Electricity Transmission

Delivering your future electricity transmission system

National Grid Electricity Transmission's draft business plan 2021-26



July 2019

Who we are and what we do

We are National Grid Electricity Transmission plc (NGET). We own and maintain the highvoltage electricity transmission network in England and Wales.

Serving England and Wales

We move electricity from where it's generated, down the superhighway of the electricity system, to our direct customers and to the distribution companies who deliver that power to homes and businesses.

Part of a leading FTSE 100 company with a social purpose

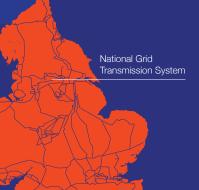
We are part of National Grid plc and we support the highest standards of governance required by the London and New York stock exchanges.

We are committed to being a responsible business. We want to be a force for positive social and environmental change. To do this, we act responsibly in everything we do, and in the way we do it. This belief is fundamental to the way we work at National Grid.

A greater focus on transmission

On 1 April 2019 the electricity system operator (ESO) became a legally separate company from us. This means our draft business plan is focussed even more on delivering your priorities for electricity transmission for the next five years.

Our electricity transmission network



National Grid Electricity Transmission Welcome to our draft business plan

We are an organisation with a purpose: we bring energy to life. It's why we're here and it's what gets us out of bed each morning.

Our purpose drives our vision to exceed the expectations of our customers, shareholders and communities today and to make possible the energy systems of tomorrow.

We believe our nation should have a clean, reliable energy system to help reduce our contribution to climate change, improve the quality of the air we breathe and support a prosperous economy for future generations.

We have engaged with you extensively to build this draft plan. We are committed to delivering a safe, reliable and resilient electricity transmission network for homes, businesses and communities both today and into the future. We will play our part in reducing greenhouse gas emissions and make sure the move to a clean energy system is fair, ensuring no one gets left behind. We want to achieve this change at the lowest possible cost for bill payers.

This draft plan balances the needs of today's and future consumers. For today's consumers we will deliver our commitments while **keeping the same or reducing our part of consumers' energy bills,** excluding inflation. For future consumers we will invest in our network to keep energy flowing and maintain security of supply as we enable the development of the low-carbon, whole energy system of the future.

We are proud to provide an essential service to the nation. Our core values reflect the responsibilities that go with that:

- Safety above everything
- We always do the right thing
- We find a better way

We welcome comments from the RIIO-2 challenge group, our independent stakeholder group and you on this draft plan. We will take them on board for our next draft plan in October. You can **provide your feedback** on our draft plan to gary.stokes@nationalgrid.com

A message from the chair of our board

Electricity is vital to our modern lives. At National Grid Electricity Transmission we have the privilege to provide this essential service to you. We are rightly proud about the quality of the service our dedicated team has provided to you up to now, including high levels of reliability, helping reduce greenhouse gas emissions and protecting your electricity supply against external threats. But we are restless to provide an even better service to you going forward.

We have carried out our largest ever engagement exercise with our customers, stakeholders and consumers for this draft plan. You provided us with clear feedback on what you think is important: a reliable and resilient network that can support the changing energy system. You also want us to care more about the communities we work in and be more open in explaining our performance.

An independent stakeholder group of experts has also scrutinised our draft plan to make sure we are addressing your views. I would like to thank all of you, including the stakeholder group, for the time and effort you have committed to creating and improving our plan.

For the first time, we have built our business plan around your priorities. We hope this will make our plan easier to understand and clearer on what we will deliver and why it matters to you. This represents an important further step in our organisation being more customer-focused and open. A theme we picked up from our engagement is that you don't just care about what we deliver, but how we deliver it. We agree. As the provider of an essential service you have high expectations of us looking after the environment, communities and future generations.

This draft plan covers a crucial period when we all expect rapid change in the energy system to reduce carbon emissions dramatically. The government recently committed to achieving net zero greenhouse gas emissions by 2050 to prevent the worst effects of climate change for our society. We stand ready to make the changes needed to deliver long-lasting benefits for electricity consumers and society.

Finally, I want to remind you that this is our draft plan. We are listening to your views, including on the move to net zero greenhouse gas emissions. We can still make changes before submitting our final plan to our regulator, Ofgem, in December.



Nicola Shaw Chair of National Grid Electricity Transmission

Our strong track record of delivering for consumers



Delivering a cleaner energy system

We are connecting and facilitating **12.6GW** of clean generation.



