Connecting with you

**Stakeholder engagement**

Summary report to inform TransGrid’s 2018/19 to 2022/23 regulatory period
About TransGrid

As the operator and manager of the main high voltage transmission network in NSW and the ACT, we connect generators, distributors and major end users to the electricity they need, when they need it.

Our core role is to provide safe, reliable and efficient transmission services to NSW, the ACT and the National Electricity Market.

We take this role seriously. While transmission is a small component of the electricity bill – around 7% for households and businesses – we do not believe that energy users should pay more than necessary for a reliable electricity supply.

It is our responsibility to ensure we operate our business as efficiently as possible, to drive down costs and promote strong customer service.

Our network comprises 99 bulk supply substations and more than 13,000 kilometres of high voltage transmission lines and cables. Interconnected to Queensland and Victoria, the network provides a strong electricity system that enables energy trading between Australia’s three largest states along the east coast and supports a competitive wholesale electricity market.

TransGrid within the electricity supply chain.
Objectives, principles and drivers

TransGrid engages with stakeholders on business decisions that they can influence. Our engagement is driven by the following framework and principles:

**OBJECTIVES**
- Effectively engage with stakeholders on things that they can actually influence based on policy, projects and planning.
- Be leaders in stakeholder engagement by embracing stakeholder input and be recognised as a business that makes changes based on stakeholder feedback.
- Integrate engagement and outcomes into our decision making and business as usual processes as a result of the engagement and feedback received.

**PRINCIPLES**
- **Accessibility**
  Identify key stakeholders and work with them throughout a project lifecycle.
- **Transparency**
  Open and honest feedback will be sought and incorporated into planning processes.
- **Communication**
  Proactively develop two-way communication channels tailored to the needs and interests of stakeholders.
- **Inclusiveness**
  Through early and open engagement we will integrate views of stakeholders into our decision making.

**DRIVERS**
- **Policy**
  Policy frameworks play a core role in how we shape our business.
- **Plans**
  We actively seek stakeholder views on our business plans.
- **Projects**
  We aim to work with stakeholders through the whole of a project life-cycle.
Proactive, transparent and with a genuine desire to inform, TransGrid has continued to engage on our business plans and challenges faced across the National Electricity Market (NEM).

In 2016, we established the TransGrid Advisory Council which brought together key stakeholders to join a panel of consumer representatives, customers and large energy users. The council provides advice to TransGrid on strategic policy issues, business plans and offer consumer insights to improve the value of TransGrid’s transmission services to the state.

Building upon our previous activities, we’ve evolved our engagement program to ensure it aligns with TransGrid’s Revenue Proposal which will be submitted in January 2017 to ensure feedback continues to genuinely inform our business direction.

### Identifying our stakeholders and understanding relationships

We recognise stakeholder groups have differing levels of knowledge and interest in our business which is why we tailor our engagement program and use a variety of channels; including face-to-face and one-on-one meetings, online engagement, formal submissions, workshops, forums and roundtables.

### Who we engage with

<table>
<thead>
<tr>
<th>TransGrid Advisory Council</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue Proposal Working Group</td>
</tr>
<tr>
<td>Consumer &amp; business reps</td>
</tr>
<tr>
<td>Consumer &amp; business reps</td>
</tr>
</tbody>
</table>

**Business as usual**

“In the experience that I have with other businesses, this stakeholder engagement is leading practice. This is very good.”

TransGrid Advisory Council member
TransGrid Advisory Council

An executive-level forum which provides ongoing advice to TransGrid. Members have been appointed based on their level of industry expertise to jointly provide high level advice and feedback on areas such as price, infrastructure, investment and innovation to ensure the customer and consumer perspective is considered in TransGrid’s decision making.

