

2016

Five Year Plan for our Victorian and Albury Natural Gas Distribution Networks: 2018 to 2022

Customer Overview

We are Australian Gas Networks, one of Australia's largest natural gas distribution companies.

Our vision is to be the leading gas distributor in Australia. We aim to deliver for our customers, be a good employer and be sustainability cost-efficient.



Ben Wilson
Chief Executive Officer

I am delighted to present our Final Plan for our natural gas distribution networks in Victoria and Albury for the five-year period commencing 1 January 2018. Our plan delivers continuous improvement on our already high service levels, an 11% upfront cut in distribution prices (before inflation), reduced total expenditure, and lower financing costs in line with recent decisions by the Australian Energy Regulator (AER).

Australian Gas Networks Limited (AGN) is one of Australia's largest natural gas distribution companies, serving around 1.2 million customers across most Australian states and territories. In Victoria and Albury we deliver natural gas to around 650,000 customers across central and northern Melbourne, north to Shepparton, Wodonga and Albury in New South Wales, east to Warragul, Traralgon and Bairnsdale and south east to the Mornington Peninsula.

We have delivered strong performance for our Victorian and Albury customers over the 2013 to 2017 period, and importantly, we have met our leak management targets. We have connected over 16,000 new customers to natural gas each year and are on track to deliver 100% (or 696 kilometres) of our mains replacement program.

We intend to improve on our strong safety performance over the 2018 to 2022 period. We are proposing to replace a further 297 kilometres of old mains, which includes 25 kilometres of mains in the centre of Melbourne. This will complete the replacement of old mains in the Victorian network. This program is the key driver for ensuring ongoing public safety and network reliability.

Melbourne and Victoria are some of the fastest growing areas in Australia and AGN is proud to support this growth. Over the 2018 to 2022 period, we expect to connect around 16,000 new customers to natural gas each year. Customer growth spreads the benefits of gas and lowers prices to existing customers by spreading our mostly fixed costs over a larger customer base.

We are very conscious that the cost of living, including utility bills, is a major concern for our customers. Gas distribution prices make up around one third of the average domestic retail gas bill, so we have a role to play in the affordability challenge. I am therefore pleased to deliver an 11% upfront price cut (before inflation), with modest annual increases thereafter to match our growing asset base.

Natural gas remains a highly cost-effective and clean domestic fuel compared to electricity. In Victoria most electricity is produced from coal, and using natural gas in the home saves around five tonnes of carbon dioxide per annum annually compared to mains electricity, meaning that gas is cleaner as well as cheaper than electricity.

Our plan is based on the considerable experience of AGN, our operating partner (APA Group) and the feedback we have received from our stakeholders, including our customers. A key part of enabling this feedback was the release of our Draft Plan in July 2016. We proactively sought and facilitated feedback on this Draft Plan and you will find details on how we've incorporated these views into our plans throughout this document.

I would like to take this opportunity to thank the staff of AGN, APA Group, our Reference Groups and those customers and stakeholders that have helped to develop and shape our proposal.

Overall, we are proposing to continuously improve our strong safety and customer service levels and cut distribution prices on 1 January 2018. We are confident that our plan for 2018 to 2022 is in the long-term interests of our Victorian and Albury customers.

Ben Wilson
Chief Executive Officer,
Australian Gas Networks



Our Vision is to be
the leading natural
gas distributor
in Australia.

11%

Lower
prices

Cut in prices on 1 January 2018



Improved Service

>90%

Of emergency calls
answered within
10 seconds.

100%

Mains replacement
completed.

Continuous
improvement in
safety, reliability
and customer
service.



Lower Costs

\$23m

Cut in expenditure
compared to actual
expenditure incurred
in the current Period.

>2.00%

Finance cost down from
7.39% to less than 6%.

Ensuring we
are sustainably
cost-efficient.



New Customers

+80,000

New customers
connecting to our
networks over
2018 to 2022

5.4 tCO₂

Tonnes of CO₂ saved per
new customer per annum.

