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

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

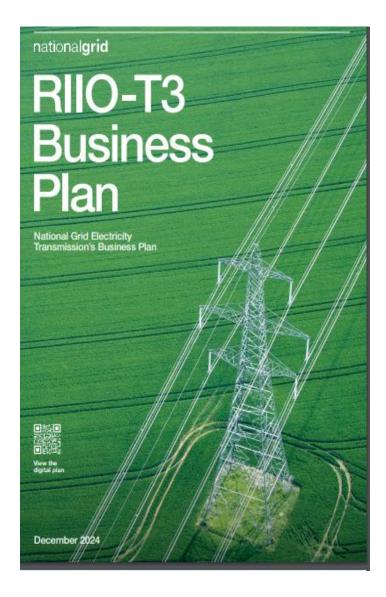


Agenda Introduction 5 mins Overview of our plan 20 mins Deliver the grid of tomorrow, today 5 mins Do the right thing for consumers, 5 mins communities and the environment Transform the way we work 5 mins 5 mins Next steps

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



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.

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RIIO-T3 Business Plan

National Grid Electricity Transmission's Business Plan



View the digital plan

December 2024

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 houshold

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...

Listening		гѧ¬ ペペ	Understanding the needs, priorities and perspectives of a broad spectrum of involved and impacted stakeholders, including household and business consumers
Optioneering and testing		Q	Testing and challenging the emerging strategies during formation, including any trade-offs or optioneering required
Sharing		ک	Sharing the next iteration of the strategies and how they have built on the stakeholder input to that point - with colleagues and the broader stakeholder network
Refining		\checkmark	Continuing to Refine and Share, maintaining the regional Network Blueprints and keeping them relevent through enhanced ongoing engagement

...And this approach continues beyond our December Business Plan submission to Ofgem, as we refine its details throughout delivery. Y 12,000 voices We listened to over 12,000 voices representing all stakeholder groups

We hosted a playback webinar on our T3 plan in November

E 23,000 residents

General Science of the second second

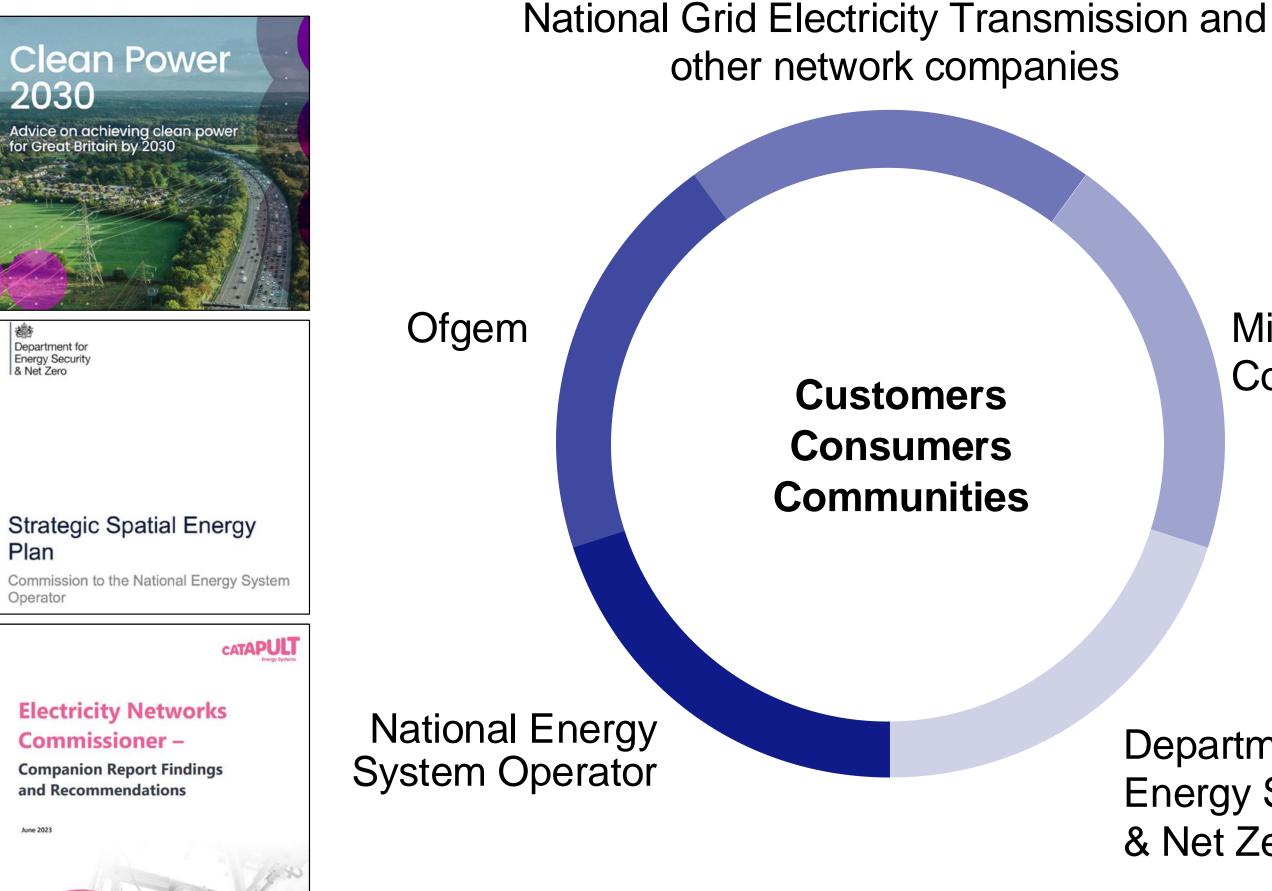
We consulted with over 23,000 residents in communities already impacted We held 35 region focussed workshops with our industry and regional stakeholders



