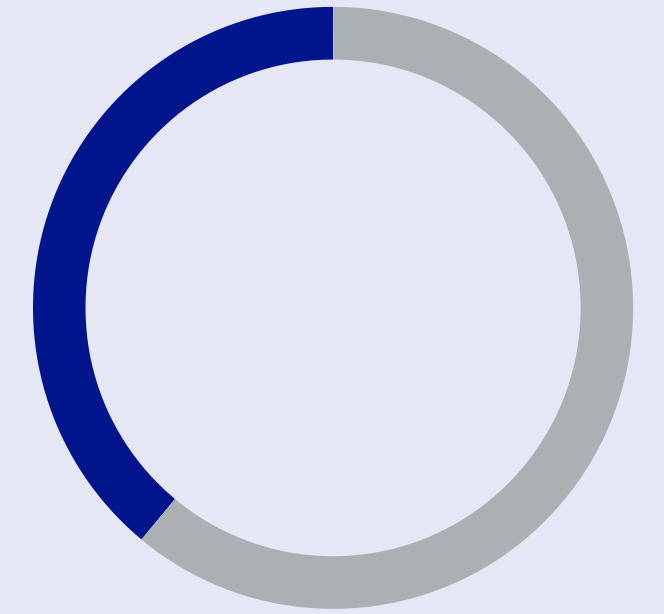
## We have a responsibility to consumers, customers and stakeholders to:

- deliver value for electricity consumers 25 million households, small and large businesses, who ultimately pay for the work we do.
- deliver a service to our 96 directly connected customers across six different sectors (power generation, distribution network operators, rail, industry, steel and data centres) who rely on us to transmit the electricity they generate or use.
- we enable an efficient wholesale market, so that households and businesses in all regions can access and benefit from the cheapest and cleanest electricity wherever it is across the country
- work with stakeholders and communities that host our infrastructure.

59 GW connected to our network today

**39%**  
Clean Power

**61%**  
Fossil Fuel



# We are committed to delivering value for consumers and our stakeholders:

## Our impact on consumer bills:

### Average annual household electricity bill

|                              |           |
|------------------------------|-----------|
| Transmission (of which NGET) | £36 (£25) |
| Distribution                 | £120      |
| Grid Operation               | £37       |
| Wholesale Energy             | £339      |
| Policy                       | £136      |
| Other                        | £254      |

*Indicative for 2024, based on annual average Ofgem cap for an average household*

## 3,000 colleagues

Across 350 sites in England & Wales

## 51% female

Representation on our leadership team

## 99.9999% reliability on our network

Our customers can access electricity 24/7

Safety of our staff and the wider public is our top priority. We are proud of our record today, but will always challenge ourselves to continue to improve.

## Awards/Benchmarks



**Asset Management Excellence 2023**  
Eason Award for Digital Innovation



**Equileap**  
Second in the UK and fourth globally for gender equality



**Human Rights Campaign Foundation**  
Leader in LGBTQ+ workplace inclusion 2023/24. 100% score for 5th year running



**Construction News Awards**  
Project Team Of The Year, 2023 for our London Power Tunnels project



**RateMyPlacement**  
Best 100 Student Employers 2023/24

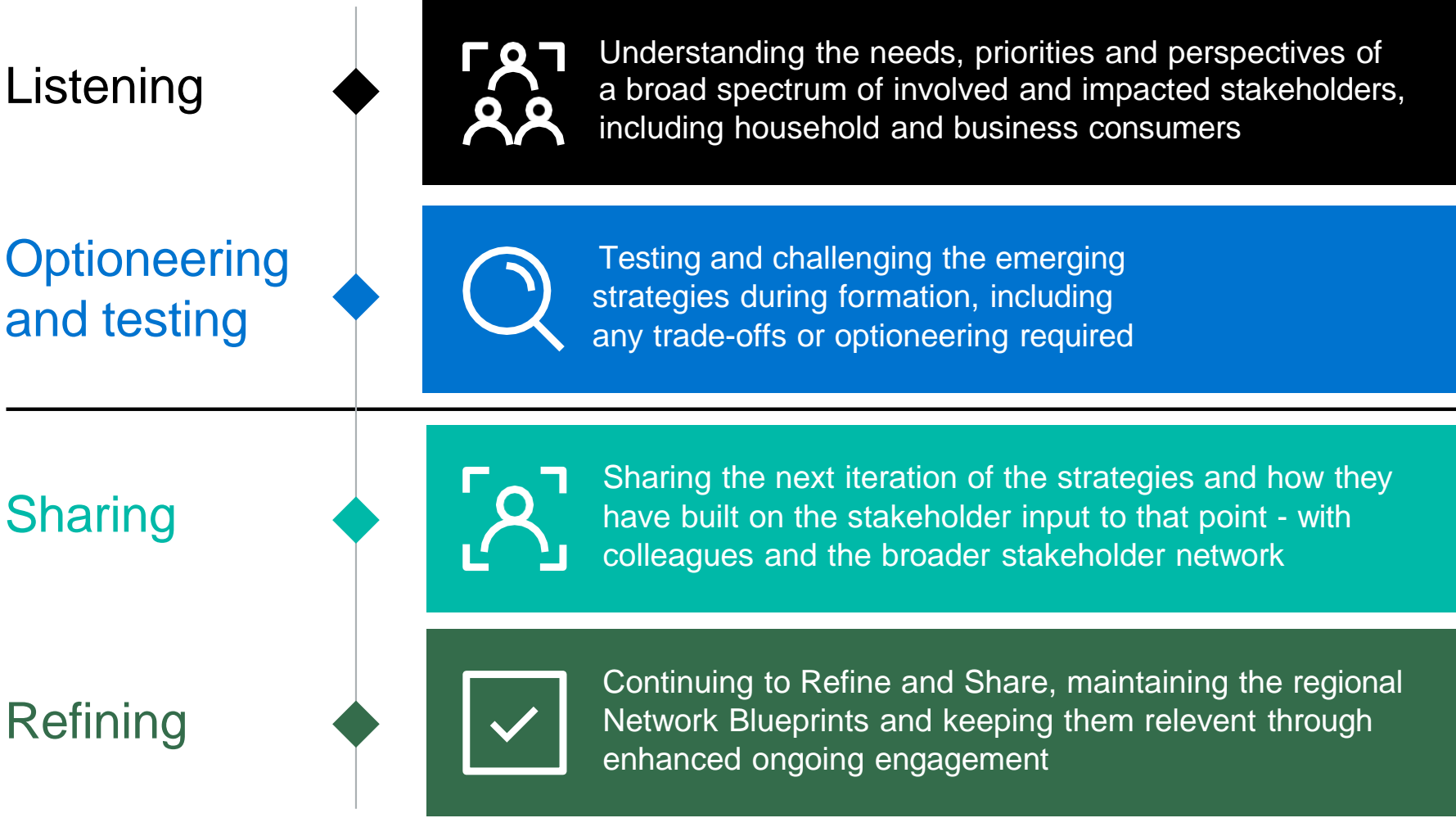


**ISO certification:**  
Asset Management System (ISO 55001)  
Integrated Management System across Quality (ISO 9001), Environmental (ISO 14001), Occupational Health and Safety (ISO 45001)



# Our stakeholder engagement approach

Since 2022 we have listened to and worked with those who are impacted by the design, timing, cost and delivery of the network upgrade...



