

# Delivering a sustainable electricity network

Stakeholder workshop – 2<sup>nd</sup> November 2023

**nationalgrid**



# Housekeeping

- Please leave questions until the end of the talk
- Please keep microphones and cameras off for the duration of the talk
- Polls will be displayed throughout the talk
- Time for Q&A at the end
- The session will be recorded and shared

# Agenda

Item	Timings	Presenter
Who are we? An introduction to National Grid Electricity Transmission (NGET)	12:05 – 12:10	Carolyn
Why do we care? Our Environmental Action Plan	12:10 – 12:20	Carolyn
An introduction to our Annual Environmental Report 2023	12:20 – 12:25	Lizzie
How did we do? FY23 performance update	12:25 – 12:40	Lizzie
Looking at our future strategy (RIIO-T3)	12:40 – 12:50	Carolyn
Q&A session	12:50 – 13:00	Both

# Purpose of this event – to find out:

- Who we are and what we do
- Our environmental performance for FY23
- The changes & challenges that the electricity industry faces in enabling a future zero carbon and nature positive society
- What this means to you as our stakeholders and how we can work in partnership for successful delivery
- Our future strategy and approach to delivering net zero



# 01

**Who are we?  
An introduction to National  
Grid Electricity  
Transmission (NGET)**

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# Networks in the electricity sector – who does what?

## One Transmission Network Owner in England and Wales- National Grid Electricity Transmission

Transporting electricity from where it is generated to where it is needed.

## Six Electricity Distribution Networks in England and Wales

Taking electricity from the transmission network and generated from other regional sources, and delivering it to homes and businesses across their respective regions.



National Grid Electricity System Operator (NGESO) operates Great Britain's system to keep homes and businesses supplied with the energy they need 24/7, 365 days a year





# National Grid businesses



Electricity Transmission and  
Strategic Infrastructure  
(ET & SI)



Electricity Distribution (ED)  
(previously WPD)