Better access to
gas, contributing
to lower carbon
emissions.

Lower prices, lower costs,
continuous service
improvements.

About our Business

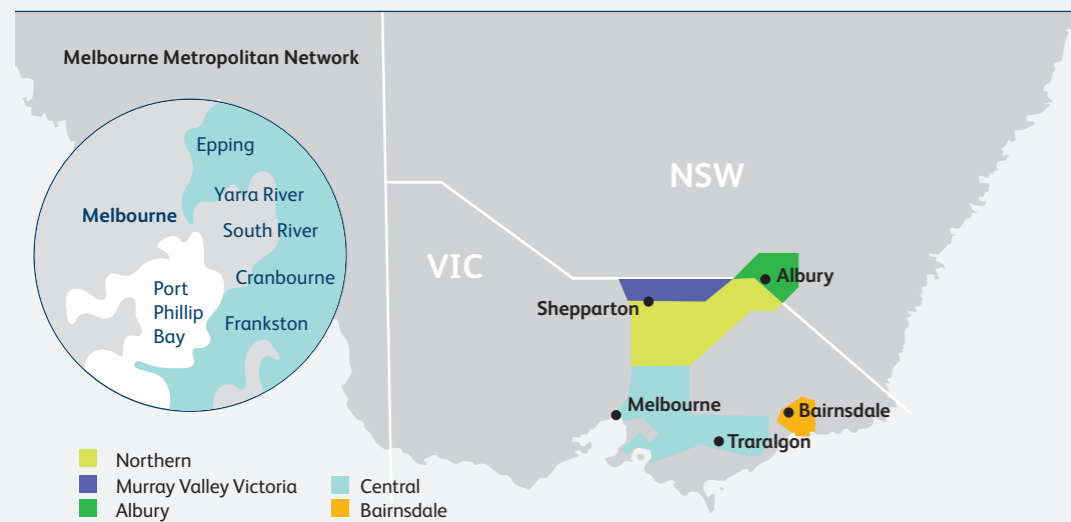
Who We Are: Australian Gas Networks Limited (AGN) is one of the leading natural gas distribution businesses in Australia, serving around 1.2 million domestic, small business and large industrial customers.



We own over 23,000 kilometres of natural gas distribution networks and 1,100 kilometres of transmission pipelines in Victoria, New South Wales, South Australia, Queensland and the Northern Territory.

This Customer Overview relates to our operations in Victoria and Albury where we supply close to 650,000 customers through around 11,000 kilometres of predominantly distribution mains.

Figure 1: Our regulated networks in Victoria and New South Wales



	VIC	NSW	VIC	NSW
Regulated metropolitan networks	Melbourne	n/a	Length of mains (km)*	10,461
Regulated regional networks	Shepparton, Wangaratta, Wodonga, Moe, Morwell, Traralgon, Sale, Bairnsdale	Albury	Number of customers*	626,106
			Volume transported for 2015 (TJ)	55,843
				2,759