Members
- Australian Industry Group
- City of Sydney
- Energy Consumers Australia
- Energy Users Association of Australia
- Goldwind Australia
- New South Wales Council of Social Services (NCOSS)
- Snowy Hydro
- St Vincent de Paul
- Total Environment Centre (TEC)
- Tomago
- Woolworths

Objectives
- Act as the point for consultation on strategic policy issues and key planning decisions at an executive level
- Provide high level advice and feedback on programs, initiatives, service and tariff issues to ensure the customer and consumer perspective is considered in TransGrid’s decision making
- Provide a regular and consistent forum for information sharing and input on emerging issues and matters affecting the future of the grid
- Identify an annual agreed set of priorities for discussion to ensure the group remains focussed
- Enable consultation on the Revenue Proposal for the next regulatory period as well as other regulatory milestones or policy changes

Revenue Proposal Working Group

To ensure that customers, consumers and interested parties have an opportunity to tangibly influence TransGrid’s approach to the Revenue Proposal which will be submitted in January 2017, TransGrid established the Revenue Proposal Working Group, a subsidiary of the TransGrid Advisory Council.

The working group is advisory in nature and its purpose is to provide advice to TransGrid on areas relating to operational and capital expenditure.

Members
- City of Sydney
- New South Wales Council of Social Services (NCOSS)
- Public Interest Advocacy Centre (PIAC)
- Sydney Water
- Total Environment Centre (TEC)
- University of NSW
- Visy

Responsibilities
- Provide advice to TransGrid in relation to customer and consumer needs, issues and services across relevant areas outlined in TransGrid’s Revenue Proposal
- Act as a link to and from TransGrid and broader stakeholders on its 2018/2019 to 2022/23 regulatory control period to help open the conversation across the industry
- Report back to the TransGrid Advisory Council and facilitate customer and consumer feedback from organisations on the Working Group’s agenda items
The year in review

Stakeholder engagement in 2016 has been carried out in a strategic and focussed way, including:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Jan</th>
<th>Feb</th>
</tr>
</thead>
<tbody>
<tr>
<td>TransGrid Advisory Council</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenue Proposal Working Group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NSW Energy Forum</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power Sydney’s Future Forum</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Board &amp; Executive debrief</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transmission Pricing Methodology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Online engagement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ongoing face-to-face</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conferences</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Topics of engagement

We know that stakeholders are interested in a range of issues that impact both our business and the industry more broadly. Topics that we consulted on included:

- Supporting a low carbon future
- Transmission annual planning
- Innovation and technology
- TransGrid’s strategic direction and vision for the future
- NSW Electricity Transmission Reliability Standards
- Asset strategy and potential capital investments
- Operational expenditure
- Transmission Pricing Methodology
- NSW Climate Change Policy
- Weighted Average Cost of Capital (WACC)
- Sustainability of the NEM

“In terms of genuine consumer engagement TransGrid has gone further and faster than any other network business I have experience with. They are the leading practitioners in sharing the evidence base for their proposed investment and spending plans, in sufficient detail and at an early enough stage to provide consumers with a decent opportunity to consider and provide input. I believe the dialogue with consumers is improving the quality of TransGrid’s proposals.”

Tennant Reed, Principal National Adviser - Public Policy, Australian Industry Group
Engagement

What we heard

Stakeholders would like:

➢ Clarity on how TransGrid defines a customer, given that a transmission business has no direct contact with household energy users
➢ Strategic stakeholder engagement methods, including: reporting insights back to the business to support informed decision-making, strategic approach to regional engagement and evolution of household/consumer engagement
➢ Clarity on how TransGrid determines what household energy users want, and how business decisions will affect them
➢ Greater collaboration between transmission and distribution services, particularly regarding reliability standards
➢ TransGrid to invite customers to attend stakeholder engagement events and listen to their feedback
➢ Confirmation of how TransGrid balances stakeholder and shareholder priorities.

Stakeholders support:

➢ Continuation of TransGrid’s improved approach to engagement
➢ Further understanding of household energy users, including: what they value and expect from energy transmission, their level of understanding and interest in electricity transmission
➢ Stakeholder engagement that puts TransGrid issues in industry context, rather than focussing on TransGrid-specific initiatives
➢ Continuation of stakeholder engagement methods which gather insights that genuinely influence business decisions. This may include early engagement, engagement activity driven by TransGrid staff who have working knowledge of projects and concepts, and ensuring that the business is open to change that’s based on stakeholder feedback
➢ Ensuring that before stakeholders are invited to give feedback; they understand key concepts, reasons for engagement, and the decisions their comments may influence
➢ Further educating consumers about how transmission contributes to the energy supply chain, so TransGrid can demonstrate its role and value in relation to what TransGrid services enable, rather than the technical details of what the business does.

