



# Report on our RIIO-T2 Business Plan Stakeholder Engagement

December 2019

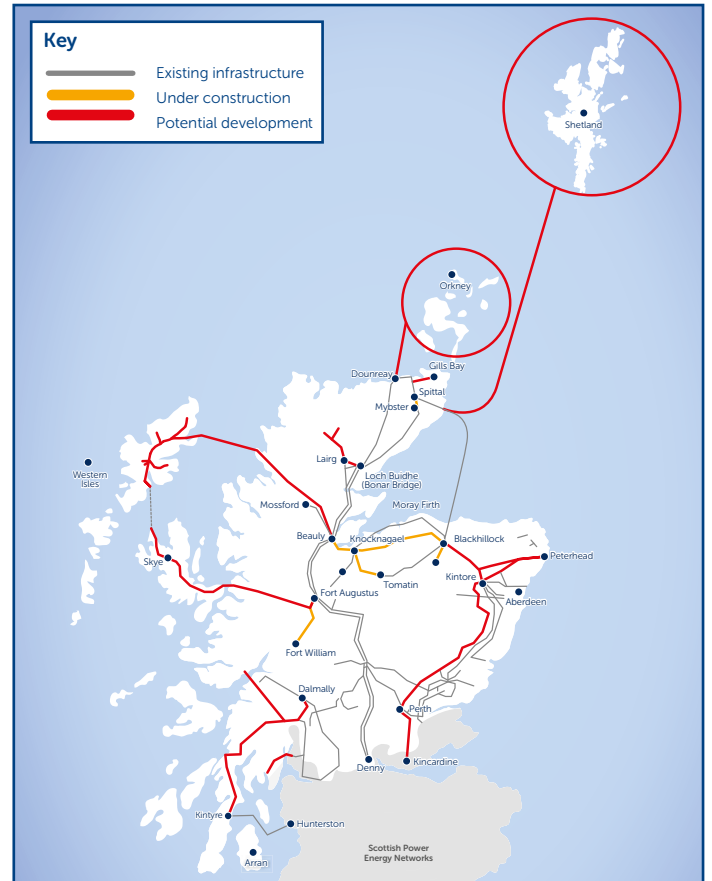
## About us

We are Scottish Hydro Electric Transmission (SHE Transmission), part of the SSE Group, responsible for the electricity transmission network in the north of Scotland.

We operate under the name of Scottish and Southern Electricity Networks, together with our sister companies, Scottish Hydro Electric Power Distribution (SHEPD) and Southern Electric Power Distribution (SEPD), who operate the lower voltage distribution networks in the north of Scotland and central southern England.

As the Transmission Owner (TO) we maintain and invest in the high voltage 132kV, 220kV, 275kV and 400kV electricity transmission network in the north of Scotland. Our network consists of underground and subsea cables, overhead lines on wooden poles and steel towers, and electricity substations, extending over a quarter of the UK's land mass crossing some of its most challenging terrain.

We power our communities by providing a safe and reliable supply of electricity. We do this by taking the electricity from generators and transporting it at high voltages over long distances through our transmission network for onwards distribution to homes and businesses in villages, towns and cities.



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# 1. Introduction

Our RIIO-T2 Business Plan follows over two years of extensive stakeholder engagement, consultation and research which has taken us the length and breadth of our vast network region. From project specific public consultation events to bilateral engagements, workshops and events, we have deployed a range of communications and engagement methods to ensure our stakeholders have had the opportunity to shape our RIIO-T2 Business Plan.

Whilst our network region is clearly defined, we recognise that the impact of our activities, and by association our stakeholders, extends far beyond the north of Scotland. This reflects the role our network will play in meeting GB energy needs and UK renewable and climate change targets, as well recognising that the costs of using the transmission system are ultimately spread across and recovered from GB electricity consumers.

Our engagement therefore included the wider role our activities have in a GB wide context, targeting energy consumers, representative bodies, elected members and governments to ensure our engagement targeted those that represent consumers and stakeholder groups beyond the north of Scotland. Furthermore, we have proactively targeted our public consultations to stakeholders across GB, from direct mailings to the extensive use of social media, to maximise the reach of our engagement.

This report provides an overview of the stakeholder engagement that has shaped and refined our RIIO-T2 Business Plan or associated activities, such as the development of our major projects. It is structured to align with our final RIIO-T2 Business Plan to show where the views of our stakeholders have helped inform the various sections of our plan.

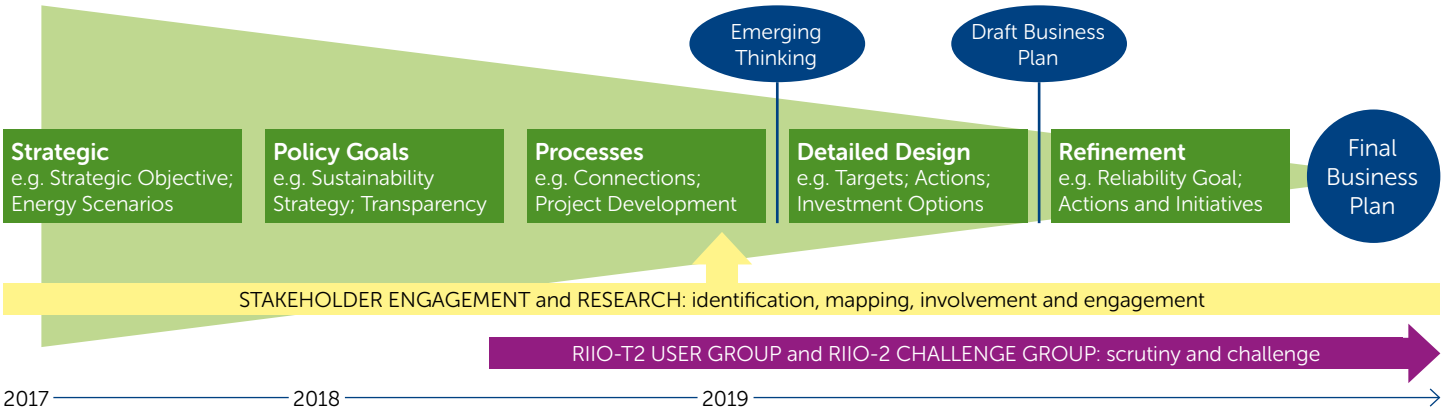


Figure 1 Approach to stakeholder engagement in the development of this RIIO-T2 Business Plan

## 2. Being stakeholder-led: our approach to business plan engagement

### What we mean by Stakeholder-led

Energy networks are built and operated to meet the needs of current and future customers, and so customers' and stakeholders' needs must be the drivers of all activities. This is what we mean by being stakeholder-led, putting the interests of customers and stakeholders at the centre of our strategy. This is also the approach that has guided the development of our RIIO-T2 Business Plan. Throughout this report, we set out how being stakeholder-led has influenced and shaped the various sections of this plan.

### Who are our stakeholders?

#### Customers

As a transmission owner, our direct customer is National Grid ESO and indirectly the electricity generators, large demand customers<sup>1</sup> and distribution network owner<sup>2</sup> that are directly connected to our network. With a significant proportion of the generation feeding on to our network being directly connected to the distribution network, we also consider these parties to be our customers.

#### Consumers

Our ultimate customer is the energy consumer, be they domestic or industrial and commercial users of energy. The 705,000 households and 74,000 businesses in the north of Scotland are dependent on our operational performance. The GB consumer, as the bill payer, has an interest in the investments we make, the funding for which is recovered through electricity bills. Energy consumers are one of our hard to reach groups of stakeholders as we do not have a direct relationship with this group. There are numerous bodies who represent the interests of consumers, some general and some focused on specific groups of consumers, e.g. those that are vulnerable or in fuel poverty. These groups are also stakeholders.

#### Stakeholders

Because our activities have an impact on local communities, our supply chain and the environment, these stakeholders are additional parties interested in and seeking to influence our planning and our delivery.

Communities are a major stakeholder in our project development and our operations. Landowners who provide us with access to build and maintain our infrastructure are another important group and one which can be hard to reach. In the interest of co-ordinated development and minimising impacts on communities, we work with other infrastructure companies such as Scottish Water and Transport Scotland.

At a strategic level, the UK and Scottish Governments are also stakeholders in our business plans. As a developer of Critical National Infrastructure, Governments rely on us to enable the delivery of their policy ambitions. Local authorities are also increasingly influential. Ofgem has responsibility for ensuring that we meet our statutory duties and licence requirements. In addition to Ofgem, the environmental impacts of our development and operations are regulated by SEPA.

The increasing interdependencies between energy networks has made other network owners priority stakeholders in our business planning and operations. This is not limited to electricity, gas network owners can also be impacted by, and impact on, our network.

With increasing decarbonisation in other sectors, the expectation of electrification as a route to decarbonisation of other sectors including transport and heat has increased the need for us to engage actively with parties in these sectors. This can stretch as far as auto manufacturers and developers of new heating solutions.

<sup>1</sup>We have two – St Fergus Gas Terminal and the Shell/Esso processing plant at St Fergus

<sup>2</sup>Scottish Hydro Electric Power Distribution (SHEPD)



Figure 2 Our Stakeholders

Shareholders are a major stakeholder for our business with engagement concentrated on strategy and performance. Our own employees are also a major stakeholder in our business. It is these employees that deliver our performance and they have expectations in terms of job security, skills alignment and opportunities for progression.

#### Future customers

One of our hardest to reach stakeholders is future customers.

The end consumers of 2030 will be largely those of today. Some stakeholders have advised us that drastic changes in their expectations are unlikely over the period of the price control. However, new consumption habits such as charging electric vehicles at home, could influence the expectations of this group.

Other future customers include young people who will ultimately become bill payers. Young people in the UK are generally more environmentally conscious than older generations. They prioritise climate action, are digitally literate and expect personalisation of service and communications.

Their expectations on corporations to be inclusive, and to make a positive contribution to society is an expansion of the wider social trend on expectations for corporate social responsibility and fairness in tax and wages.

Some of our future customers are not yet visible. Energy innovators designing new solutions to energy challenges are still forming and will continue to form as new markets develop.

In RIIO-T1 we have relied on these organisations identifying themselves to us and seeking out discussions, often as part of connections processes which were not designed for exploratory and creative discussions. However, in our innovation and industry change projects we have actively identified potential future customers. In RIIO-T2 we will be more involved in innovation and collaboration being led by others, and will provide access, information and scope to influence for those that recognise their role as future customers of our system.

## Stakeholder mapping

Every day, across all activities at every level of our business, we engage with people (our stakeholders) who have an interest or are affected by what we do and how we do it. Naturally, not all stakeholders will be interested in, or affected by, every aspect of our activities. Our targeted engagement programme focuses on the most pertinent issue/s for each stakeholder group, to encourage active participation and ensure meaningful feedback.

Following the identification of the various stakeholder groups identified above, we then classified our stakeholders into the following four groups to reflect their level of interest and to establish the most appropriate method of engagement for each group:

### Experts

Specialist knowledge or previous experience of the topic. Early and ongoing engagement largely through face-to-face meetings.

### High Impact

Potential activities directly and materially affect the individual, community or stakeholder. Early and ongoing engagement largely through face-to-face meetings and events.

### Bill Payer

Customers will incur the cost of the proposed activity: generator, DNO or electricity consumer. Research, modelling and direct / indirect engagement including surveys, focus groups, forums.

### Everyone

Transparency and use of 'networks' to extend reach. Best practice of others. Specific involvement from employees and investors.

## How we have engaged

### Engagement methods

We have adopted a broad range of communications and engagement methods throughout the development of our RIIO-T2 Business Plan. This includes:

- Consultation events
- Written consultations
- Bilateral meetings
- Targeted workshops
- Webinars
- Secondary research
- Primary research
- Industry events
- Staff engagement
- Direct stakeholder mailers
- Social media
- Paid for advertising

Over and above our stakeholder mapping exercise which identified the communication and engagement methods for the four specific stakeholder groups identified, we also tailored our engagement for specific audiences and hard to reach groups, in particular energy consumers.

Whilst we have always been successful in engaging energy consumers throughout the development of our large capital investment projects, we have previously struggled to engage them on wider matters, including the development of our business plan.

To broaden the reach of our engagement with end users across GB we widened the focus of our engagement with consumer representative bodies, targeting those that represent consumers, particularly the fuel poor and vulnerable, across GB rather than specific to Scotland. Finally, as part of our summer draft Business Plan consultation, we carried out a number of specific activities to encourage feedback from energy consumers and their representative bodies, as set out in the 'Our Strategy' section.



### 3. RIIO-T2 enhanced engagement process

Meaningful and impactful stakeholder engagement is a core element of Ofgem's RIIO regulatory framework.

In March 2018, Ofgem published their consultation on the framework for the next set of transmission price controls, RIIO-T2. Here, Ofgem outlined their intention to build on the progress that has been made in RIIO-T1 and introduced an enhanced engagement model. This model included the requirement for networks to appoint an independent panel who would scrutinise business plan proposals and provide input and expert challenge. In August 2018, we established an independent "User Group" to fulfil this requirement.

Separately, Ofgem established an independently chaired RIIO-2 Challenge Group that will assess business plan proposals across sectors and will provide a report to Ofgem on their findings.

#### RIIO-T2 User Group integration with the Stakeholder Advisory Panel

As our Stakeholder Advisory Panel's tenure had reached one year when Ofgem announced the requirement to establish an independent User Group, best practice from our Stakeholder Advisory Panel was applied to the set-up of the planning, recruitment and induction of the RIIO-T2 User Group.

In addition, the User Group Chairperson attended the Stakeholder Advisory Panel to understand the objectives and nature of the topics discussed. This has been complemented by the recruitment of a serving Stakeholder Advisory Panel Member to the RIIO-T2 User Group providing further alignment.

The Stakeholder Advisory Panel has provided comprehensive support, scrutiny and challenge to the development of our RIIO-T2 plan, dedicating an additional two days to review and challenge our Business Plan drafts before submission to the regulator.

More on our Stakeholder Advisory Panel can be found here: <https://www.ssen.co.uk/Stakeholderengagement/Panels/>

#### RIIO-T2 User Group

The User Group has played a vital role in the development of our RIIO-T2 Business Plan.

Established in August 2018, our independent RIIO-T2 User Group brought together eight experts who have a varied background in areas including distribution networks, generators, large users and suppliers. The User Group's remit included working on behalf of electricity consumers, customers and wider stakeholders to ensure we submit a robust business plan that delivers a sustainable and efficient future network.

Our Subject Matter Experts met with the User Group regularly to present plans for the RIIO-T2 price control period and to seek feedback and challenge. The User Group has scrutinised our proposals and provided input and expert challenge to the following areas:

- Our track-record
  - Enhanced engagement and new stakeholder engagement strategy
  - Meeting the needs of consumers and network users
  - Asset Management - including Reliability and Resilience
  - Sustainability, including environment
  - Incentives, Consumer Value Propositions and costs
  - Enabling whole system solutions
  - Innovation
  - Competition
  - Future Energy Scenarios
  - Strategic Narrative
  - Operating Model for RIIO-T2
  - Procurement Strategy
  - Our Five Goals
  - Business Plan structure
-

In all areas of our planning the User Group has encouraged us to undertake broader and deeper stakeholder engagement, to consider the contribution of our plan to GB decarbonisation and to be ambitious, putting real stretch into our ambitions.

