

**Electricity
Transmission**

Our sustainable business strategy

**Welcome to our webinar on our
RIIO-T2 Environmental Action Plan**

06 November 2019

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Welcome to our webinar on our RIIO-T2 Environmental Action Plan

- Thank you for joining us! You will be joined in listen only mode.
- Please do not unmute yourself or turn your camera on.
- Please note we will be recording this webinar.
- The recording, slides and Q&A will be made available on our website.

Your hosts:



Alison Fulford

Environmental Manager

Alison.Fulford@nationalgrid.com



Carolyn Gardner

Incentives Officer

Carolyn.gardner@nationalgrid.com

Agenda

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RIIO-T2 overview and business planning

2

Electricity Transmission's environmental performance

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Should the environment be incentivised in RIIO-T2?

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Discussion and next steps

Quick Poll #1



What is the reason for your interest today?

I'm joining today for:

- A) sales opportunities**
- B) interest in environmental progression**
- C) obtain ideas for my business**
- D) see where my electricity bill money goes**
- E) other**

RIIO-T2: Our regulated transmission business

We're currently preparing our next business plan for the RIIO-T2 period 2021-2026.

Our planning involves:

- Setting the standards of service we provide
- The investment we make
- How we'll innovate for the future
- The performance outcomes upon which we're measured

We're developing our next business plan against a background of rapid change in the energy industry.

Ofgem have set out that companies should embed consideration for the three impact areas below into their RIIO-T2 business plans in form of an

Environmental Action plan:

- Decarbonising the energy networks – with a focus on business carbon footprint and embedded carbon in networks
- Reducing networks other environmental impact i.e. pollution to local environment; resource waste; biodiversity loss; and other adverse local effects that are specific to each sector
- Supporting the transition to an environmentally sustainable low-carbon energy system