What we did

➢ Undertook stakeholder and customer analysis including why we engage, then reported back on this to the TransGrid Advisory Council
➢ Integrated advice received into feedback documents which were circulated to TransGrid’s leadership team
➢ Streamlined our engagement program to ensure that we engage with regional communities that are directly impacted by our business
➢ Held a joint engagement forum with Ausgrid to discuss the need and potential solutions for future reliability of the electricity supply in the Inner Sydney area
➢ Ensured that customers and consumer representatives were included in our engagement forums so that they have an opportunity to provide ongoing advice to the business.

“We think TransGrid’s consultative forums are of great value and are immensely useful for industry-consumer dialogue. TransGrid does a fantastic job of engaging with various consumer stakeholders.”

Consumer representative
Powering Sydney’s Future

What we heard

A reliable, affordable and sustainable electricity supply is essential to Sydney’s future. Demand forecasts and the condition of some assets operated and managed by TransGrid and Ausgrid show that Inner Sydney is likely to need an updated energy solution in place by 2022-23. The Powering Sydney’s Future project invites stakeholder feedback on network and non-network solutions to service current and future electricity needs.

**Stakeholders would like further information about:**

- Project scope, including:
  - Which cables may be replaced
  - When they need to be replaced
  - What percentage of the network the affected cables account for
  - Whether decommissioning cables could impact reliability
  - Capacity of affected TransGrid and Ausgrid cables
  - How work may be done.

- How TransGrid has engaged with Ausgrid and non-network service providers to identify a solution to Inner Sydney’s energy supply

- How projected electricity demand may impact the project, including:
  - Seasonal and weather event demand variation
  - How the N-1 IPART reliability standard may impact the project
  - How AEMO’s national forecast could apply to NSW
  - How TransGrid calculates demand
  - Whether non-network demand can be forecast accurately
  - How other countries manage demand.

**Stakeholders asked:**

- Whether the RIT-T process privileges network solutions over non-network solutions, and if it will result in selection of the most cost-effective solution

- If consideration has been given to emerging technologies and to integrating non-network solutions with the grid

- About the duration of contracts that TransGrid may offer to non-network service providers

- If demand management and a smaller capital investment would meet the need.

> “Over the past 12 years, I have dealt with several transmission companies that are considering similar programs. It is clear to me that TransGrid in particular has been more forthright and open with stakeholders on the state of its assets and the situation it has found itself in. I applaud TransGrid for their approach.”

*Energy industry representative*
Responding to advice within the regulatory framework

Stakeholder feedback will be considered when assessing network and non-network options, in alignment with the Regulatory Investment Test for Transmission (RIT-T).

Activity planned up to July 2017 includes:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inviting feedback on both network and non-network options through formal submissions</td>
<td>February 2017</td>
</tr>
<tr>
<td>Publishing Project Assessment Draft Report</td>
<td>March 2017</td>
</tr>
<tr>
<td>Publishing Project Assessment Conclusion Report</td>
<td>June 2017</td>
</tr>
<tr>
<td>Raising awareness about the project need and communicating with local communities who may be impacted by a potential network solution</td>
<td>Ongoing</td>
</tr>
</tbody>
</table>

Understanding the RIT-T

A RIT-T is undertaken if a network option forms part of a solution where the cost of the most expensive credible option is greater than $6 million. A requirement of the National Electricity Rules, the process is designed to: inform stakeholders of the investment need and potential network or non-network options to address it, test the market for alternative solutions, and advise stakeholders of the outcome of the selected solution.

The RIT-T consultation process normally involves the issuing of three documents:

- Project Specification Consultation Report (PSCR) – released for this project on October 11, 2016
- Project Assessment Draft Report (PADR)
- Project Assessment Conclusion Report (PACR).