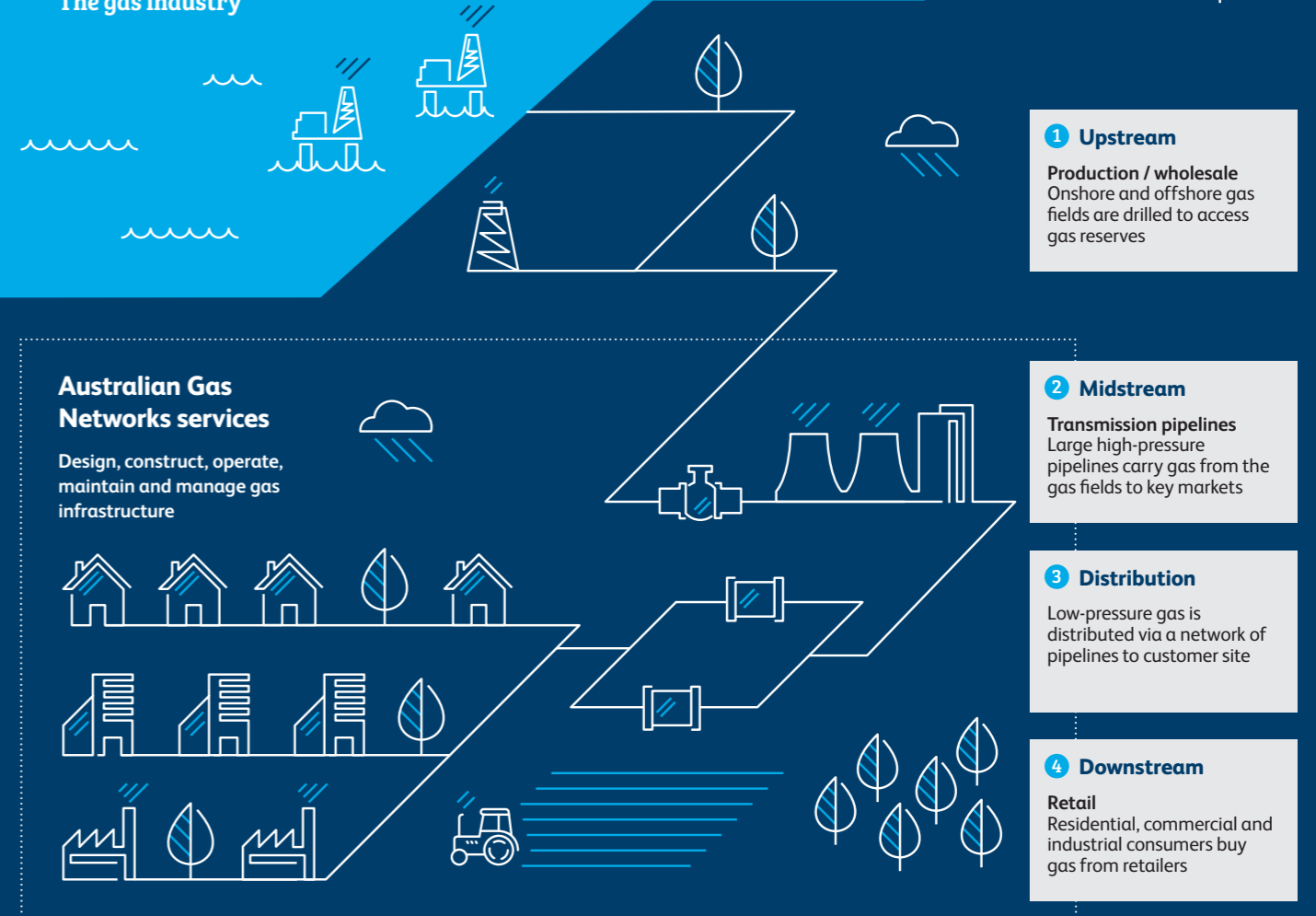
* As of 31 December 2015

Our Role: Gas distribution plays an important role in ensuring homes and businesses have access to a safe and reliable supply of natural gas. Our distribution network receives natural gas from transmission pipelines and delivers that gas to the customer's home or business.

Retailers are responsible for entering into contracts for the purchase of gas from the producers and for the transport of that gas on the transmission pipelines and the distribution network (owned by AGN).