New York



New England



National Grid  
Partners



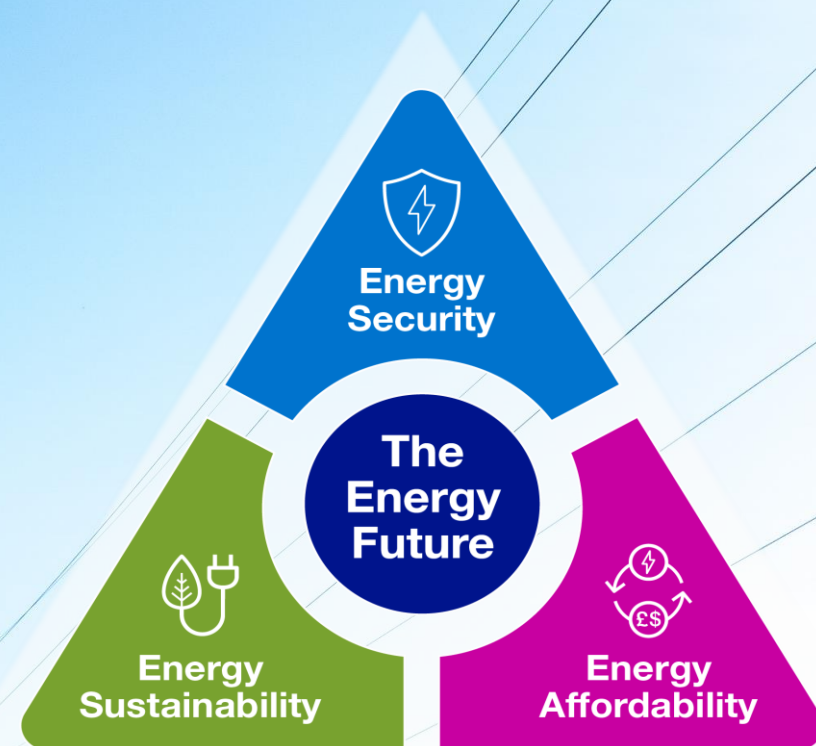
National Grid  
Ventures



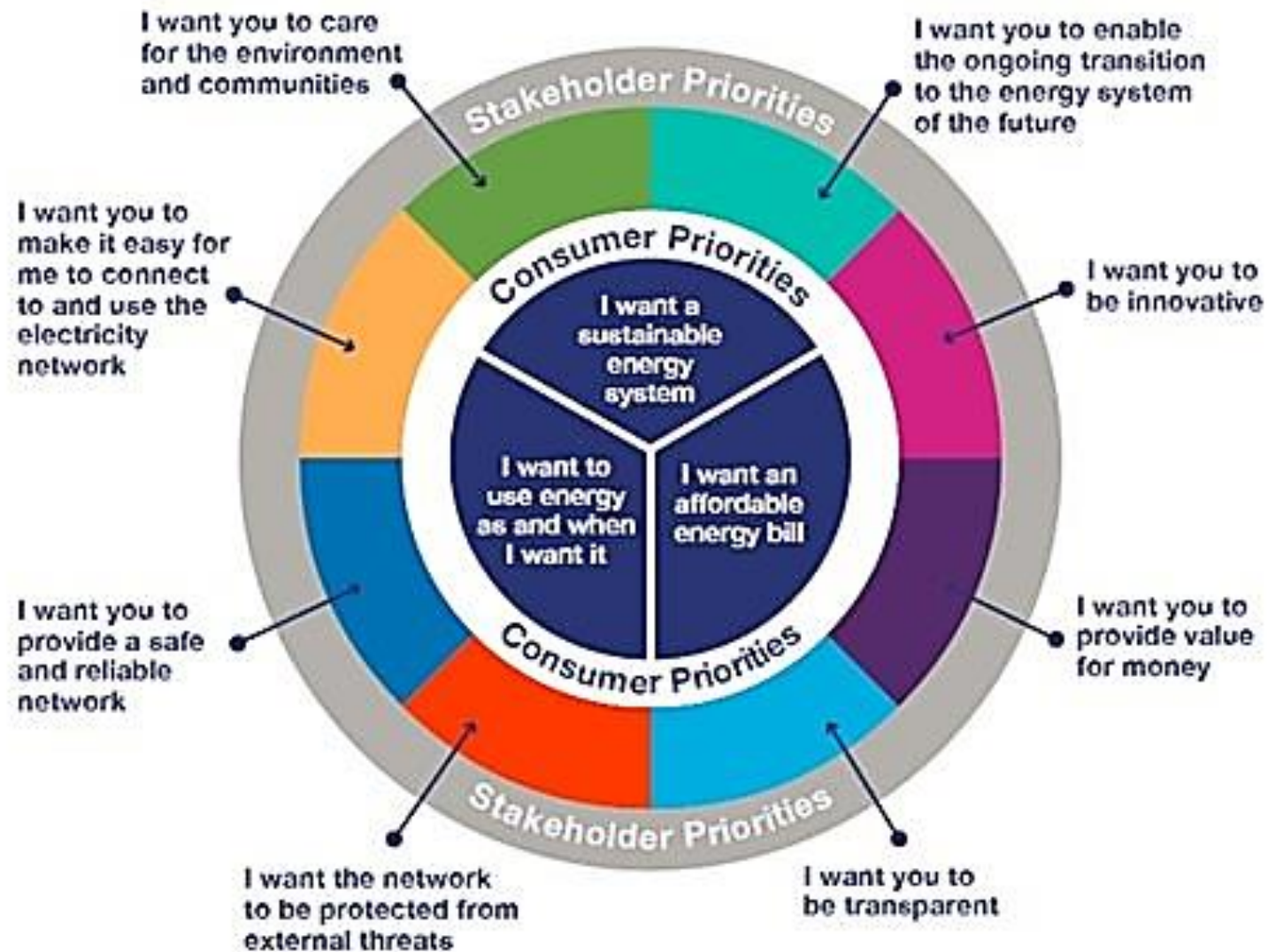
Electricity System Operator  
(ESO) *(to be divested)*