A summary of the most material influences of the User Group on the Business Plan is provided in the following table, along with an explanation of how our plan has changed due to this feedback:

User Group ask/comment	Our action
<p><b>Stakeholder-Led Strategy</b> In May 2019, we presented our proposals for our Stakeholder Engagement Strategy. The User Group advised us to consider expanding on relationship and advocacy opportunities.</p>	<p>Following this feedback, we undertook a consultation on the Stakeholder Engagement Strategy and sought views from stakeholders on how we could better incorporate these aspects into our engagement objectives. The consultation supported the views of the User Group and two of the draft objectives were edited to more clearly include collaboration, partnerships and advocacy.</p> <p>We presented our revised Stakeholder ambition for 2026 to the User Group in June as part of our draft Business Plan. The User Group recognised the ambition for 2026 as being at the forefront of engagement practice.</p> <p>The User Group were pleased with the changes made by the team in this area following their challenge. They felt that the strategy explored and exposed all challenges from the previous meeting.</p>
<p><b>Customer Connections Proposition</b> Customer Connections was an area the User Group wished to see improvements made, they felt there was an opportunity to expand on customer experience and wished us to explore what changes could be made to the connections process in RIIO-T2 to enhance engagement and measure customer satisfaction.</p>	<p>Our initial ideas in this area had been to continue the RIIO-T1 approach with a continued focus on timely connections.</p> <p>Following the challenge from the User Group we engaged with connections customers and potential future connections customers to explore the challenges to delivering connections and how customers felt our service could be improved.</p> <p>This resulted in our goal to deliver every connection on time and a new ambition for 2026: Provide tailored solutions and services for all our connection customers, that are also optimal for the wider GB energy consumer. This ambition is supported by detailed proposals on:</p> <ul style="list-style-type: none"> <li>• Tailored customer services and products for our existing and future customers;</li> <li>• Optimal connection solutions; and,</li> <li>• Accessible connections process.</li> </ul> <p>We also proposed a new Quality of Connections incentive which would allow performance in this area to be tracked throughout the customer experience. This incentive was later adopted by Ofgem as a sector wide incentive for all Transmission Owners.</p>



<p><b>North of Scotland Future Energy Scenarios (FES)</b>          In order to appropriately meet customers’ future needs over the next decade and beyond, we must understand which technologies are likely to impact generation and demand profiles. This cannot be done in isolation but must take a view on local energy developments and the whole energy system.</p> <p>The User Group scrutinised the work undertaken to construct future energy scenarios for the north of Scotland. This work highlights several exceptional circumstances relating to the north of Scotland which are notably different to the scenarios mapped out at a GB level.</p> <p>The User Group encouraged us to explain these differences in the business plan. The consultation and engagement approach used to present the scenarios was presented to the User Group who felt that while there was very high-quality engagement, the number of consultees was relatively small.</p> <p>The User Group expressed sympathy for ‘consultation fatigue’ for both the consulted and the consulting and recommend a blended approach to consultation including the use of focus groups and engaging with academia for future similar work.</p>	<p>We have published an additional paper on future energy scenarios alongside our Business Plan which discusses the implications of Net Zero and how our plans for the developing network will be able to flex to react to the pathways to achieving it.</p> <p>In this paper we provide additional explanation of the differences in our network region as reflected in our North of Scotland Future Energy Scenarios.</p> <p>We have incorporated an objective within our new Stakeholder Engagement Strategy which is focused on future optionality which includes collaborative development of future energy scenarios. The Engagement Strategy is designed to reduce consultation fatigue by applying engagement methods most appropriate to the audience and the topic. This will ensure quality engagement with experts and the opportunity for a broader group of interested stakeholders to contribute.</p>
<p><b>Asset Management</b>          The User Group requested a fuller understanding of the RIIO-T2 asset management ambition, noting that asset management capability is a tangible way to demonstrate customer service through reliability and resilience of the network, as well as providing evidence of efficiency and long-term planning capabilities.</p> <p>The User Group has challenged the efficiency of a 100% reliability target and encouraged us to review this approach for our final Business Plan.</p>	<p>We recognise this as a challenge and as we grow as a business we need to change and adapt our Asset Management capabilities. We believe in continuous improvement which is also a key requirement for ISO 55001 certification.</p> <p>Similar concerns on the efficiency of targeting 100% reliability were also raised by other stakeholders during the consultation on our draft Business Plan. All stakeholders agreed that we should always aim for 100% reliability for homes and businesses, but some stakeholders recommended that we were likely to see diminishing cost to benefit ratios as we proceeded towards 100% reliability.</p> <p>In response to this we have re-framed our ambitions on 100% reliability. We will maintain our 100% reliability goal as an aspirational goal to drive focus on continuous improvement to service and avoidance of faults, but all measures proposed to deliver fault reduction or improved reliability must demonstrate efficiency. The wording of the 100% reliability goal has been updated to make this clear.</p> <p>Targets for electricity not supplied will be set as dynamic improvement targets always above RIIO-T1 average ENS and an improvement on prior years. They will not be set at 100%.</p>

The User Group has been well placed to offer robust challenge to our proposals and their views have helped us to understand the extent to which our business plan reflects and will meet the needs of stakeholders now, and in the future.

Stakeholder feedback told us that we have embraced a stakeholder-led inclusive process and due to the complexities of the industry and the regulatory frameworks, meaningful engagement on these topics requires stakeholders with sufficient knowledge and expertise.

Decisions made within the price control period could also benefit from this independent challenge and input from a knowledgeable group of stakeholders, on this basis we propose to establish a “RIIO-T2 Implementation Group” to support us in the delivery of our plans during RIIO-T2 - ensuring stakeholders are at the heart of the way we run our business. We have created an action to develop this Implementation Group in our Stakeholder Engagement Action Plan, which we have submitted alongside our final Business Plan.

Finally, the User Group has also provided helpful feedback which has led to the refinement of our Five Goals as well as the structure of our final Business Plan.

## RIIO-2 Challenge Group

As part of the process, we submitted a first draft Business Plan to the RIIO-2 Challenge Group on 1 July 2019 and the User Group submitted their views on the draft Business Plan to the Challenge Group. We have welcomed the opportunity to engage with the Challenge Group four times since it was established:

1. An introductory meeting in November 2018, when we were invited to present to the Group on our track record and the key issues we see for the RIIO-T2 period.
2. In late April 2019, with an agenda based on a pre-briefing information request issued two weeks before the meeting. This focused on historic capital expenditure and operating costs, in particular the reason for savings when compared with RIIO-T1 price control allowances.
3. Following the submission of our first draft RIIO-T2 Business Plan, we presented our Plan to the Group and answered questions. The Challenge Group sent us written feedback on 16 August 2019. This highlighted a number of areas where the Group wanted to see additional information. We have sought to address all of these points in our final RIIO-T2 Business Plan.
4. Similarly, following the submission of our second draft RIIO-T2 Business Plan, we presented our Plan to the Group and answered 'deep dive' questions on our proposals for investment in existing circuit breakers and overhead lines. The Challenge Group sent us written feedback on 25 October 2019, before we met. Again, this highlighted a number of areas where the Group wanted to see additional information that we have sought to address in our final RIIO-T2 Business Plan.

The RIIO-2 Challenge Group has pressed upon us the importance of rigour in our expenditure forecasts for the RIIO-T2 period: taking an evidence-based approach to the justification of the need to intervene; and being able to demonstrate the efficiency of our expenditure. The Group has also provided useful clarification of expectations in relation to the financing of our Plan, and the preferred options for maintaining investment grade credit ratings. Responding to these challenges has, we believe, improved the quality of our Business Plan.

Together with the 18 meetings of our RIIO-T2 User Group and the comprehensive, wide ranging programme of stakeholder engagement we have undertaken over the past two years, the Challenge Group has contributed important insights to the needs of our customers and stakeholders in our planning for RIIO-T2.

Stakeholder ask/comment	Our action
<b>Business Plan document</b> In July the Challenge group told us that they found it difficult to navigate around our plan.	For our October submission we submitted a Business Plan Guidance Content Map to support the navigation of our plan. This has now been built into the 200-page Business Plan and can be found in Appendix 5.
<b>Business Plan document</b> The group have asked for us to provide information on our cost forecasts in the main body of the plan document, showing how we have justified a change from your current run rate for opex and non-load expenditure.	For Opex there is a section in the Business Plan which explains our RIIO-T1 position, drivers and why things are increasing in RIIO-T2. This is linked to the justification paper.  We have included justification in our narrative that supports the data tables. This explains the increase in costs and volumes in comparison to RIIO-T1. We have not included this in the main Business Plan due to the detailed nature of the content.
<b>Stakeholder engagement</b> The group asked us to summarise where and how our engagement with our User Group and with the RIIO-2 Challenge Group has influenced our plan.	We have created this report in an effort to clearly demonstrate the extent of our engagement with these groups and all our stakeholders. Further detail on our stakeout engagement can be found in the corresponding evidence such as individual strategies and workshop reports.
<b>Stakeholder engagement</b> The group challenged us to provide more information on how we will create a significant cultural transformation in our organisation in regards to stakeholder engagement. They also wanted clarity on the how we will engage during RIIO-T2 and the cost to do.	Our public Stakeholder Engagement Action Plan has been designed to create meaningful change in our business and deliver improvements for our stakeholders. In the Action Plan we have also included indicative costs for our engagement in RIIO-T2 <sup>3</sup> .

<sup>3</sup><https://www.ssen-transmission.co.uk/information-centre/our-stakeholder-engagement/implementing-the-strategy/>

<p><b>Sustainability</b></p> <p>The group challenged our sustainability plan, stating that it is very light on details/ precise figures in areas such as the SF6 target and own business carbon reduction e.g. on figures for the operational fleet.</p>	<p>Our updated Sustainability Action Plan has been updated to include a section on our Business Carbon Footprint current performance and projected benefits from meeting our carbon target. We have also included our SF6 carbon target in our new Strategy for the Management of Insulation &amp; Interruption Gases<sup>4</sup>.</p>
<p><b>Sustainability</b></p> <p>A specific comment on sustainability included the need for us to present evidence that all outputs and proposals are: supported by stakeholders, cost effective and backed up by delivery plans.</p>	<p>In our updated Sustainability Action Plan we present our approach to stakeholder engagement and meeting stakeholder expectations in our environmental and sustainability planning. Each of our sustainability ambition sections includes a summary of stakeholder expectations. Whilst section nine of the plan provides an overview of our approach to costing it.</p>
<p><b>Whole system</b></p> <p>In regard to enabling whole system solutions, the group requested clear explanations with specific examples of how we will work with stakeholders, and in particular the ESO, other energy networks, and energy market participants, to identify and deliver whole system solutions, particularly non-network solutions.</p>	<p>We have provided this information in our updated Enabling Whole Energy System Outcomes Policy which has been submitted with the final business plan<sup>5</sup>.</p>
<p><b>Competition</b></p> <p>The group challenged our plan to include more detail on competition, particularly: our alignment with the best practice principles; additional commitments to share information and data in relation to competitions; commitments to go 'above and beyond' the minimum requirements of the relevant procurement rules; and any public commitment to better embed the concept of 'technological agnosticism' in your competitive processes.</p>	<p>Within our 'Embracing Competition'<sup>6</sup> document we have included a section with our response to Ofgem's native competition best practice principles (which includes technology agnosticism). Each best practice principle is listed within the report and our proposed approach under RIIO-T2 is included.</p> <p>The document also contains our public commitment to report on embedding competition throughout our RIIO-T2 procurement activities, through an Annual Competition Report. This will include, but not limited to:</p> <ul style="list-style-type: none"> <li>• Information on procurement processes that we have completed during the period;</li> <li>• A review of whether those procurements are aligned with our native competition plan and commitments;</li> <li>• If any procurements do not comply to the native competition plan, a statement of how we intend to make sure that they do in future; and</li> <li>• A summary of procurements we expect to begin in the next two financial years.</li> </ul>
<p><b>Outputs, Incentives and Innovation</b></p> <p>The group asked us to provide more detail on our proposals in response to all outputs and incentives (including any evidence of cost benefit analysis) as well as detail on any bespoke incentives we are proposing.</p>	<p>We have published our Regulatory Framework Outputs Incentives and Innovation that includes evidence that our outputs and commitments are: supported by stakeholders, cost effective and backed up by delivery plans<sup>7</sup>.</p>

<sup>4</sup><https://www.ssen-transmission.co.uk/riio-t2-plan/sustainability-action-plan/>

<sup>5</sup><https://www.ssen-transmission.co.uk/riio-t2-plan/enabling-whole-energy-system-outcomes-policy/>

<sup>6</sup><https://www.ssen-transmission.co.uk/riio-t2-plan/competition-strategy/>

<p><b>Uncertainty mechanisms</b></p> <p>The group asked us to provide further detail to justify our proposed uncertainty mechanisms answering their questions such as why we cannot manage these risks in our revenue allowance?</p>	<p>We have undertaken a robust review to understand the key drivers for investment during the RIIO-T2 period and have only proposed uncertainty mechanisms where:</p> <ul style="list-style-type: none"> <li>• We cannot reasonably forecast the scope and cost for such elements (e.g. future generation connections)</li> <li>• We cannot reasonably foresee the need for future additional expenditure risk (e.g. Brexit, system operability requirements)</li> </ul> <p>Basing our ex ante revenue allowance on scenarios where the need and costs are not clearly established can pose a material risk to both consumers and companies. Either base allowances are included which may transpire not to be required (a windfall to the network company) or no allowance is included, and the investment need materialises (a material risk to the network company's returns and delivery of consumer outputs). A good price control would wish to avoid both these outcomes.</p> <p>Our uncertainty mechanism proposals have been informed by extensive discussion with both the regulator and other Transmission Owners.</p>
<p><b>Forecasting and scenarios (and Net Zero)</b></p> <p>The group have requested that we provide more information so alternative scenarios, including pathways to NetZero can be considered. They also challenged us to demonstrate the differences between the ENA common scenario specified by Ofgem and our certain view.</p>	<p>We have produced "Planning for Net Zero – Scenarios, Certain View and Likely Outturn".<sup>8</sup> This paper describes a broad range of scenarios, their basis and differences between them, including our certain view and the ENA core view. It also sets out how the consideration of these scenarios has fed into network development plans.</p>

<sup>8</sup><https://www.ssen-transmission.co.uk/riio-t2-plan/planning-for-net-zero-scenarios-certain-view-and-likely-outturn/>

## Staff engagement

To develop the various elements of our Business Plan we have directly engaged with targeted employees across the business to gather their expert knowledge in their areas. This has been done via bilaterals, workshops, webinars and Peer reviews, and their input is captured in the specific areas throughout this document.

Whilst not directly related to Ofgem's enhanced engagement process, we also engaged with the wider business. In total, we reached over 70% of our people through a range of activities: predominantly our staff roadshows led by our Managing Director and the senior team, as well as an online webinar led by our senior team. Attendance at the roadshows included Field staff who were also engaged via our mobile app and internal magazine. The aims of our employee engagement have been to ensure our people:

- Are involved in creating a plan that works for everyone and meets stakeholders needs;
- Can challenge the deliverability of the plan and provide suggestions for improvement;
- Are familiar with our plan and are kept up to date with progress and actions;
- Feel engaged and informed; and
- Act as ambassadors for the plan, seeking feedback on the plan during their day to day engagements.

During our consultation on the draft Business Plan the views from employees were very much aligned with those of external stakeholders.

Overall, the feedback has been positive. Colleagues like our five goals and our approach to the 'certain view'. Through the questions asked at the online webinar and internal roadshows, there was evidence that the majority of colleagues back our ambition to become a network for net zero. Colleagues were interested in the detail of how we will deliver the ambitious goals of 1/3 reduction in our controllable greenhouse gas emissions and cautioned that the 100% reliability goal must be aspirational and not become a rule that leads to investment which is not cost effective.

Our Board has also been involved throughout the development of our Business Plan, reviewing our strategic approach and approving each development stage, encouraging us throughout to ensure our Business Plan meets the needs of current and future customers and stakeholders, particularly as we transition to net zero. At each stage of refinement of the business plan the feedback from stakeholders and our action taken in response to this has been presented to the Board.

Some examples of our employees input and the outcome have been captured below.

Stakeholder ask/comment	Our action
Employees asked how we are going to achieve our RIIO-T2 ambitions with the current resource available in more remote locations.	With support from our HR Business partner, we have created a detailed resource plan that highlights the areas of the business we will strengthen going into RIIO-T2. This includes updates to our approach to relocation.
Some internal stakeholders asked for more information on how we plan to incorporate emerging technologies within the Certain View of our business plan.	We acknowledged that we have not included emerging technologies such as marine or further offshore wind within the 'Certain View'. We have since provided employees with more information that shows how we are planning to utilise these credible technologies in our uncertainty mechanisms for RIIO-T2.
Employees asked us for more detail on how we intend to reduce our greenhouse gas emissions by 1/3 during the next price control period.	The main sources of our gas emissions are: SF6 gas leakage (which we are familiar with from RIIO-T1), energy consumption at our substation, and business travel.  We have provided clarity on how we will reduce our greenhouse gas emissions by creating actions to tackle them. For example, we will install micro-renewables to generate local green power to reduce our energy consumption as well as working with SSE Group to electrify our fleet where possible.

## Engagement timeline

On our website we have created our 'RIIO-T2 - Our Stakeholder Engagement Journey' page<sup>9</sup>. Here you can find a timeline of our engagement with links to our stakeholder engagement events, workshops and webinars, as well as the associated reports and our consultation documents. We have also saved this report on the same webpage so that it is publicly available to all our stakeholders.



## Our Business Plan Engagement in numbers



**3000+**  
Engagements



**20**  
Events



**19**  
Consultations



**50+**  
Organisations  
engaged



**1600**  
Consumers  
participated in  
willingness to pay



**8**  
User Group  
members

<sup>9</sup><https://www.ssen-transmission.co.uk/riio-t2-plan/riio-t2-our-stakeholder-engagement-journey/>



## 4. Our strategy

In developing our business plan, we have been engaging with stakeholders and carrying out research since 2016.