Upgrading our network

We are investing over **£4bn** to make sure we provide worldclass reliability for future generations.

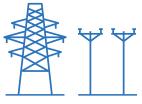


Investing in communities

We have awarded **£1.24m** in grants to community projects.



We are innovating to reduce our costs by over **£1bn**, which reduces your bills.



Protecting the electricity network

We are protecting **90** sites from external threats to keep your electricity supply secure.



Lower greenhouse gas emissions

We have driven down the carbon emissions we control by **12%** over the last five years.



High levels of reliability

We are delivering worldclass network reliability of **99.99999%** energy supplied.



Highest-ever customer satisfaction

Our connection customers' satisfaction has increased to **8 out of 10**.



Improving the natural environment

We have enhanced the natural environment at **30** of our sites.

We have developed our draft plan with you

Part of being a responsible business is listening to our stakeholders, customers and consumers and acting on that feedback.

Over the last two years we have carried out our most extensive engagement exercise ever. We have engaged with over 900 individuals covering all our main stakeholder groups. We have also listened to over 10,000 household and business consumers through meetings, focus groups and surveys.

We have provided more information about our emerging ideas for our business plan to you than ever before. And we thank you for your feedback.

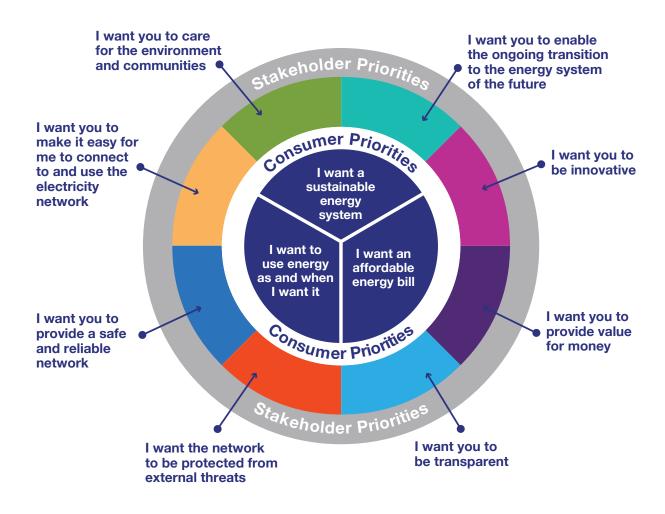
What you've said

As consumers, you've told us:

- I want an affordable energy bill
- I want to use energy as and when I want it
- I want a sustainable energy system

As stakeholders, you've told us your eight key priorities as set out in the outer ring of the diagram below.

We have built our draft business plan around your eight stakeholder priorities and three consumer priorities.



You've also told us that you expect your views to make a genuine difference to our business plan. The independent stakeholder group has been making sure we take account of your views. In the next sections, we explain how we have built our draft business plan around your feedback.

Our draft plan uses a "baseline" built on a common scenario of future energy supply and demand patterns. We have developed it with other energy network companies. Our draft plan proposes ways that we can adapt to the future being different from the baseline.

Our draft plan at a glance

We expect to spend £7.4bn to operate and invest in our network over five years to deliver your priorities. We will deliver our draft plan while **keeping the same**, or reducing, our part of the household energy bill, excluding inflation.

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. **This saves you**

over £1.1bn and means this plan is 15% lower cost than it otherwise would have been.

Building our past innovations into this draft plan accounts for £707m (10%) of the savings and our commitments to stretching efficiency improvements account for £392m (5%).

Here, at a glance, is what we will be delivering for you by your priorities, organised into Ofgem's three output categories for this price review.

Maintain a safe and resilient network

I want you to provide a safe and reliable network	I want the network to be protected from external threats
Cost over five years: £4,560m	Cost over five years: £620m
• We will deliver world-class levels of safety and reliability.	• We will invest at least £620m to protect the network from

 We will invest £4,560m to renew and modernise the ageing network to keep it healthy and reliable for future generations. We will **invest at least £620m to protect the network** from cyber attacks, physical attacks and extreme weather and to be able to quickly recover the network from a shutdown.