...And this approach continues beyond our December Business Plan submission to Ofgem, as we refine its details throughout delivery.

  
**12,000**  
 voices

**We listened to over 12,000 voices** representing all stakeholder groups

  
**23,000**  
 residents

**We consulted with over 23,000 residents** in communities already impacted

  
**35**  
 workshops

**We held 35 region focussed workshops** with our industry and regional stakeholders

We hosted a playback webinar on our T3 plan in November



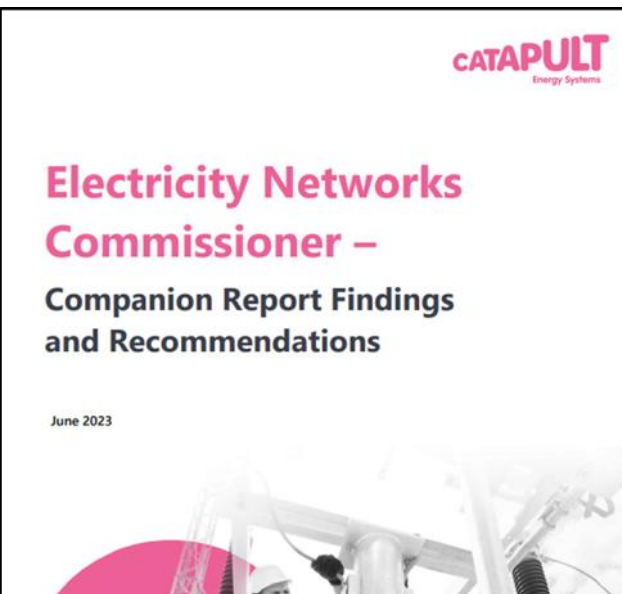
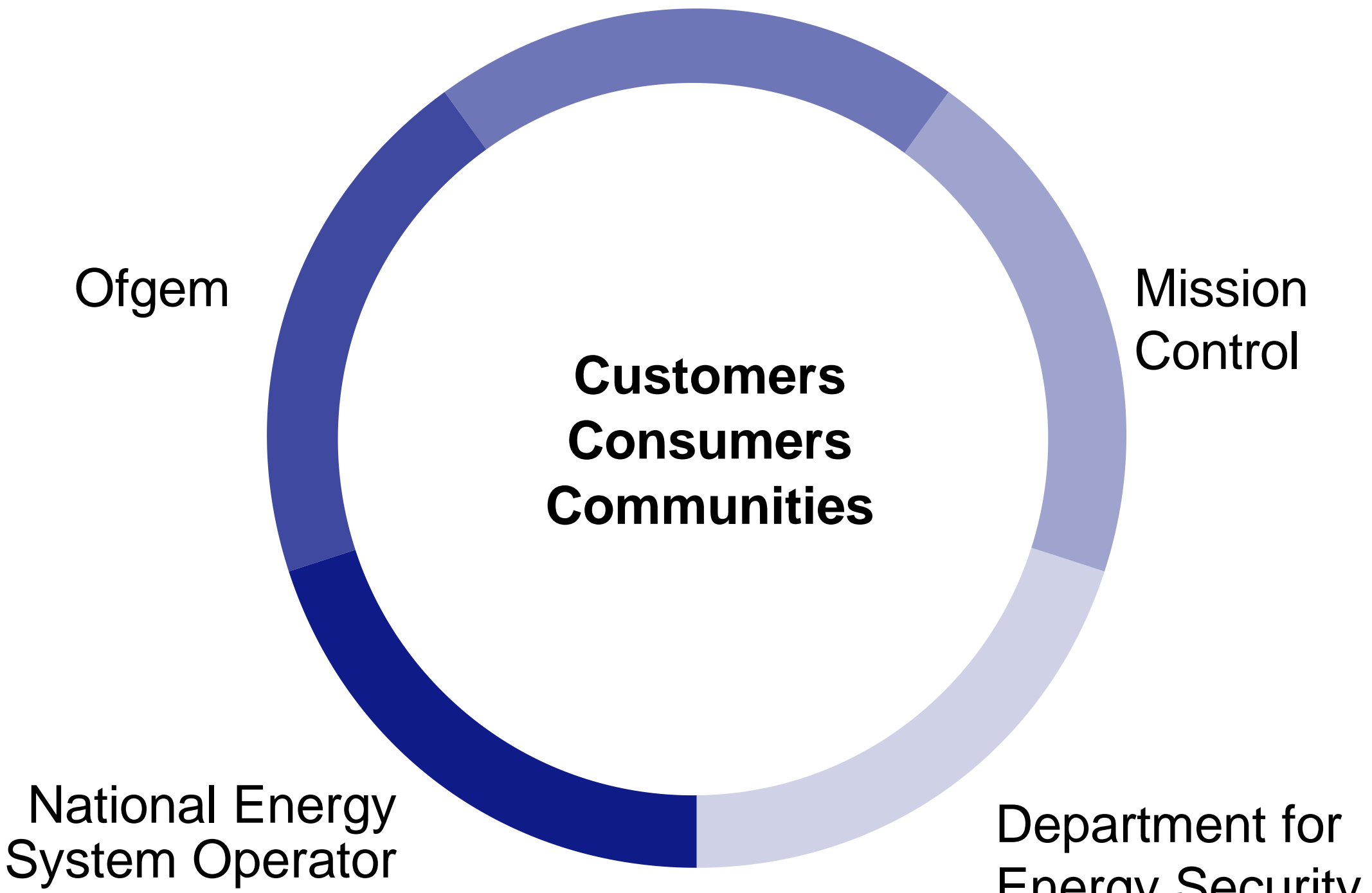
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Accelerating the transition to a net zero economy, to make Britain a clean energy superpower



# RIO-T3: a shared national endeavour

National Grid Electricity Transmission and other network companies



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Based on insights from our stakeholder engagement programme we have set three ambitions which shape our plan