Our initial work began back in 2016/17 which was largely gathering insights, direct and indirect, into stakeholders' priorities and the policy framework driving changes in the GB energy sector.

Building on this research, in 2017/18 we consulted with our stakeholders as part of the development of our strategic objective and associated strategic themes, as well as testing with our stakeholders their priorities for the RIIO-T2 period.

Throughout 2018 and 2019 we conducted significant stakeholder engagement with a particular focus on bilateral engagements and stakeholder consultation events/workshops to develop the specific policies that have shaped our RIIO-T2 Business Plan. Then in early 2019 we brought together all of this insight, research and consultation when we consulted on our Emerging Thinking consultation.

In summer 2019, we published our draft Business Plan for consultation, embarking on our most ambitious campaign ever to test the acceptability of our plan, and crucially seek challenge and feedback, with our stakeholders.

Finally, we have refined and revised our final Business Plan in light of the feedback received through this consultation, as well as considering changes in the external policy environment such as the adoption of net zero emissions targets.

As well as consulting on the specific investments, activities and commitments in our RIIO-T2 Business Plan, we also carried out consultation and research looking at consumers' willingness to pay; the need for us to consider whole system solutions; as well as how we build on innovation in RIIO-T2.

### Developing our Strategic Objective

Following our initial insights and research work in 2016/17, the first meaningful stakeholder engagement we undertook to inform the development of our RIIO-T2 Business Plan was a review of our strategic objective, back in 2017<sup>10</sup>.

Our strategic objective since 2010, encompassing the RIIO-T1 price control period, has been to enable the transition to the low carbon economy. The 2017 review was motivated by the ongoing changes in the energy sector and we questioned whether our current objective was consistent with the requirements for the transition to cleaner economic growth for now and looking forward to 2025 and beyond. More broadly, we wanted to understand if customers' expectations from the energy networks were changing and, if so, what customers and stakeholders thought we should be focused on.

Throughout this review we engaged with over 100 stakeholders through a combination of:

- Desktop research on consumer views and priorities;
- Stakeholder workshops; and
- Face-to-face and telephone interviews

This engagement was structured around the following six steps:

1. **Perceptions Review:** 30 in-depth interviews (conducted independently) with a broad range of stakeholders on their perception of SHE Transmission and their future priorities. Interviewees included: Government, Regulators, Generators and developers, Local Authorities, Statutory Consultees, Supply chain and Contractors, other network companies, landowners, and community groups.

Additional interviews took place with employees that regularly interact with external stakeholders, gathering information on: areas on which positive feedback is received, any areas of recurring challenges or topics where they perceive a level of stakeholder dissatisfaction, and priorities for our business in RIIO-T2.

2. **Options assessment:** informed by the findings of our perceptions review, in late 2017 we undertook an internal consultation with over 50 representatives from all areas of the business to determine what our employees believed to be the most important criteria for successful operation in RIIO-T2.

<sup>10</sup><https://www.ssen-transmission.co.uk/media/3222/engaging-on-our-strategic-objective.pdf>

- 3. Contextualisation:** desktop reviews of the policy landscape and consumer priorities and preferences was carried out with findings verified through one-to-one discussions with government and consumer representative groups.

A stakeholder engagement workshop was held in Glasgow in March with our expert and high impact stakeholders. A total of 57 stakeholders attended the independently facilitated workshop which included roundtables and Q&A to gather stakeholder views on priorities in RIIO-T2<sup>11</sup>.

We also presented the draft themes to employees through a series of Director's roadshows in Aberdeen, Inverness, Perth and Glasgow, attended by over 50 people from across the business.

- 4. Narrative Drafting:** A draft strategic narrative was produced based on the results of the earlier stages of development and engagement, reflecting what we and our stakeholders considered to be the critical elements for our network for RIIO-T2 and beyond.
- 5. Consultation and Refinement:** One-to-one review of the draft strategic narrative with a select group of our expert stakeholders. This stage of the engagement was designed to check that our strategic purpose and approach was clearly stated, that it had stakeholder support and that it could be easily understood by multiple audiences.
- 6. Launch:** The final Strategic Objective was launched at our RIIO-T2 Stakeholder Engagement Event in Glasgow in November 2018<sup>12</sup>. The strategy was well received at the event which was attended by 73 stakeholders representing a wide range of expert, high impact and broader stakeholders. Stakeholders in attendance were also provided with an opportunity to feed in views on the practical application of the four strategic themes in the areas of stakeholder engagement and sustainability.

Following approval from our Board the strategic narrative was presented to the User Group in October 2018. The User Group's feedback on the strategic narrative was applied in the refinement and adaption of our strategic themes and development of our five clear goals for RIIO-T2.

The outcome of this engagement and research led us to retain our overarching strategic objective - to enable the transition to a low carbon economy - underpinned by four strategic themes that collectively capture the views of our stakeholders in determining our strategy for the RIIO-T2 period.

Stakeholder ask/comment	Our action - Strategic Objective Themes
Security of supply is most critical factor	Safe and Secure Network Operation
Importance of cost	Sector-leading efficiency
Need for more, earlier and better engagement; more customer focus and more involvement in policy discussions	Stakeholder-led Strategy
Environmental and social factors are highest considerations behind security of supply and costs and are of increasing importance	Leadership in Sustainability

<sup>11</sup><https://www.ssen-transmission.co.uk/media/2730/ssen-transmission-stakeholder-workshop-report.pdf>

<sup>12</sup><https://www.ssen-transmission.co.uk/media/3450/she-transmission-stakeholder-workshop-november-2018-report-final.pdf>

## Emerging Thinking

In February 2019 we published our Emerging Thinking paper for consultation. This brought together all the research and early insights that have played a significant role in the development of our Business Plan and set out our initial Business Plan proposals for RIIO-T2. The Emerging Thinking consultation received local and national media coverage which extended our reach and received over 700 engagements on social media channels.

Responses to our Emerging Thinking consultation highlighted the cost of energy as one of stakeholders' key considerations, with many advocating for the cost of the north of Scotland transmission network to be kept as low as possible. However, this was tempered with support for the decarbonisation of energy and the need to maintain security of supply. Since then and the adoption of net zero targets, there has been a notable shift in increased support for decarbonisation, but affordability remains a key priority of our stakeholders. Some of the subject specific feedback received and our actions in response are summarised below.

Stakeholder ask/comment	Our action - Strategic Objective Themes
Promotion of natural environment interests within the sustainability ambition, particularly woodland and biodiversity.	Focus on natural environment and woodland increased in development of Sustainability action plan with specific engagements held on woodland cover and biodiversity to inform refinement of these policies.
Consider climate change adaptation as well as mitigation, particularly impacts on assets such as flooding and erosion.	Review undertaken by Asset Management team to assess resilience to climate change and any actions required in T2 to mitigate identified risks. Outcome of review included in Non-load investment plans.
Improve approach to engagement long term planning and engagement and be more accessible.	Feedback applied in development of Stakeholder Engagement Strategy objectives on early and collaborative engagement and increased accessibility.
Whole system approach is critical.	Further engagement on Whole System requirements and development and refinement of Enabling Whole Energy System Outcomes Policy.

## Draft Business Plan consultation

Following two years of engagement with stakeholders across GB, the publication of our draft RIIO-T2 Business Plan in June 2019 provided an opportunity to test the acceptability of the plan with our stakeholders, including consumers.

To ensure that our proposals were transparent, we published the full unredacted business plan as a formal consultation. It was vital to us that we provided the opportunity for stakeholders to review and challenge the plan as this was the first opportunity for stakeholders to see our plan as a complete package as previous consultations were issue specific.

In our consultation we sought to test the acceptability of the plan as a whole, including the scale of investment, and to gather views on the judgements we had made on the trade-offs between the interests of different stakeholders.

In order to make our consultation accessible to consumers and stakeholders across GB, we undertook the most ambitious campaign we have ever undertaken. Initiated via direct email to our full stakeholder list and the publication of the draft Business Plan on the SSEN Transmission website, the campaign used various channels to reach different stakeholder groups.

- Promotion and consultation – traditional and digital channels including social media. Social media promotion and advertising was used to reach consumers; in-read advertising in online newspapers, political publications and trade press to reach expert stakeholders including government and elected members; print advertising and media coverage in Scottish Newspapers and online publications provided further reach to expert and high impact stakeholders.
- Direct mailings – to over 1,000 stakeholders representing all our stakeholder groups. This included all elected members (MPs, MSPs, Councillors) and Community Council's in SHET region; key spokespeople across all main UK political parties; trade bodies across GB, including consumer and energy representative bodies.
- Bilateral meetings – meetings were offered to all stakeholders on our mailing list with a number of meetings held with stakeholders representing our Experts and High Impact stakeholder groups. This engagement included both the UK and Scottish Government's; various Local Authorities across the SHET region; energy representative bodies; and consumer representative bodies.
- Roadshow events – in and out of region we held five individual events that were promoted via direct mailings to all 1,000+ stakeholders, on social media and paid for advertising. We also asked third parties to help promote these consultation events to their members and stakeholder lists.

The main campaign materials were our Business Plan film, A Network for Net Zero, and the Five Clear Goals poster which included the annual cost to a GB Bill Payer based on Ofgem's calculation of average consumption. The campaign materials were designed to be accessible to everyone and directed stakeholders to our website for further information and the opportunity to respond to the consultation.

The launch delivered a total 29,438 impressions<sup>13</sup> which resulted in 7,931 full video completions<sup>13</sup>; and reached almost 70,000 people on social media channels, generating over 1,000 social media engagements<sup>14</sup>.

Through having this targeted campaign, bilateral meetings held and several external events, we have increased our engagement significantly in these areas as well as our previously engaged group. Since the launch of our draft Business Plan, we have engaged with over 70 organisations which allowed us to gain the views and general support of all of our targeted Stakeholders groups.

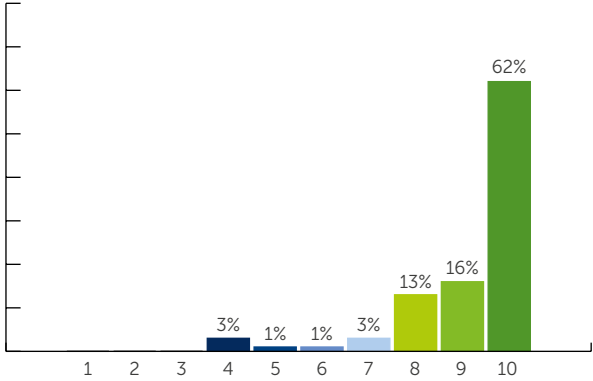
The results of our consultation roadshows demonstrate the overwhelming stakeholder support for our RIIO-T2 Business Plan – see poll results below. Whilst our bilaterals provided similar responses as we received comments such as: "we are supportive of all 5 of the goals set out at the start of the plan. We think they are sufficiently ambitious and set a positive precedent" From Citizen Advice Scotland; "Government have legislated for Net Zero, good to see your focus here. We're pleased to see extent of stakeholder engagement and would encourage this to continue" from BEIS; and the Scottish Government who stated that our "focus on reliability, safety and environment were all positive".

<sup>13</sup>'Impressions' measures how many times our content was displayed

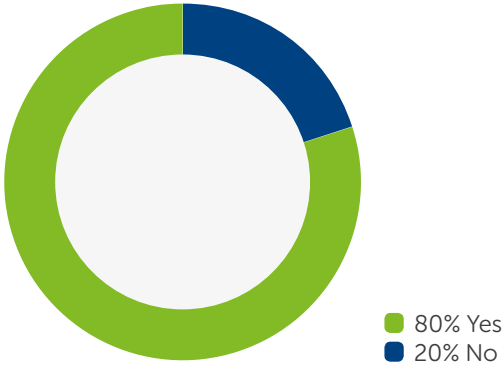
<sup>14</sup>'Engagement' measures the number of interactions people had with our content such as likes, comments, shares.

### Roadshow poll results

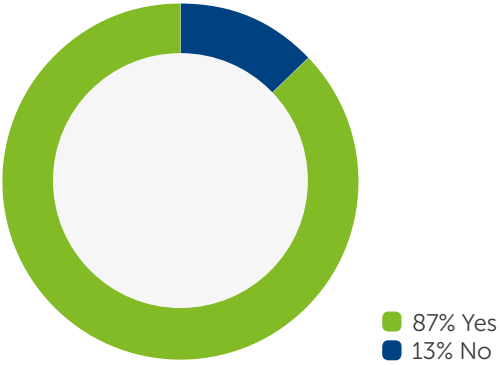
On a scale from one to ten, how important do you think it is to achieve net zero emissions?



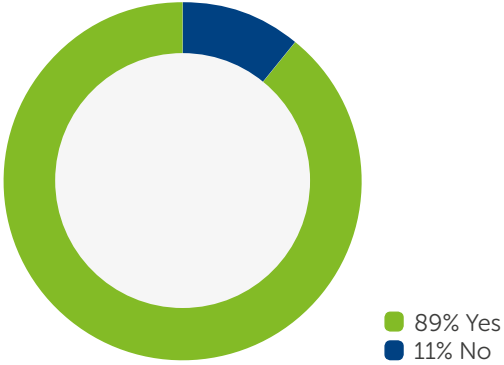
For investments that are currently uncertain, we propose that funding is only released as and when it is required, protecting bill payers from unnecessary spend. Do you agree with this approach?



Our current share of a typical electricity bill is around £5 a year. We forecast this cost will rise to around £7 a year by 2026, which includes forecast increases in inflation. Do you think this is fair and affordable based on what you have heard today?



Do you believe that our five goals are the priority areas for our business and are suitably ambitious?



Set out below are the more stakeholder-led material changes we have made to our Business Plan following our summer consultation on our draft Business Plan.

Stakeholder ask/comment	Our action
<p>While all stakeholder groups supported the ambition of our goal for 100% reliability for homes and businesses and agreed that this was the primary interest of consumers, some stakeholders challenged whether aiming for 100% reliability would result in efficient investment.</p>	<p>While we are confident that a risk-based approach to asset management and investment, combined with increased digitisation of our network will result in improved performance in reliability, we agree that striving for targets of 100% could encourage over-investment. To ensure our teams remain focused on continuous improvement and innovation to improve reliability, we will maintain 100% reliability as an aspirational goal while economic to do so but set stretching targets for electricity not supplied based on an improvement on RIIO-T1 average performance and improvements on prior year performance.</p>
<p>People asked for more detail on future energy scenarios and how these relate to the Certain View, pathways to Net Zero and uncertainty mechanisms. This also relates to developers and customers looking for more clarity on the Uncertain View, particularly how decisions have been made on what is included, and government and consumer representatives asking how delivery of projects in the Uncertain View will impact local communities and end consumer bills if these projects are progressed.</p>	<p>As the Certain View is designed to capture only the most certain investments, a further scenario which sets out the investment that would be required to put us on a pathway towards Net Zero would be beneficial for understanding likely outcomes and the impact of delivery of further investment through uncertainty mechanisms.</p> <p>We developed a new scenario which sets out a “likely outturn” view which is in line with pathways to Net Zero. This view was set out in our supplementary paper: Pathways for Net Zero, which was published alongside the October draft of our Business Plan. The paper included projected costs to consumers for the Likely Outturn View. In this paper we also provided more detail on how the Certain View was determined with the methodology for how projects were ruled in or out of the Certain View. This paper also provided additional information on future energy scenarios and the ENA Core View.</p>
<p>Stakeholders are particularly keen to understand what will happen with the Islands projects. Some stakeholders encouraged us to include these projects within our Certain View but others, including Citizens Advice Scotland and Citizens Advice, agreed with our more conservative approach.</p>	<p>Following the outcome of the Contracts for Difference auctions we reviewed again our treatment of the Islands projects. The outcomes did not change the level of certainty on development of these projects. Given the continued uncertainty on the Islands Projects we ruled out including them in the Certain View in our Business Plan. We will continue to work with Ofgem and other stakeholders in support of the Needs Cases for the Islands and getting Island customers connected.</p>
<p>During the consultation suppliers and contractors have expressed the need for earlier awareness of future projects to allow adequate resources to be allocated across the industry. This need was reiterated by other interested stakeholders including other network companies and statutory consultees.</p>	<p>We recognise the critical role our supply chain plays in delivering our ambitious plans. We ran a focused event for our supply chain to gather their views on how we can best manage the volumes of work and provide certainty for them to prepare for delivering the activities required in our Business Plan. The Certain View was seen as an important threshold which created certainty on minimum work required which gives confidence to invest. This also creates a sufficient baseline from which it is feasible to scale up to deliver projects in the less Certain View. Visibility of projects throughout the price control period, as provided by the Certain View, was recognised as allowing for a portfolio approach to procurement creating more opportunities for partnerships where appropriate. This is set out in our Procurement Strategy.</p>



## Willingness to pay

In line with the development of our strategic objective and associated strategic themes, cost remains one of our stakeholders' main priorities. In early 2019 we undertook a joint Willingness to Pay study<sup>15</sup> with other Transmission Owners to help understand what is important to end consumers (both domestic and non-domestic) and importantly the value that they place on particular services; put simply how much they are willing to pay for improvements in some of the services we provide. The final report was received late June in 2019.