Delivering a **clean,  
fair, and affordable**  
energy future

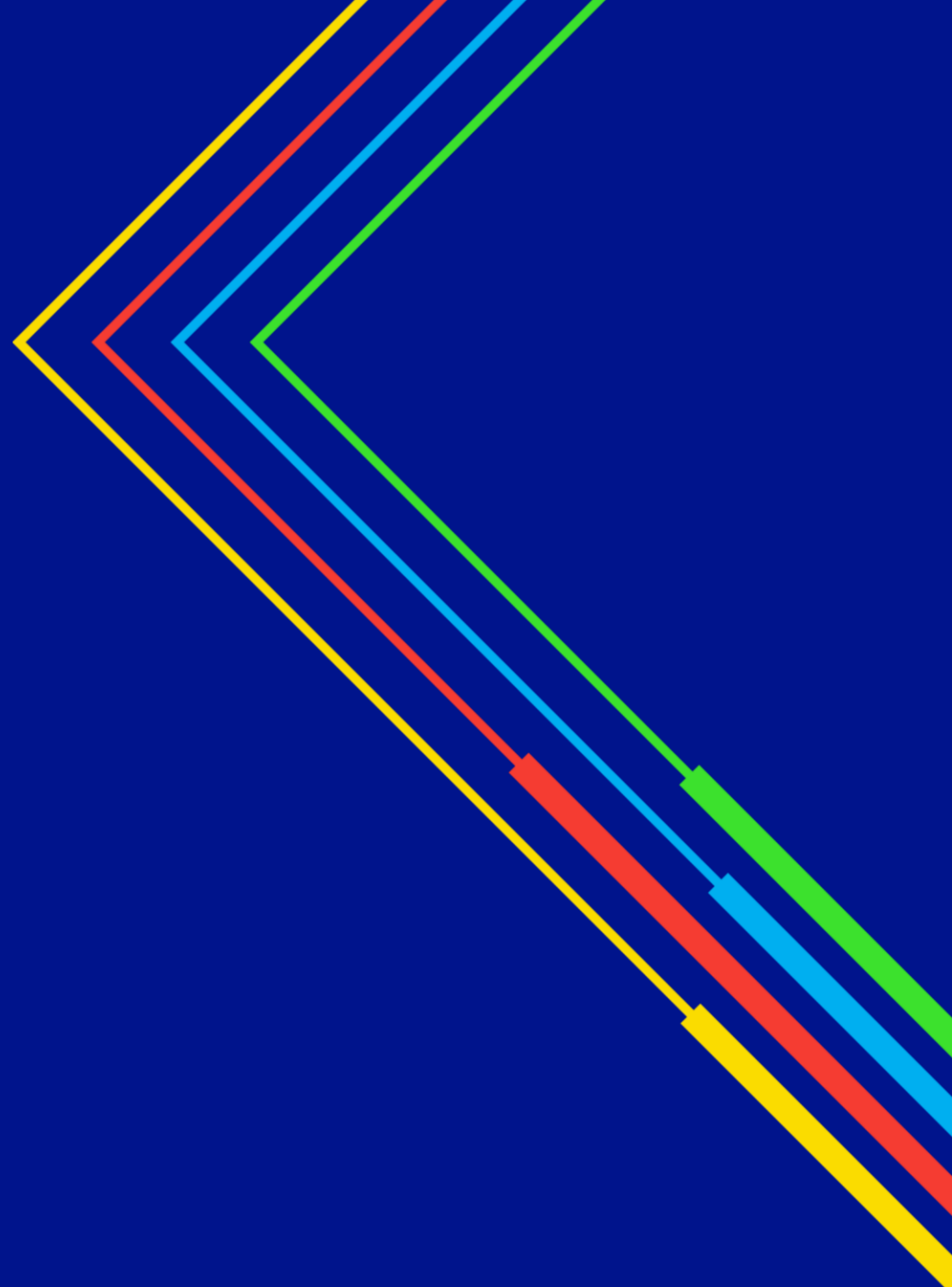






# 02

## Why do we care? Our Environmental Action Plan





# RIIO-T2 – Delivering a sustainable electricity network

In the July 2018, RIIO-2 framework decision document, Ofgem stated that “*network companies must play a stronger role in minimising their environmental impact and facilitating the decarbonisation of the energy system*”, and that “*RIIO-2 has to endeavour to mitigate the impact of networks on the environment*”.

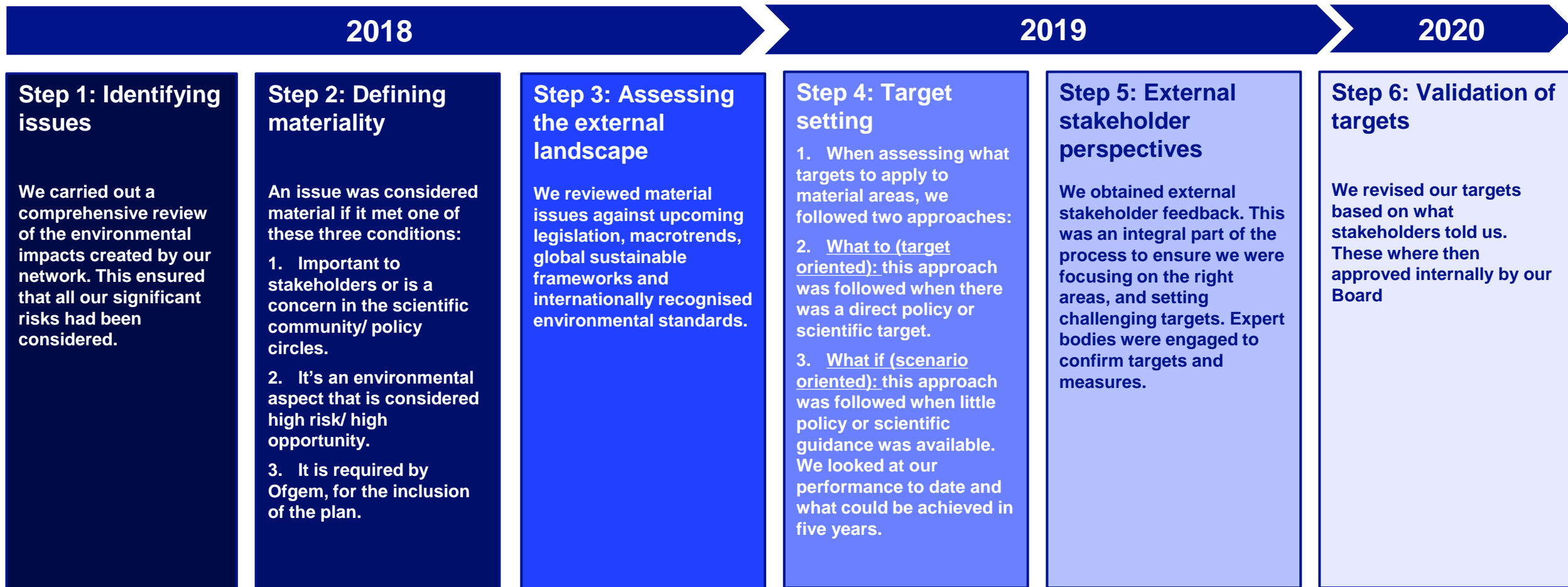
Ofgem set out that companies should embed environmental considerations in their RIIO-T2 business plans in the form of an Environmental Action Plan (EAP).