◆ ————— ◆

## **Ambition A**

**Deliver the grid of tomorrow, today**

**Deliver with urgency the Transmission Network needed for Great Britain's future growth and decarbonisation**

◆ ————— ◆

## **Ambition B**

**Do the right thing for consumers, communities and the environment**

**How we deliver is as important as what we deliver**

◆ ————— ◆

## **Ambition C**

**Transform the way we work**

**Transform our capabilities to deliver for consumers**

# Highlights of our RIIO-T3 plan

## Power flows

Nearly doubling the power that can flow across the country

£12bn

Avoiding c.£12bn of constraint costs, equivalent to £40 per year for consumers

35 GW / 19 GVA

Connects 35 GW generation and 19 GVA demand

## Decarbonisation

Supports growth of British businesses and decarbonisation of our economy

99.9999%

Keeping the lights on, with 99.9999% reliability

0.7% Efficiency

0.7% efficiency year-on-year

## Emissions reduction

50% reduction in our own emissions compared to our 2018/2019 baseline

## Legacy of benefits

Both community and regional benefits

Grow workforce by 50%

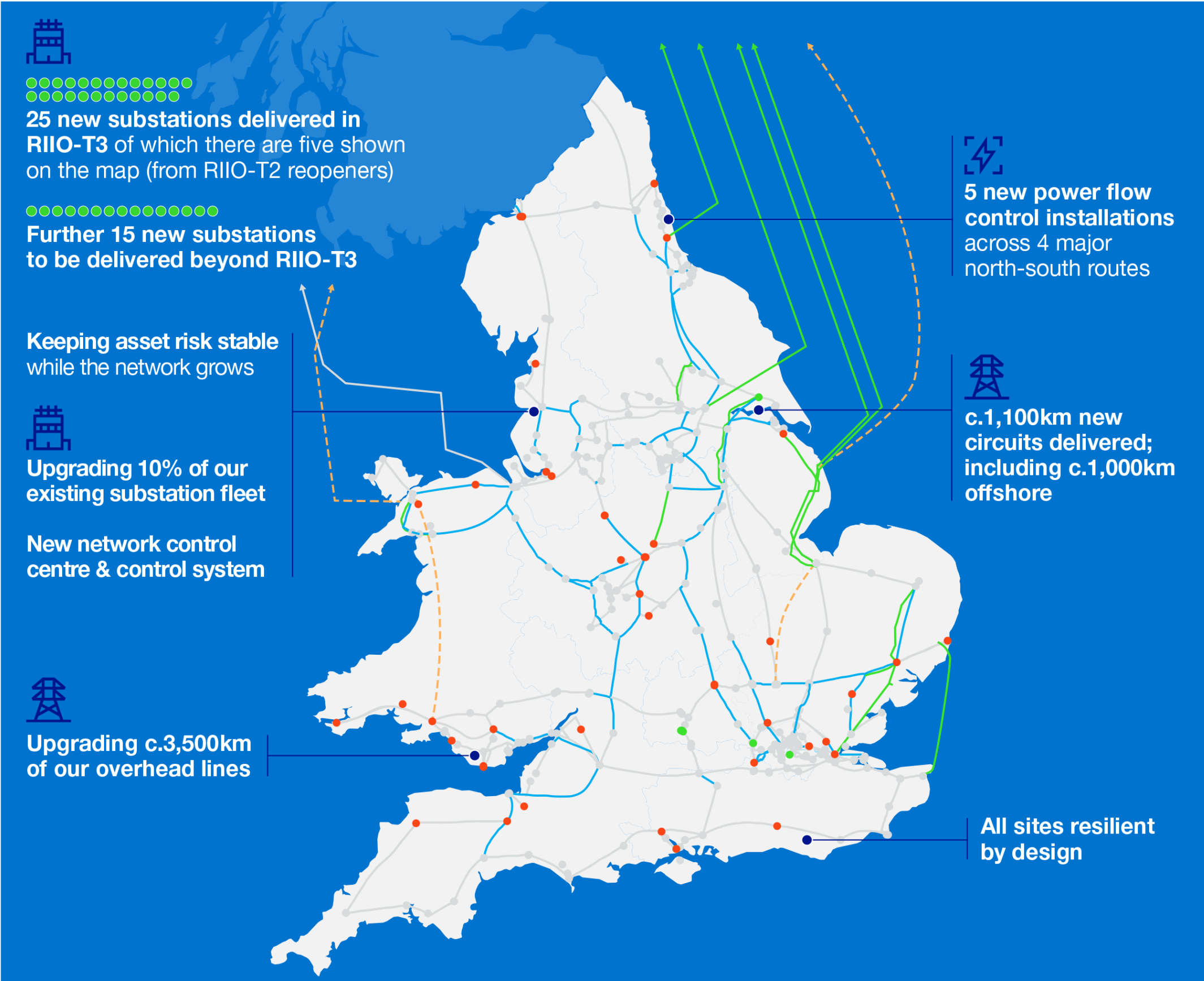
And improve diversity to better reflect our communities

## Biodiversity net gain

Biodiversity net gain across equivalent of >8,000 acres of land, 7x impact vs. RIIO-T2



# Highlights of our RIIO-T3 plan



● Existing Substation   ● Major Site Strategy   ● New Substation   — Existing Network   — Upgrade Existing  
 — New Build   — Developing Only

## Outcomes for customers, consumers & communities

- **Nearly doubling** the power that can flow across the country
- **Avoiding c.£12bn** of constraint costs, equivalent to £40 per year for consumers
- **Connecting 35 GW** generation and **19 GVA** demand
- Supporting **growth of British businesses** and **decarbonisation** of our economy
- Keeping the lights on, with **99.9999% reliability**

## How we are delivering responsibly

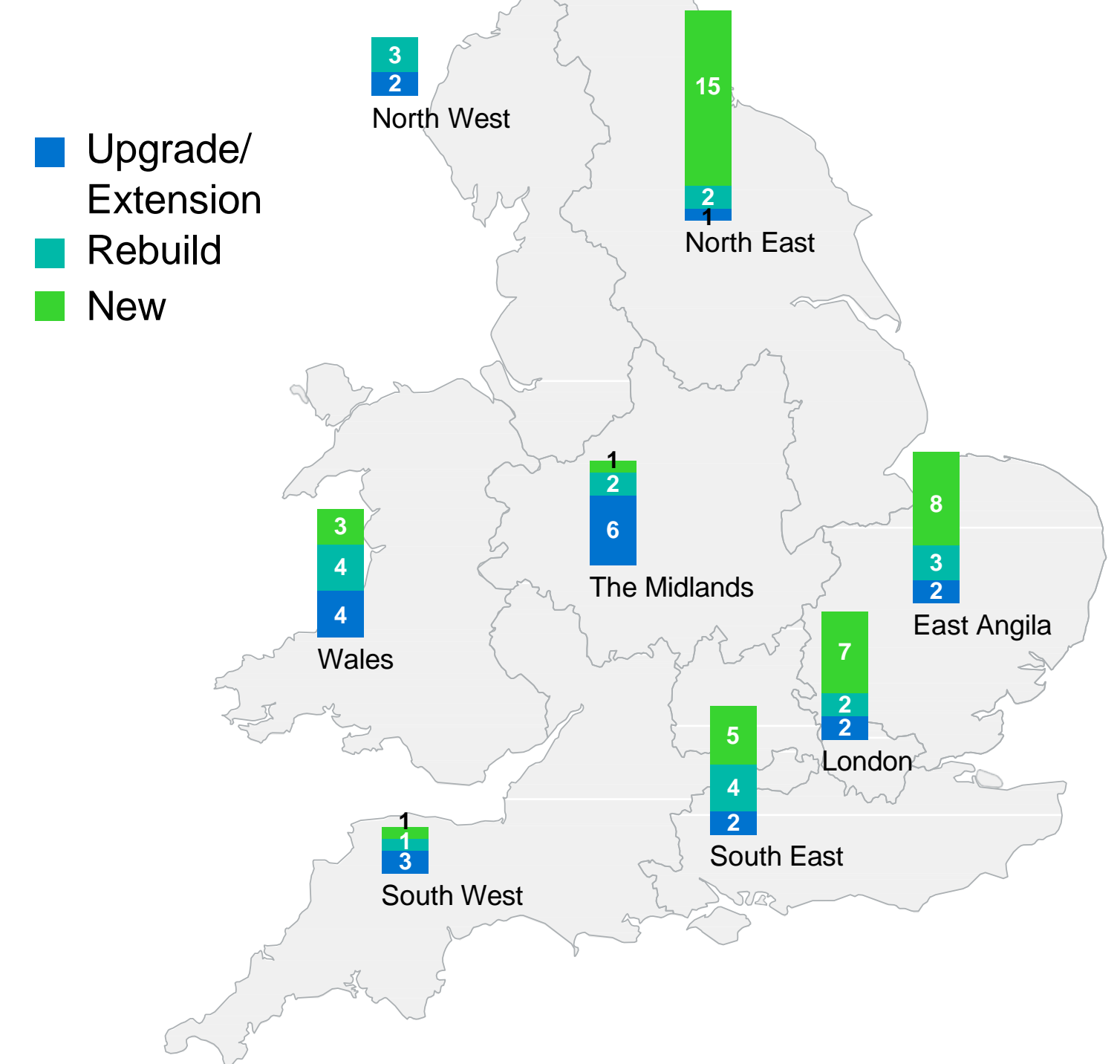
- **0.7% efficiency** year-on-year
- **50% reduction** in our own emissions
- **Leaving a legacy** of community and regional benefits
- **Grow workforce** by c.50% and improve diversity to better reflect our communities
- **Biodiversity net gain** for equivalent of >8,000 acres of land, 7x impact vs. RIIO-T2