Meet the needs of consumers and network users I want you to make it easy for I want you to be innovative I want you to be transparent Cost over five years: £479m Cost over five years: £121m Cost over five years: £1m • We will connect 17.3GW of customer • We will deliver an ambitious long-term We will report clearly what we deliver for you, with an independent capacity, providing the UK with clean innovation programme, focused on power, flexible storage and access to delivering a clean energy system and stakeholder group challenging us on clean and cheaper power from Europe. lowering costs for future bill payers. our clarity and performance. We will improve our customer service • We will drive innovation further into • We will align the remuneration with more tailored and digital solutions. our culture. of our leaders and teams with delivering outputs for you.

Deliver an environmentally sustainable network	
I want you to enable the ongoing transition to the energy system of the future	I want you to care for the environment and communities
Cost over five years: £752m	Cost over five years: £226m
 We will invest in our network to enable the decarbonisation of electricity, transport and heating in the least cost way. We will think beyond traditional network approaches and adopt whole system solutions to reduce the cost of the transition. 	 Our ambitious environmental action plan includes commitments to reduce our carbon emissions by 45%, achieve net zero emissions from construction and increase the natural capital of our land by 10%. We will support communities affected by our major projects, with a focus on supporting people in vulnerable circumstances. We will improve the visual impact of our assets.

Our **business support costs**, such as IT, finance and human resources, help us deliver against your key priorities. We have challenged and benchmarked these costs to make sure they are efficient. Forecast cost over five years: £680m

Total cost of this draft baseline plan over five years: £7.4bn

Our draft plan for 2021–26 in summary

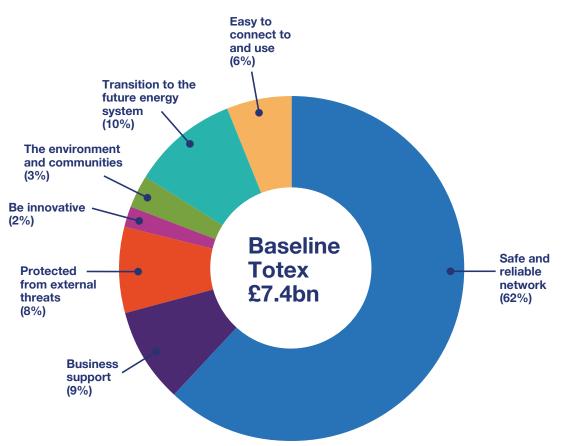
We have built our draft plan around your eight stakeholder priorities. In this section we summarise our draft plan, starting with how it provides value for money.



We recognise that consumers have just seen a decade of flat or falling real incomes while utility bills have gone up. More than a fifth of the population live on incomes below the poverty line after housing costs. In this context, it is even more important than ever that we provide value for money.

The diagram below shows our forecast total expenditure (totex) for the five-year regulatory period and how it breaks down across your stakeholder priorities.

We are expecting to **invest £7.4bn in our network over five years** in this draft plan. This is the sum of the cost of delivering the eight stakeholder priorities and £680m for business support costs. Business support include costs such as information technology, human resources and finance that are needed to run any large organisation.



Our baseline draft plan costs £1.5bn per year compared with £1.2bn per year in the current regulatory period. We will be spending more per year in the next price control period because we will be delivering more for you. We will be:

- spending more on our assets to maintain the current high levels of reliability for you because the number and type of assets that we predict will reach the end of their operational lives in this plan period are different to the current regulatory period. This is because the long-term profile for asset replacement is not flat due to a range of factors such as when the assets were originally installed;
- increasing protection against cyber-attacks because these are more of a threat to our network now than they were at the beginning of the current regulatory period; and
- carrying forward visual impact projects from the current price control period to the next one, resulting in most of their costs occurring in the next price control period.

Being more efficient to deliver value for money

We have challenged ourselves to make sure our costs are as low as they can be, by embedding the benefits of past successful innovations in our draft plan and making stretching future efficiency improvement commitments. **This saves you over £1.1bn and means this plan is 15% lower cost than it otherwise would have been.**

Building our past innovations into this draft plan accounts for 2707m (10%) of the savings and our commitments to stretching future efficiency improvements account for 2392m (5%).