A licence obligation was created for National Grid Electricity Transmission and other networks to produce an Annual Environment Report (AER).



# Environmental Action Plan (EAP) methodology

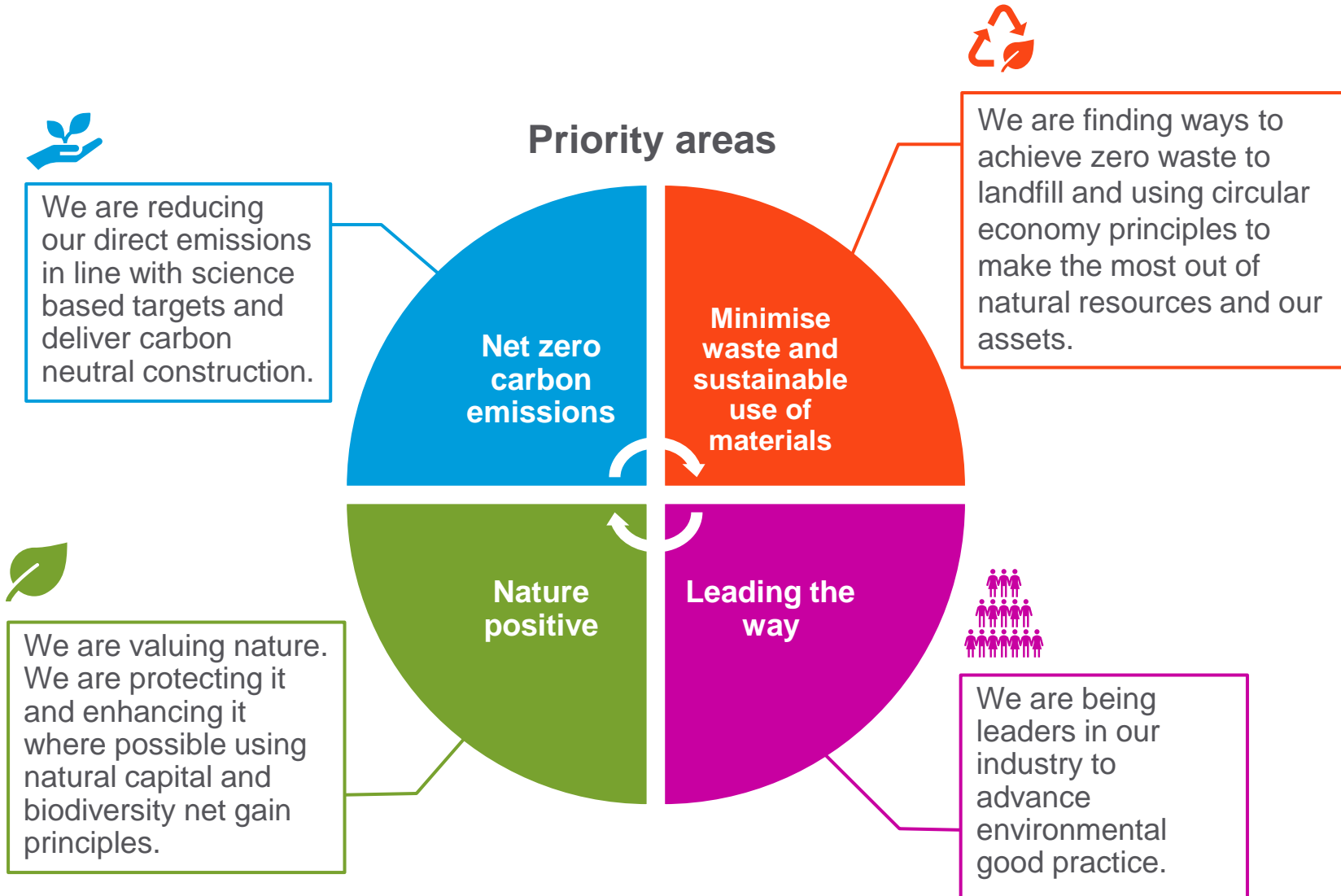
We carried out a materiality assessment to understand where we could make the greatest contribution to a more sustainable future, as we build and maintain electricity assets. This followed a six-step process:



# NGET's Environmental Action Plan








Our electricity network is turning the UK's Net Zero ambitions into reality by building the infrastructure needed to deliver green power across the country, in a clean, fair and affordable way.