# We have combined our regional stakeholder insights and network development plans into eight Future Network Blueprints

Our RIIO-T3 plan considers what is needed at a national level and the investments in eight regions based on what our stakeholders expect us to deliver to support their objectives.

The Future Network Blueprints are a live tool for us to use with our stakeholders on an ongoing basis. They will evolve, reflecting the dynamic, changing context within which we are operating

**Substation investment by network region**  
(Number of substations undergoing major activity)



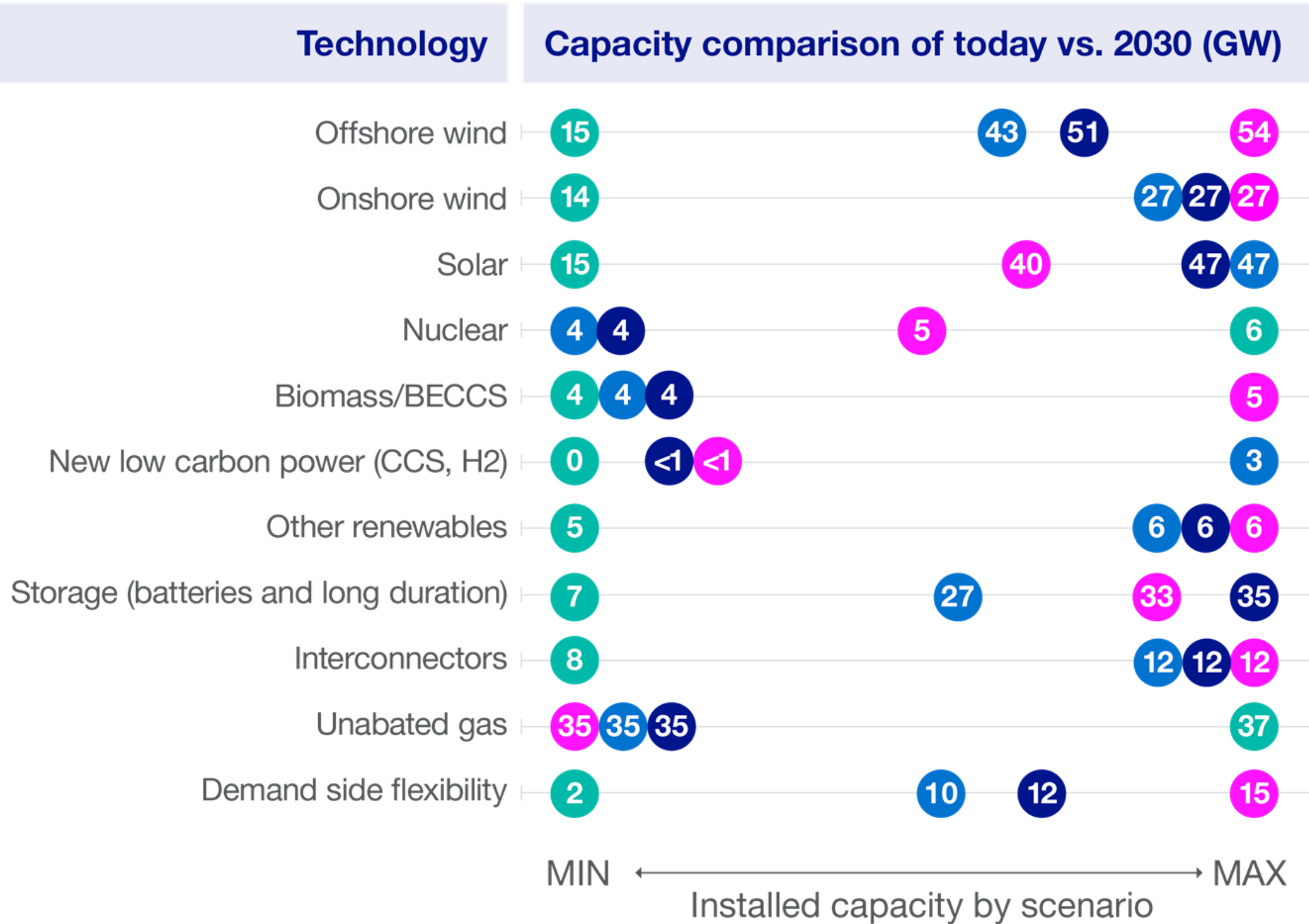
# Our plan has the scope to meet the accelerated timescales of Clean Power 2030

In line with Ofgem guidance, our plan is based on NESO's 2024 Future Energy Scenario.

We can adapt the plan to align with the ambition set out in NESO's Clean Power 2030 study, but rely on Government and Ofgem taking bold action.