Building our plans around your priorities

Your priorities

Consumers want

An affordable energy bill

To use energy when they want

A sustainable energy system

Stakeholders want us to

Provide a safe and reliable network

Protect the network from external threats

Care for communities and the environment

Be transparent

Make it easy to connect to and use the network

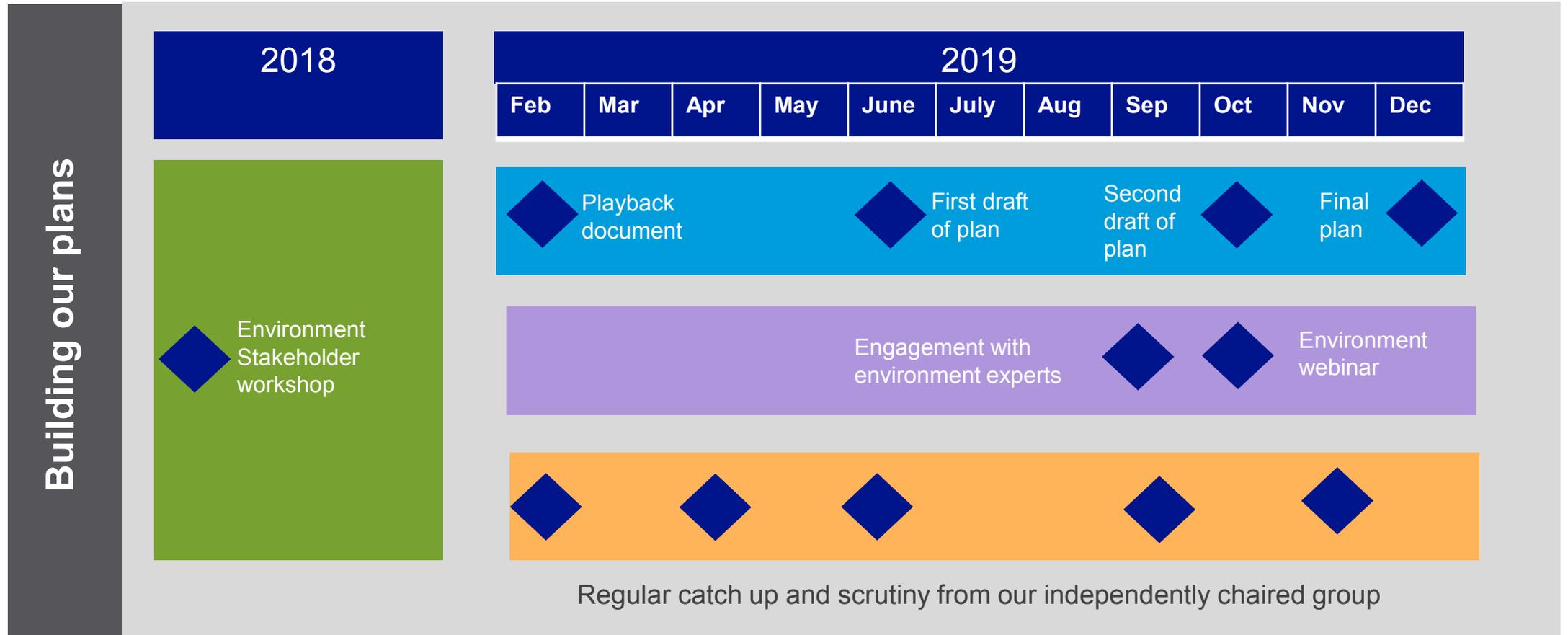
Enable the energy transition

Be innovative

Provide value for money

- Consumer and stakeholder priorities; established in 2017 and tested continually
- A sustainable energy system and caring for the environment is a very important aspect of our plan

Our stakeholder engagement plan



Here is what stakeholders have told us

Climate change/ decarbonisation

- “60% of our consumers want us to achieve net zero before 2050”
- “We should look to minimise our carbon emissions”
- “We should be encourage to go beyond our legal obligations, even if that means increasing costs”
- “We should look to use carbon offsetting to go carbon neutral for construction”
- “We need to continue to focus on SF6 leakage”

Resources and waste management

- “Softer targets should be aligned to an industry standard e.g. ISO 20400 for procurement and new ISO 8001 for circular economy”
- “Aim to achieve zero waste to landfill with increasing recycling for construction “
- Resource targets should be SMART and measurable (e.g. % up or down)

Caring for the natural environment

- “We should focus on minimising the local impact of our construction activities”
- “The current Visual Impact Provision scheme should continue and potentially be expanded in RII02”
- “More focus is needed on biodiversity”

Organisational leadership

- “We should consider whole life costs and whole life carbon impact when making investment decisions”