In 2021, we published our Environmental Action Plan. We committed to four priority areas and set ourselves ambitious targets. It is our handbook to achieve progress across four priority areas.





# 2021-2026 environmental commitments

Priorities	Net zero carbon emissions	Minimise waste and sustainable use of materials	Nature positive	Leading the way
Ambitions	We will reduce our direct emissions in line with science based targets and deliver carbon neutral construction	We will achieve zero waste to landfill and use circular economy principles to make the most out of natural resources and our assets	We will value nature, and will protect and enhance it where possible using 'natural capital' and 'net gain' principles	We will be leaders in our industry to advance environmental good practice
Commitments	<p>By 2026, NGET will:</p> <ul style="list-style-type: none"> <li>Achieve 34% reduction in controllable scope 1 and 2 emissions from a 2018/19 baseline, with additional targets of: 50% reduction by 2030 and net zero by 2050</li> <li>Reduce carbon emissions for our business transport by 10% on 2013-2020 averages</li> <li>Purchase 100% of electricity we use from renewables</li> <li>Create a transmission losses strategy</li> <li>Create a substation energy efficiency programme</li> <li>Deliver carbon neutral construction</li> <li>Focus on an efficiency-first approach to decrease the carbon emissions from our office energy use by 20% from a 2019/20 baseline</li> <li>75% of National Grid's UK top 250 suppliers (by category/spend) will have carbon reduction targets</li> <li>Replace 60% of our fleet with Alternative Fuel Vehicles (AFVs)</li> </ul>	<p>By 2026, NGET will:</p> <ul style="list-style-type: none"> <li>Achieve zero waste to landfill across our construction projects</li> <li>Reduce the waste tonnage (from a 2018/19 baseline) and water use (from a 2019/20 baseline) at our offices by 20%</li> <li>Reduce the waste intensity of our construction projects year on year</li> <li>Pilot and implement circular economy principles by aligning our business to international recognised standards, e.g. BS 8001 - circular economy standards</li> <li>Increase our construction recycling and composting rates and set a target from a 2021/22 baseline</li> <li>Align our Procurement Strategy to international recognised standards, e.g. ISO20400 Sustainable Sourcing Standard</li> <li>Increase our operational and office recycling rates from 45% and 46% (respectively) to 60%</li> <li>Maintain our high standards of oil containment and pollution management</li> </ul>	<p>By 2026, NGET will:</p> <ul style="list-style-type: none"> <li>Increase environmental value of non-operational land by 10% against a natural capital/ biodiversity baseline</li> <li>Deliver Net Gain by at least 10% or greater in environmental value (including biodiversity) on all construction projects (including those delivered by third parties building on our land).</li> </ul>	<p>By 2026, NGET will:</p> <ul style="list-style-type: none"> <li>Have senior leadership accountability which reflects our corporate focus on the environment</li> <li>Work collaboratively with the other Transmission Owners to develop a consistent approach to capital carbon management</li> <li>Have an engaged workforce on environmental issues that lead by example</li> <li>Work collaboratively with the other Transmission Owners to develop and pilot a common and robust methodology for assessing Natural Capital Impacts and opportunities (associated with Electricity Transmission activities)</li> <li>Take bold steps to tackle our SF6 emissions and stimulate the market to more rapidly meet our stakeholders needs</li> <li>Be an environmental leader for the energy industry by actively contributing and shaping the discussions in external working groups</li> </ul>
Sustainable Development goal	 13 CLIMATE ACTION	 12 RESPONSIBLE CONSUMPTION AND PRODUCTION	 15 LIFE ON LAND	 7 AFFORDABLE AND CLEAN ENERGY  12 RESPONSIBLE CONSUMPTION AND PRODUCTION  13 CLIMATE ACTION  15 LIFE ON LAND

# Updates to EAP for FY23

In FY23, we added in four new commitments:

1. Install 1,430 ac electric vehicle (EV) charging bays and 40 dc EV chargers on Electricity Transmission (ET) operational estate in support of the commercial fleet electrification programme.
2. All band A-C cars to be zero emission vehicles (ZEVs).
3. Phase out the use of diesel generators where commercially and technically viable.

4. Develop an oil leakage reduction strategy.



Net zero carbon emissions



Sustainable use of resources

# Our commitment to review our environmental strategy

It is important for us to review our Environmental Action Plan (EAP) annually to ensure it aligns with current legislation, best practice and public expectation.