## Comparison of capacities across NESO's Future Energy Scenario (FES24) and Clean Power Scenarios.

- Scenario key**
- Today
  - NESO FES24 Holistic Transition (scenario for our RIIO-T3 plan)
  - NESO Clean Power New dispatch
  - NESO Clean Power Further flex and renewables

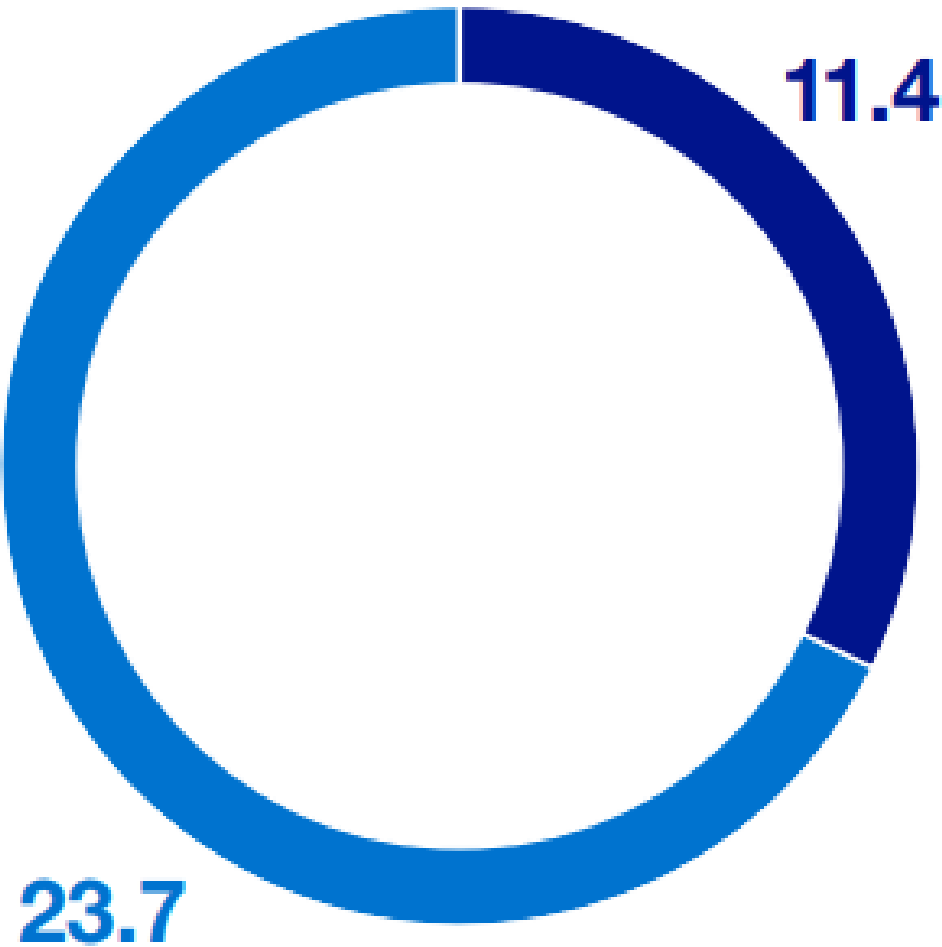




# Achieving these outcomes for consumers will require a set-up in investment levels

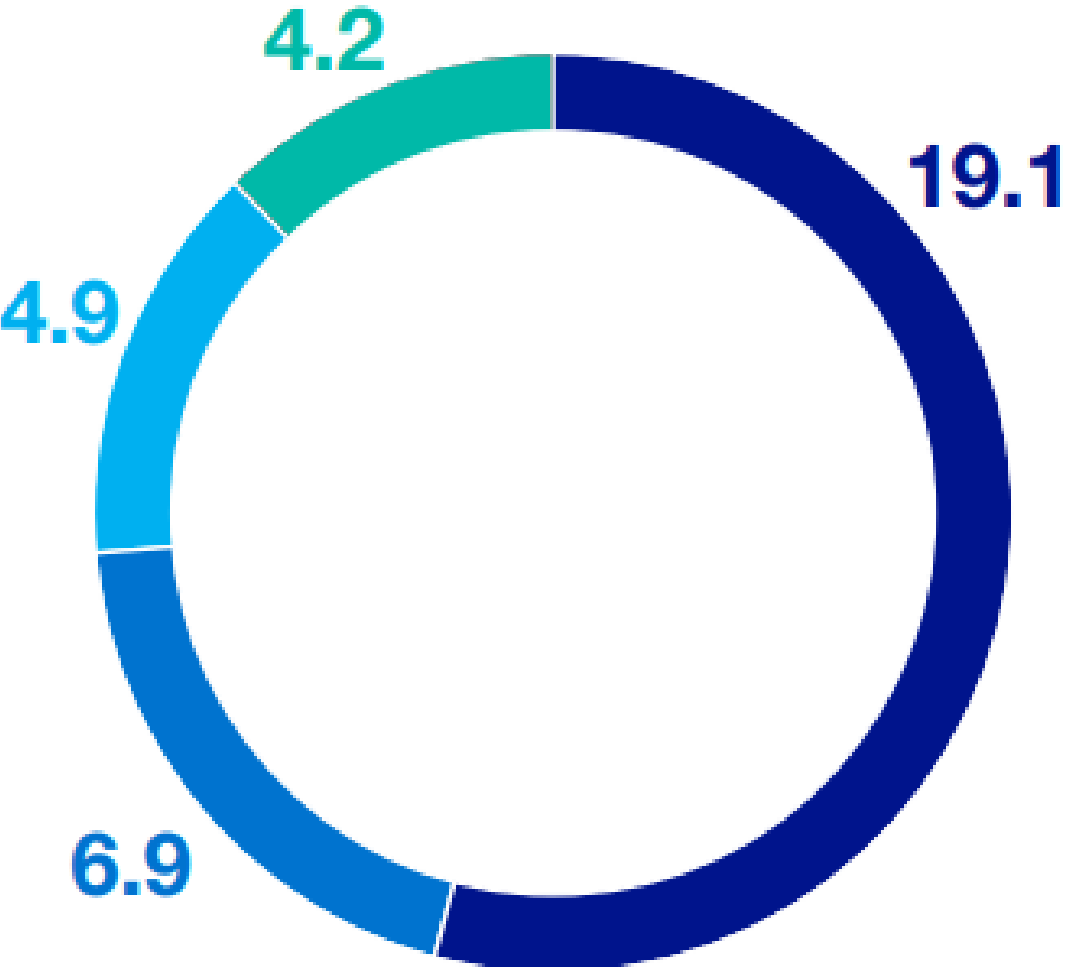
## NGET RIIO-T3 investment (£bn)