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



RIIO-T3: a shared national endeavour

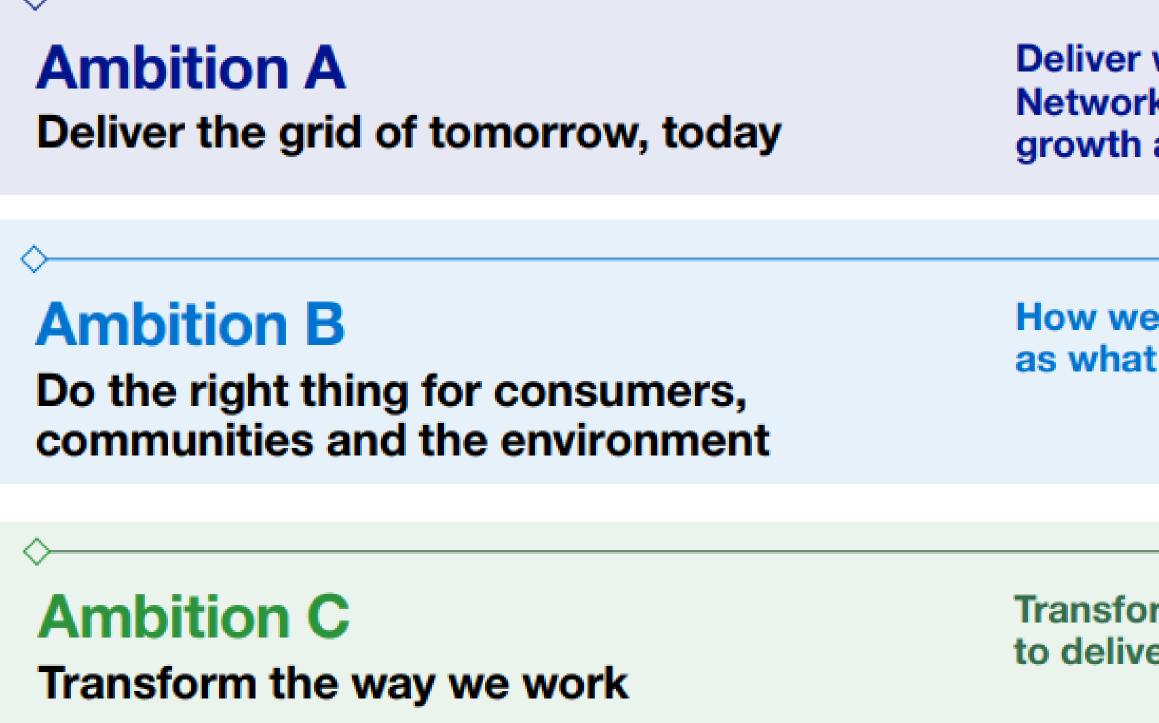


Mission Control

Department for **Energy Security** & Net Zero



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



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

How we deliver is as important as what we deliver

Transform our capabilities to deliver for consumers

Highlights of our RIIO-T3 plan

Power flows	Nearly doubling the percountry
£12bn	Avoiding c.£12bn of c £40 per year for const
35 GW / 19 GVA	Connects 35 GW gene
Decarbonisation	Supports growth of Bi decarbonisation of ou
99.9999%	Keeping the lights on,
0.7% Efficiency	0.7% efficiency year-o
Emissions reduction	50% reduction in our o our 2018/2019 baselin
Legacy of benefits	Both community and r
Grow workforce by 50%	And improve diversity communities
Biodiversity net gain	Biodiversity net gain a acres of land, 7x impa