The service attributes we asked consumers about were:

- Risk of power cuts;
- Time taken to recover from blackouts;
- Undergrounding of overhead lines;
- Improving visual amenity of overhead lines;
- Improving the environment around transmission sites;
- Investing in innovation projects;
- Supporting local communities;
- Investing to make sure the network is ready for electric vehicle charging; and
- Investing to make sure the network is ready to connect renewable generation.

Just over 1,000 domestic consumers and just over 600 non-domestic consumers responded to the electricity component of the survey. Using econometric models, the research found that consumers are, on average, willing to pay for improvements in all the service attributes presented to them. What is clear is that the level of willingness to pay identified across each area typically exceeds the costs of the provision and on the face of it provides good justification for us providing the services.

When asked to rank and prioritise which services domestic customers would be willing to pay more for improvements, fighting climate change was the clear priority, followed by minimising disruption to electricity supplies, supporting innovation, protecting the local environment, minimising electricity bills and finally, supporting local communities.

The results support the stakeholder engagement that we have conducted to date – consumers want us to invest in decarbonisation, reliability, being environmentally leading, supporting local communities and meeting the needs of the future – and are willing to pay for it.

The results of the survey are extremely helpful in further supporting and validating the stakeholder engagement that has shaped the development of our RII0-T2 plan. We do not intend to use this research in our CBA tool as it would outweigh other inputs to the model and would result in disproportionate outcomes that may not be the most efficient and therefore, not necessarily in the interest of electricity consumers, particularly the fuel poor. However, it can legitimately be used as an indicative amenity value that consumers place on the provision of particular services.

<sup>15</sup><https://www.ssen-transmission.co.uk/media/3455/consumers-willingness-to-pay-final-0107.pdf>

## Innovation

In developing our Innovation Strategy, we have prioritised stakeholder views and feedback; ultimately if we do not deliver for them then we won't succeed.

We have engaged across all these parties directly, through workshops, webinars, events and consultations to ensure that our plans are stakeholder-led.

We initially conducted 50 internal interviews to understand what has worked well in RIIO-T1 and what has not been successful. This led to the development of our first draft innovation framework.

We then presented our innovation framework at our November stakeholder event<sup>16</sup>, attended by 76 stakeholders representing 53 organisations. At this event we received support for our innovation objective and our innovation values. Stakeholder challenge led us to expand our innovation definition to include wider societal benefits, extend collaboration to include more parties and expand our Cost Benefit Analysis (CBA) approach to account for views on speed of technology change.

In February 2019, at our Connections, Innovation and Whole Systems<sup>17</sup> event with 21 stakeholders representing 15 organisations, we presented on the latest version of the strategy, the benefits from innovation and focus areas for future innovations. Feedback received at this event included:

- Increase importance of one of the themes in framework to account for digitalisation
- Increase innovation opportunities development as there wasn't sufficient focus on technical policy
- Increase focus on CBA to account for longer term benefits
- Added more commercial focus as not at all about technology innovation

Finally, in May, at our second Connections, Innovation and Whole Systems<sup>18</sup> event, we presented to 40 stakeholders (12 via webinar) representing 22 organisations, covering our innovation management plans, the implementation of our plans in RIIO-T2, our latest innovation framework and our proposed implementation plan. Feedback received at this event included:

- Further develop CBA approach and funding model to encompass benefits that don't accrue to SHE Transmission
- Increase detail on improving transfer of innovation to Business as Usual
- Increase level of ongoing engagement as parties felt there hadn't been enough engagement on innovation in RIIO-T1

Through these events we have replayed what we have heard from our stakeholders to check that we have captured it correctly, with the feedback received directly shaping our innovation policies. Throughout the various stages of consultation, stakeholders demonstrated increasing levels of support for our approach to innovation as we further refined our strategy in response to stakeholder feedback, as reflected in our stakeholder reports.

We have summarised feedback from stakeholders and refined our plans accordingly. The table below has some examples of that feedback and what we have done to account for it to make sure our Innovation Strategy is stakeholder led.

<sup>16</sup><https://www.ssen-transmission.co.uk/media/3450/she-transmission-stakeholder-workshop-november-2018-report-final.pdf>

<sup>17</sup><https://www.ssen-transmission.co.uk/media/3398/riio-t2-connections-innovation-and-whole-systems-stakeholder-engagement-event-february-2019-output-report.pdf>

<sup>18</sup><https://www.ssen-transmission.co.uk/media/3453/riio-t2-connections-innovation-and-whole-systems-stakeholder-engagement-events-may-2019-output-report.pdf>

Stakeholder ask/comment	Our action
Stakeholders suggested broadening out the definition of innovation, considering it in the context of wider societal ambitions for a low carbon energy system and not just the transmission network.	Took a broad view of innovation to cover all our business activities. CBA approach will include prediction and tracking of benefits and values including wider societal impacts.
Fast pace of technological change poses risk so SHET should ensure customer money is spent wisely.	Developing CBA methodology using Ofgem CBA to ensure value for money throughout the innovation lifecycle. Covers opportunity assessment through to benefits realisation.
SHET should do more to ensure innovation is a core value that permeates through the company.	Implementation refined to include instilling innovation culture with necessary structure and resources in place to deliver.
More information about what the issues are would be good. For example, the kind of things you're doing around cybersecurity.	We will establish new methods of communicating issues, lessons learnt, successes and failures with external parties as part of our Innovation Management System.
Broad support for the proposed innovation values.	Finalised proposed innovation framework.
Whole system, energy system transition and using network flexibility all go hand in hand. Thinking about electric vehicles, the whole decarbonisation agenda fits in there too. Whole system approach is key to developing that innovation piece too. Otherwise it's fragmented and won't encompass disparate elements.	Identified whole system as an innovation opportunity during RIIO-T2. Built up collaboration value to support joint industry development including government and ENA.
What's the process for taking on these new innovations? There needs to be more clarity.	Implementation will include processes showing how innovation opportunities are identified and subsequently developed with those who it will benefit.

## 5. Building a Network for Net Zero

The north of Scotland is home to some of the UK's greatest resources of renewable energy, from established technologies such as hydro-electric, onshore and offshore wind; to emerging technologies such as marine energy. The region is already contributing significantly to UK and Scottish Government renewable and climate change targets and is set to play a leading role in the transition to net zero.

### North of Scotland Future Energy Scenarios<sup>19</sup>

To be able to meet the needs of our generation and large demand customers to connect to our network in a timely manner, we must understand the range of potential outcomes and the effects that these would have on the transmission network. From changes to the generation background to the speed and scale of the electrification of heat and transport, we must ensure our network is ready to facilitate changes in how electricity is being made and used.

The process of developing our north of Scotland Future Energy Scenarios started in 2016 when we ran our first business wide workshop to identify areas of uncertainty in the future of our network. This workshop identified some of the specific challenges of our network and considered that localised scenarios may be required.

We undertook an initial consultation, supported by our first north of Scotland Energy Trends paper in August 2017, to assess stakeholders' views on the merits of developing local scenarios. Support for this was universally positive and so we designed a scenario development methodology that included a series of external engagements, alongside our internal analysis. This external engagement was essential for gathering further insight, and for guiding and reviewing our internal analysis, to ensure that the scenarios we developed included the views and expectations of our customers and stakeholders.

There were four stages in our scenarios engagement approach:

1. Targeted interviews with customers, experts and high interest groups to: confirm the need for localised scenarios, identify issues affecting customers and stakeholders, and agree best methods for future engagement.
2. Broad, public research and consultations on identified areas of uncertainty with a regional element. We consulted on five papers in 2017 and 2018:
  - North of Scotland Energy Trends
  - North of Scotland Onshore Wind Repowering
  - North of Scotland Electric Vehicles
  - North of Scotland Energy Efficiency and Heat
  - North of Scotland Generation and Storage
3. Reviewing consultation findings (including a range of potential outcomes) and proposed scenario development methodology with targeted expert stakeholders.
4. Publication of the north of Scotland Future Energy Scenarios Report and Summary paper. The report included a summary of the feedback received through the consultations and stakeholder engagement and how this feedback was incorporated into our scenarios.

Throughout the process customers and stakeholders were invited to agree or challenge the treatment of the feedback and the resulting scenario proposals. These confirmations and challenges were used in the refinement of the methodology and scenario assumptions.

<sup>19</sup><https://www.ssen-transmission.co.uk/information-centre/industry-and-regulation/future-energy-scenarios/>

The scenarios developed were then independently peer reviewed by Professor George Wright a leading scenarios expert at the University of Strathclyde.

The outcome was three different Future Energy Scenarios for the north of Scotland that captured a broad but realistic range of potential outcomes to 2030.

In total, circa 150 stakeholders were directly engaged as part of the development of our North of Scotland Future Energy Scenarios.

Stakeholder ask/comment	Our action
Stakeholders told us that current policy measures will not deliver decarbonisation aims.	Because of this we lowered our base scenario to reflect lower growth of generation and demand.
Stakeholders provided additional information on generation projects in their areas for inclusion in our scenarios; Potential for 680MW of offshore wind projects in Argyll & Bute and 100MW in the Outer Hebrides.	We did not include the 680MW of offshore wind in Argyll & Bute in our modelling as the proposed project was cancelled.  We did include the 100MW of offshore wind in our Proactive decarbonisation scenario.
Stakeholders highlighted that the most common charger size used to charge electric vehicles at home was 7kW.	Following this input we updated our modelling assumptions on charger size used in homes from the assumed mix of 3.5kW and 7kW chargers to solely 7kW chargers.
Stakeholders advised that heat pumps hold great potential to decarbonise the heat sector but cost and lack of promotion are negatively impacting their uptake.	We reduced the uptake of heat pumps to a lower level in our Local optimisation scenario to reflect lower uptake due to cost and awareness.
Stakeholders stated that the electrification of heat on the islands is continuing as heat pumps are now being used in new builds as the primary heating source.	All new homes built on the Islands in our Proactive decarbonisation and Local optimisation scenarios have been modelled with air source heat pumps as the primary heating source.

## Planning for Net Zero paper

Following the publication of our draft Business Plan consultation in June stakeholders expressed support for our approach to our North of Scotland Future Energy Scenarios but asked for more information on the scenarios used and how these compared with our Certain View for investment.

This led to the development of our Planning for Net Zero<sup>20</sup> paper, which sets out how our Certain View compares to net zero scenario planning. This paper also includes a new scenario pathway for net zero following the decisions of both the UK and Scottish Government's to legislate for net zero by 2050 and 2045 respectively.

Also included in our Planning for Net Zero paper was our forecast outturn for the RIIO-T2 period. Stakeholders, including Citizens Advice and Citizens Advice Scotland, believed it was important to have sight of this forecast outturn to be able to consider the potential impact on bill payers if more than the Certain View is delivered.

Stakeholder ask/comment	Our action
How does Certain View scenario compare to net zero pathway?	Planning for Net Zero paper developed and published setting out methodology for inclusion of projects in the Certain View and a pathway to net zero.
What do you think final financial outturn will be for RIIO-T2 when considering potential 'uncertain' investments?	Published estimated spend forecast and how this was determined in the Planning for Net Zero paper.

<sup>20</sup><https://www.ssen-transmission.co.uk/riio-t2-plan/planning-for-net-zero-scenarios-certain-view-and-likely-outturn/>

## Whole system

Traditionally, our network has developed in response to large generation and demand users with predictable behaviours. This approach has served GB consumers well.

Advances in technology are providing new and cost-effective ways of decarbonising our energy systems, creating new possibilities for the generation and use of electricity. This is opening up opportunities across the whole of the energy system for new consumer technologies, such as electric vehicles, heat pumps and smart meters, together with increasing volumes of Distributed Energy Resources (DERs) such as solar, energy storage and wind. This led to the development of our Whole System Strategy.

During the development of our Enabling Whole Energy System Outcomes Policy<sup>21</sup>, we held stakeholder engagement sessions, both internally and externally, including three special engagement events with round-table discussions and a webinar.

The internal stakeholder engagement sessions have helped to broaden internal perspectives and awareness of the scope and the opportunities that exist under a whole system approach.

Externally, we have successfully engaged more than 35 organisations including: Ofgem, utilities, parties with interests in transport, generation and construction, consultancy firms and academia. This provided us the opportunity to present our whole system ambition and listen carefully to their views and feedback on our proposals. We took proactive steps to ensure the engagement of academia, a stakeholder group which was underrepresented in more general engagements and which was identified as an expert stakeholder group on this topic.

These events have shaped our whole system thinking based on the feedback we received from our stakeholders. In February 2019<sup>22</sup>, it was clear that stakeholders attending the event had little understanding of what whole system meant. Acting on their feedback we reviewed our approach and developed realistic examples to specifically illustrate the benefits of whole system.

Stakeholders attending the next event<sup>23</sup>, three months later, responded more confidently when asked how well the concept of whole system had been explained and whether they agreed with our approach to whole system, demonstrating the value of this engagement and evidencing stakeholder influence and support.

<sup>21</sup><https://www.ssen-transmission.co.uk/riio-t2-plan/enabling-whole-energy-system-outcomes-policy/>

<sup>22</sup><https://www.ssen-transmission.co.uk/media/3398/riio-t2-connections-innovation-and-whole-systems-stakeholder-engagement-event-february-2019-output-report.pdf>

<sup>23</sup><https://www.ssen-transmission.co.uk/media/3453/riio-t2-connections-innovation-and-whole-systems-stakeholder-engagement-events-may-2019-output-report.pdf>



Stakeholder ask/comment	Our action
Stakeholders highlighted that as we start to consider more components and systems get bigger, it will be much more difficult to ensure that everyone wins.	Because of this we have committed to using Cost Benefit Analysis to justify whole system schemes that deliver net GB society benefits .
Stakeholders stated that they didn't understand our role in developing a whole system. For example, will we drive the strategy?	<p>We have created an approach to Whole system development that will start with us driving consensus through industry for definition, objective and Cost Benefit Analysis.</p> <p>We have also taken a proactive approach to informing Ofgem's position and shaping its Whole System Co-ordinated Adjustment Mechanism (CAM) (a reopener designed to allow for realignment of revenues and responsibilities within the price control)<sup>24</sup>.</p>
Stakeholders explained that for any developer, the boundary between distribution and transmission is a false one. They stated that we should be thinking more widely across gas and electricity.	Following this input we redrafted our definition and objective to reflect cross vector working.

## Cost Benefit Analysis

Our investment appraisal and optioneering process centres around the benefits we can deliver to our customers and consumers, local communities and wider stakeholders. We apply an open and engaged approach to allow everyone to contribute to and understand the reasoning behind our business decisions. This is supported by our new Cost Benefit Analysis (CBA) methodology which was developed during 2019 and incorporates social, environmental, and economic values.

Our CBA framework will allow us to engage more effectively with our stakeholders to deliver network solutions that ensure we meet current and future customers' needs. This should enable the identification of alternative 'non-standard' approaches to system planning and network development, including the implementation of our innovation strategy, where these can deliver better value, whether that value is economic, social or environmental. We will share the outcomes with our stakeholders to show the trade-offs we make in our decision making.

To develop our new Cost Benefit Analysis methodology, we have reviewed previous Cost Benefit Analysis work undertaken and best practice from other networks and wider industry.

We also held a webinar in June 2019 to seek feedback from stakeholders on our CBA framework and present on how we developed our approach. There was wide stakeholder representation with participants from Ofgem, National Grid Transmission, National Grid Electricity System Operator, Scottish Power Energy Networks, Edinburgh University, Strathclyde University, Yorkshire Water, Scottish National Heritage and Scottish Hydro Electric Power Distribution. The questions asked, and feedback provided, are shown on the next page:

<sup>24</sup><https://www.ssen-transmission.co.uk/riio-t2-plan/regulatory-framework-outputs-incentives-and-innovation/>

Question to stakeholders	Summary of stakeholder feedback	Our action
Do you agree our CBA methodology fits within our four strategic themes?	There was agreement that our methodology fits within our themes.	No action required.
Do you think our CBA framework includes the relevant social, economic and environmental benefits to allow us to deliver the best solutions for our customers?	There was agreement that our framework does consider the relevant costs and benefits. Comments were made around the quantification of whole system benefits.	We will develop quantification of whole system benefits in the lead up to and during the RIIO-T2 price control period.
How important are the wider societal benefits inclusion within the framework?	There was agreement that it is valuable to include societal benefits within CBA, but there needs to be clear traceability and verification of underlying calculations/assumptions to ensure a robust approach.	<p>We currently calculate the carbon impact of our investments, as well as the estimated Gross Value Add enabled by both the new connections we enable, and our own activities, but we recognise the need to quantify the wider societal benefits of our investments.</p> <p>We will explore the quantification of wider societal benefits on the lead up to and during the RIIO-T2 price control period.</p>

## Project development process – strategic optioneering

The recent growth in renewable electricity across the north of Scotland has resulted in significant development of the transmission system and the construction of new transmission assets. The development of these major projects is an area where we carry out significant stakeholder engagement and consultation to ensure our stakeholders have the opportunity to help influence and shape our project designs. We have a well-established approach to our major project development process that has served us very well throughout the RIIO-T1 period.