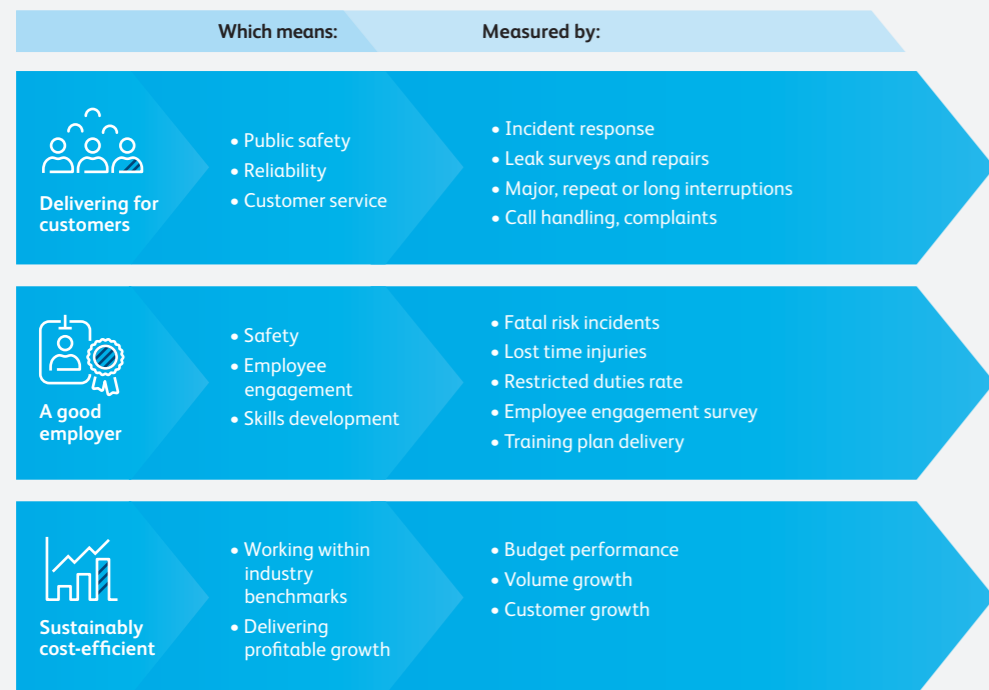
Like most businesses, we recover the costs incurred for providing our service through charging customers who use them (in our case, retailers). The distribution charge (or tariff) is a key part of the natural gas supply chain, accounting for around 30% of the bill issued by the retailer to the residential customer in Victoria and Albury.

The gas industry



Our Vision: Our aim is to be the leading natural gas distributor in Australia. Our definition of leading is to achieve top quartile performance compared with other Australian natural gas distributors across all of our key targets.

Figure 2: Our Vision Statement



Our Plans: Recently, the AGN team has been working with our customers and stakeholders to develop plans for our Victorian and Albury natural gas distribution networks (the networks) for the next five years (2018 to 2022).

We operate our networks in accordance with the National Gas Law (NGL), National Gas Rules (NGR) and various state-based operating guidelines.

The overarching requirement of the NGL is the National Gas Objective (NGO) which requires AGN to: “promote efficient investment in, and efficient operation and use of, natural gas services for the long term interests of consumers of natural gas with respect to price, quality, safety, reliability and security of supply.”

This Plan, known as our Access Arrangement (AA) Proposal, set out what work we need to undertake over the next five year period and how much we expect this work to cost.

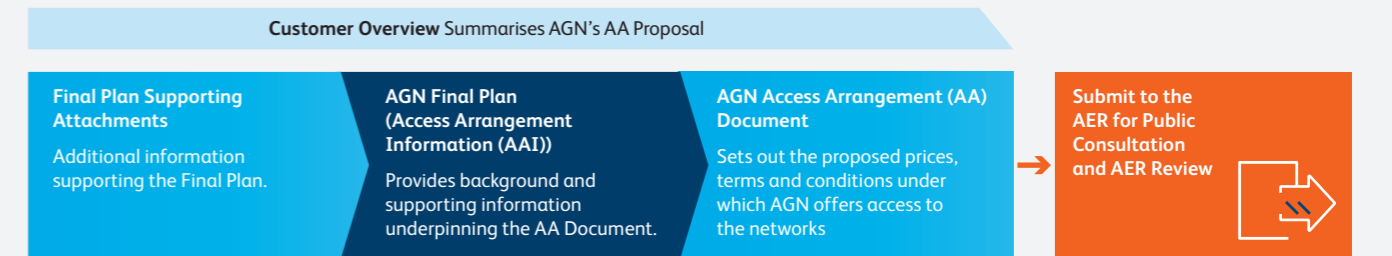
The Proposal itself consists of our Final Plan, also known as our Access Arrangement Information (AAI), associated attachments and AA Document and is submitted to the Australian Energy Regulator (AER) for further public consultation and AER Review.