power that can flow across the

constraint costs, equivalent to sumers

neration and 19 GVA demand

British businesses and our economy

n, with 99.9999% reliability

-on-year

own emissions compared to

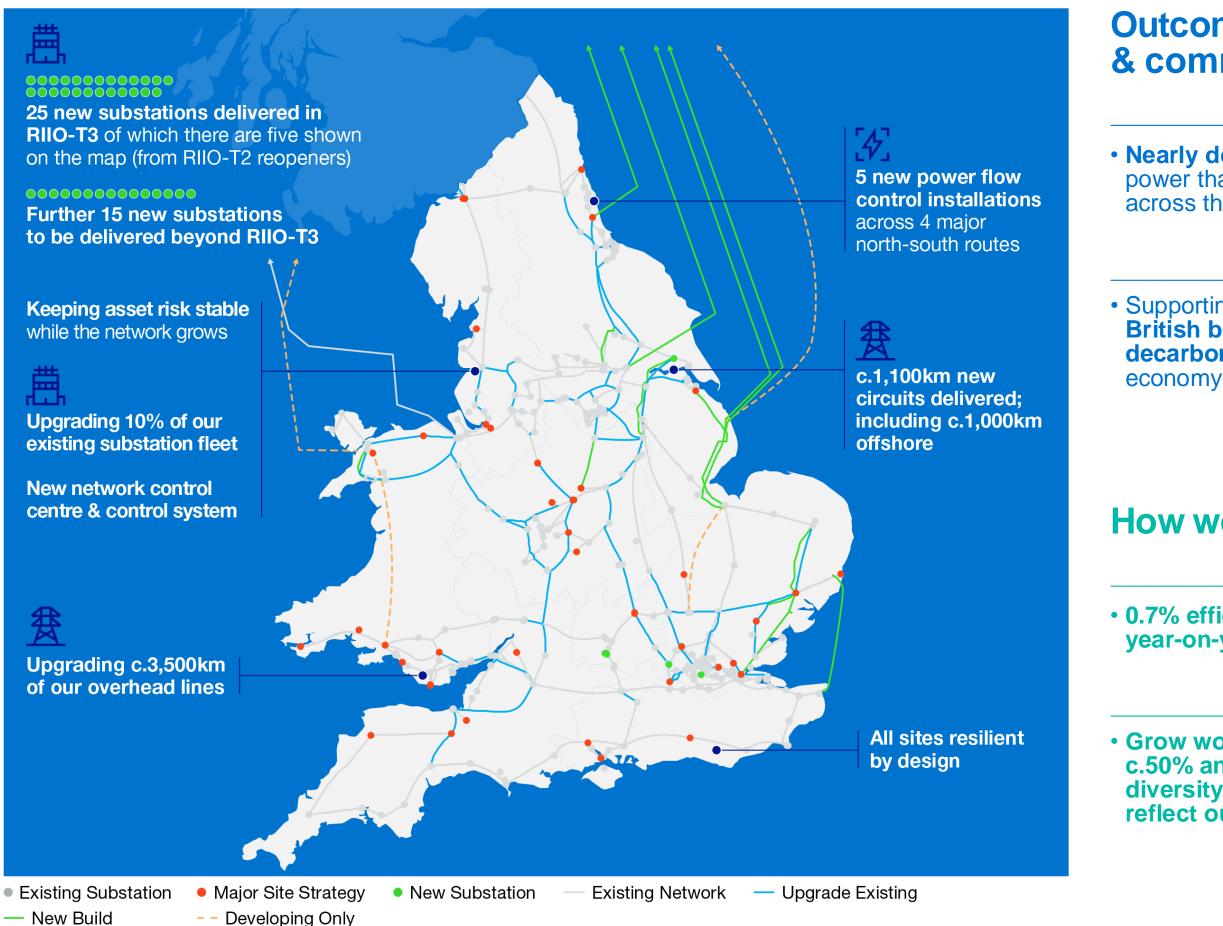
regional benefits



y to better reflect our

across equivalent of >8,000 act vs. RIIO-T2

Highlights of our RIIO-T3 plan



Outcomes for customers, consumers & communities

early doubling the ower that can flow cross the country	 Avoiding c.£12bn of constraint costs, equivalent to £40 per year for consumers 	 Connecting 35 GW generation and 19 GVA demand
upporting growth of ritish businesses and ecarbonisation of our	 Keeping the lights on, with 99.9999% reliability 	