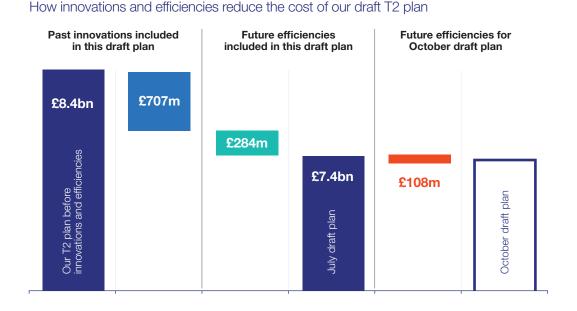
First, we have built in the direct benefits of our past successful engineering and asset management innovations into this draft plan, **saving at least £707m.**

Second, we are stretching ourselves to commit to future efficiency gains in this draft plan, with an **estimated saving of £284m.** This is made up of:

- our ambition to extend our proven engineering innovations in network protection and control upgrades to new asset types: estimated saving of £27m.
- the forecast future benefits of our stretching UK efficiency programme: estimated saving of £200m.
- a further ambitious commitment to improve our operating productivity by the end of the plan period by 5.6%: estimated saving of £57m.

Third, we've recently received the results of an independent, expert benchmarking exercise that compared our forecast unit costs of network capital investments with similar organisations. While overall our costs compared favourably to the industry average, being 6% below them, in a small number of areas our costs were above the industry average. We are therefore making two further commitments, which we will build into our October draft business plan with an **estimated saving of £108m.** This is made up of:

- moving our benchmarked network unit costs to be at or below the industry average. This will mean our total benchmarked costs will be 10% below the industry average: estimated saving of £67m.
- extending our productivity improvement ambition, of 5.6% by the end of the plan, to the costs in our capital plan that relate to our people: estimated saving of £41m.



The diagram shows the three categories of efficiencies we are committing to.

Figure 1

The future is uncertain, but our plan is flexible

Our baseline forecast is built on the common energy scenario. This is a view of future energy demand and supply patterns that we have developed with the other energy network companies. This makes sure we are all using a consistent approach in our draft business plans so that stakeholders can compare our plans more easily.

We know the future will likely turn out differently to the common energy scenario. The government will define the path to net zero and we stand ready to deliver it. We have **built flexibility into our plan** so that we can deliver the outputs that consumers need. Our plan includes ways to adjust our outputs and revenue up or down to make sure consumers only pay for the outputs we deliver. We estimate our costs could be as low as \pounds 6.7bn or as high as \pounds 10bn:

- Our costs could be lower than our baseline if fewer customers request connections than we expect.
- Our costs could be higher than our baseline if:
 - more customers request connections than we expect;
 - the relevant government agencies require us to improve our cyber security even further; and
 - we, rather than competing businesses, carry out some large construction projects.

The impact on the household energy bill

Our average annual cost on a household electricity bill in the currently regulatory period is around £24. We can make all the investments in our draft plan while keeping the same or reducing our part of the consumer household energy bill, excluding inflation. This is the result of:

- us assuming a lower return for the shareholders in our company (called the "cost of equity") of 5.5% compared with the current price control period;
- a reduction in average household use; and
- our strong commitments on efficiency have reduced the cost of delivering our outputs compared to what it would have been otherwise.

Our estimate of the cost of this draft plan on the average annual household bill is around £23.50 (in 2018-19 prices). We mentioned above that because the future of the energy system is uncertain our total expenditure could be as low as £6.7bn or as high as £10bn. This implies a range of approximately £23.00 to £25.50 for our part of the average annual household bill.

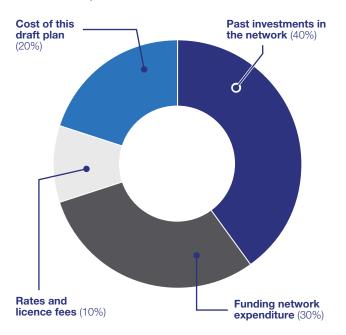
Changes in our total expenditure have a relatively small impact on the consumer household bill. This is because we are a long-term business that invests in infrastructure that will be used over many years. As figure 2 shows:

 around 40% of our revenue relates to investments we have made in past years because the cost of that infrastructure is spread over the lifetime of the assets;

- around 30% of our revenue relates to the costs of financing that long term investment so that consumers do not have to pay for it all upfront;
- around 10% of our revenue relates to costs we pass through, such as rates and licence fees; and
- around 20% of our revenue relates to the cost of this plan, that is the cost of running the network for consumers and new investment to benefit consumers.