The external landscape – challenges to Sustainable Development

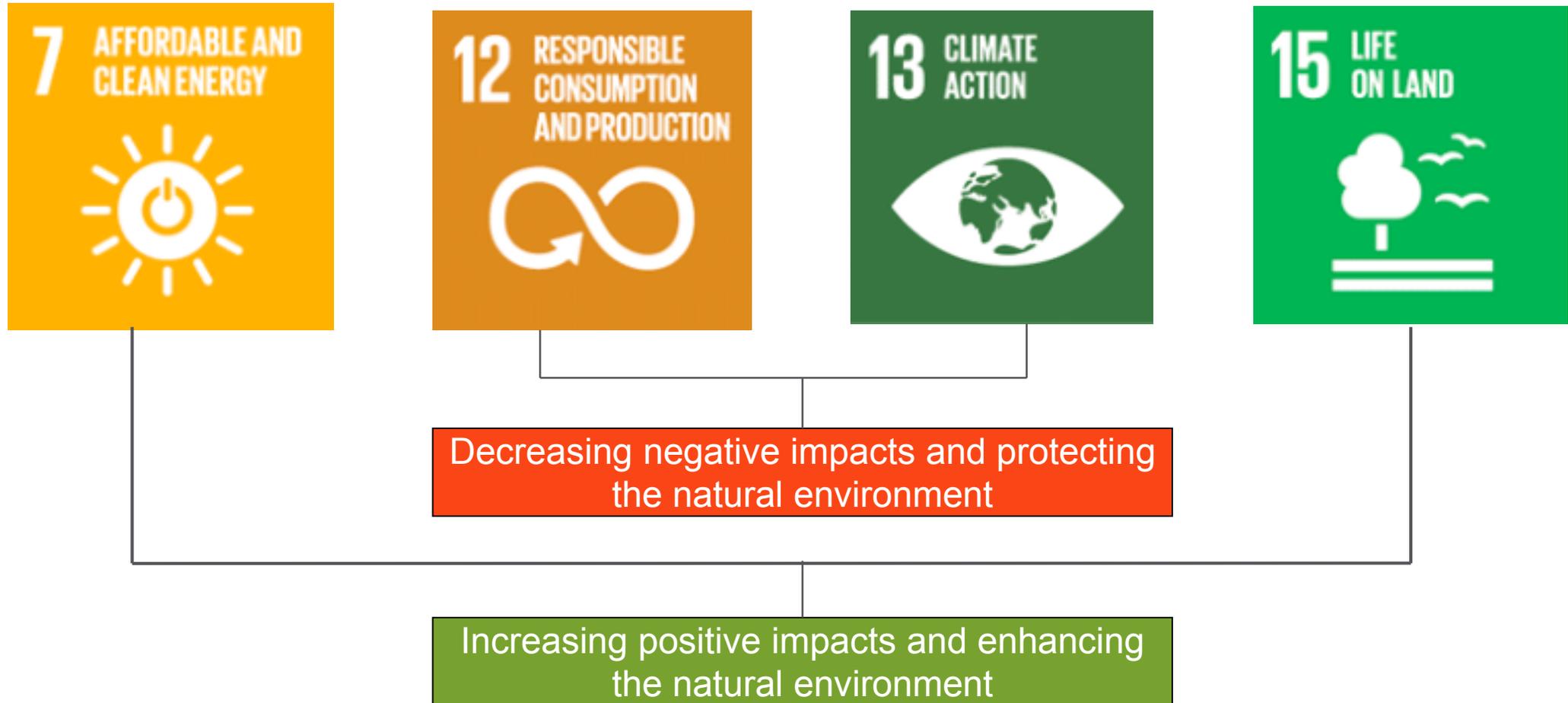
The main **challenges to sustainable development** which are global in character include:

- poverty and exclusion,
- unemployment,
- climate change,
- conflict and humanitarian aid,
- building peaceful and inclusive societies,
- building strong institutions of governance, and
- supporting the rule of law.



The **2030 Agenda for Sustainable Development** adopted by all United Nations Member States in 2015, provides a shared blueprint for peace and prosperity for people and the planet, now and into the future. At its heart are the 17 Sustainable Development Goals (SDGs), which are an urgent call for action by all countries and business.

Environmental issues most material to National Grid Electricity Transmission



Why are these issues most material to us?

Climate crisis

- The **Intergovernmental Panel on Climate Change** (IPCC) published a special report in October 2018 which found that limiting global warming to **1.5C is possible**, but we would need to reach 'net zero' by around 2050.
- In 2019 the UK Parliament declared a **climate emergency** and became the first major economy to pass legally binding legislation to achieve **net-zero by 2050**
- While the net zero target has widespread support, some argue it should be earlier

Ecological crisis

- **A green future - a 25 Year Environmental Plan** is a national plan of action for the UK to use land more sustainably and create new habitats for wildlife
- **2019 State of Nature Report** –documents how human impacts are driving sweeping changes in wildlife in the UK. There's been an incredible loss of nature in the UK since the 1970s
- **Delivering net gain** – Net gain is an approach to development that aims to leave the natural environment in a measurably better state than beforehand

Resource crisis

- **Waste strategy as part of the 25 Year Environmental plan** – there is a need to use resources more wisely and radically reduce the waste we generate.
- **UK's growing waste problem** - waste is choking our oceans and despoiling our landscapes as well as contributing to greenhouse gas emissions and scarring habitats.
- **Reliance on single use plastic** - over the lifetime of the 25 year environmental plan, the UK aims to eliminate all avoidable plastic waste.