Following a review in December 2022, we made the following changes:

<b>Added one further commitment</b>	<ol style="list-style-type: none"><li>1. Work collaboratively with the other transmission owners to agree a consistent approach to measure biodiversity impacts and dependencies in the supply chain (including water)</li></ol>
<b>Updated three commitments to be in line with our Responsible Business Charter</b>	<ol style="list-style-type: none"><li>1. Maintain a certified Environmental Management System</li><li>2. Encourage 75% of National Grid's top 250 suppliers (by category/spend) to have carbon reduction targets and for 80% (by emissions) of these to be science-based (UK target)</li><li>3. Maintain an 80% recycling rate within construction</li></ol>
<b>Retiring four commitments that have been completed</b>	<ol style="list-style-type: none"><li>1. Create a transmission losses strategy</li><li>2. Have senior leadership accountability which reflects our corporate focus on the environment</li><li>3. Work collaboratively with the other Transmission Owners to develop a consistent approach to capital carbon management</li><li>4. Work collaboratively with the other Transmission Owners to develop and pilot a common and robust methodology for assessing Natural Capital Impacts and opportunities (associated with Electricity Transmission activities)</li></ol>



# 03

## An introduction to our Annual Environmental Report 2023

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# Why do we produce an AER?

- Delivering a sustainable electricity network is a key element of our RIIO-T2 deal and an important element of how we deliver responsible business.
- We have a licence obligation to produce and publish an Annual Environmental Report which details our environmental performance for the previous financial year.



September 2023

# Our Annual Environmental Report



[Our environmental future | National Grid ET](#)