How our £23.50 estimate of our part of the household bill is made up



The impact on industrial, commercial and our direct customers' bills

Industrial, commercial and our direct customers' bills will also be affected by our draft plan. The effect of our draft plan on their charges will depend on their location, the type of contract they have and their energy use.

Customers have told us that we should give them visibility of our revenue trends over time. This will allow them to calculate their own specific bill impacts. Ofgem has not finalised the financial model that will calculate revenue for the T2 period, but using the figures set out in this draft plan, we estimate that our underlying revenue in the T2 period will be broadly flat compared with the average level in the T1 period.

There will be annual fluctuations from the underlying revenue trend due to regulatory mechanisms such as uncertainty mechanisms. We are proposing changes to the framework that will reduce these fluctuations. For this draft plan we have focused on explaining the underlying revenue trends to our customers. We will engage further with industrial, commercial and our customers on this draft plan.



Enable the ongoing transition to the energy system of the future

You want us to take a more proactive role in enabling the ongoing transition to the energy system of the future. The UK government recently introduced legislation into parliament to implement the CCC report's recommendation of a target of net zero greenhouse gas emissions by 2050. We welcome and agree with the main recommendation of the report. We haven't yet reflected the potential costs and outputs of it in our draft plan.

Costs

We will spend £752m on this priority over the next five years, in our baseline draft plan. This represents 18p of the average annual household bill.

We know the future will likely turn out to be different from the common energy scenario we have used for our baseline. Because of this we've proposed ways to adjust our funding automatically as the outputs we need to deliver change. We estimate that if we delivered all the outputs that we currently think are uncertain and all the projects that are open to competition we would spend an extra £1.7bn on this priority.

Outputs

For this investment we will deliver the extra network capacity and flexibility needed for the transition to the energy system of the future. Cost over five years

£752m

The part of your bill **180**

We will:

- carry out network reinforcement that delivers 20.8GW of additional capacity, reducing the cost of system operation;
- install system monitoring and make the changes to protection and control required to maintain security of supply;
- keep options open at the lowest cost until it becomes clear what is best for consumers;
- innovate using new technologies, operating approaches and helping support non-network solutions; and
- help competition to develop in transmission networks, where this can lower costs for consumers

The government will define the path to net zero greenhouse gas emissions by 2050. We stand ready to deliver our part. Our draft plan sets out opportunities where we could deliver infrastructure ahead of it being needed to accelerate the transition to a clean energy system. These opportunities would require some government policy and regulatory changes to support them.

Consumer benefits

Our outputs for this priority will allow us to make progress towards the energy system of the future at the lowest total cost for bill payers. We will help reduce greenhouse emissions, benefitting future consumers and society more broadly. We will make sure the electricity network can still deliver electricity where and when it's needed to consumers even as the energy system changes greatly.



Make it easy to connect to and use our electricity network

You, as customers, want us to improve our customer service around connections and network outages. You also want us to predict our charges more accurately.

Costs

We estimate we will spend £479m on this priority over the next five years, in our baseline draft plan. £125m of this relates to the connection charges part of excluded services that do not impact on the consumer bill. As a result, we estimate the impact of this chapter on the average annual household bill is 12p.

We have worked with other energy companies in building our draft plan to identify whole system solutions for consumers. This has reduced our baseline proposals by £199m for this priority.

Outputs

In the common energy scenario, we estimate we will connect new generation customers providing 17.3GW of power onto our transmission network over five years. We estimate that 73% of this power will come from renewable sources, technologies that optimise the use of renewable energy and from interconnectors that allow renewable energy to be imported from other countries. For our direct demand customers, we estimate we will invest in 18 supergrid transformers (SGTs) in the common energy scenario. Cost over five years

£479m

The part of your bill

We will invest in the systems and people to develop more tailored services and improved customer experiences for you when you connect to the network. And we will continue to embed our customer focus throughout our business. We will develop incentives for our final business plan for us to deliver even better services where our customers value them.

We'll improve your experience of us accessing the network. This will allow us to carry out vital work on the network with the least disruption to your business.

We will seek to improve the stability and predictability of our charges to you through smoothing the adjustments we make to our revenues. This will involve us working with Ofgem.

Consumer benefits

Our outputs for this priority mean we can help to reduce wholesale electricity costs for consumers by linking up new generators to the network more quickly and efficiently. We will help reduce greenhouse emissions, by connecting low-carbon generators, benefitting future customers. We will improve our customers' experience by more effectively meeting their needs, which will make the whole electricity system run more smoothly and at lower cost for consumers.