To ensure that our project development in RIIO-T2 meets stakeholder expectations to be able to help shape and influence our major projects, in September 2018 we consulted on our Transmission Asset Development Process<sup>25</sup> which presented an opportunity for our stakeholders to influence how we develop our major projects in RIIO-T2. This engagement largely focused on stakeholders within our network region who are more directly impacted by our project developments.

The outcome of this consultation, supported by our experience of developing projects throughout RIIO-T1, was that whilst stakeholders welcomed the extent of consultation undertaken on our major projects, they wanted to be engaged earlier in the process and wanted a greater influence in the development of project design. Our new stakeholder engagement strategy will address both points, giving our stakeholders greater influence in the development of our projects.

Stakeholder ask/comment	Our action
Earlier involvement in project design optioneering.	<p>These expectations influenced the development of objective three in our new stakeholder engagement strategy:</p> <p><i>Work with stakeholders in our planning and delivery, and strive to achieve mutually acceptable and agreed outcomes.</i></p>
Greater influence in decision making.	

<sup>25</sup><https://www.ssen-transmission.co.uk/media/2948/ssen-riio-t2-project-development-process-document-16pp-web.pdf>

## Engaging on our RIIO-T2 projects with local communities

We have conducted significant engagement with stakeholders as part of the development of our RIIO-T2 major projects. From project specific consultations to specific meetings with local communities, stakeholders have had the opportunity to find out more about the project and importantly, provide feedback to help influence project design.

The extent of project consultation and engagement has varied depending on the timing and level of certainty of the project and will continue throughout the remainder of RIIO-T1 and into RIIO-T2. i.e. for some projects we have undertaken significant engagement with local communities; for others we have undertaken very little or in some cases, none at this stage.

We have summarised below the various consultations held on our RIIO-T2 projects and where appropriate, any specific stakeholder feedback and how we have responded to this.

Stakeholders were also given visibility of projects planned in their area at our summer regional roadshows which were held throughout August in Inverness, Aberdeen, Perth, Inveraray and Glasgow. At these roadshows we presented maps of the developments expected in RIIO-T2 within the relevant region. Comments on the planned developments were generally supportive, with stakeholders encouraging us to consider visual impact concerns in our project development.

### Eastern projects

Project	Summary of engagement	Stakeholder ask/comment	Our action
Rothienorman 275/400kV Substation	2 drop in events (74 attendees)	Concerns about impact on Private Water Supply	Committed to safeguard for 10 years post construction, as opposed to initial 12 month monitoring proposal
New Deer 275/400kV Substation	1 drop in event (28 attendees)	n/a (our contracted customer is responsible for all development consultation)	n/a
Peterhead 400kV Substation	1 drop in event (48 attendees)	Interest in local opportunities for businesses and people	We have committed to host a 'meet the buyer' event to help maximise local opportunities
North East 400	4 drop in events (78 attendees)	General support (largely utilisation of existing infrastructure)	n/a

### Caithness, Orkney, Shetland

Project	Summary of engagement	Stakeholder ask/comment	Our action
Limekilns wind farm connection	2 drop in events (54 attendees)	Understood need for project, general comments about routing of overhead line, including suitable clearance from homes	Feedback considered and where possible, acted upon in design of project
Creag Riabhach wind farm connection	1 drop in event (5 attendees)	None of note	n/a

## Argyll, Central and Western Isles

Project	Summary of engagement	Stakeholder ask/comment	Our action
Port Ann to Crossaig	12 drop in events (132 attendees) <sup>26</sup>	Main feedback related to routeing of replacement line, including suitable clearance from homes	Feedback considered and where possible, acted upon in design of project
Tummel Reactive Compensation (Kinardochoy Substation)	1 drop in event (29 attendees)	Comments about access to site during construction – concerns raised about proposals to use road popular with tourists	Committed to use an alternative route for access to site
Alyth substation	2 drop in events (39 attendees)	None of note	n/a
Glen Kyllachy Wind Farm Connection	Met Community Council (23 attendees)  Updated local Community Liaison Group (3 meetings)	None of note	n/a

## Driving efficiency with our supply chain

As our capital investment is around 80% of our total expenditure, achieving efficient outcomes from this competitive process is essential to the overall efficiency of our activities.

Our full-time procurement and commercial team determine the optimum supply chain procurement solutions for our current and future capital delivery programme. The objective of this approach is to determine the most economic procurement strategy to delivering projects whilst ensuring we do not compromise project delivery or other requirements such as safety, environmental and land assembly.

Throughout the development of our RIIO-T2 Business Plan we have carried out extensive engagement with our supply chain to ensure we continue to drive efficiency for electricity consumers.

Supporting engagement undertaken included surveys and interviews with our existing framework contractors to determine feedback, lessons learned, opportunities, and experiences with other Transmission Owners (including internationally) in terms of contracting approach. We also engaged with the wider supply chain via issue of a questionnaire to relevant contractors so that our focus was not solely upon those contractors who have historically worked with SSE. Asking the supply chain to provide insight into experiences with other Transmission Owners, including internationally, helped identify best practice.

A specific RIIO-T2 Supply Chain event was conducted in May 2019. Presenters at the event included senior management such as Managing Director Rob McDonald, the Director of Capital Development and Delivery Tony Scott, and the Senior Procurement & Commercial Manager Paul Leddie. The event was attended by senior representatives from key members of our supply chain and was very well-received. It was considered proactive engagement as it covered the RIIO-T2 Business Plan, provision of initial thoughts regarding prospective procurement strategy and an outline of our programme and next steps. This was followed up with further engagement to expand identified opportunities to enable achievement of efficiencies, delivery and wider business plan objectives.

Through all of this engagement we are able to determine that the procurement strategy for RIIO-T2 is efficient, driving value for electricity consumers. We will continue to drive further value with our supply chain throughout the RIIO-T2 period with a particular focus on innovation and whole system solutions.

<sup>26</sup>This includes engagement carried out on the Inveraray-Port Ann section of this project, which is being delivered in RIIO-T1

Stakeholder ask/comment	Our action
Stakeholders identified an opportunity for an alternative approach to dealing with contractual and operational risk, with a view to reducing costs.	We will update our approach to risk in order to optimise the commercial approach within the contracts which will support RIIO T2 delivery.
Stakeholders ratified the 'partnership' approach being proposed for delivery of the T2 project portfolio, endorsing achievement of cost efficiencies and outputs, innovation and wider objectives through collaboration, early engagement and incentivisation.	We will incorporate the principles of a partnership approach to deliver benefits in terms of safety, sustainability, cost efficiencies, design, constructability and programme delivery within our forthcoming Framework Agreements, where feasible and appropriate.
Stakeholders highlighted potential resource constraints during the price control period and how that could be mitigated through greater communication of the project portfolio.	We will mitigate the impact of resource constraints by providing visibility of workload for longer periods to enable effective resourcing and utilisation of market capacity in anticipation of expected volumes.
Stakeholders identified opportunities to promote, deliver and maintain innovation, and ultimately deliver value for customers, through our procurement commitments.	We will involve contractors early where appropriate to facilitate supply chain optioneering and innovation to deliver optimum value.

## 6. Maintaining and investing in the existing network

Maintaining and investing in our existing transmission network is an essential requirement to ensure we continue to deliver a reliable, safe and secure network for our customers, electricity consumers and stakeholders. We take a risk-based approach to intervention, ensuring we intervene on the right asset at the right time, before our assets reach the end of their operational life.

### Asset Management

Stakeholder engagement has shown that customers, including energy consumers, have four key expectations:

- **Reliable:** Assets should not breakdown
- **Available:** Assets should operate when required and are easy to maintain
- **Predictable:** The requirement for intervention can be forecast to prevent breakdown and ensure long-term availability
- **Sustainable:** Assets should be adaptable and offer value for money over their whole life. They should allow for continuous improvement and be easy to decommission.

These clear expectations and priorities have shaped our approach to maintaining and investing in our network. This has led to the development of a three-tier approach to the development of our existing network:

#### 1. Minimum requirements

The bare minimum required to “keep the lights on” and maintain legal/ regulatory compliance

#### 2. Responsible operator

A more resilient network for longer term customer benefit

#### 3. Progressive network enabler

An adaptable, sustainable and flexible network providing enhanced value to current and future customers.

### Operations stakeholder workshop<sup>27</sup>

In March 2019 we held a workshop to present stakeholders with various options to help deliver network resilience and reliability in our RIIO-T2 Business Plan. This workshop also covered Security of Supply activities, covered in the next section of this report. A total of 46 stakeholders attended, representing 31 organisations.

The workshop included presentations associated with network resilience, with a range of options presented that required increasing levels of investment, in line with our three-tier approach to asset management: ‘minimum standard’, ‘responsible operator’ and ‘progressive network enabler’.

At the end of each presentation, an independently facilitated round-table discussion took place followed by a voting exercise where stakeholders were asked to identify their preferred option for the RIIO-T2 Business plan, without an awareness of the costs. At the end of the workshop, once stakeholders had visited and discussed all four topics, they were then asked to complete another voting exercise, this time with knowledge of the costs of delivering each level of investment.

The outcome of this workshop has shaped our approach to maintaining and investing in our existing network, with the results from the stakeholder event reflected in our RIIO-T2 Business Plan. A summary of the topics covered and stakeholders’ response to which option we should progress is provided below.

<sup>27</sup><https://www.ssen-transmission.co.uk/media/3385/she-transmission-operations-stakeholder-workshop-report-pdf.pdf>



### Our asset replacement programme

Our asset replacement programme is informed by our risk-based approach to asset management. Therefore, rather than seeking feedback from our stakeholders on the specific asset replacement projects we are taking forward in RIIO-T2, which our own risk-based analysis has demonstrated the need for, we instead sought feedback on investment activities that could help deliver future efficiencies.

We presented stakeholders three case studies of instances where we could consider bringing forward investment from RIIO-T3 into RIIO-T2 in order to:

- Use SF<sub>6</sub> alternatives in switchgear to reduce greenhouse gas emissions;
- Front-load civil works to minimise future disruption in sensitive locations; and
- Safeguard land for future expansion of operations.

Whilst the table discussion focused on these case studies, which highlighted stakeholder support for all of them, the option that stakeholders were asked to vote on in exercises 1 and 2 was the overall principle of bringing forward investment into RIIO-T2.

Stakeholders were presented with two options; minimum standard, defined as 'to replace or refurbish assets forecast to fail during RIIO-T2, bringing them up to current specifications'; or 'responsible operator', which builds on minimum standard but also includes to 'bring RIIO-T3 enabling works forward when carrying out RIIO-T2 works.' The rationale for the responsible operator option is to deliver future efficiencies in investments as well as minimising the local impacts of our activities.

Whilst stakeholders supported the 'responsible operator' option, they did comment that there was a big leap between the costs in the minimum standard option and those for responsible operator, adding that certain works should be looked at on a case-by-case basis. It is this flexible, case-by-case approach we have adopted for our RIIO-T2 Business Plan.

### Materials management

Stakeholders were presented with three options relating to the storage of critical infrastructure used both for the ongoing and efficient maintenance of our network as well as to provide a speedy response to emergency situations. Three options were given, ranging from having one standard warehouse to having two sets of twin warehouses, plus a full operations centre. Both before and after costs were revealed, stakeholders selected the 'responsible operator' option, 'two sets of twin-warehouses (bundled and non-bundled) – one north and one south.

There was recognition that having strategic spares close by was important in emergencies as it reduced the length of outages by accelerating SHE Transmission's response time.

Another reason that stakeholders wanted to see us go beyond 'minimum standard' was because there was a financial cost associated with outages, as a result of planned maintenance, which helped offset the capital investment required to build new facilities. They also recognised that the current approach, which relied heavily on third parties to supply spares as needed, also came at a cost which should be considered against the cost required to build new warehouses.

### Energy Not Supplied: 100% reliability target

The vast majority of our stakeholder engagement has told us to prioritise network reliability. Whilst we already deliver an impressive network reliability of over 99.99%, when faults do occur at transmission level the impact can be far reaching. This led us to establish the goal of delivering 100% network reliability for homes and businesses in our network region, as set out in our summer draft Business Plan consultation.

However, as part of our draft Business Plan consultation, our stakeholders, including the User Group, challenged whether aiming for 100% network reliability would result in efficient investment. This led to a revision of our reliability goal, where we will maintain 100% reliability as an aspirational goal, while economic to do so.

<sup>28</sup>Please note the outcome of the SF<sub>6</sub> case study is covered in the Sustainability section of this report.

Stakeholder ask/comment	Our action
<p>While all stakeholder groups supported the ambition of our goal for 100% reliability for homes and businesses and agreed that this was the primary interest of consumers, some stakeholders challenged whether aiming for 100% reliability would result in efficient investment.</p>	<p>While we are confident that a risk-based approach to asset management and investment, combined with increased digitisation of our network will result in improved performance in reliability, we agree that striving for targets of 100% could encourage over-investment. To ensure our teams remain focused on continuous improvement and innovation to improve reliability, we will maintain 100% reliability as an aspirational goal while economic to do so but set realistic dynamic targets for electricity not supplied based on an improvement on RIIO-T1 average performance and improvements on prior year performance.</p>

## Networks Access Policy (NAP) & Outages

We held stakeholder workshops to obtain feedback on our proposals for RIIO-T2 on our Connections, Innovation and Whole System Proposals. This stakeholder insight was supplemented with engagement through industry forums including the Electricity transmission operational forum. As well as leading to the development of our Customer Connections Policy, this engagement has also helped inform and support our ambitious NAP approach. Our improvement processes are as follows:

Stakeholder ask/comment	Our action
<p>Our generation customers are keen to "optimise that advanced notice" and "need to be much clearer on what outages are likely post-connection during the connection offer process".</p>	<p>This supports going further than our year ahead plans and embedding lessons learned in RIIO-T1 in setting an ambitious RIIO-T2 NAP.</p>
<p>There has been consistent feedback from customers at the Operating Code 2 (OC2) Forums<sup>29</sup> that they want to see KPIs introduced which clearly demonstrate Transmission Owners consider the impact of outages in line with the NAP.</p>	<p>We have developed our KPIs in line with the NAP Policy but importantly, we intend to hold ourselves to account through publishing our NAP outcomes each year as part of our annual performance report.</p>
<p>Generation Customers reported at the OC2 Forums that they were willing to pay to reduce the impact of future outages if a process could be found to facilitate this. The existing System Operator Transmission Owner Code Procedure STCP 18.1 Connection and Modified Application is an enabler for existing network customers to modify their connection to reduce future outage impact.</p>	<p>This supports our position making optimal use of current processes in creating an ambitious and constantly evolving and improving NAP.</p>

<sup>29</sup>National Grid ESO host these forums to discuss future outage plans and any potential issues with outages

## 7. Security of supply

Maintaining network reliability and security of supply has been the unanimous priority of the vast majority of our stakeholders, reflected in the engagement and consultation we have undertaken as part of the development of our RII0-T2 Business Plan.

### Operations stakeholder workshop

Our operations workshop in March 2019<sup>30</sup> sought views from our stakeholders on the level of investments we should take forward to address and improve security of supply. This followed the same format as that described above for our asset replacement programme, with a range of options presented that required increasing levels of investment, in line with our three-tier approach to the development of our existing network: 'minimum standard', 'responsible operator' and 'progressive network enabler'.

Stakeholders were asked to vote on their preferred investment option covering a range of activities, firstly before cost was known then again once costs had been revealed. The outcome of this is summarised below.

#### Intelligent network control

In this session we presented three investment cases for each of the following investments: a new control centre, control systems, protection and communications.

**A new control centre:** Both before and after costs were revealed stakeholders chose the 'responsible operator' option: *"a new control centre - and establishment of control centre support team at a suitable location already having pre-prepared facilities, but displacement of incumbent staff using the site"*. Whilst the score was only marginally in favour of the 'responsible operator' option compared to the more expensive 'progressive network operator' option, stakeholders recognised that ultimately it was down to cost and so, whilst in an ideal world they would choose 'progressive network enabler' to increase the resilience of the network, the significant £12m increase in cost ruled out the 'progressive network enabler' option.