Responding to advice

Stakeholders told us there is a perception that transmission networks don’t actively pursue non-network alternatives and that the process during a RIT-T can be seen as a ‘tick box’ exercise.

In response, TransGrid hosted a technical workshop that invited stakeholders and non-network proponents to discuss potential options and ensure they had enough information to make an EOI submission to the RIT-T. Over 90 stakeholders attended the November 2016 event, and more than 25 expressed an interest in receiving further information about submitting a non-network EOI.

Following feedback from this workshop, TransGrid has:

1. extended the consultation period to February 2017
2. created and issued a standard EOI template
3. created and issued a set of FAQs
Energy prices and costs

What we heard

Stakeholders would like:

➢ Visibility of how TransGrid’s cost savings affect the average household energy bill
➢ More work done to explain price increases to consumers, so they understand that the industry has their best interests in mind when delivering an essential service
➢ Certainty about how security and affordability can be maintained in a changing energy landscape.

Stakeholders believe:

➢ The price of electricity continues to place pressure on households and businesses
➢ Networks play a role in electricity affordability for vulnerable consumers, but retailers and government could provide greater assistance through hardship payment programs
➢ The cost of electricity continues to increase and the standard of service has not changed. This raises questions about the value for money the grid delivers.

What we did

➢ As part of the capital expenditure workshop, TransGrid engaged on a number of case studies that included the breakdown of cost impacts to households to help build clarity and understanding on the cost impacts of our decisions
➢ Continued dialogue on capital expenditure processes to ensure we invest at the right time and in the best interest of customers and consumers
➢ We have significantly improved our approach to replacement expenditure, including our risk assessment methodology
➢ Publicly advocated for a more interconnected National Energy Market with the aim to help alleviate price pressures and system insecurity.

“Minimum cost to users and an affordable, reliable energy supply are the foundations of our network planning. When we design, integrate and run network assets, we carefully consider whether capital expenditure can be reasonably deferred or reduced. Investing for value is both our responsibility and priority.”

Gerard Reiter, Executive Manager Network Planning and Operations, TransGrid

All assets have a lifecycle – they are planned, built, operated, maintained and then renewed or replaced.
What is capital investment?

TransGrid is focused on efficiency, cost reductions and smarter ways of delivering our services in the long term interests of customers and consumers.

Augmentation
New or upgraded infrastructure to cater for growing demand

Replacement
Updating infrastructure which is wearing out

Market benefits
New or upgraded infrastructure to expand generator access and competition

Others
Non-network infrastructure, including commercial property and IT systems
In May 2014, TransGrid consulted closely with customers, large energy users and consumer representatives on the NSW Transmission Pricing Methodology, which came into effect in July 2016.

Three key points were consistently communicated by customers during the consultation:

1. For transmission pricing to be more cost reflective
2. Reduce non-locational proportion of transmission charges
3. Charges to be based on demand rather than energy

TransGrid’s Pricing Methodology responded to these customer priorities by introducing Modified Cost Reflective Network Pricing (MCRNP) which reduces the revenue being collected from non-locational charges and instead prioritises locational pricing. This improves price signals and the customers’ ability to respond to price signals. Adopting MCRNP also improves the cost reflectivity of pricing as it is based on network utilisation, providing relevant price signals for more or less congested parts of the network.

TransGrid also changed the basis of pricing, shifting from energy to maximum demand. Customers supported this change as they recognised our investment decisions are based on maximum demand, rather than energy. By aligning our price signal to our investment driver we could better signal and encourage efficient use of the network.

Changes to the Pricing Methodology for the current period were strongly supported by customers:

1. Move to Modified Cost Reflective Network Pricing from standard CRNP
2. Move to maximum demand from energy for non-locational and common services pricing
Our approach to the next Pricing Methodology

In preparing our next Pricing Methodology, TransGrid undertook a targeted consultation process to ensure that our objectives are closely aligned to the needs of our customers.