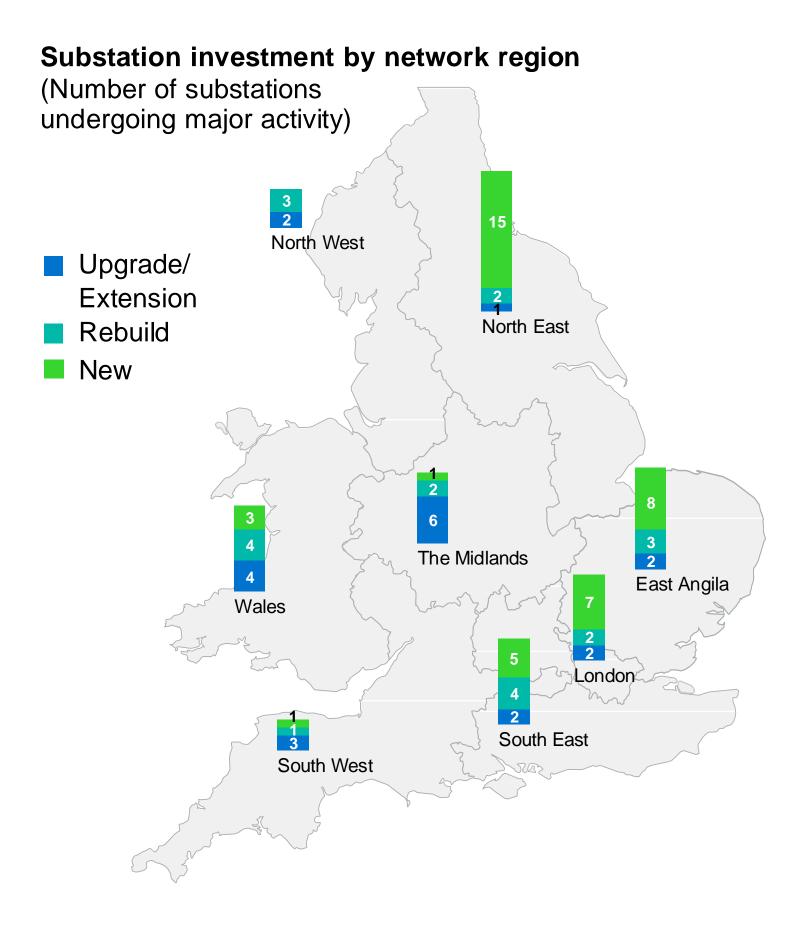
How we are delivering responsibly

7% efficiency ear-on-year	 50% reduction in our own emissions 	 Leaving a legacy of community and regional benefits
Frow workforce by 50% and improve iversity to better eflect 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