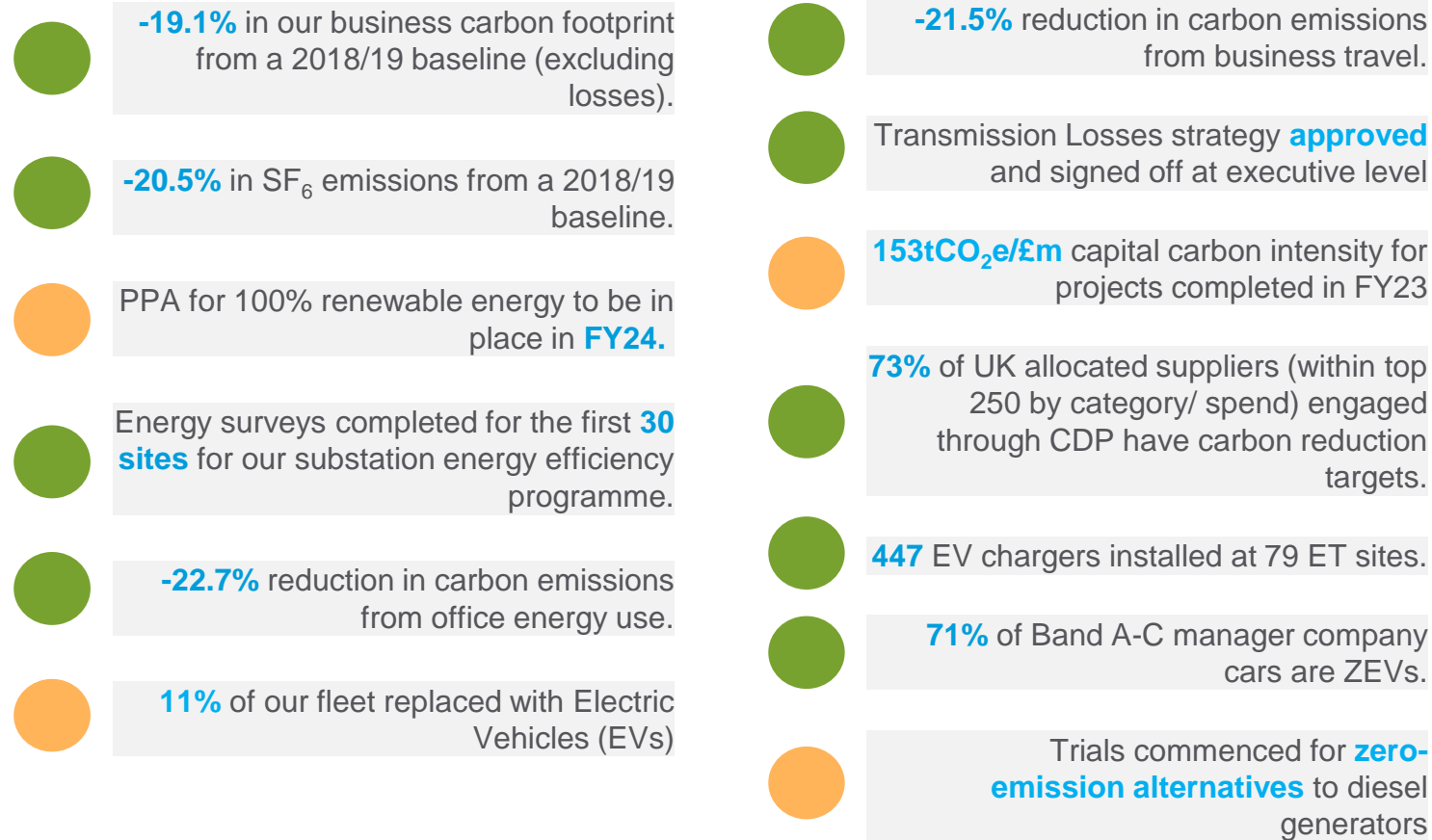
# 04

## How did we do? FY23 performance overview





# FY23 net zero carbon emissions performance

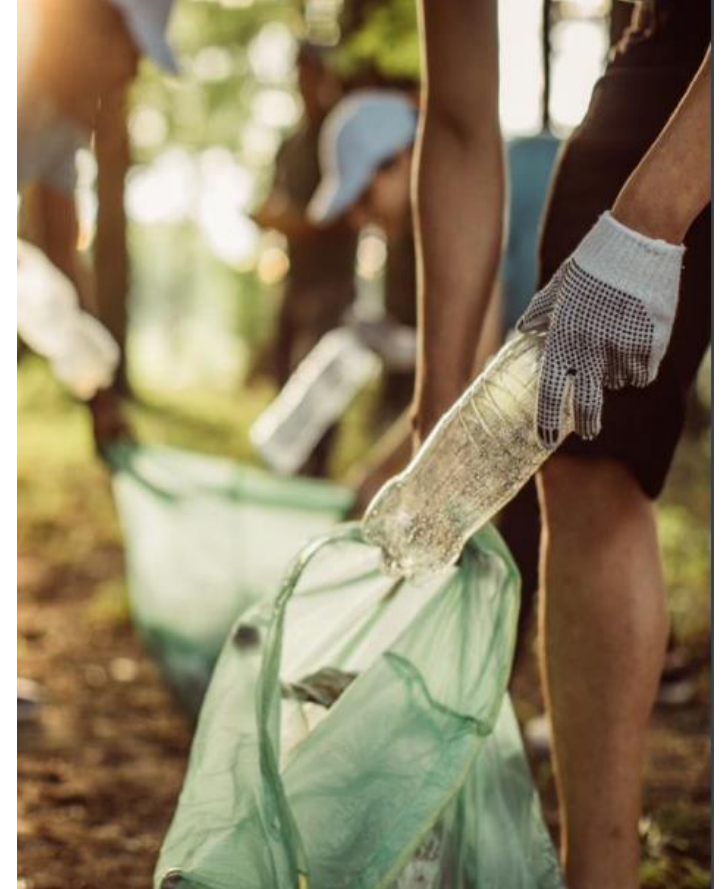


# FY23 sustainable use of resources performance



## RAG

- Progress against the implementation milestones is on track.
- Progress is delayed but likely to be achievable before the end of the price control period.
- Progress against milestones is at significant risk and highly likely to be missed.



# FY23 nature positive performance



**+4.5%** improvement in environmental value in our non-operational land



**100%** of construction projects committed to net gain of at least 10%.



**15%** net gain achieved in seven construction projects

## RAG



Progress against the implementation milestones is on track.



Progress is delayed but likely to be achievable before the end of the price control period.



Progress against milestones is at significant risk and highly likely to be missed.





# FY23 leadership for change performance

● **100%** of NGET directors are accountable for our environmental commitments

● **74%** of employees think we are a responsible business.

● **No further procurement** of SF<sub>6</sub> where there is a commercial alternative.

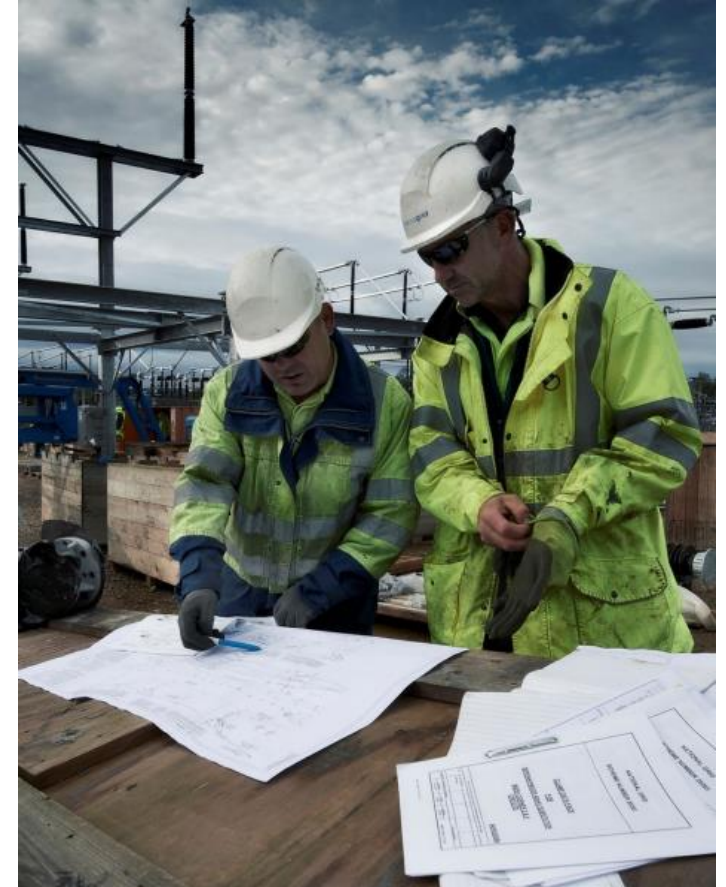
● **ROCCIT** group developed a robust governance policy to enable **new carbon data** to be added into the Carbon Asset Database.