What we learnt

- The consultation process gave us an opportunity to assist customers in understanding price impacts and sense-check our approach to the next Pricing Methodology.
- Following on from the first consultation session, we adapted our discussion paper so that it was more in-line with the consultation objectives before we published for broader comments.
- We heard modelling of Long Run Marginal Costing (LRMC) outcomes for customers in dollar terms is required prior to further consideration of any rule changes.
- Customers and stakeholders have different levels of understanding when it comes to the Transmission Pricing Methodology so it’s important to tailor the consultation process to each audience.
- Customers recognised TransGrid’s efforts to change and improve our pricing in the interest of consumers, but noted that there is a bigger conversation that needs to happen across the industry on price and tariff reforms.

“Stakeholders significantly shaped the last Transmission Pricing Methodology: we implemented a modified Cost Reflective Network Pricing Methodology, and now base common service and non-locational rates on historical yearly maximum demand, rather than historical energy. We have again welcomed stakeholder feedback as we approach the next methodology to ensure that it’s aligned with stakeholder expectations.”

Nicola Tully, Manager, Prescribed Revenue & Pricing, TransGrid

It’s our responsibility to balance the needs of customers, consumers and shareholders.
Grid innovation

What we heard

Stakeholders support:

> TransGrid seeking further views on how regulatory constraints could be amended to meet the future needs of customers and consumers
> Reforms that enable a level playing field for non-network solutions
> Further investigation on the application of grid scale storage and non-network solutions to deliver network services
> Innovative solutions to extend access for new generators
> TransGrid to actively pursue demand side innovation and technology.

Shakeholders asked how TransGrid is:

> Committed to environmental sustainability, including electric vehicles and renewable energy
> Taking strategic and operational steps to remain competitive in the changing electricity market, and to meet consumer expectations
> Responding to opportunities to integrate non-network technology with owned infrastructure assets to deliver embedded/distributed generation (inclusive of wind and solar)
> Going to consider batteries becoming part of its regulated asset base
> Anticipating demand management may impact electricity price and consumption.

What we did

> As part of our commitment to a low carbon future, our business fleet consists of full electric vehicles and hybrid vehicles
> Founded and Chaired the Electric Vehicle Council collaborating with industry
> Collaborated on research on the barriers to electric vehicle growth and to collaborate with industry on a comprehensive recommendations report for the future of electric vehicles in Australia
> Prepared a feasibility study and report into the development of a Renewable Energy Hub in NSW to unlock renewable energy resources and optimise the network
> Held a technical workshop with non-network proponents to help further investigate a non-network solution for Powering Sydney’s Future
> Enhanced our connection services to further meet customer needs
> Approximately 70% of our new formal connection agreements over the past two years came from renewable generators.

“Australia’s electricity system is experiencing change on an unprecedented scale, so we’re creating a long-term vision for our network. We believe transmission will play a key role in enabling a low carbon future, and that the grid will play a vital role in supplying consumers and customers with reliable and affordable energy.”

Tony Meehan, Executive Manager, Strategy & Regulation
TransGrid Stakeholder Engagement

Battery storage

TransGrid understands the future of energy consumption is changing and that consumers are seeking smarter ways to manage energy use. Battery storage will play a crucial role in that future; with applications that support the generation, transport and use of electricity. As part of our commitment to supporting the changing environment of energy use, TransGrid is partnering with the City of Sydney and the University of NSW to trial energy storage solutions. Our partners receive lower energy charges due to more efficient site energy management, while TransGrid has the ability to dispatch the battery energy to manage network constraints.

Automatic Demand Response (ADR)

TransGrid is committed to using demand management as an alternative to network investment where it can provide a cost-effective alternative for meeting peak demand. The Australian market for demand management solutions is relatively new. To help dispatch a wide portfolio of demand management more cost-effectively (including battery storage), TransGrid is implementing a pilot installation of an automated demand response (OpenADR) solution. The pilot will help build TransGrid’s technical capability with demand management services, in turn further developing the demand management market.

iDemand

TransGrid’s iDemand system facilitates research, and promotes development and education in demand management. The iDemand system consists of a 400 kilowatt-hour battery energy storage system, 98 kilowatts of solar generation capacity (including thin film technology and polycrystalline panels), energy efficient LED lighting, and a web portal that provides iDemand’s live status and historical data for download. Installed at our Sydney West site, the system typically reduces site electrical demand by 25 to 30 per cent. Research agreements with universities seek to optimise battery algorithms, and understand lifecycle costs.