This Customer Overview document provides a summary of the key components of our AA Proposal. The full Final Plan is available to download from our Have Your Say webpage: <https://www.australiangasnetworks.com.au/our-business/have-your-say>

Our overarching objective is to submit a plan that:

- delivers for our customers consistent with the NGO;
- is underpinned by effective stakeholder engagement; and
- is capable of being accepted by the AER.

Figure 3: Our Access Arrangement Proposal



Our Track Record

We have delivered for customers in Victoria and Albury over the current (2013 to 2017) AA period by meeting the key safety standards set for the business and delivering the major outputs set by the AER.

Our total expenditure in the current AA period will be below the allowances set by the AER, generating savings for customers in the next five years.

Importantly, cost savings have not come at the expense of service, safety or reliability. For example, we will complete the major outputs approved by the AER such as 696 kilometres of mains replacement and several major network extensions.

Figure 4: What we have delivered over the current AA period



* Major is defined as an interruption affecting five or more customers

* LTIFR is the number of lost time injuries over a year relative to the total number of hours worked in the year

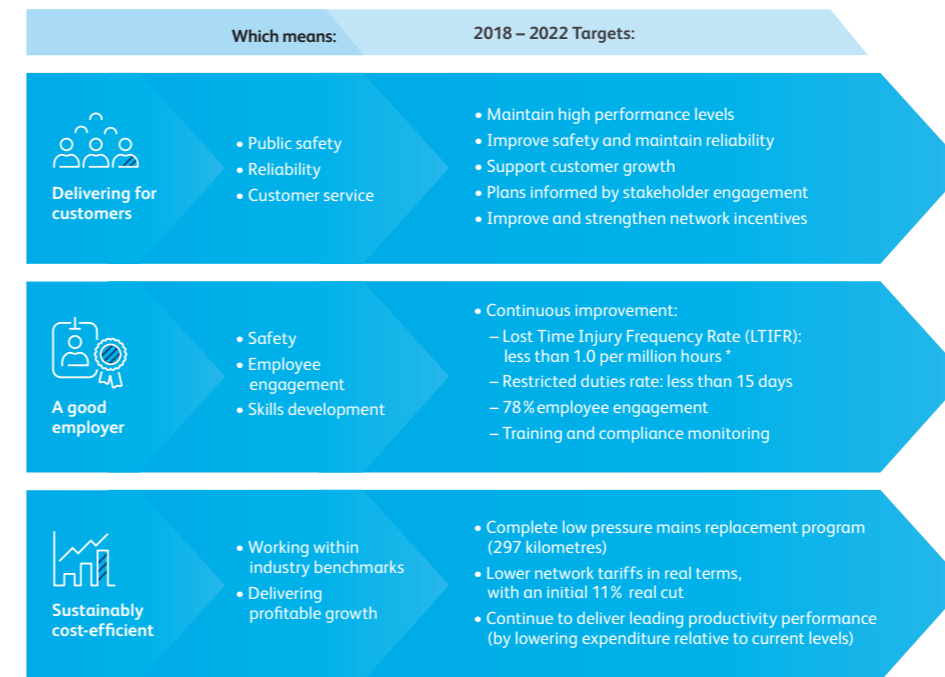
What we will Deliver

We will continue to deliver high performance levels over the next (2018 to 2022) AA period by improving safety, maintaining reliability and lowering distribution prices.

Our total expenditure in the next AA period will be below that incurred in the current AA period, despite continued network growth, improved safety and the maintenance of high reliability.

Importantly, our plan has been informed by an effective stakeholder engagement program. We have reported on how stakeholder feedback has impacted our plans throughout our AA Proposal.

Figure 5: What we will deliver over the next AA period



* LTIFR is the number of lost-time injuries over a year relative to the total number of hours worked in that year

Supply interruption



40^{YRS}

Typically our customers experience only one hour off supply every 40 years.