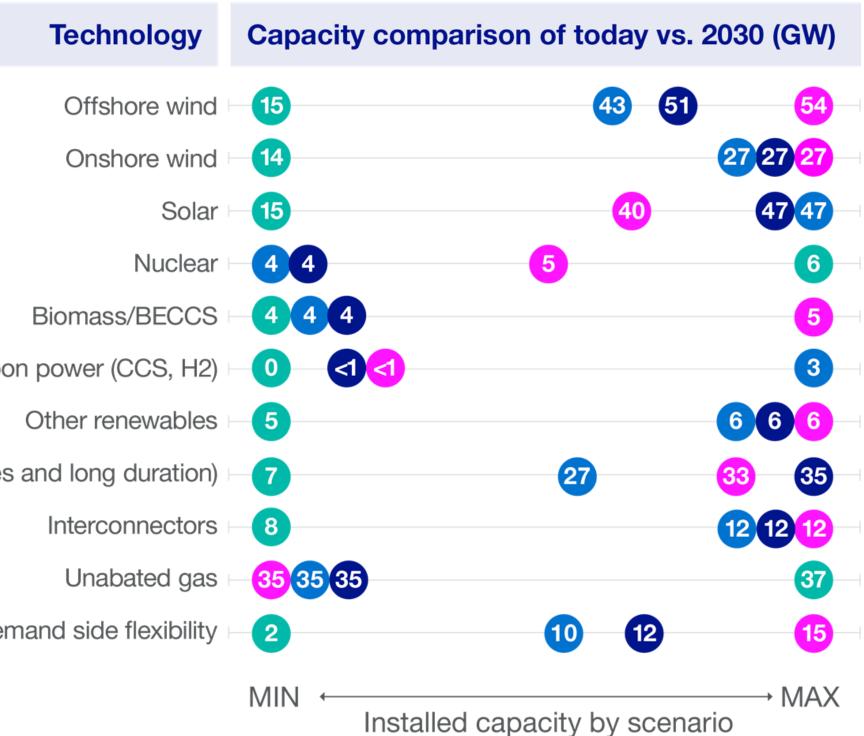


Our plan has the scope to meet the accelerated timescales of Clean Power 2030

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

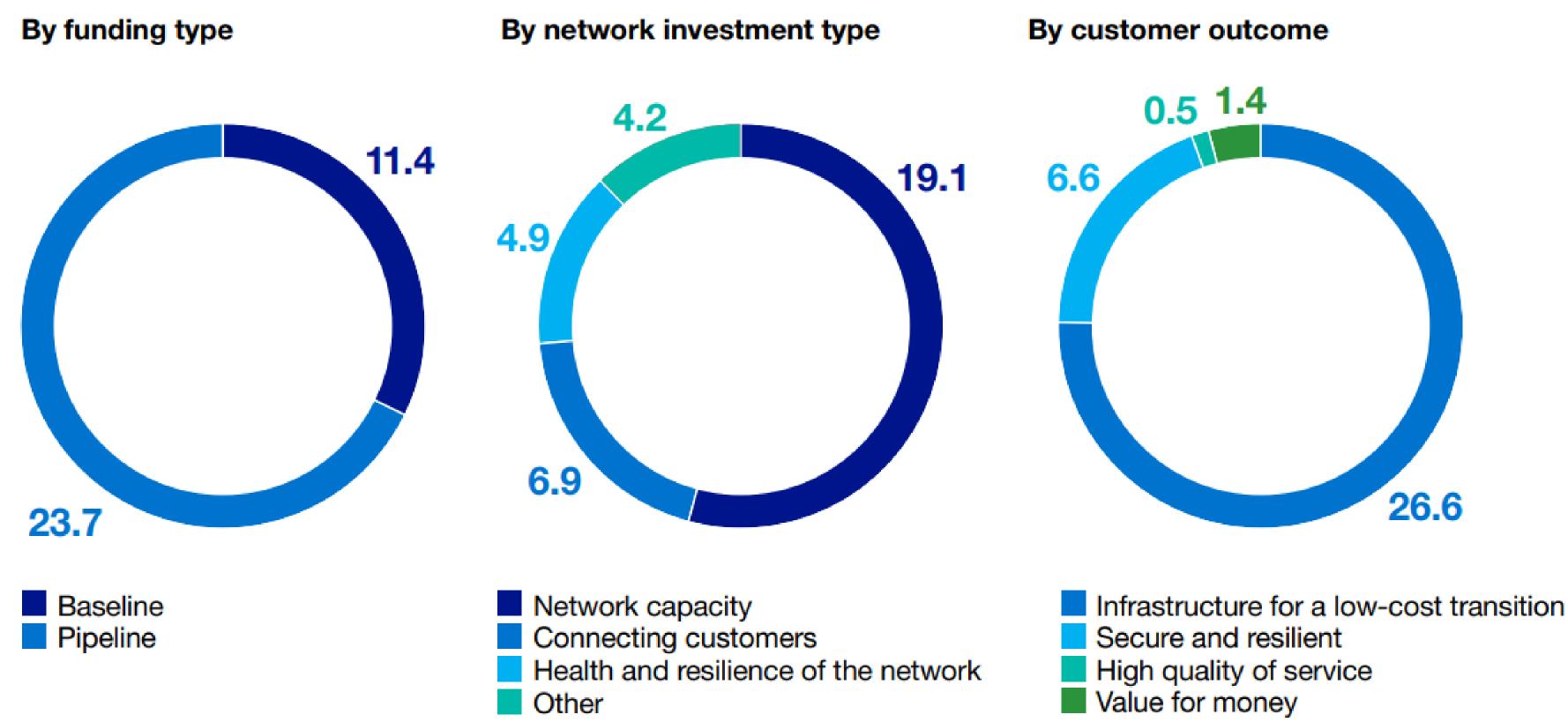
We can adapt the plan to align with the ambition set out in NESO's Clean Power 2030 study, but rely on Government and Ofgem taking bold action. Comparison of capacities across NESO's Future Energy Scenario (FES24) and Clean Power Scenarios.

Scenario key	New low carbo
Today	
NESO FES24 Holistic Transition (scenario for our RIIO-T3 plan)	Storage (batteries
NESO Clean Power New dispatch	
• NESO Clean Power Further flex and renewables	Den



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

NGET RIIO-T3 investment (£bn)