A safe and reliable network

Cost over five years

The part of your bill

£4,560m £3.06

You want us to provide a safe and reliable network so that electricity is there whenever you need it. You want us to maintain our current level of reliability.

Costs

We will spend £4,560m on this priority over the next five years, in our baseline draft plan. This represents £3.06 of the average annual household bill. Our costs have increased from the T1 period, on an annual average basis, because the number and type of assets that we predict will reach the end of their operational lives in this plan period are different to the current regulatory period.

Outputs

The safety of the public and our employees around our equipment is of paramount importance to us. For the next regulatory period, we will deliver world-class levels of safety and continue to pursue our goal of zero harm.

We have proposed a target measure for the long-term health of our network, within a consistent framework that applies to all networks. Our target maintains overall network risk over the five years of this plan. For those assets the framework does not apply to, we will propose specific outputs so that you can measure our delivery. There are some choices we can make within our reliability investment programme. We are continuing stakeholder engagement activities in this area. We will use your feedback to update the second draft of our plan in October.

Consumer benefits

Our outputs for this priority will make sure that we protect the public from harm. We will maintain our current high levels of reliability so that electricity is available whenever and wherever current and future consumers want it.



Protect the network from external threats Cost over five years **£620m**

The part of your bill



You want us to protect the network from external threats that could affect the supply of electricity to you.

The government and its agencies set minimum requirements for some areas of protecting our network and in other areas are developing minimum requirements.

Costs

We will spend at least £620m on this priority over the next five years, in our baseline draft plan, based on what we think is more certain to be required to safeguard your electricity supply. This represents 32p of the average annual household bill.

We estimate another £252m of investment, which is not in our baseline plan, might be needed to deliver possible new minimum requirements for cyber security. If we did deliver these improvements it would add a further 13p to the household bill.

The minimum requirements for cyber security and 'Black Start' (a recovery from a full or partial shutdown of our network) that we must meet are still being developed by government organisations, but should be clearer later this year. Any changes could affect the costs in our baseline for this priority and the household bill in the next draft of our plan.

These requirements can continue to change in response to changing external threats. Because of this we are proposing ways to change our funding during the price control period to the level needed to protect the network as the external threats change. This ensures you won't pay more than you need to for a protected electricity supply.

Outputs

We are required to meet certain standards set by the Government through specialist organisations. We have worked collaboratively to understand their requirements.

In our baseline draft plan, we are committing to protect the network against cyber attacks, physical attacks and the effects of extreme weather. We will enhance the cyber security capabilities of our systems and people. We will implement physical security improvements at 2 sites and maintain protection across our other sites. We will protect 111 sites from surface water flooding and carry out research into future risks from climate change. We will replace 1,850km of operational telecoms fibre cables that are coming to the end of their life.

We will improve the capabilities of our systems and people to carry out an efficient 'Black Start" recovery of the network to a new, specified performance standard in case of a full or partial shutdown of the network.

Consumer benefits

Our outputs for this priority will make sure that your electricity supply will be better protected from cyber attacks, physical attacks and extreme weather events. We will also able to restore your electricity supply more quickly in the case of a full or partial shutdown of the network.



Care for the environment and communities

You want us enhance the natural environment and make a positive contribution to our society and communities.

Costs

We will spend £226m on this priority over the next five years, in our baseline draft plan. This represents 9p on the average annual household bill. The costs for many of our other activities implicitly include a base level of environmental and community activities.

Outputs

For the environment:

- we will reduce our controllable greenhouse gas emissions by 45% by 2025-26;
- we will achieve net zero greenhouse gas emissions for our construction activities by 2025-26;
- we will increase the natural capital value of our nonoperational land by 10% by 2025-26;
- we will continue our stakeholder-led approach for selecting projects to improve the visual impact of our assets; and
- we will provide leadership on environmental issues through collaboration and open data sharing.

Cost over five years

£226m

The part of your bill

9p

For communities:

- we will support communities affected by our major projects and procurement activity with up to £7.5m of investment. Our focus will be on supporting people in vulnerable circumstances through education and employment in line with our core business activities and expertise;
- we will help to make sure the transition to a lowcarbon energy system supports local communities to ensure no-one is left behind;
- we will continue to act as an excellent employer, promoting opportunities for all; and
- we will continue to adopt responsible and ethical business practices and promote them with our suppliers through our contractual relationships.