Network Vision 2056

Significant change to energy generation, transport, and use means it’s time to plan for the future of our transmission network. Our Network Vision 2056 report sets out how the NSW transmission network could adapt over the next forty years; and the principles by which it will be planned, operated and managed to deliver the future of energy. You can view the report at https://www.transgrid.com.au/what-we-do/Business-Planning/network-vision/Pages/default.aspx

Electric vehicles

Our commitment to building a smarter, greener electricity grid drives our belief in the future of electric vehicles. With an increasing share of our electricity coming from renewable sources, moving our cars to electricity will enable a low carbon future. In 2016 we contributed to a report to help identify and overcome barriers to electric vehicle growth. You can view the report at http://climateworks.com.au/publication/document/path-forward-electric-vehicles-australia-joint-submission-federal-government. Four key barriers were identified to overcome to accelerate the rollout of electric vehicles in Australia, which include:

> High upfront purchase costs
> Lack of vehicle model choice
> Technological concerns, such as driving range
> Customer information gaps.

Four key barriers were identified to overcome to accelerate the rollout of electric vehicles in Australia, which include:

> High upfront purchase costs
> Lack of vehicle model choice
> Technological concerns, such as driving range
> Customer information gaps.
Fit for purpose network

What we heard

**Stakeholders would like:**

- Network reliability and supply security for customers and consumers – across both NSW and the NEM, as the energy market continues to change
- To broadly understand the methodologies for setting capital expenditure, have insight into the methodology we use and be provided with examples to increase their understanding of our approach
- A NSW-specific Value of Customer Reliability (VCR) report, as reliability standards are not benchmarked at a national level
- Further clarity on how we plan the network in the long term interest of customers and consumers to ensure that infrastructure investments are made at the right time
- TransGrid to continue to enhance its asset monitoring and planning methods to mitigate risk of stranded assets, overinvestment and to maintain assets to maximise their life.

**What we did**

- Engaged with stakeholders on the NSW Transmission Reliability Standards throughout the standard-setting process and incorporated feedback received into our recommendations papers to IPART
- Continued the dialogue on how we have adapted and improved our asset management strategy and investment framework to build understanding in our decision making processes
- We’ve adopted a ‘probabilistic planning’ approach to allow for a targeted investment program. Tailored to the network investment requirements as they emerge, the planning approach minimises costs for customers and consumers.

**Real-time asset management**

We constantly look for innovative approaches to better leverage the capacity of the network such as the recent introduction of our asset monitoring system. The asset monitoring centres at Sydney West and Newcastle are tasked with day to day reviews of equipment health and co-ordination of activities to ensure equipment is available to keep the network running. Benefits to the asset monitoring system include:

- Reduction in field call-outs
- Fewer changes to planned work
- Early diagnosis and response to events
- Reduction in equipment failure
- Tailored maintenance requirements

We have significantly improved our approach to replacement expenditure, including our risk assessment methodology, which ensures we replace infrastructure assets at the right time and in the long-term best interest of customers and consumers.
“It’s pretty easy to sit back and judge organisations like yours against some hypothetical perfect model – but look at where you have come from. You’ve moved to modern asset management tools, other recording systems in the field – it’s all a sign of an organisation that’s up with the play and trying to be efficient.”

Revenue Proposal Working Group member
Measuring success

Engagement program

It’s important for us to measure our stakeholder engagement program so that we can ensure it provides value to both our business and stakeholders. TransGrid has sought feedback through stakeholder surveys conducted independently by experienced researchers. Feedback is used to improve the quality and effectiveness of engagement activities but also informs the business more generally about what is most important to customers and stakeholders.

What we learnt

Trust in TransGrid to do the right thing by stakeholders rose markedly, from 52% in 2015 to 70% in 2016

Advocacy for TransGrid improved significantly from 59% in 2015 to 73% in 2016

TransGrid’s overall reputation increased from 64% in 2015 to 70% on 2016

Praised for active engagement, responding to feedback, being flexible and responding to issues quickly, direct customers noted that TransGrid has taken a more customer-centric approach.