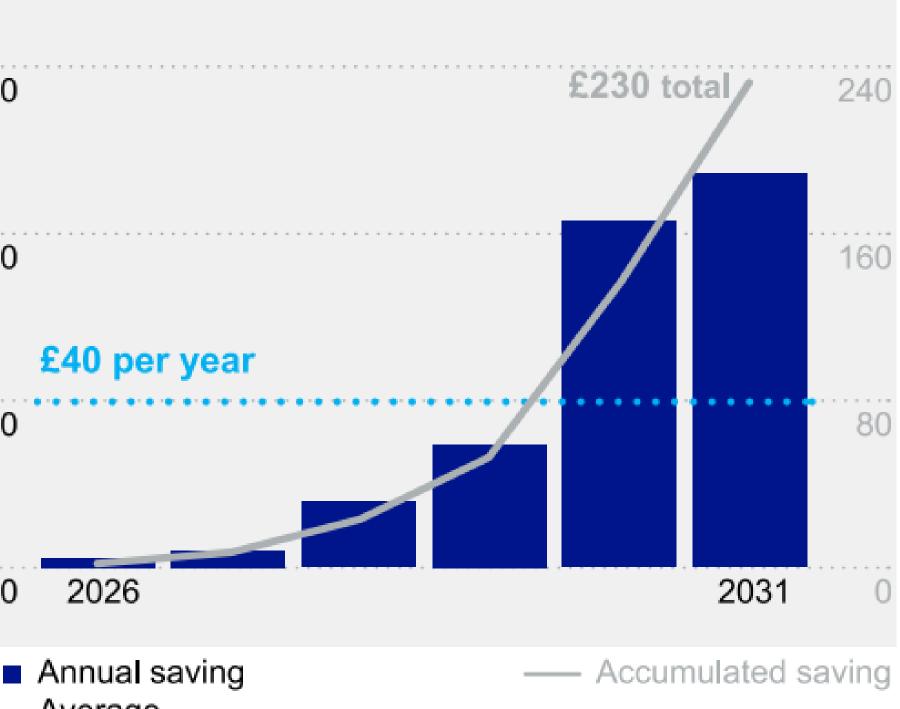


We have a responsibility to minimise the additional costs we are asking consumers to pay to unlock the value for Great Britain

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 RIIO-T3 period representing a c.£40 average annual saving for the typical consumer

120



Average

Constraint cost savings as a result of our investment plan

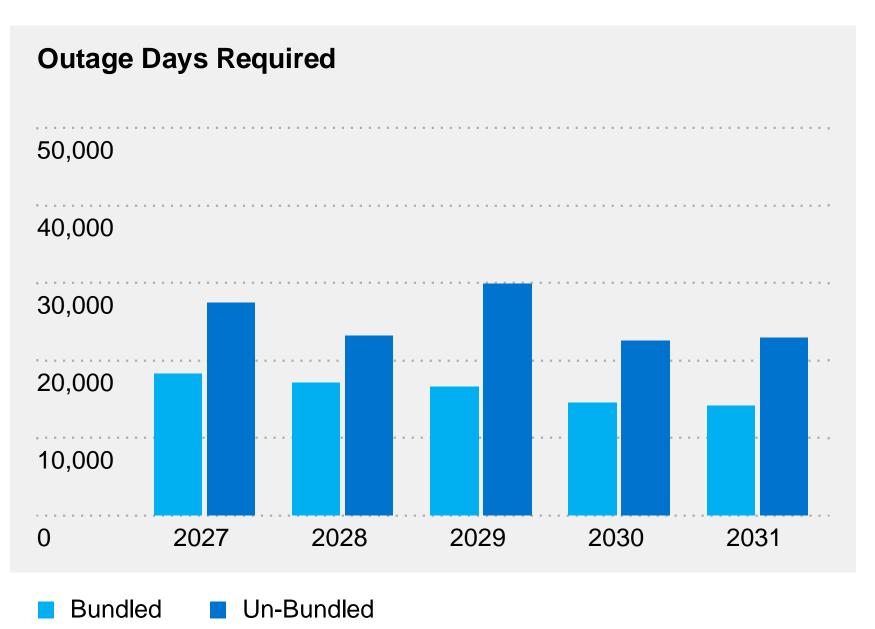
We have made a detailed assessment of the risks to the delivery of this plan

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





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

Deliver with urgency the Transmission Network need 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

 $\begin{array}{c} 35 \ GW \\ \text{of new generation connected} \end{array}$

19 GVA of new demand connected

- All new sites resilient by design and a new resilience modelling approach and Climate Adaptation Strategy
- Increase customer satisfaction rating from 7.2 to above 7.7 in the Quality of Connections Survey
- Provide better insight and visibility of options for ourselves, DNO partners and broader stakeholders
- Approximately £150M invested in innovation projects



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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.