Consumer benefits

Our outputs for this priority will benefit consumers and future consumers by reducing greenhouse gas emissions and enhancing the natural environment for communities. We will also improve the visual impact of our assets in protected landscapes benefitting the millions of consumers who visit those national parks.

We will support communities and vulnerable consumers by providing education and employment opportunities locally, where there didn't exist before.

Be innovative

Cost over five years

The part of your bill

£121m

96n

You have told us that you want a clean, reliable energy system and lower energy bills. You want us to invest in innovative ways of delivering this.

Costs

We will spend £121m on this priority over the next five years, in our baseline draft plan. This represents 26p on the average annual household bill.

Outputs

• We will deliver a long-term innovation programme to deliver a low-carbon energy system and lower costs for future bill payers. The main areas we plan to focus on are:

- reducing our carbon footprint and helping others reduce theirs;
- enabling whole system solutions through digitisation;
- embedding innovation into our culture;
- increase collaboration and openness with other organisations; and
- accelerating the testing and rollout of new technologies.

Consumer benefits

Our outputs for this priority will benefit consumers and future consumers through lower costs, continued reliability and quicker progress towards a clean energy system.



Being transparent

You have told us to improve the transparency of our business, including how we report information, how we develop our business plan updates and how we are held to account for our performance.

Costs

We have allocated £1m to this priority over the next five years, reflecting the IT investment we will need to carry out. We estimate we will spend a further £20m over five years, but these costs are part of our operating costs, for example, business support costs.

Outputs

As a company listed on the London and New York stock exchanges, we already identify and implement best practice and act as a role model for other companies. Our ambition is to be the most transparent energy company in Great Britain. Cost over five years

£1m

The part of your bill

<1p

In the next regulatory period, we will be clearer than ever on how what we deliver for you links to our financial performance. You will have the opportunity to be involved in our annual business plan updates. And for the first time an independent stakeholder group will challenge us on our delivery of outputs and the clarity of our reporting.

To clearly show our commitment to this business plan we will make sure our leadership team's pay and rewards are linked to delivering the outputs in it.

Consumer benefits

Our outputs for this priority will mean consumers can see much more clearly what they are getting in return for paying their energy bills. Consumers will also be able to see more clearly how our financial returns link to what we deliver for consumers. Consumers will benefit from an independent stakeholder group holding us to account for delivering against our commitments. A clear link between our leaders' pay and our delivery of outputs for you ensures our interests are aligned with yours.



Overview of our draft plan



We can finance our draft plan

We have developed our business plan to deliver your priorities and provide you with value for money. Part of this is making sure that the financial framework balances the needs of investors with the needs of consumers today and in the future. A financial framework that reflects the risks and long-term nature of our investments is vital to make sure we can efficiently fund future infrastructure.

In this draft plan, we propose a base return for shareholders (called the "cost of equity") that rewards shareholders for the risk they take when investing in our business. Our plan assumes a base return of 5.5%, which is consistent with our response to Ofgem's December 2018 RIIO-2 framework consultation.

We recognise that there are economic reasons why the cost of equity should be lower in the T2 period than it was in the T1 period, but not to the extent Ofgem has indicated in its sector specific methodology document that it published in May. We consider Ofgem's proposals for returns are incorrect because they involve errors in the approach, arbitrary adjustments and the selective use of available evidence. Our assumption of 5.5% better reflects the risk of running an electricity transmission business and provides a sustainable longterm risk/return balance. The base return we propose enables and encourages us to innovate to meet the huge challenges required to deliver the clean energy system of the future.

An appropriate return is important to the resilience of the energy sector as a whole, but it is particularly important for transmission. This is because the uncertainty and complexity of investment requirements, and the scale and pace of market disruption is markedly higher in transmission than in other sectors. There has also been growth in the risk of cyber attacks and political intervention in our operations over the last few years. These are risks that we are best placed to manage because our customers and consumers do not have the ability to manage them.



We can deliver our draft plan

We have long-term plans to make sure we have a resilient, diverse and technically-skilled workforce that can deliver this draft plan. We have a robust supply chain with access to a wide market to buy the goods and services we need to deliver this draft plan at lowest cost to consumers. And we have a flexible delivery model that can adapt to the uncertainties we face in the 2020s as we move to the energy system of the future.