By funding type



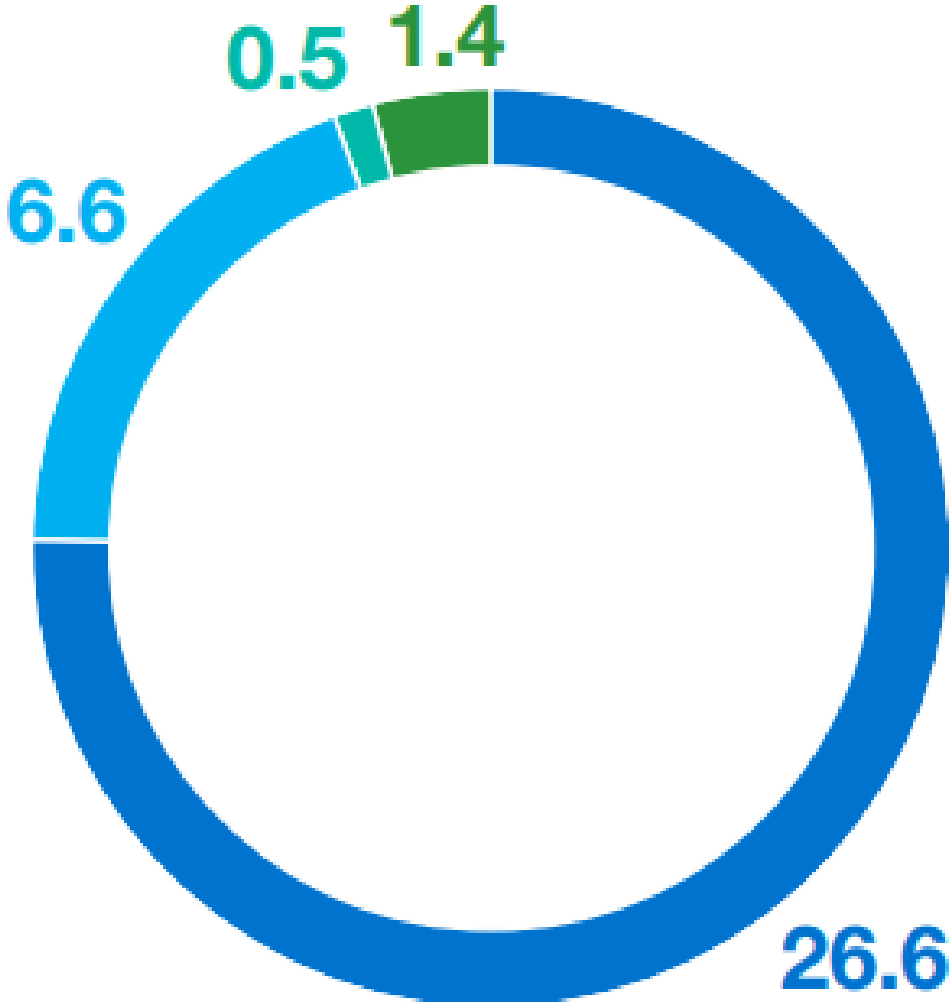
- Baseline
- Pipeline

By network investment type



- Network capacity
- Connecting customers
- Health and resilience of the network
- Other

By customer outcome

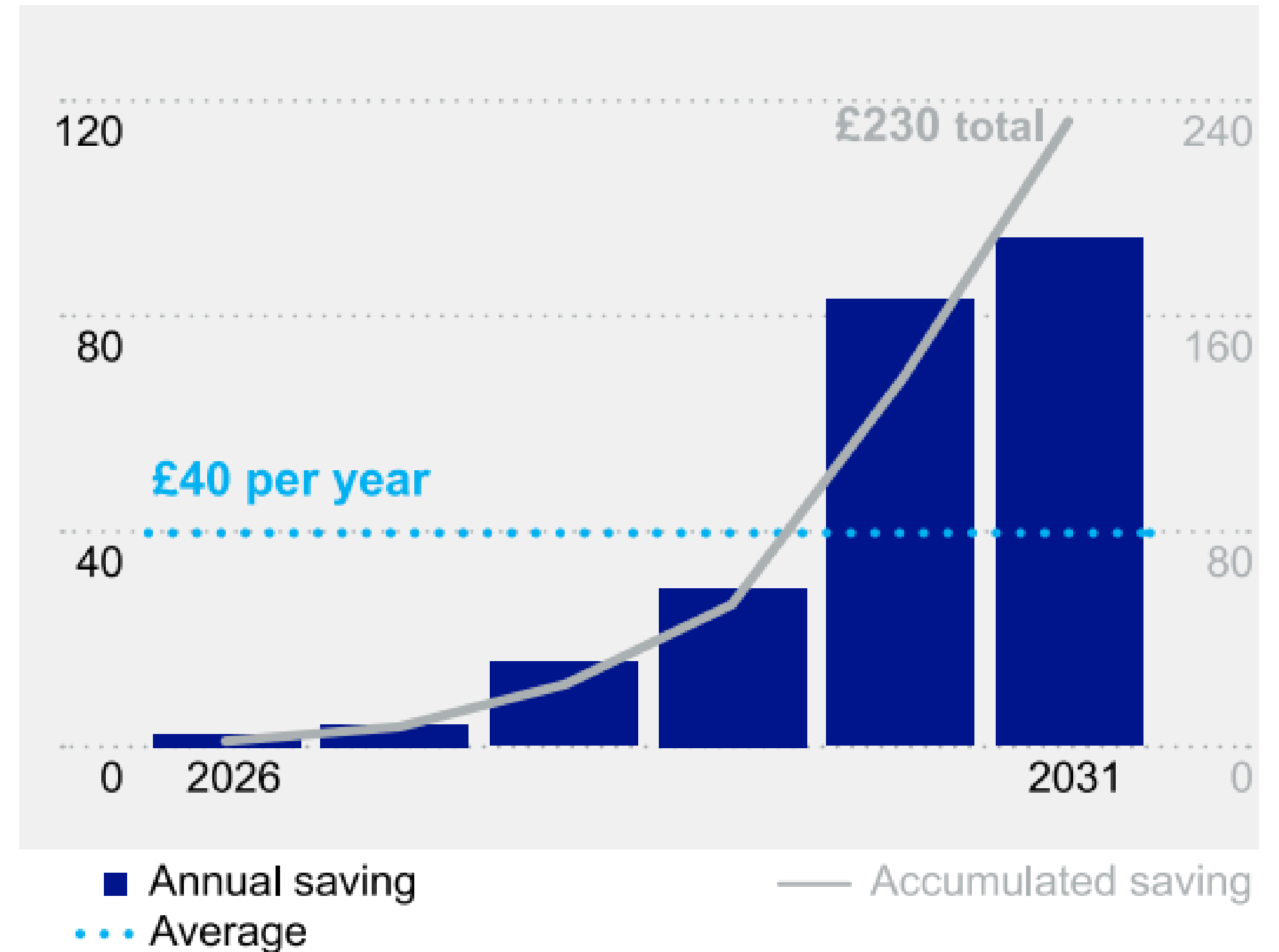


- Infrastructure for a low-cost transition
- Secure and resilient
- High quality of service
- Value for money

# We have a responsibility to minimise the additional costs we are asking consumers to pay to unlock the value for Great Britain

Our analysis suggests the transmission element of the average domestic bill will increase from c.£23 per year in 2026 to c.£44 per year in 2031.