Consumers believe that TransGrid continues to deliver a safe, reliable supply of electricity with a focus on efficiency and cost effectiveness.

When asked how TransGrid could improve, a key theme was to provide strong vision and leadership in the transition to a low-carbon economy, including focusing on renewables, emissions reduction and new technologies.

“Of all the TNSPs, they [TransGrid] have engaged more on the issues around the integration of renewables into the grid.”

Government representative
How customers and stakeholders have shaped the revenue proposal

<table>
<thead>
<tr>
<th>Customer and Stakeholder insights</th>
<th>TransGrid Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customers commented on, and made recommendations to change TransGrid’s proposed approach to output growth for forecasting operating expenditure</td>
<td>TransGrid changed its approach to adopt the suggested recommendations. This has reduced the output trend and is reflected in a lower operating expenditure forecast of $1 million</td>
</tr>
<tr>
<td>Customers said they want TransGrid to invest in maintaining its assets to maximise their life. In doing this, customers wanted to ensure that investments are made at the right time and in the long term interest of customers and consumers to minimise cost impacts</td>
<td>TransGrid has heard and responded to feedback and improved the asset management strategy and risk framework. This proposal is centred on a capital program that is, efficient, innovative and in the long term interests of consumers</td>
</tr>
<tr>
<td>Customers advised that TransGrid needs to provide reasonable explanation and justification for costs relating to the step change for hazard trees within the next period</td>
<td>TransGrid has reflected this feedback and provided further detail as Appendix D to the revenue proposal</td>
</tr>
<tr>
<td>Customers recommended that TransGrid focus more on the proposed WACC number rather than the approach itself</td>
<td>TransGrid has ensured that it is transparent in regards to the proposed WACC of 6.6%. Details of the WACC and expenditure are included in the front of both the Executive Summary and the Overview Paper for the revenue proposal, in addition to the later more detailed proposal chapters</td>
</tr>
<tr>
<td>Customers were concerned that the Productivity Commission’s Productivity Update for 2016 data could have been distorted as it included the water sector</td>
<td>In response, TransGrid looked for an alternative forecast and subsequently identified that the AER’s DNSP report, which includes a substantially larger data set to the AER’s TNSP report, might be a suitable alternative</td>
</tr>
<tr>
<td>Customers suggested that TransGrid clarify its messaging on IT efficiencies as it created uncertainty around the potential for service impacts resulting from cost reductions</td>
<td>In response to this feedback, TransGrid improved and clarified the information in its proposal</td>
</tr>
<tr>
<td>Customers told TransGrid that there is a perception that transmission networks don’t actively pursue non-network alternatives and that the process during a RIT-T can be seen as a “tick box” exercise</td>
<td>TransGrid recognises that this is an established concern for stakeholders and is working hard to satisfy customers that wherever it is most cost-effective for customers, a non-network solution will be pursued. In TransGrid’s last revenue proposal, TransGrid proposed going to market early to develop the network support capabilities in the Sydney CBD which might improve the prospects of being able to source adequate network support as the emerging constraints in the Sydney CBD crystallised. This approach was not supported by the AER. More recently the anticipated network requirements in the Sydney CBD have started to firm up and TransGrid is now actively seeking network support as an alternative to building a capital solution. TransGrid held a major public forum in November 2016 to assist in defining non-network requirements to address the emerging network requirements in the Sydney CBD. This forum was well attended and helped both TransGrid and non-network proponents better understand respective requirements. TransGrid has also proactively commenced a survey of demand reduction available from commercial buildings in the Sydney CBD, to actively develop the demand management market</td>
</tr>
<tr>
<td></td>
<td>The new reliability standards for NSW were finalised and published in December 2016. The standards create a new requirement to improve supply reliability in the Broken Hill area and surrounding mine customers. This new standard was a late change from the published draft and the options to address it are still being developed. TransGrid is hopeful that a non-network solution will be identified to address the need and will update the AER as soon as a cost-effective preferred solution is identified</td>
</tr>
</tbody>
</table>