**Control systems:** Two investment cases were presented, minimum standard and responsible operator. Stakeholders again choose the 'responsible operator' option for control systems: *"replace specific identified list of hardware which is obsolete / time expired on a like-for-like basis, plus replacement of existing hardware with Internet Protocol (IP) connected, digital, compliant equipment – including cyber security measures"*. The average score hardly changed when stakeholders were presented with the costs and in the subsequent discussions that followed, stakeholders unanimously agreed that the only real option was 'responsible operator' as it was critical that we keep up with the evolving technology in this area.

**Protection:** When presented with the options without the cost, stakeholders marginally voted for 'progressive network enabler' for protection: *"replace existing obsolete/ time-expired protection equipment on a bay-by-bay basis with modern equivalents, replacement of full-bay protection scheme including bay control units, system monitoring and initiate programme for full deployment of digital substations"*. However, once stakeholders had been made aware of the marginal difference in costs between the three options, they supported that we go even further in this area – still voting for 'progressive network enabler', but by a clear margin. This received the highest score of all the options presented in all four areas of the workshop. This point was made in the table discussions, where stakeholders felt the £1m cost increase was negligible in comparison and was worth going for 'progressive network enabler'.

**Communications:** Similar to the 'Protection' voting exercise, when presented with the options without the cost, stakeholders marginally voted for 'progressive network enabler' for communication: *"programme of works to complete fibre optic communications to all substations, plus installation of secure Internet Protocol (IP) network connections at all substations to enable enhanced system monitoring and further IT capabilities."* However, once stakeholders had been made aware of the marginal difference in costs between the three options, there was resounding agreement that 'progressive network enabler' was the right option.

<sup>30</sup><https://www.ssen-transmission.co.uk/media/3385/she-transmission-operations-stakeholder-workshop-report-pdf.pdf>

### Investing to prepare for Black Start

In this session we presented two investment options to prepare for a black start situation. Under the 'minimum standard' option, this would see the upgrade of generators and batteries across our network to meet the minimum standard of 72 hours operation, with the 'responsible operator' option building on this with additional network tools to support system stability so that restoration time is improved.

Whilst the average score (both before and after costs were revealed) was at the lower end of the 'responsible operator' option, the result was even more marginal when stakeholders were made aware of the £200m extra investment required for this option. Due to how marginal the result of this was, coupled with the significantly higher investment cost to meet the 'responsible operator' option we have progressed with the 'minimum standard' option. For further investments in Black Start we have instead proposed uncertainty mechanisms, where any additional investment deemed necessary by the ESO and/or Government is released once the need and justification has been clearly demonstrated.

### Cyber resilience

During the Operations workshop there were a number of stakeholder comments raised relating to cyber resilience. As our operational technology transitions during RIIO-T2 from traditional electro-mechanical, segregated infrastructure with centralised SCADA control systems to, "digitalised" infrastructure with connectivity to third parties and more Internet Protocol based technologies, the cyber resilience threats will change.

This development broadens the Attack Surface for potential Threat Actors and consequently requires a range of People, Process and Technology changes to ensure a robust approach to cyber resilience is implemented to mitigate risks and to ensure compliance with the Network Information Systems (NIS) Directive.

There was no specific session to discuss cyber resilience during the workshop. However, Stakeholders' provided comments during the sessions detailed above (Network control systems, Protection and Communications) which were consistently themed around ensuring we manage the cyber resilience threats as our operational technology architecture and hardware changes. These comments, along with input which we will gather during future stakeholder engagement, will be used in the development of our strategy for Cyber Resilience which we will submit by April 2021.

### IT Investment Plan

We have engaged with stakeholders to determine our RIIO-T2 Business Plan, including clear goals such as 'Every connection delivered on time'. To support the delivery of these goals we will need to become a more fully digitalised business. In line with our engagement on our Business Plan, our Stakeholders have told us they want to see a whole system design approach, with data driven network development. The IT Investment Plan has been built to meet those expectations. The improvements will also ensure all our data will meet the level of maturity regarding its accuracy, completeness and timeliness, as set out in ISO 55000 and ISO 17020.

Our IT Investment Plan (Non-Op Capex) has been informed by targeted Stakeholder engagement. By gathering input from internal colleagues who have engaged with stakeholders on specific areas and understand their wants and needs, we have developed the requirements for the IT Investment Plan. This was done through numerous bilaterals, three workshops and IT surveys which generated over 50 responses.

We reached out to targeted external stakeholders and successfully conducted two successful bilaterals with National Grid and SGN. Following this, we worked with external IT specialists (Gartner Consulting), who have confirmed our plan is either following current industry trends, or addressing shortfalls compared to our peers.

We will continue to engage with internal colleagues and with other utilities (both directly and indirectly through international benchmarking groups) to inform and monitor our strategy and roadmap development. We are currently extending our reach with experts and peers through attending and presenting at events such as the European International Transmission Operations Maintenance conference which we presented at in March, and the Networks Utilities conference which we attend in September.

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## 8. Protecting consumers from an uncertain future

Our customers and stakeholders have been consistently clear that the cost of energy is of significant concern to consumers and wider stakeholders. This was clear from our early insights work, the Public Attitudes Tracker survey<sup>31</sup>, the workshop feedback we have heard<sup>32</sup>, responses to our February 2019 Emerging Thinking consultation<sup>33</sup>, and our draft Business Plan consultation and associated summer roadshows.

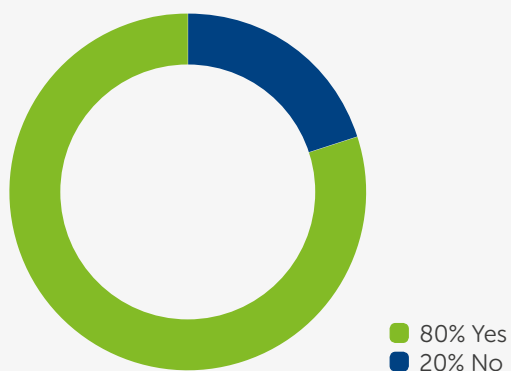
In developing our Business Plan, we identified potential investments totalling around £7bn to cover a range of scenarios. However, much of this investment, such as connecting the Scottish Islands which still haven't met the necessary regulatory tests to proceed, is still uncertain. We have therefore taken a pragmatic approach to this in our Business Plan. We have set out what we do know – our Certain View – where there is sufficient confidence that investment is essential to maintain and grow our network to meet the needs of current and future customers. We are therefore not seeking approval for this investment now but instead, we propose regulatory mechanisms to release funding when the need is known.

This pragmatic approach, which has been successfully applied during RIIO-T1, protects customers by ensuring that investment is only approved when the need is certain and an outcome is delivered.

Whilst some stakeholders have challenged us on this approach, in particular that the Scottish Island links are not included in the Certain View, when we tested the Certain View with our stakeholders during our summer draft Business Plan consultation, which included our workshop 'Managing Uncertainty Round Table' held in Glasgow, the majority of stakeholders were supportive.

This approach also aligns with one of the five key principles for RIIO2 from Citizens Advice, in which they have called for the value of any unspent funding for infrastructure projects to be returned to consumers promptly and in full. Our Certain View removes upfront funding for infrastructure without a strong investment case.

For investments that are currently uncertain, we propose that funding is only released as and when it is required, protecting bill payers from unnecessary spend. Do you agree with this approach?



The need for investment and the associated costs will become clearer during RIIO-T2, at which point we will need appropriate mechanisms to release efficient funding. We have provided proposals for these in our Business Plan based on targeted engagement with other Transmission Owners, technical experts and Ofgem. Following the submission of the Business Plans, Ofgem will openly consult on the uncertainty mechanisms. During this stage, we will work with our stakeholders to help develop their understanding and encourage them to provide input into this process.

<sup>31</sup>BEIS Public Attitudes Tracker, (BEIS, March 2019) available at: [www.gov.uk/government/statistics/beis-public-attitudes-tracker-wave-29](http://www.gov.uk/government/statistics/beis-public-attitudes-tracker-wave-29)

<sup>32</sup>In March 2018 we asked workshop attendees to rank the most significant factors affecting electricity transmission in the future, cost to customers was ranked second behind security of supply. SEN Transmission Stakeholder Workshop, (EQ, March 2018) available at: <https://www.ssen-transmission.co.uk/news-views/articles/2018/3/ssen-transmission-stakeholder-engagement-event>.

<sup>33</sup>Responses to Emerging Thinking, Your Plan, Our Future: RIIO-T2, (SSEN, February 2019) available at: [https://www.ssen-transmission.co.uk/media/3219/she-transmission-riio\\_t2-emerging-thinking-paper.pdf](https://www.ssen-transmission.co.uk/media/3219/she-transmission-riio_t2-emerging-thinking-paper.pdf) highlighted that the cost of energy to customers was ranked only second to security of supply.

## 9. A sustainable network for current and future energy consumers

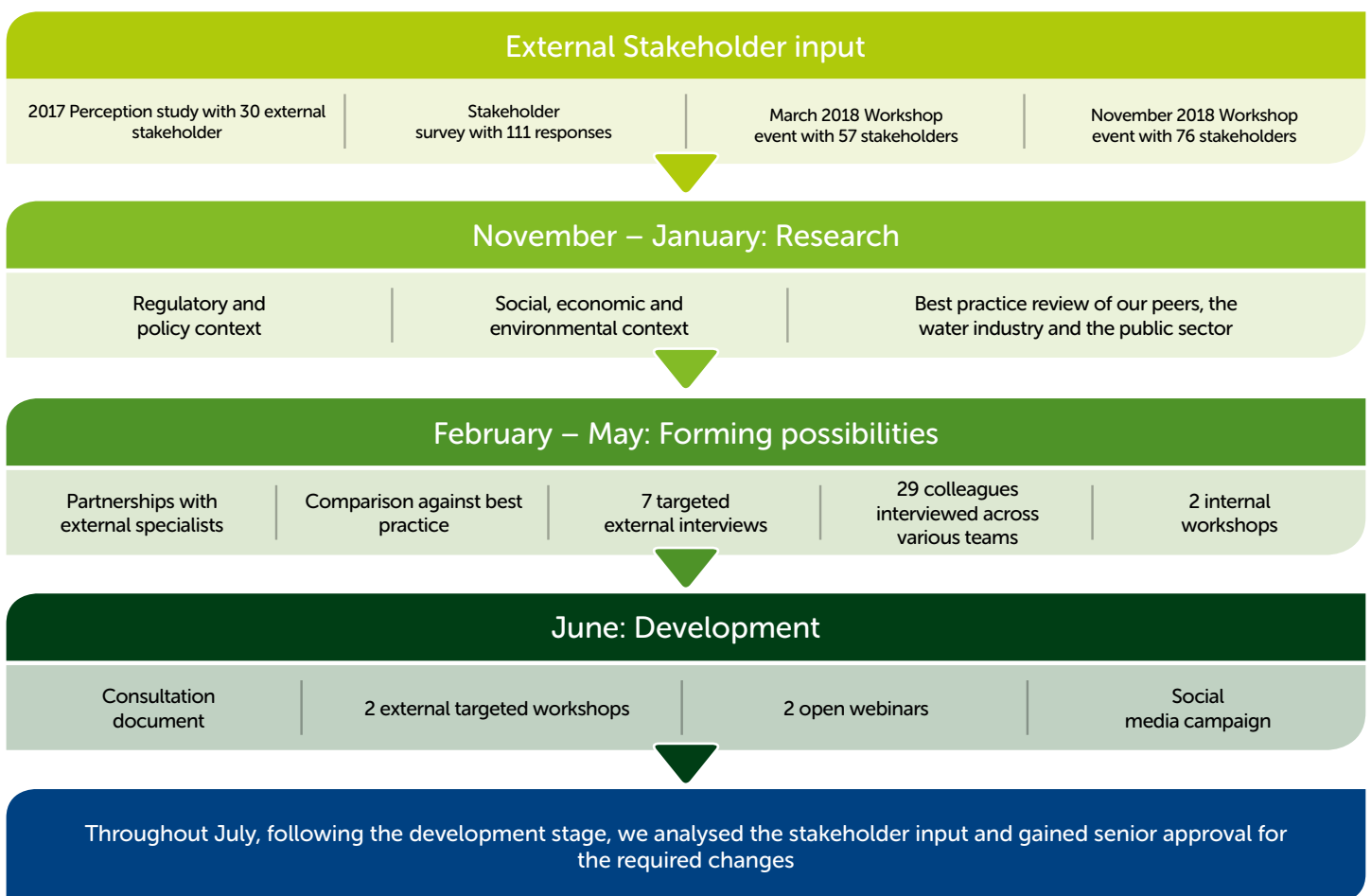
Throughout our engagement with our stakeholders, we have been encouraged to show ambition in our approach to sustainability. From taking action to address our own environmental impact and doing the right thing for society, to ensuring our decisions meet the needs of our customers and stakeholders, our approach to sustainability extends beyond climate change and the environment.

### Developing a new Stakeholder engagement strategy

When we first began engaging on our RIIO-T2 plan, it became clear that engagement with stakeholders and the need to be more customer and stakeholder focussed was critical. This position was clearly backed up through our engagement with our RIIO-T2 User Group.

While stakeholders felt that we are approachable and are good at communicating our plans; they saw a lack of engagement in early project development, and policy discussions. Developing our stakeholder input further, we agreed that being stakeholder led should be a key strategic theme of our RIIO-T2 Business Plan, ensuring stakeholder needs are the drivers of all our activities<sup>34</sup>.

We engaged with 185 stakeholders from all four categories (Experts, High Impact, Bill Payer and Everyone) to develop our new Stakeholder Engagement Strategy and supporting Action Plan<sup>35</sup>. This included stakeholders such as Consumer representative groups, Developers, Landowner representatives, and employees. Our approach to collaborating on the strategy is captured below, whilst our consultation report provides more detail on our engagement throughout July<sup>36</sup>.



**Figure 3** Methodology for the development of our Stakeholder Engagement Strategy

<sup>34</sup><https://www.ssen-transmission.co.uk/media/3450/she-transmission-stakeholder-workshop-november-2018-report-final.pdf>

<sup>35</sup><https://www.ssen-transmission.co.uk/information-centre/our-stakeholder-engagement/>

<sup>36</sup><https://www.ssen-transmission.co.uk/media/3559/stakeholder-engagement-strategy-consultation-report.pdf>

Stakeholder ask/comment	Our action
People want us to take on an ambitious step change in our stakeholder engagement. They want us to put the needs of stakeholders at the centre of what we do.	<p>We share this ambition and have shaped our strategy to show our commitment to this new approach, specifically creating a new purpose for engaging: "To effectively understand and include the needs of our stakeholders in our current network planning, development and operations, and in planning for a decarbonised future."</p> <p>We have also committed to establishing a RIIO-T2 implementation group, made up of stakeholder representatives, which will help challenge our decisions and ensure we meet stakeholder needs.</p>
Many want us to improve our engagement to limit stakeholder fatigue, provide more tailored events and increase our online channels.	We recognise we have not always followed best practice and have designed objectives to improve the experience stakeholders have when they engage with us.
Stakeholders asked us to be clear about our desired level of collaboration.	To be successful we need to increase and improve how we collaborate with stakeholders. We have designed a new engagement cycle model to help explain how we will work with stakeholders to develop mutually acceptable and agreed outcomes.
Stakeholders asked us to be clear on when and how their input has shaped our decisions.	Based on this input we developed a feedback model which shows that we will feedback regularly to stakeholders on their input. We have developed actions to deliver this in our Plan. In this a balance needs to be achieved as it is not cost effective to provide direct responses to large numbers of stakeholders. Therefore, we will ensure we can tailor our approach.
People noted that our business can be inconsistent in our communications, our methods of engaging and our approach to using stakeholder input.	We have developed objectives to take significant action to improve our processes and our culture of engagement. This includes setting up new systems to track stakeholder engagement, delivering training to all our employees and consistently rolling out processes across all teams.
People have stressed that we need to use stakeholder engagement to continuously improve and use their input to create stronger business plans.	We agree and have developed objective six to improve in this area. This includes further developing our future scenarios, improving stakeholder input into our work on innovation and engaging in a whole system approach.
We have been told that we need to drive policy forward and engage more actively in industry change, influencing where we can on behalf of our stakeholders who may not have a voice.	We share this sense of responsibility and have created objective seven as part of our efforts to work with stakeholders on improving the future. This includes actions such as developing a process to analyse what change means for our business and our stakeholders, with their input.