We expect these costs to be more than offset by reductions in the costs of managing the electricity. Our modelling shows a £12bn saving in constraint costs during the RII0-T3 period representing a c.£40 average annual saving for the typical consumer



Constraint cost savings as a result of our investment plan

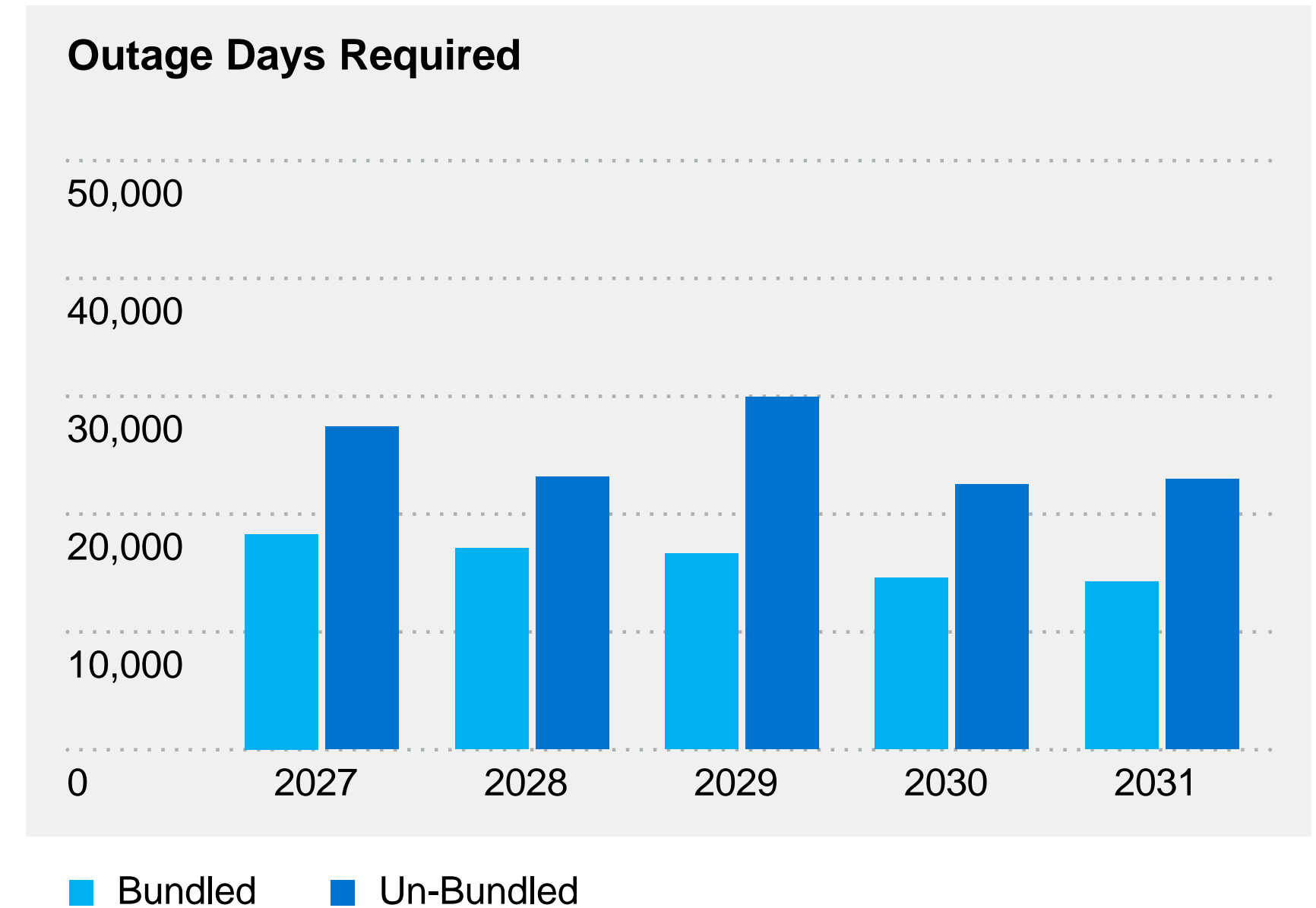
# We have made a detailed assessment of the risks to the delivery of this plan

We are realistic about the challenges we face, so we undertook an assessment of the risks and how we can mitigate them. We focused on the four largest constraints:

- community acceptance
- securing the required supply chain capacity
- building a workforce with the right skills
- agreeing outages to complete our work

We are taking action and will need support from others in the industry on all four areas.

We will not compromise on safety.





Turning ambition  
into action – our  
business plan for the  
RIIO-T3 period

## Polling question

With what you have heard so far, what is your initial reaction to our RIIO-T3 Business Plan headlines?

Favourable

Neither  
favourable or  
unfavourable

Unfavourable

Undecided



# 2

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Deliver  
the grid of  
tomorrow,  
today



# Our ambition: Deliver the grid of tomorrow, today

Deliver with urgency the Transmission Network needed for Great Britain's future growth and decarbonisation



Maintain world class levels of network performance and resilience



Deliver the capacity our customers need now, looking holistically across multiple investment drivers



Future-proof our network with strategic capacity and flexibility for the longer term



Invest in the next generation of innovative technologies



# Deliver the grid of tomorrow, today

## Selected success measure/targets

**99.9999%**  
network reliability

- All new sites resilient by design and a new resilience modelling approach and Climate Adaptation Strategy

**35 GW**  
of new generation connected

- Increase customer satisfaction rating from 7.2 to above 7.7 in the Quality of Connections Survey

**19 GVA**  
of new demand connected

- Provide better insight and visibility of options for ourselves, DNO partners and broader stakeholders
- Approximately £150M invested in innovation projects





# Deliver the grid of tomorrow, today

Selected success measure/targets



**“From my experience, when it comes to resilience this isn’t something one party can solve on their own. We must come together as a sector to set consistent standards that will ensure continuity of service for consumers into the future**

**Jon Davies**

Director of Network Operations and Intelligence

## **Case Study Project ICECREAM**

We are assessing the risks of future increases in sea level, shoreline erosion, coastal storm activity and salt marsh encroachment. This innovation project is undertaken together with the University of Liverpool and flooding experts Previsico.



# 3

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Do the right thing  
for customers,  
communities and  
the environment



# Our ambition: Do the right thing for customers, communities and the environment

How we deliver is as important as what we deliver



Maximise the value we create by controlling our costs



Play a leading role in accelerating net zero and driving a nature positive future



Build social value and support consumers in vulnerable situations



Represent the diverse communities we serve



# Do the right thing for customers, communities and the environment

## Selected success measure/targets

**0.7%**

Commit to a 0.7% ongoing efficiency challenge at the top end of range

**50%**

reduction in scope 1 and 2 emissions from a 2018/19 baseline

**45,000**

10-year commitment to develop skills for the future for 45,000 people in our communities (from 2020)

**50%**

reduction in SF6 emissions by 2030 from a 2018/19 baseline

**Investment**

in community benefit in line with government guidance, with transparent reporting on benefits delivered

**10%**

or greater Biodiversity Net Gain alongside wider environmental and societal benefits for all developments requiring formal planning or consenting



# Our ambition: Do the right thing for customers, communities and the environment

How we deliver is as important as what we deliver

## London Power Tunnels

In partnership with social enterprise, Connectr, our London Power Tunnels Programme worked with secondary schools to address social mobility by promoting green skills and career opportunities in the energy industry.