Employee training



100%

100% compliance employee refresher training

Mains replacement



100%

Approved mains replacement volumes

Lower prices



11%

Lower network tariffs in real terms with an 11% initial price cut

Injury frequency



<1.0

Lost Time Injury Frequency Rate of less than 1.0 per million man hours

Mains replacement



297^{KM}

297 kilometres of mains replacement, completing the 10-year program

Stakeholder Engagement

We are committed to providing a plan to the AER that delivers for our customers and is capable of being accepted. Our stakeholder engagement program is a key part of achieving this objective.

Our Reference Groups have been a key part of our stakeholder engagement program. These groups provide AGN with efficient access to the needs, values, priorities and preferences of a broad cross-section of customers served by our networks.

Our two Reference Groups are the:

- Victorian and Albury Reference Group (VARG) – which comprises representatives from a broad cross-section of key community stakeholder groups; and the
- Retailer Reference Group (RRG) – which comprises the retailers operating in Victoria and Albury.

The key role of our Reference Groups is to challenge, guide and review the process of developing and implementing our stakeholder engagement program and the development of our wider network plans.

Figure 6: Composition of AGN Reference Groups



“Origin values the co-operative approach taken by AGN, most notably through the establishment of its retailer reference group”

Origin Energy, Submission to AGN Draft Plan for Victorian Gas Distribution Networks

Effective Stakeholder Engagement



Multiple opportunities for feedback, broad range of stakeholders and transparent reporting.

Continuous Engagement with Key Stakeholders



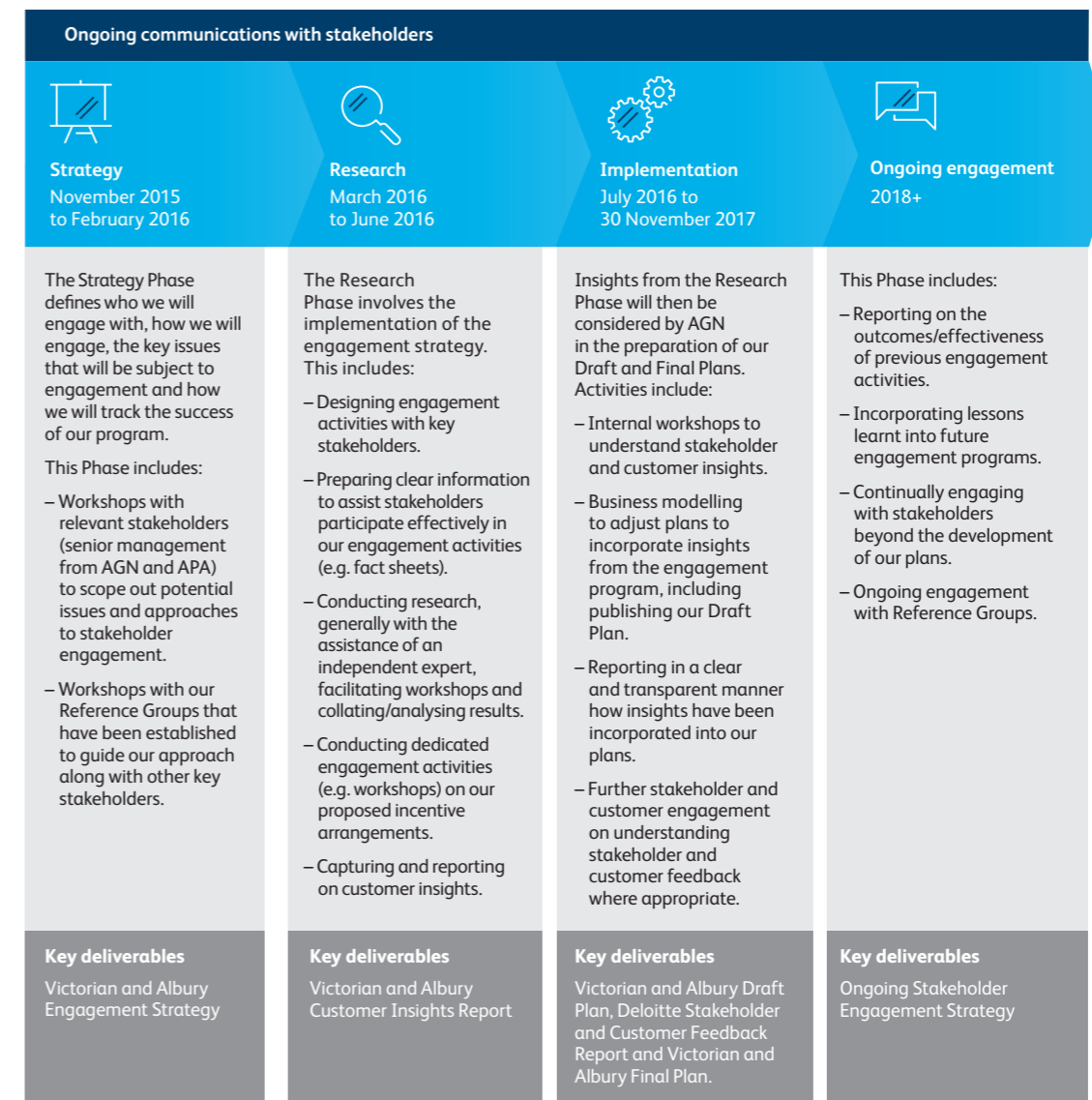
We have engaged with our Reference Groups continuously throughout the development of our Plans.