● **Natural capital tool** and methodology developed with AECOM.

● **Environmental leadership** for the energy industry demonstrated by our contribution and shaping discussions in external working groups/ events

## RAG

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- Progress against milestones is at significant risk and highly likely to be missed.





# 05

## Looking at our future strategy – RIIIO-T3



# Future strategy



# Future strategy

Which environmental issues are most important to you?

Decarbonisation and clean energy transition

Sustainable SF6 free substations

Net zero construction

Net zero supply chain and offices

Biodiversity net gain

Marine environmental improvement and restoration

Waste, resource use and the circular economy

Ecological embodied impacts

Oil and pollution management

Water stewardship

# Our environmental vision

We stand at a critical juncture that demands action. With pressing concerns such as exceeding 1.5°C global warming, biodiversity loss and extinction, and the over consumption of resources, there is an urgent need for more robust, transformative action.

Business operations and across the value chain need to accelerate progress and impact to deliver the UN 2030 Agenda and beyond. Now is the time for our network and sector to go beyond responding and complying – to champion a transformative, positive trajectory.

**Our ambition is to achieve a net zero, nature positive future, within the planetary boundaries.**

We believe that by unlocking the potential of our assets, and through our role in convening others, we are in a pivotal position to drive action in a way that creates lasting and shared prosperity.





# Environmental sustainability emerging trends

These aspects seem to have become more topical since the creation of the EAP in 2020.

Emerging trends	Commentary	Emerging legislation	Reputational	Leadership
<b>Marine net gain</b>	The Government's response to the 2018 terrestrial Biodiversity Net Gain (BNG) consultation confirmed the intention to develop and consult on an appropriate regime for the marine environment which builds on commitments in Defra's 25 Year Environment Plan.			
<b>Land use emissions</b>	Due to a previous lack of agreed upon guidance, land use management and land use change and associated GHG impacts have often been excluded from companies' GHG inventories. The Land Sector and Removals Guidance builds upon existing GHG Protocol corporate-level standards and guidance explains how companies should account for and report GHG emissions, CO2 removals, and carbon storage from land-based activities and products across the value chain. The final guidance is anticipated to be published in mid 2024. GHG Protocol's Land Sector and Removals Guidance builds on the Corporate Standard and Scope 3 Standard,		<b>Word cloud</b> Is there another emerging trend that you would add to this list?	
<b>Net zero by 2040</b>	Antonio Guterres of the UN said the G20 should aim for net zero "as close as possible" by 2040, while emerging nations deliver by 2050. Many other large organisations and cities now have 2040 net zero targets.			
<b>Water use/ water stress</b>	'Embodied water' is the latest challenge for the building industry, a new WWF report urges businesses to establish effective water stewardship strategies, disclose water risks, enhance efficiency, engage in collective resilience efforts, and advocate for improved water policies and practices.			
<b>Sustainability impacts in the supply chain</b>	More pressure is being put on companies to understand and reduce the impact of wider sustainability impacts in the supply chain, rather than just carbon. This looks into water management, deforestation and human rights. The TNFD is pushing this agenda forward			
<b>Carbon positive/ water positive</b>	Leading multinational companies such as Microsoft, Amazon, Google are stating that they will do more than just mitigate impact, but that they will deliver a positive environmental impact by being carbon positive or water positive. This is done through restoring more than consumed. They also mention compensation for past emissions/ impacts.			

# Environmental focus areas

## Quick poll

What do you think of these focus areas?

Like

Dislike

Not sure

## Word cloud

Is there another focus area missing?

The big picture



- Sustainable and SF<sub>6</sub> free substations
- Net zero construction
- Net zero supply chain and offices



- Biodiversity net gain
- Marine enhancement and restoration
- Ecological embodied impacts



- Waste & circularity
- Water stewardship
- Excellent environmental management

# Thank you 😊



To keep in touch, or if you have any questions, please contact us on the below email:

[box.et.environmental@nationalgrid.com](mailto:box.et.environmental@nationalgrid.com)

## We will:



Gather and record all the valuable feedback we receive today through the polls and Q&A session



Follow up on any clarifications, reinforce the new stakeholder links formed from today



Liaise across network businesses to incorporate and evidence today's feedback into our network plans



# Keeping you updated

Please scan the QR code to keep the conversation going and to sign up for regular updates.



# 06

## Q&A session

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