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Electricity Transmission environmental performance

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Current performance



40% reduction in business carbon footprint including losses (from a 2012/13 baseline)



50% reduction in the carbon intensity of our construction design (from a 2015/16 baseline)



We have committed to **deploy 30 electric vans** in our operational fleet by 2020



In 2017, we committed to **drive net gain** in environmental value on major infrastructure projects by 2020



Four protected landscapes have been selected by the VIP Stakeholder Advisory Group for visual enhancement work



0.4% reduction in controllable carbon (from a 2012/13 baseline)



We were the first transmission system operator to trial an innovative alternative to SF₆: **Green Gas for Grid** in 2016/17



93% of our operational waste is currently being diverted from landfill



29 sites (out of <300) in electricity transmission land have been enhanced with a natural capital approach (since 2015/16)



In 2017, we committed to implement **Carbon Pricing** on all major investment decisions by 2020

*Performance is up to 2018/19

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Our sustainable business strategy

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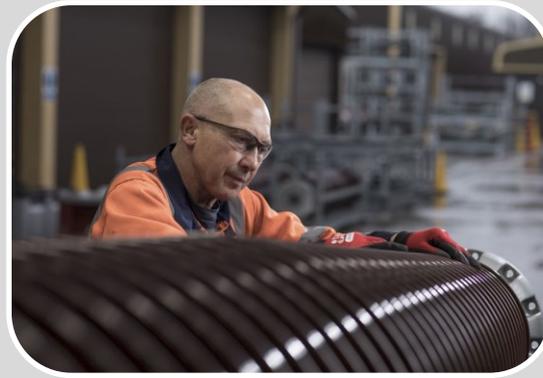
What we will deliver by 2025/26?

We have set ourselves four key areas of focus:



Our climate commitment for greenhouse gas reduction

We aim to reduce our 'controllable carbon footprint' by 34% by 2026



Making the most out of our assets

We will use circular economy principles to make the most out of natural resources and our assets



Caring for the natural environment

We will protect and give material consideration to the value of nature



Leadership for change

We will act as leaders to advance environmental good practice

Our climate commitment

Challenges

Leading the way toward a 1.5C future - in 2018 the Intergovernmental Panel on Climate Change (IPCC) emphasized the urgent need for concerted and decisive action to avoid catastrophic consequences beyond a 1.5C warming

Reaching net zero emissions – UK is the first major economy to pass net zero emissions by 2050 by law

Low-carbon transport - Transport is now by far the biggest UK emitting sector

Electricity from 100% renewable energy - Most sources of renewable energy result in little to no emissions

Our actions by 2026

We will:

- ❖ Aim to reduce our 'controllable' greenhouse gas emissions by 34% by 2026 and 50% by 2030 (from a 2018/19 baseline) compatible with our NET-ZERO pathway'
- ❖ Purchase 100% of electricity we use from renewables
- ❖ Replace 60% of our fleet with Alternative Fuel Vehicles (AFVs)
- ❖ Deliver carbon neutral construction
- ❖ Have 75% of our top 250 suppliers set an emission reduction target

Quick Poll #2



What do you think of our climate change targets?

- A) These targets are too ambitious
- B) These targets seem about right
- C) They are not ambitious enough
- D) I don't know

Making the most out of our assets

Challenges

Earth's limited resources - Humanity's demand for ecological resources and services is exceeding what the Earth can regenerate. This is liquidating the sticks of ecological resources and accumulating waste, primarily carbon dioxide in the atmosphere.

Zero waste as a global movement - The 5 'Rs' of zero waste : Refuse, Reduce, Reuse, Repurpose and Recycle

The rise of the circular economy - We all need to seek an alternative to our current 'take, make, dispose' economic model, to one where resources are put back in economic use

Preserving precious resources – so that future generations have a place to live and thrive

Our actions by 2026

We will:

- ❖ Pilot and implement circular economy principles by aligning our business to industry standards e.g. BS 8001 – circular economy standard
- ❖ Align our Procurement process to ISO20400 Sustainable Sourcing Standard
- ❖ On our construction projects, we will:
 - ❖ Achieve zero waste to landfill
 - ❖ Reduce the waste intensity year on year based on a 2019/20 baseline
 - ❖ Work with contractors to increase recycling and composting rates year on year (from a 2018/19 baseline)
- ❖ On our operations sites, we will improve our recycling rates from 45% in 2018/19 to 60%
- ❖ On our main offices, we will:
 - ❖ Reduce the waste we create by reducing waste tonnage by 20% from a 2018/19 baseline
 - ❖ Improve the recycling rates, and recycle 60% of our waste
 - ❖ Achieve a 20% reduction target on our water use against a 2019/20 target

Quick Poll #3



What do you think of our resources targets?