Our approach to stakeholder engagement comprises four phases (see figure 7).

Our stakeholder engagement program has played a key role in the development of our Plan. The program has provided feedback on the values of our customers, our approach to running our business and our forward plan. We are confident that our Final Plan has appropriately captured feedback from our customers and stakeholders and has responded to this feedback in an appropriate way. We are continuing to seek feedback from stakeholders on an ongoing basis (see page 20 for further detail).

“Stakeholders were supportive of AGN’s collaborative approach to stakeholder engagement and noted that the release of the Draft Plan facilitated improved engagement”
Draft Plan Stakeholder Workshop Feedback

Figure 7: Approach to Stakeholder Engagement



Developing our Plans

Figure 8: Key elements of our engagement program to date



Consideration of Stakeholder Feedback into our Plans

Customer and stakeholder feedback has been considered throughout our Final Plan. We have also gone back to customers to test our understanding and incorporation of feedback to ensure we have understood and responded appropriately.

Key feedback received throughout our engagement program, and our response, is summarised in the below table.

“It was positive to hear the company had listened to our feedback”
Customer Workshop Participant

Our stakeholders



We have gone back to customers to ensure we listened and responded appropriately.

Topic	Customer and Stakeholder Feedback	Our Response to this Feedback
Our Engagement Approach	<ul style="list-style-type: none"> Support for our proactive approach to engagement. Acknowledgment of the significant opportunity to participate, particularly through the release of the Draft Plan. Encouragement for continued engagement beyond the Final Plan development period. Support for detailed engagement on our Mains Replacement proposal with Energy Safe Victoria (ESV). 	<ul style="list-style-type: none"> Our stakeholder engagement strategy provides for: <ul style="list-style-type: none"> continuously improving our approach to engagement by facilitating feedback on our program and subsequently redefining our approach; and for ongoing engagement beyond submission of our Final Plan. We have engaged directly with the ESV on our proposed mains replacement program.
Operating Expenditure (Opex)	<ul style="list-style-type: none"> Support for our approach to forecasting opex, including by adopting previously approved AER approaches. Acknowledgement that opex is most closely aligned with customer numbers not throughput. Support for our proposed marketing program if we could demonstrate the benefits outweighed costs. 	<ul style="list-style-type: none"> Our approach to forecasting opex is consistent with that outlined in our Draft Plan, which approach: <ul style="list-style-type: none"> is consistent to that used to forecast opex in South Australia where ever possible; includes AGN absorbing \$4 million in identified new costs without compromising our service levels; and calculates output growth based on customer numbers. We are proposing to implement a marketing program consistent with that in our Draft Plan. The information outlined in our proposal outlines that the medium-term benefits to customers of this program exceeds the near-term costs.
Capital Expenditure (Capex)	<ul style="list-style-type: none"> Support for our approach to forecasting capex, which approach is consistent with that recently approved by the AER for our South Australian network. Support for the current levels of reliability and improvement in network safety. Support for AGN increasing its visibility and their information offering to customers. Support for additional annual costs for AGN to complete a range of initiatives, with the completion of the mains replacement program the highest priority. 	<ul style="list-style-type: none"> Our capex forecasting approach is consistent with that outlined in the Draft Plan, with additional information provided to support our positions. We will: <ul style="list-style-type: none"> maintain current levels of supply reliability primarily by completing several key network augmentation projects; maintain and improve network safety primarily by completing our mains replacement program; improve our visibility and communication with customers by improving our digital capabilities; and complete a range of initiatives, for a lower cost than originally communicated with customers.