## Meeting Citizens advice principles in RIIO-T2

In May 2018, Citizens Advice published five principles that it considered needed to be met in order for the RIIO-T2 price control to really deliver for consumers<sup>37</sup>. Since then we have worked with them to adopt their principles in the development of our RIIO-T2 Business Plan. This engagement included a number of bilaterals, with both Citizens Advice and Citizens Advice Scotland, and their attendance at several User Group meetings, where they shared their views on our proposals and provided constructive challenges. The table below sets out how our Business Plan seeks to align with five key principles set out by Citizens Advice.



Stakeholder ask/comment	Our action
1. Profits are lower than the previous price control, to more accurately reflect the relative low risk for investors in this sector.	Based on the current market evidence, we have proposed a lower cost of equity than in RIIO-T1.
2. The value of any unspent funding for infrastructure projects is returned to consumers promptly and in full.	Our Certain View removes upfront funding for infrastructure without a strong investment case.
3. Industry business plans and regulatory decisions are directly informed by consumer (including future consumer) feedback and research.	We have co-created our Business Plan by holding over 3000 engagements (including bilaterals, events, social media) with over 50 organisations. We also engaged with 1700 consumers in our willingness to pay research and, following stakeholders' advice, we worked with consumer representatives.
4. Companies are required to publish complete information on their performance, financial structures, gearing and ownership.	We worked with Citizens Advice to develop a new reporting framework that is open and encompasses performance, financial and benefits to society.
5. Innovation funding and incentives support consumers in the transition to a low-carbon future, particularly those consumers in vulnerable circumstances.	Our approach to innovation and incentives is to deliver cost-effective, whole system outcomes for GB society. We have proposed measures to support vulnerable communities.

We have also worked with Citizens Advice to develop our Enhanced Reporting Framework which we openly consulted on in March<sup>38</sup>, the outcome of which will be greater transparency for our stakeholders and customers on our key reporting metrics and business, financial and social performance.

<sup>37</sup>[www.citizensadvice.org.uk/about-us/policy/policy-research-topics/energy-policy-research-and-consultation-responses/energy-consultation-responses/citizens-advice-riio-2-framework-consultation-response/](http://www.citizensadvice.org.uk/about-us/policy/policy-research-topics/energy-policy-research-and-consultation-responses/energy-consultation-responses/citizens-advice-riio-2-framework-consultation-response/)

<sup>38</sup>Reform in RIIO: Transparency, SHE Transmission consultation: [www.ssen-transmission.co.uk/media/3224/reform-in-riio\\_transparency.pdf](http://www.ssen-transmission.co.uk/media/3224/reform-in-riio_transparency.pdf)

## Sustainability

In developing our approach for sustainability, we have conducted thorough research with the help of consultants, and undertaken an extensive programme of engagement with other networks and all our stakeholder groups to understand their views and needs. This included development of partnerships with organisational stakeholders with an environmental or social remit including Scottish Natural Heritage. We have used all this information to inform our decisions and goals.

Since 2017 we have engaged with over 150 stakeholders to ensure our decisions are reflective of customer and stakeholder views. During our engagements, stakeholders have strongly and consistently emphasised their desire for us to show ambition and leadership in sustainability. For example, respondents to our RIIO-T2 Emerging Thinking Consultation argued for bolder action: “enable carbon free future”, “strive for Environmental Net Gain” and “welcome positive work on transparency”.

>150

People directly received our Sustainability Strategy, Sustainability Plan, Approach to Biodiversity Net Gain and RIIO-T2 Emerging Thinking consultations

53

Written responses received relevant to our Sustainability ambitions

83

People attended our large RIIO-T2 Stakeholder events which included topics on sustainability

6

Workshops held on Environment, Biodiversity Net Gain, Losses and Vulnerable Consumers; with 44 attendees joining these sessions

In our first consultation document on our Sustainability Strategy, “delivering a smart, sustainable energy future”<sup>39</sup> published at the start of 2018, we highlight the key issues relevant to each group as identified from our engagement. It includes details on how we are addressing those issues and how they have shaped our ambitions for the future. This included establishment of the comparative materiality of different environmental issues which was a specific feature of the consultation. We used the UN sustainable development goals as the categories for consideration. Having carried out our own materiality assessment we asked stakeholders for their views and adjusted our selection and order of material issues based on this feedback.

Following this consultation we engaged extensively, from working with experts to determine how we can deliver our plan, to consulting openly with everyone on our performance during the first year of delivering our new strategy<sup>40,41</sup>. Taking this engagement approach has enabled us to develop and continuously improve to meet our stakeholders’ needs, for example we published our “Sustainability Strategy Update” this summer<sup>42</sup>. This latest document reflects on stakeholder’s input and the rapidly changing world, such as the impacts associated with climate change and the rate of global warming. This input has shaped our Business Plan and we will continue to engage in line with our new stakeholder engagement strategy.

An example of this engagement includes our Operations Stakeholder Workshop, where we discussed SF<sub>6</sub> with the 46 stakeholders who attended<sup>43</sup>. Stakeholders were very much of the view that alternatives to SF<sub>6</sub> should be used wherever possible, given its impact on the environment. In response to this, with input from stakeholders across the industry such as the HSE (Health and Safety Executive) and the ENA Switchgear Assessment Panel, we put forward a proposal to reduce our SF<sub>6</sub> emissions in our draft RIIO-T2 Business Plan.

<sup>39</sup><https://www.ssen-transmission.co.uk/media/2568/ssen-sustainability-report.pdf>

<sup>40</sup><https://www.ssen-transmission.co.uk/media/3215/our-sustainability-plan-consultation-report.pdf>

<sup>41</sup><https://www.ssen-transmission.co.uk/media/3520/ssen-sustainability-annual-statement-2018-19.pdf>

<sup>42</sup><https://www.ssen-transmission.co.uk/media/3498/ssen-riio-t2-sustainability-strategy-update.pdf>

<sup>43</sup><https://www.ssen-transmission.co.uk/media/3385/she-transmission-operations-stakeholder-workshop-report-pdf.pdf>

Following input from Ofgem, the User Group and the Challenge Group, we have strengthened our proposal for SF6 emissions. Using input from our stakeholders (which included several engagements with our supply chain such as GE, Siemens and ABB) we have developed a specific Strategy for the Management of Insulation & Interruption Gases, as well as four targeted actions in our Sustainability Action Plan. These set out our plans to reduce our leakage rate and minimise our SF6 mass holdings increasing due to network growth. Details on this, including the challenges we received, can be found in our Sustainability Action Plan<sup>44</sup>.

The table below includes some of the input stakeholders provided along with our response. For further information please see the sustainability area of our website<sup>45</sup>.

Stakeholder ask/comment	Our action
<p>We have received strong support for our sustainability strategy and action plan receiving comments such as:</p> <p>Scottish Natural Heritage: "We welcome SSEN Transmission's leadership in sustainability, which has been demonstrated during the RIIO-T1 period and which we are keen to support during the RIIO-T2 period. Our view is that the proposals set out in the Draft Business Plan can help to deliver a Nature Rich Future for Scotland."</p> <p>SEPA: "There is a clear commitment by Scottish and Southern Electricity Networks to go beyond compliance to deliver biodiversity gain that is additional to what would happen anyway. Your commitment to enhancing biodiversity across the whole of your portfolio, with staff working to this objective from board room to contractors, demonstrates leadership to the wider strategic infrastructure sector."</p>	<p>This strong stakeholder support has encouraged us to continue our approach to sustainability. Working with stakeholders and developing appropriate partnerships to choose the correct actions.</p>
<p>The User Group challenged us to justify our Consumer Value Proposition for sustainability by demonstrating how we will go above and beyond the "new norm".</p>	<p>With the support of consultants, we have undertaken a desk-based benchmarking analysis to compare 11 peer organisations sustainability plans (including other Transmission Owners, Network Companies, other UK regulated business and peer organisations) to define what is the norm and what is ambitious and leading action. Each section of our action plan includes a summary of the benchmarking findings and how our proposed action compares against our leading peers. It is important to note that this benchmarking seeks to provide an indication of what sustainability best practice looks like for our company and what further action we can take – which has also informed our Consumer Value Proposition.</p>
<p>Stakeholders highlighted the need for increased content and targets on resource use in our sustainability strategy.</p>	<p>Using the input from our first consultation on our strategy we developed an additional ambition on 'Optimising resources' to address this gap. This ambition highlights our aim to improve though minimising waste, using resources more efficiently and, increasing reuse and recycling of waste.</p>
<p>Our stakeholders have told us to adapt to the consequences of climate change as the Met Office recently published detailed analysis that indicates there will be further and significant climatic changes this century.</p>	<p>Following this input, we have broadened our ambition focus to include climate change mitigation and adaptation and retitled the ambition, Tackling Climate Change. To deliver this we have: set the ambition to reduce our scope 1 and 2 greenhouse gas emissions to achieve the level of decarbonisation required to limit rising global temperatures to 1.5°C at the trajectory to achieve Net Zero emissions; as well as collaborate with our supply chain to target reductions in our scope 3 carbon emissions.</p>

<sup>44</sup><https://www.ssen-transmission.co.uk/riio-t2-plan/sustainability-action-plan/>

<sup>45</sup><https://www.ssen-transmission.co.uk/sustainability-and-environment/sustainability-strategy/>

<p>Connecting for Society was developed to address key issues for a significant majority of our stakeholders, from energy consumers to Suppliers and contractors. A particular area of focus was raised by our local community energy customers, who highlighted issues around connecting.</p>	<p>We recognise that we have a responsibility to ensure our customers, communities around our operations and society at large all thrive as a result of our operations. To address our stakeholders input in this area, we are committed to using local supply chains, supporting community and locally owned renewable energy projects through our new 'local and community energy policy statement' and improving whole system planning through our new 'Whole System Strategy'.</p>
<p>Our stakeholders and society expect us to support and contribute to the communities in which we operate. In line with this our Stakeholder Advisory Panel challenged us to go further and address consumer vulnerability.</p>	<p>Through engagement on this topic we came to the agreement that the central provision of support services should be provided by the most capable and directly relevant organisation. Nevertheless, we believe we can play a supporting role in addressing consumer vulnerability. Therefore, we have broadened our ambition to focus on meeting the needs of vulnerable consumers. To do this we have created a series of actions such as co-ordinating activities with the Distribution Network Operator (DNO), local authorities and other agencies to meet the needs of vulnerable consumers.</p>
<p>People support our existing VISTA policy and they want to see it developed further.</p>	<p>We have received support to further engage with stakeholders during the next price control to test the appetite and potential methodologies for extending our VISTA policy to areas out with National Parks and National Scenic areas (due to the unique sensitives of many Scottish landscapes in the North of Scotland). As a result, we have updated our VISTA policy to include a commitment to do this and where appropriate, outline potential future schemes that may be appropriate to include in future price controls.</p>
<p>Government and regulators, other network companies, shareholders and employees felt that growing careers was a key issue for us to address. As part of our engagement in this area some stakeholders did not highlight Inclusion and Diversity (I&amp;D) as a priority.</p>	<p>Whilst we value our stakeholder's input, we know from research that an inclusive and diverse workplace is more productive, creative and results in better outcomes for all stakeholders. This aligns with Ofgem's and the Government's requirement for the energy industry to tackle I&amp;D and make real improvements. To address this, we have set future targets based on our local demographics to ensure our workforce reflects the diversity of our communities in which we serve. We will also carry out employee training to promote I&amp;D; and ensure our job adverts are inclusive supported by training our hiring managers in I&amp;D.</p>

## Local and community energy policy statement

We have engaged with experts and high impact stakeholders on how we can support low carbon communities. This has included:

- Attending and presenting at events such as the Westminster Energy, Environment and Transport Forum on Local and community energy in the UK<sup>46</sup>, CARES conference<sup>47</sup>, All Energy<sup>48</sup>, Scottish Renewables Annual conference<sup>49</sup>, and Ofgem's local energy conference;
- Conducting bi-laterals with the Department for Business, Energy and Industrial Strategy, Scottish Government, Local Energy Scotland, Community Energy Scotland, Scottish Hydro Electric Power Distribution and Scottish Renewables; and,
- Holding one roundtable event with Community energy Scotland, Awesome Energy, Local energy Scotland, Delta-EE and SSEN Distribution (SEPD Future Networks).

With this input we have developed a specific 'Local and Community Energy Policy Statement' to address how we will deliver for our stakeholders. The table below demonstrates the key themes stakeholders raised and how we are responding to those in our RIIO-T2 Business Plan.

Stakeholder ask/comment	Our action
Stakeholders encouraged us to work on Local Energy Plans in collaboration with other parties including local authorities, electricity distribution companies, gas distribution companies, transport companies and other utilities.	Our Local and Community Energy Policy Statement sets out how we will contribute to and support the development of local energy plans and support the delivery of local energy. We are not proposing to develop local energy plans in isolation. This includes using collaboratively developed local energy plans as an input to our local energy scenario planning.
Stakeholders highlighted the lack of expertise for early stages of projects as a barrier and that generators don't have a view of demand and how to link up with others.	We've listened to this and addressed it via our new stakeholder engagement strategy which has the strategic objective to 'Enable and encourage stakeholder input by providing easy access to ourselves and appropriate information as well as ensuring our communications are inclusive.' We have also created specific initiatives within our Commercial and Connections Policy including creating a live 'capacity availability map' on our website and enabling connecting customers co-location and collaboration.
People find it difficult to identify contacts and relevant information, as well as understanding the role of Transmission and Distribution (e.g. responsibilities and dependencies).	As part of our stakeholder Engagement Action Plan we have documented our action to provide open information on our organisation structure and teams responsibilities. We have also committed to continue working with SSEN Distribution to improve how we engage with shared stakeholders and develop understanding of our separate businesses.
Stakeholders have told us that they struggle with the complex language and terminology used in lengthy documents.	Consistent with our new Enhanced Reporting Framework developed Citizens Advice, we have developed an action to ensure all engagement activities meet current and future stakeholders' needs. This will include using free tools to create public documents with high readability scores for the average GB adult and adopting the Scottish Governments' principles of communication support needs.
We've learnt from stakeholders that some processes aren't agile enough to support decentralised generation (e.g. current Queue Management).	Our new Stakeholder Engagement Strategy and Innovation Strategy are driving a proactive culture that facilitates and drives change for the benefit of our stakeholders. In line with this, our new Commercial and Connections Policy includes our commitment to continue working with the ESO and the ENA's Open Networks project to create and utilise a queue management service taking lessons learned from the Alternative Approach on Orkney.

<sup>46</sup><https://www.westminsterforumprojects.co.uk/publication/developing-the-local-energy-sector-19>

<sup>47</sup><https://www.localenergy.scot/news-and-events/2019/march/join-us-at-the-cares-conference-2019/>

<sup>48</sup><https://www.all-energy.co.uk/Conference/Conference-Overview/>

<sup>49</sup><https://www.scottishrenewables.com/events/srac19/>

## Connections

To ensure our Commercial & Connections Policy was responsive to the needs of our current and future customers we developed a targeted stakeholder engagement plan to build upon the input we received during RIIO-T1. This involved a phased approach, demonstrated in the figure below.

In total we engaged directly with over 100 stakeholders from all four stakeholder groups. This was achieved by: conducting bilateral discussions with connections customers and National Grid ESO; carrying out online communications through emails and publishing an open consultation on our website; gathering input from 64 people through targeted face to face events in February and May 2019 and online webinars in April and May 2019; and attending and presenting at industry events such as National Grid Customer seminars, National Grid RIIO-T2 events, Operating Code 2 forums<sup>50</sup> and All Energy.

We began building upon the stakeholder input we received during RIIO-T1 in November 2018 through our Transmission Connection Process Consultation Document<sup>51</sup>. After gathering further input, we developed a draft approach and asked our stakeholders and connecting customers what they thought of our aim and ambition. The majority were satisfied with 67% of respondents stating they were either satisfied or very satisfied (28% scored neutral). We then published our draft RIIO-T2 Business Plan for consultation in June 2019. During this engagement we asked specific questions on our Commercial & Connections Policy. We received support for our approach from stakeholders such as Scottish Renewables, who believe our “Connections policy changes will address all things members have been saying”, and have published a revised policy with our final Business Plan submission to incorporate additional information requests<sup>52</sup>.