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

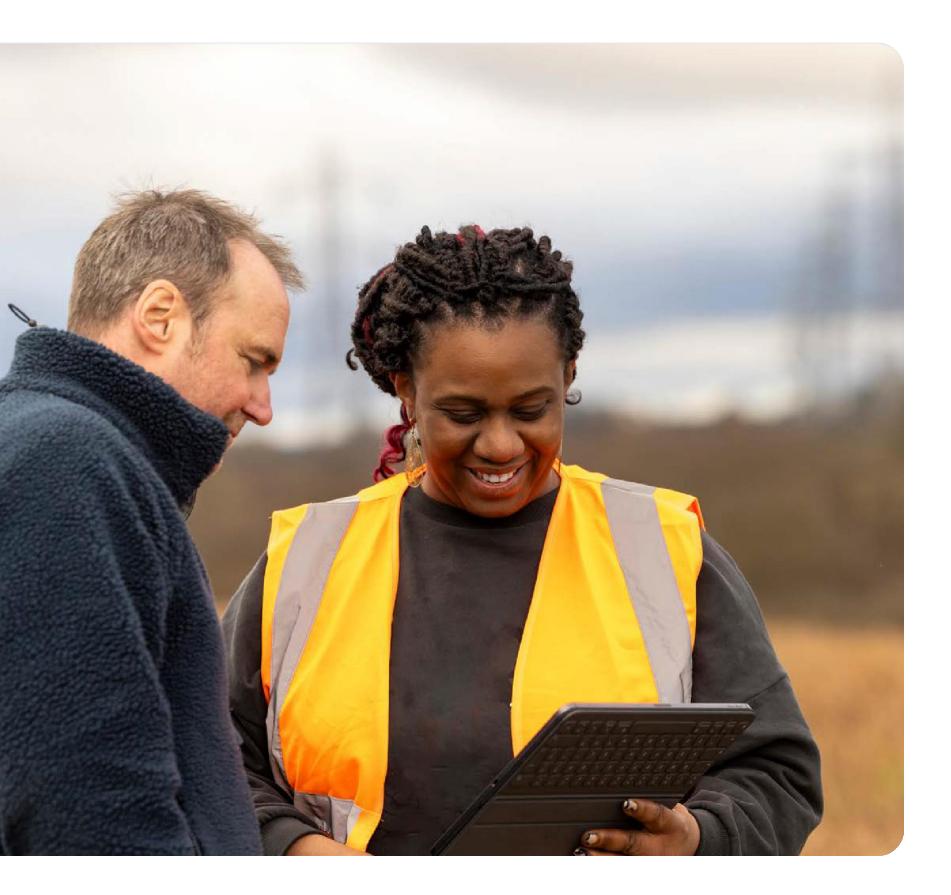
Q

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

Q

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

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

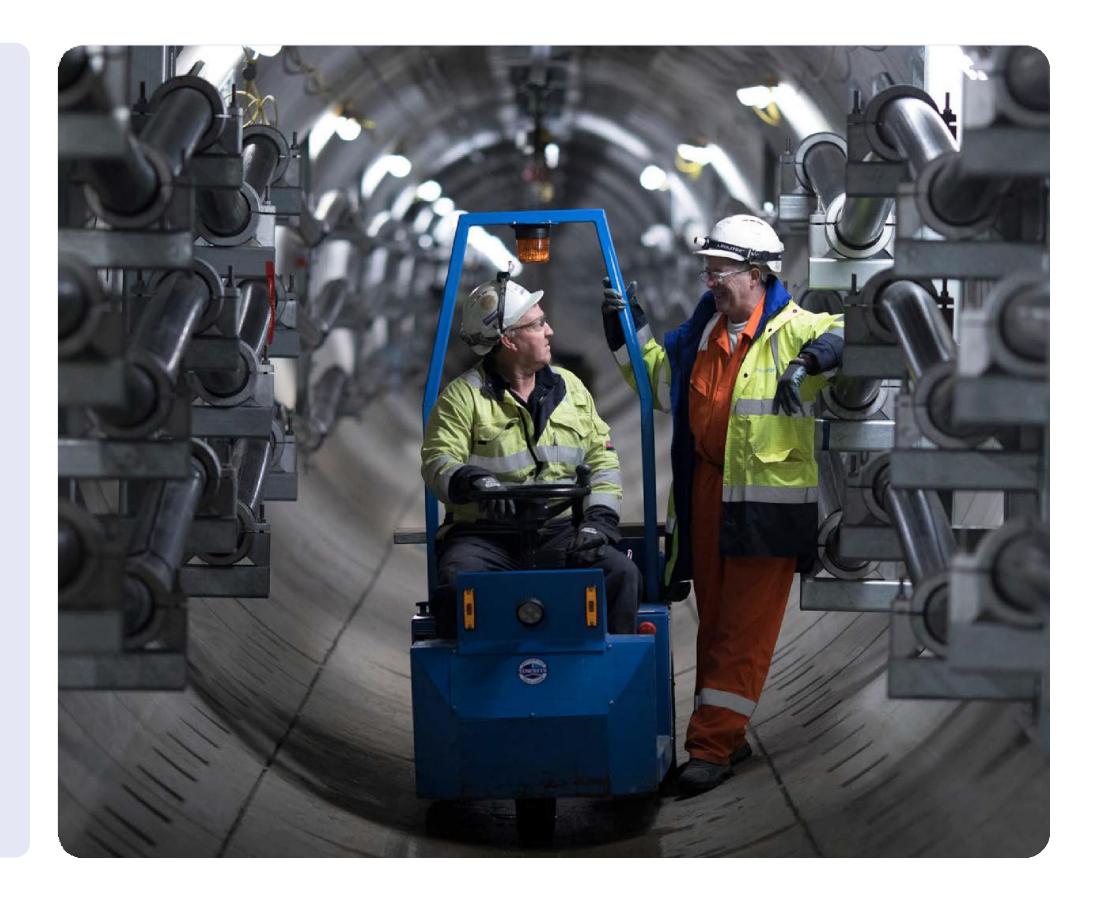
Investment

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

50% reduction in scope 1 and 2 emissions from a 2018/19 baseline

50% reduction in SF6 emissions by 2030 from a 2018/19 baseline

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



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

Q

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

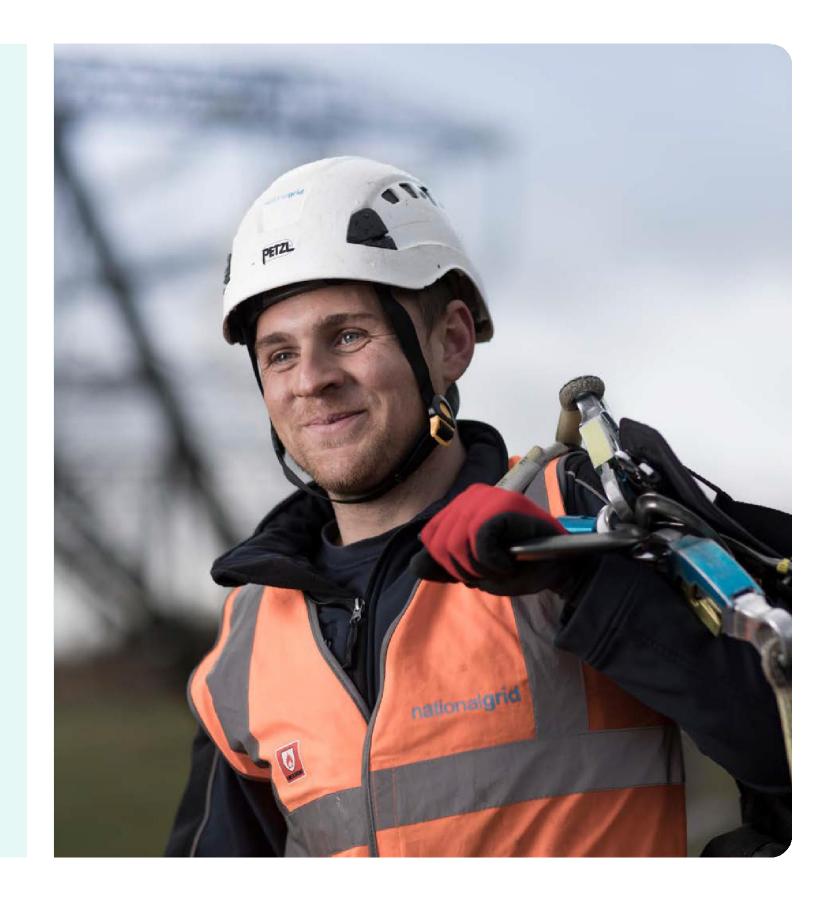
Transform our capabilities to deliver for consumers

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.





Next steps







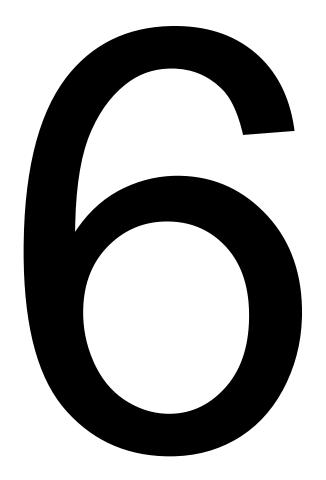
Ofgem's Call for Evidence 18 December to 10 February

All responses welcomed

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

Please send your response to RIIO3@ ofgem.gov.uk

More information at Ofgem Call for Evidence RIIO-3



Q&A



Joining the questions and answers



Anna Turrell Responsible business



Stephen Knight-Gregson Strategic Infrastructure



Wayne Mullins Connections



Carolyn Helm Environmental



Jeni Ray Stakeholder and Insight



Paul Challinor Finance



Ben Haggerty Future Network Blueprints

Polling question

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



Slightly helpful

Not at all helpful

Undecided



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