- A) These targets are too ambitious
- B) These targets seem about right
- C) They are not ambitious enough
- D) I don't know

Caring for the natural environment

Challenges

Restoring and enhancing nature and green spaces - nature is in decline. For too long, we haven't been able to reverse this downward trend and now urgent action is needed to drive necessary change

State of Nature report 2019 – UK's wildlife loss continues unabated. 41% of UK species in decline since 1970 . We need to stop this loss by creating more homes for wildlife.

Delivering Biodiversity Net Gain – Protecting remaining areas with high biodiversity value is not sufficient to halt the significant decline in biodiversity in the UK.

Our actions

We will:

- ❖ Increase environmental value of non-operational land by 10% against a Natural Capital/ Biodiversity baseline (2% per annum)
- ❖ 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)

Quick Poll #4



What do you think of our natural environment targets?

- A) These targets are too ambitious
- B) These targets seem about right
- C) They are not ambitious enough
- D) I don't know

Leadership for change

Challenges

Business leadership in sustainable development - is central to developing and maintaining the kind of markets and economies that the environment and society need to thrive.

The role of business and sustainability – creating long term value by given proper consideration to the ecological, social and economic environment



Our actions

We will:

- ❖ Have senior management accountability for environmental performance
- ❖ Drive forward industry in areas where we are leading by sharing our expertise, data and tools. We will work collaboratively with other Transmission Owners to deliver this.
- ❖ Be an environmental leader for the energy industry by actively contributing and shaping the discussions in external working groups
- ❖ Educate the public more on environmental issues through our education centers, community events and the role of energy and its impact.

Quick Poll #5



What do you think of our leadership targets?

- A) These targets are too ambitious
- B) These targets seem about right
- C) They are not ambitious enough
- D) I don't know

Societal benefit

Against the backdrop of environmental challenges, we are conscious that we don't have all the answers yet. There is still a way to go. This is the latest step on our journey for chartering a course for how we, as National Grid Electricity Transmission, will make our contribution to advancing net-zero . But by adopting this plan, we aim to:



Ensure access to affordable, reliable, and sustainable energy



Ensure sustainable consumption and production patterns and minimize waste



Take urgent action to combat climate change and its impacts



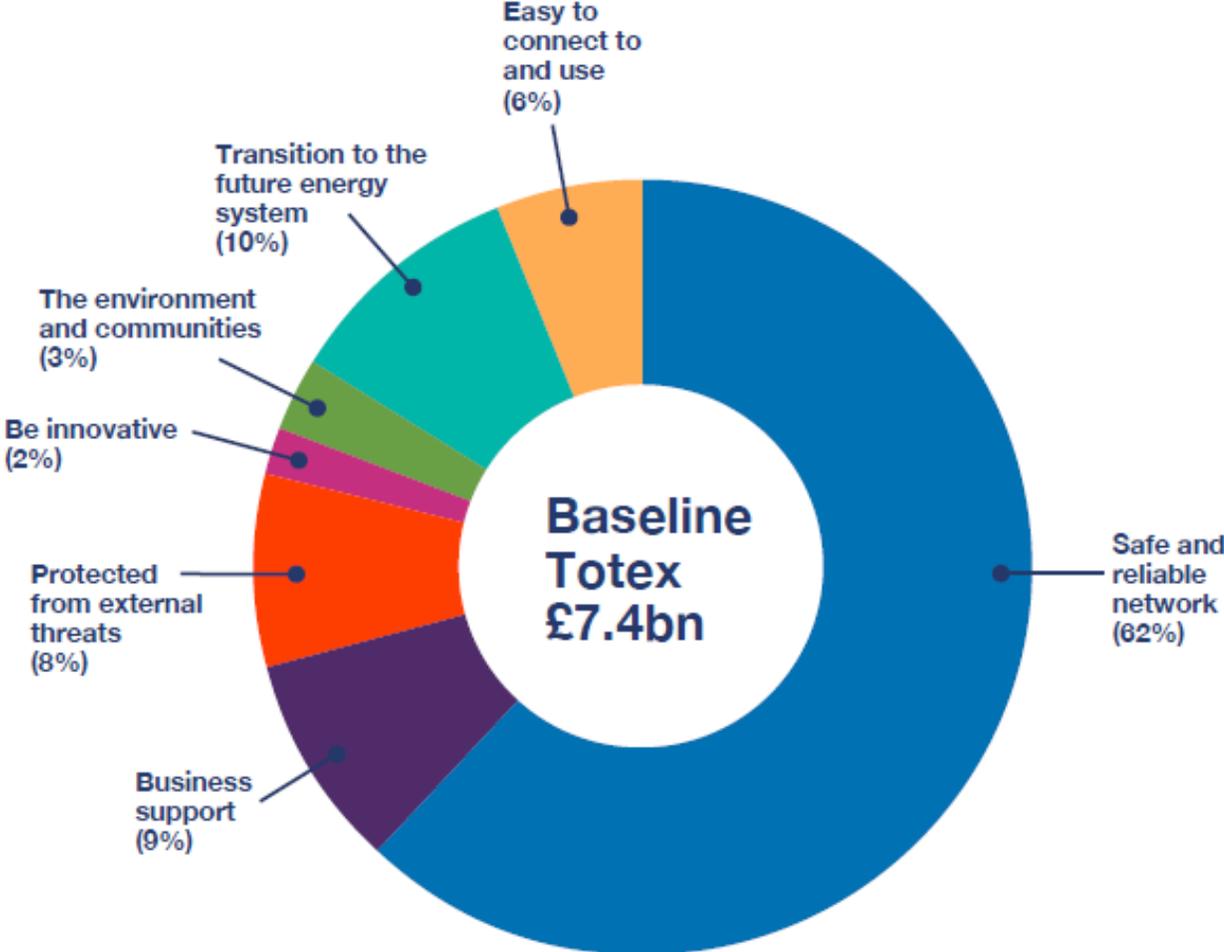
Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss

Ensuring a just transition for a greener, fairer economy

Affordability is an important part of our business plan. We are focused on delivering our commitments in way that minimises cost impact or delivers cost savings (e.g. low carbon construction).

Reducing carbon, reduces costs

We have challenged ourselves to make sure our costs are as low as they can be, by embedding the benefits of successful past innovations and making stretching efficiency improvement commitments.



4

Should the environment be incentivized during RIIO-T2?

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An environmental scorecard ODI

Our stakeholders want us to improve our environmental performance. We are considering an Output Delivery Incentive (ODI) to encourage us to improve the environment beyond the already stretching commitments in our environmental action plan.



1

Option 1:

A “Scorecard” ODI to encourage us to deliver and outperform seven of the targets in our environmental action plan

2

Option 2:

Three environmental ODIs covering:

1. Controllable carbon footprint (excluding SF6)
2. The carbon intensity of construction
3. Natural environmental improvements

Output
delivery
incentives
(ODIs)

Output delivery incentives (ODIs) are incentives for energy network companies to deliver their outputs.

ODIs involve reputational or financial penalties for not delivering an output. They also involve reputational or financial rewards for outperforming outputs.

Quick Poll #6



What do you think of us having an environmental ODI ?

A) I agree - There should be an incentive to encourage outperformance of the plan

B) I don't agree - There shouldn't be an incentive – outperformance on environment shouldn't be rewarded

C) I don't know

Question for our stakeholders

We want to be really open and transparent.

Do you have any specific requirements for our reporting on our Environmental Action Plan?



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Next steps

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Next Steps



We will take account of your feedback on our Environmental Action Plan targets in our final business plan on 9 December 2019.

Answering your questions

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