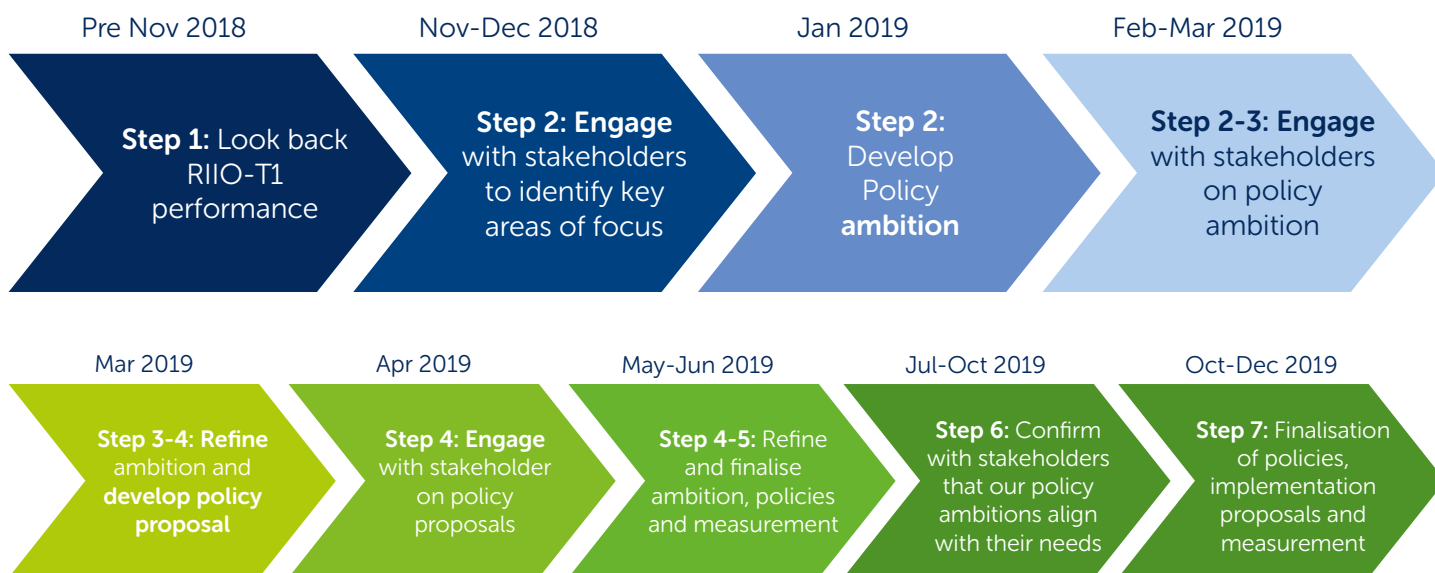


Figure 4 Methodology for the development of our Commercial and Connection Policy

<sup>50</sup>National Grid ESO host these forums to discuss future outage plans and any potential issues with outages.

<sup>51</sup><https://www.ssen-transmission.co.uk/media/3076/ssen-connections-and-whole-system-booklet-22101-web-single-pages.pdf>

<sup>52</sup><https://www.ssen-transmission.co.uk/media/3664/t2bp-bpc-0006-draft-business-plan-consultation-report.pdf>

To see some specific examples of customer feedback and how this has fed into our policy please refer to 'Appendix 1: Stakeholder feedback' in our Commercial & Connections Policy published in July<sup>53</sup>. The presentation slides and detailed engagement reports, for our workshops and seminars can be found on our website<sup>54</sup>. These document what was discussed during those sessions including our stakeholders' input.

Stakeholder ask/comment	Our action
<p>Stakeholders asked us to make more connection information available from our network, so they can plan ahead for their projects.</p>	<p>We have developed the initiative to 'equip customers with digitised information' which is being delivered through our Stakeholder Engagement Action Plan. In that document, we have committed to developing a live 'capacity availability map' on our website, and a new online portal for connecting customers.</p> <p>Stakeholders' were most supportive of our digitised information initiative (92%)<sup>55</sup>; in particular Small and Medium Enterprise stakeholders who favoured the business efficiency savings. During our draft Business Plan consultation, we received praise on our efficient and collaborative development of our initiative on our customer portal.</p>
<p>Connecting customers told us that they require more flexibility during the earlier stages of the application process. They told us that the cost and information provided within the products available before application does not suit their current needs. The budget estimate does not contain enough information and a detailed feasibility study can be expensive and time consuming.</p>	<p>We acknowledge that the application process for connections rests with the ESO. In our draft Business Plan, we committed to develop a new Offer in Principle product, by which connecting customers can choose to apply for during the scoping stage. We remain committed to delivering this and will work with the ESO and the wider industry to develop this new product which we believe will enable more efficient exploration of flexible options, and may provide customers with a more economically efficient or quicker connection when compared to traditional network reinforcement. The new 'offer in principle' product, should also hold the customer's place, for the optimal solution, for a limited period. This should provide the customer with enough time to consider the solution and whether they wish to progress to the formal application stage where more in depth studies and costings will be produced.</p>
<p>From engagement with remote islands customers during RIIO-T1 and engaging with customers during our RIIO-T2 development, people told us that one of the main barriers to connection was the fixed capacity queue.</p>	<p>To help address this during RIIO-T2 we have committed to continue working with the ESO and the ENA's Open Networks project to develop an approach to queue management which can be rolled-out across GB. By ensuring that we facilitate grid optimisation where possible, we are preventing capacity being held up by slow or non-moving projects, connecting renewable generation to the grid in a timely fashion with potentially significant cost savings for consumers, as well as contributing to Net Zero targets.</p>

<sup>53</sup><https://www.ssen-transmission.co.uk/media/3405/ssen-riio-t2-commercial-connections-policy-paper-28pp-22782-artwork.pdf>

<sup>54</sup><https://www.ssen-transmission.co.uk/riio-t2-plan/>

<sup>55</sup>92% of customers who attended our May engagement events were supportive of the optimal solution initiatives the remaining 8% were neutral.



<p>Stakeholders asked us to break down the barriers of outage planning and become more flexible.</p>	<p>We have listened to this and will tailor our services to meet the needs of our energised customers through our new Energised Engagement Service. Through this we will provide customers with indicative<sup>56*</sup> outage plans for local outages ('local means electrically local to the connection which would not cause a wider system constraint) up to 5 years in advance, irrespective of where they are in the customer experience cycle. Customers with non-firm arrangements would also be able to request network constraint data specific to their connection, which it is envisaged will be provided through the online portal. Our connected customers will have a dedicated contract manager and, following full implementation of our proposed digital tools, will be able to access all the information and services relating to their connection through the online portal.</p> <p>The 5 year rolling local outage plans will be provided on an indicative basis until plans are confirmed with the ESO one year prior to the planned outage.</p> <p>In addition we are developing a new 'outage solution' product which will provide customers with the option to apply and pay for an accelerated outage where this has no wider adverse impact upon network operation, other customers or the GB consumer (for example by paying for staff overtime and/or additional resource requirements to meet longer working patterns and shorten outage periods); or to have a temporary non-firm alternative connection arrangement in place (for example, by temporarily connecting to an alternative part of the network through ANM).</p> <p>The customer would cover any extra costs (above those already planned to be spent under the Networks Access Policy) associated with acceleration of the outage or alternative connection arrangements.</p>
<p>Stakeholders asked us to improve industry frameworks and policies on their behalf.</p>	<p>In response to this we have developed the Customer Advocacy initiative which aims to provide customers with up-to-date information on industry policy changes through: targeted events to educate customers on current industry practices; proactively seeking feedback on policy change; and advocating on behalf of customers with stakeholders such as ENA, Ofgem and the Scottish and UK Government.</p>

<sup>56\*</sup>The local outage plans will be indicative until plans are confirmed with the ESO 1 year prior to the outage; the plans may be subject to change and hold NO commercial agreement with the customer.



<p>Our Stakeholders asked us if we could enable collaboration opportunities between customers and support local communities.</p>	<p>To deliver this for our stakeholders our new Customer Collaboration service aims to enable greater collaboration between ourselves and customers, and between customers.</p> <p>To achieve this we propose to introduce:</p> <p>A 'register interest' feature on our availability map digital tool, allowing customers to provide details of their potential projects and whether they are interested in co-location and/or consortia opportunities between customers, for example, in a constrained area of the network it may be prohibitively expensive for a wind project alone to progress reinforcement; however, combined with other wind projects, or another generation technology such as marine, storage or solar it may become economically viable. Our proposals could also consider options and opportunities for already connected customers to collaborate.</p> <p>In addition, a customer forum page will be developed on our website for customers to discuss key topics, providing an area for customer knowledge and understanding to be enhanced. Areas of interest and debate for customers will provide us greater insight, pinpointing which topics are of interest to customers and where we can make improvements to our services.</p> <p>By enabling collaboration between customers via either co-location or consortia we will ensure our network is being utilised as efficiently as possible which will provide an overall saving the GB consumer.</p>
<p>Stakeholders asked us to review our goal to deliver every connection on time.</p>	<p>We have updated our goal to 'By 2026 we will provide every network connection, tailored to meet our customer's needs, on time, on budget, and to our customers' satisfaction'.</p> <p>This will be facilitated by digitising our processes and making more information available through online tools, enabling customers to make more informed investment decisions with regard to their projects at the outset, and allowing us to optimise grid utilisation, benefiting the customer, the environment and end consumers.</p> <p>In addition, we commit to gathering and acting upon responses to our new stakeholders' satisfaction survey aimed at those stakeholders impacted by transmission infrastructure projects. The results of which will enable us to take appropriate and effective action to improve. In further support this, our new Stakeholder Engagement Strategy and Action Plan will create improvements as we will engage earlier and strive to achieve mutually acceptable outcomes.</p>

## 10. Next Steps on engagement<sup>57</sup>

We will submit a complete final business plan to Ofgem and the RIIO-2 Challenge Group on 9 December 2019. Our final December Business Plan will be published on our website: <https://www.ssen-transmission.co.uk/riio-t2-plan/>.

In line with Ofgem guidance, if we exclude any information from the published plan on grounds of commercial confidentiality (or any other reason), the reasons for such exclusions will be clearly and comprehensively set out in an explanatory statement published alongside the plan. Ofgem will not publish the final business plans.

### Reports produced by the User Group

The User Group will submit their report to Ofgem on Friday 20 December 2019. In their report, the User Group will highlight areas of agreement and disagreement, including how we have responded to challenges that have been raised through the Enhanced Engagement process. Their report will also highlight where there is disagreement amongst members of the User Group. In addition to publishing the final Business Plan, we will publish the User Group report on our company website on 23 December 2019, <https://www.ssen-transmission.co.uk/talk-to-us/user-group/>.

### Report produced by the RIIO-2 Challenge Group

Ofgem currently expect the report from the RIIO-2 Challenge Group to be submitted to them by 10:00 on 6 January 2020. Ofgem are currently planning to publish this report on 6 January 2020.

### Engagement between the Ofgem RIIO-2 team and SHE Transmission

During the RIIO-2 Challenge Group's review of the 9 December final business plans, Ofgem teams will provide technical support to the RIIO-2 Challenge Group, where necessary to assist the Group in their review and challenge of our business plan. As well as providing the above technical support to the Group, the Ofgem RIIO-2 team will continue regular dialogue with SHE Transmission teams in relation to clarificatory questions on the final business plans ahead of Draft Determinations.

### Call for Evidence

After submission of our final Business Plan, Ofgem will publish a "Call for Evidence" in December 2019, which will provide stakeholders with the opportunity to provide justified and evidenced views on the network companies business plans. The Call for Evidence is expected to finish in February 2020 and a resulting report should be published in advance of the Open Hearings agenda being shared.

We encourage stakeholders to provide views to Ofgem through this process, particularly where they are able to provide additional evidence in support of, or challenge to the plan.

<sup>57</sup>Based on updated guidance: [https://www.ofgem.gov.uk/system/files/docs/2019/11/enhanced\\_engagement\\_guidance\\_final.pdf](https://www.ofgem.gov.uk/system/files/docs/2019/11/enhanced_engagement_guidance_final.pdf)

## Open Hearings

Following our Business Plan submission, between mid-March 2019 – mid-April 2020, Ofgem will be undertaking one regional Open Hearing per company which will focus on company-specific issues based on their business plan. This is in addition to a separate Open Hearing for all companies on the Cost of Capital.

Ofgem will be adopting a Select Committee style panel to moderate the Open Hearings led by the Chairman, Martin Cave. The Open Hearings will consist of three parts: an introduction where we will have the opportunity to present on certain aspects of our Business Plan; the panel led Q&A which will stem from responses to Ofgem’s Call for Evidence as well as the responses from the Challenge Group, User Group and other stakeholders; and an open Q&A where we will be asked further questions from stakeholders and other parties on topics discussed at the hearing, or any other proposals in our Business Plan.

The Open Hearings will be open to all interested stakeholders and the Media may also attend if they are interested. For those that cannot attend, a transcript of the event will be published on Ofgem’s website. Stakeholders will be given the opportunity to ask unprepared questions during the open Q&A, but these must be relevant to our RIIO-T2 Business Plan.

The final agenda for the open hearings should be shared in late February 2020. We encourage stakeholders to attend the Open Hearings and to use this opportunity to submit questions on our final Business Plan. The User Group chair and any experts from the group that the chair may wish to bring to support her, will attend the Open Hearing for our Business Plan.

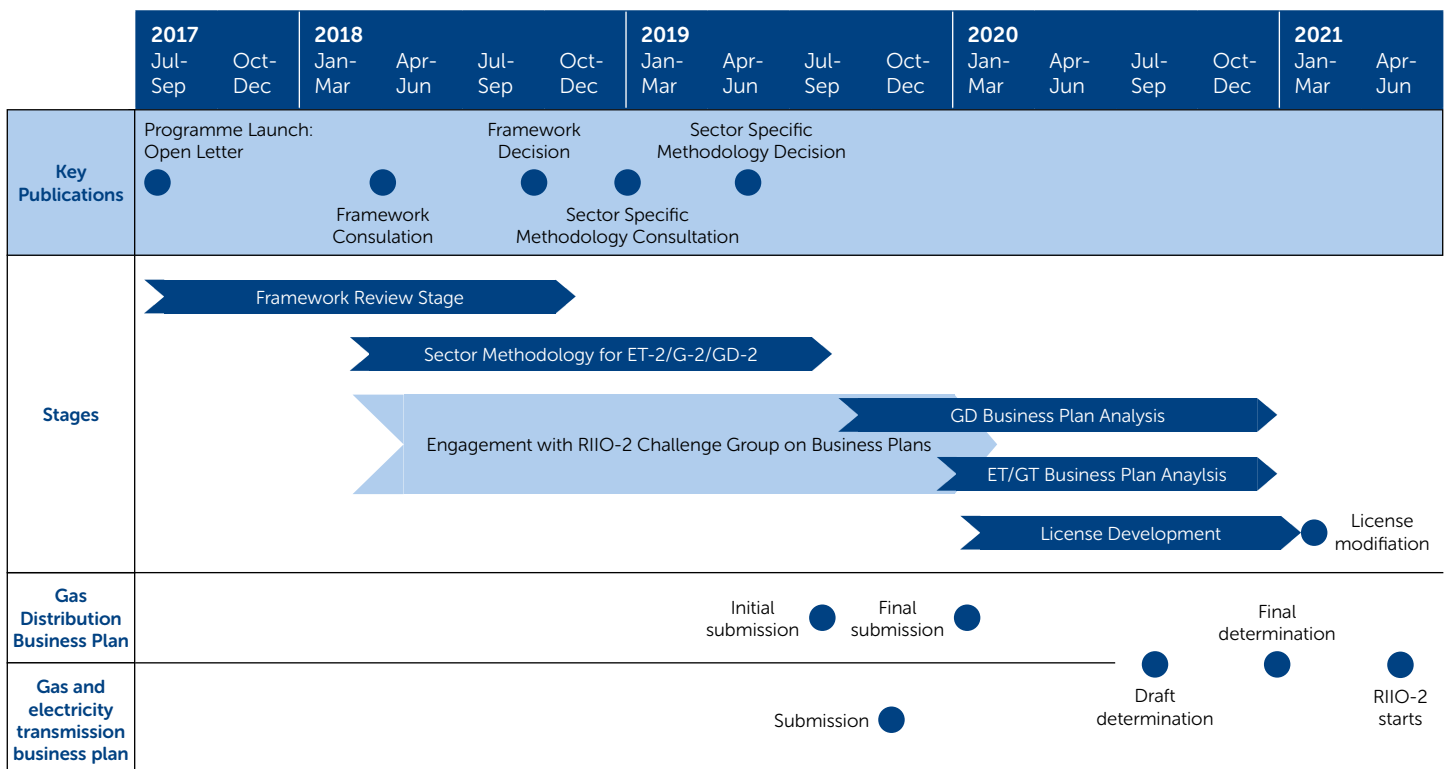


Figure 5 RIIO-2 indicative implementation timeline (for gas distribution, gas transmission and electricity transmission price controls)<sup>58</sup>

<sup>58</sup>[https://www.ofgem.gov.uk/system/files/docs/2018/04/riio-2\\_enhanced\\_stakeholder\\_engagement\\_guidance\\_v13\\_final.pdf](https://www.ofgem.gov.uk/system/files/docs/2018/04/riio-2_enhanced_stakeholder_engagement_guidance_v13_final.pdf)



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Electricity Networks

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