We are working together with other companies to make sure we will have sufficient access to the transmission network to carry out the work needed to deliver our draft plan. As part of our whole system thinking we are proposing ways to work with others to make sure we deliver lowest-cost, whole system, solutions.



We will develop our proposals as we receive feedback on our draft plan, including from the independent RIIO-2 challenge group. This process might affect the services improvements we are committing to delivering, the total cost of this plan and the impact on household consumer bills. We will produce our second draft business plan in October for the RIIO-2 challenge group and our final business plan in December for Ofgem. We welcome your feedback on our first draft business plan.

You can **provide your feedback** on our draft plan to gary.stokes@nationalgrid.com

Alternatively, you can write to: Gary Stokes, National Grid House, Warwick Technology Park, Gallows Hill, Warwick CV34 6DA

Our plan for assuring our final business plan

Our National Grid Electricity Transmission Board has been fully involved in the development of this draft plan. For our final business plan in December we are planning for our Board, including our sufficiently independent directors, to provide formal assurances on the quality of our plan. Board members of our parent company, National Grid plc, have also been involved in developing this draft plan. This page describes the assurance processes that we will follow for our final business plan in December.

Our plan uses accurate and high-quality information

We have in place a programme to make sure that our Board members have the information and confidence they need to assure our final business plan.

We have a strong control and assurance culture built on the tough rules that apply to us such as the London stockmarket listing rules, the UK's Corporate governance code and the USA's Sarbanes–Oxley requirements for publicly-listed companies. Our assurance plan builds on these strong existing assurance systems.

We have performed a full risk assessment of our business plan. We have designed an assurance plan using the following three lines of assurance:

- Business unit management
- Internal independent team
- External or internal audit

We are focusing more assurance work in higher risk areas.

We have engaged an external expert consultancy to independently review and advise us on our risk assessment and planned assurance approach. We will complete our assurance work for our final business plan in December.

The statements we will ask our Board to make on the final business plan

We will produce our final business plan in December. We are working towards providing our Board with the confidence to make statements in relation to the following areas:

- The Board's ownership of the overall long-term strategy underlying the plan.
- The quality of the information underlying our plan.
- The quality of our cost forecasts, including how they are value for money.
- Meeting our statutory and licence obligations.

Our National Grid Electricity Transmission Board members



Nicola Shaw Chair



David Wright Director Electricity Transmission



Chris Bennett Director Regulation



Alan Foster Chief Financial Officer



Cathryn Ross Sufficiently independent director



Clive Elphick Sufficiently independent director



Alexandra Lewis Treasurer

How our draft plan aligns with Citizens Advice's five principles

Citizens Advice is the statutory representative for energy consumers in Great Britain. Citizens Advice has designed five principles that need to be met for the next price control to really deliver for consumers. Below we summarise how our draft plan addresses the five principles.

No.	Citizens Advice's principle	How our draft plan aligns with the principle
1	Profits are lower than the previous price control, to more accurately reflect the relative low risk for investors in this sector.	We are proposing a lower base return in the T2 period, which will lower our profits compared with the T1 period. Our proposal reflect the risks associated with our business.
2	The value of any unspent funding for infrastructure projects is returned to consumers promptly and in full.	We are proposing many measurable outputs in our draft business plan. If we do not deliver an output, without good reason for it, we will return the money to consumers.
3	Industry business plans and regulatory decisions are directly informed by consumer (including future consumer) feedback and research.	We have built our draft business plan around our stakeholders' eight priorities and our consumers' three priorities to make sure it reflects them. We will involve our stakeholders, including consumer representatives, in the annual updates to our business plan.
4	Companies are required to publish complete information on their performance, financial structures, gearing and ownership.	We report a lot of information on our performance, financial structure, gearing and ownership to financial markets and our regulator. Going forward we will clearly show the link between what we deliver for consumers and our financial returns. The independent stakeholder group will challenge us on the quality of our annual reports.
5	Innovation funding and incentives support consumers in the transition to a low-carbon future, particularly those consumers in vulnerable circumstances.	We want the transition to a clean energy system to be fair, ensuring no-one gets left behind. We are focusing our innovation on delivering a cleaner electricity network, but also on keeping costs down for consumers.