This initiative won the Utility Week 2024 Environmental, Social & Governance Initiative of the Year Award.



**“The enriching week I undertook with National Grid opened my eyes to the sustainability and energy sectors. It has made me much more interested in exploring a career in these fields.”**

Work experience placement student

# 4

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Transform  
the way  
we work



# Our ambition: Transform the way we work

Transform our capabilities to deliver for consumers



Transform our asset management, network development, network operation and telecoms capabilities



Grow our workforce capability



Deploy new strategies that give our supply chain long-term signals to invest



Leverage digital and data capabilities



# Transform the way we work

## Selected success measures/targets

### Enhance

our enterprise asset management suite of applications making best use of leading systems

### Develop

enhanced capabilities to visualise the impact of differing scenarios, enabling greater stakeholder input and engagement

**53%**

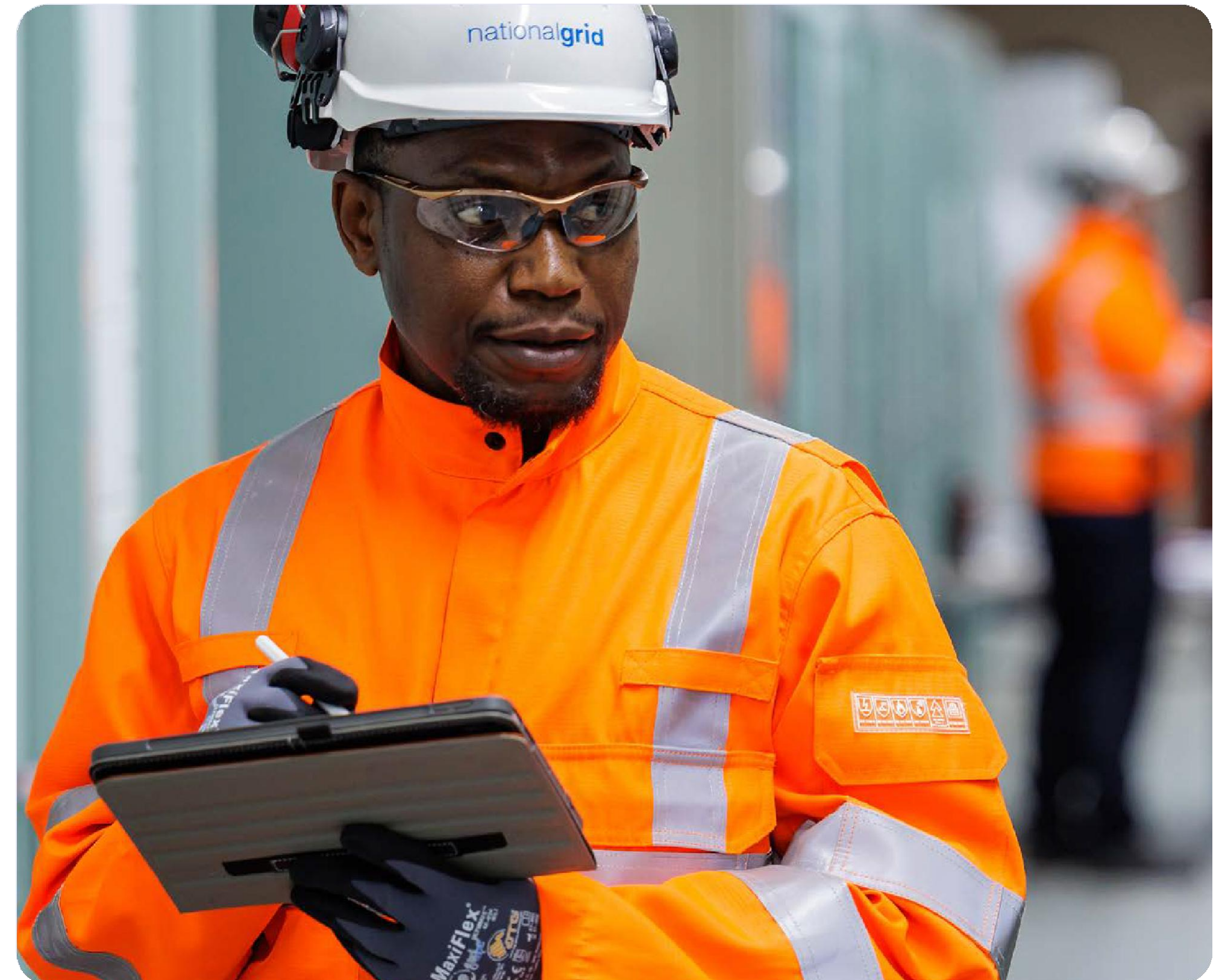
increase in workforce output and more than 1,100 apprentices and graduates

### Reduce

unplanned outage resolution time through improved predictive monitoring and early intervention, improving resiliency and efficiency

### Achieve

seamless data flow between NGET, Ofgem, and the wider energy sector through integration of the Data Fabric with the Data Sharing Infrastructure (DSI)





# Our ambition: Transform the way we work

Transform our capabilities to deliver for consumers

## Great Grid Partnership: Tackling the skills gap

One of the key benefits of creating the Great Grid Partnership (GGP) is the collective capacity, skills and knowledge it has established. The commitment and foresight of future work that GGP has given to the supply chain has given partners the confidence to invest, or increase investment, in their training facilities.

Murphy is creating a £30m new state-of-the-art overhead line, cable installation and substation training facility in Ollerton, Nottinghamshire, to be operational early in 2027. Omexom Taylor Woodrow (OTW) has invested in a new institute in Castleford, West Yorkshire offering an indoor substation, training towers, and a virtual reality suite. Morrison Energy Services is building on existing overhead line training facilities to create a brand-new training line at its National Distribution Centre at Newton near Nottingham.

This investment will increase capacity to develop and train overhead line skills and competencies.



# 5

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Next steps



# Where we are and what's next



**Ofgem's Call for Evidence 18 December to 10 February**

All responses welcomed

Your response will help to inform Ofgem's Final Determinations.

Please send your response to [RIIO3@ofgem.gov.uk](mailto:RIIO3@ofgem.gov.uk)

More information at Ofgem Call for Evidence RIIO-3



# 6

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Q&A



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# Joining the questions and answers



**Anna Turrell**  
Responsible  
business



**Stephen Knight-  
Gregson**  
Strategic  
Infrastructure



**Jeni Ray**  
Stakeholder and  
Insight



**Paul Challinor**  
Finance



**Wayne Mullins**  
Connections



**Carolyn Helm**  
Environmental



**Ben Haggerty**  
Future Network  
Blueprints

## Polling question

How helpful has this webinar been for you to understand our RII0-T3 Business Plan?

Very helpful

Slightly helpful

Not at all helpful

Undecided



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