Capital Base	<ul style="list-style-type: none"> Support for our approach to regulatory depreciation, in particular aligning economic and technical lives of assets. Discussion over the best approach to determine inflation, understanding that the market-based approach aligns more closely with actual inflation, but is different to the AER's preferred approach. Need to ensure that inflation risk would not be borne by customers 	<ul style="list-style-type: none"> Our proposal seeks to align the technical and economic lives of assets, including the end of life and replacement of our cast iron mains within the next AA period. Consistent with our general regulatory strategy, we have applied the AER preferred approach to estimating inflation pending further discussion with the AER and stakeholders during this review process.
Financing Costs	<ul style="list-style-type: none"> Support for our approach of adopting the AER's preferred approach to setting the financing and tax costs. 	<ul style="list-style-type: none"> We have continued to apply the AER's guideline approach, pending further information resolving current areas of uncertainty.
Incentive Arrangements	<ul style="list-style-type: none"> Support for our proposed approach to strengthen incentive mechanisms as it was believed that it is in the long-term interests of customers. Support for adopting a common incentives approach across electricity and gas. Support for our commitment to work with the AER in relation to the design of the incentive schemes. 	<ul style="list-style-type: none"> We are proposing to implement a strengthened incentive arrangements consistent with that outlined in our Draft Plan. Our incentive design is based on mechanisms developed by the AER for electricity, with fit-for-purpose adjustments for gas. We are committed to ongoing discussions with the AER and stakeholders during this review process.
Network Revenue and Price Path	<ul style="list-style-type: none"> Support for our proposed price path. Questioned if AGN could consider alternative price path options whilst still meeting overarching objectives. Support for the consideration of financeability at times when credit metrics are clearly below the required credit metrics. 	<ul style="list-style-type: none"> Our price path delivers an 11% price cut on 1 January 2018, followed by 2.5% increases in each year following. This is consistent with the price path consulted on with customers, with the exception of the annual increases which we have decreased from 3.0% (before inflation). The key credit metrics associated with our Final Plan do not require a financeability adjustment.
Demand Forecasts	<ul style="list-style-type: none"> Support for our approach taken to demand forecasting, noting that it was consistent with the approach recently approved by the AER for our South Australian network. Questioned if prior demand was an indicator of future demand. Requested that all assumptions be made transparent in our Final Plan. 	<ul style="list-style-type: none"> Our approach to forecasting demand is consistent with that outlined in our Draft Plan, which approach: <ul style="list-style-type: none"> is consistent to that used to forecast demand in South Australia; and has the flexibility to capture the impact of drivers of future demand which are not present in the historic demand data. We confirm that assumptions used to forecast demand will be transparent and identifiable in our Plan.
Network Pricing	<ul style="list-style-type: none"> Support for simple and transparent pricing structures. Support for the control gained by having gas bills dependent on usage levels. Mixed support for the alignment of three pricing zones in Victoria. Retailers supported alignment, however stakeholders questioned the resultant price path, which resulted in one zone experiencing a price increase. Customers were mindful of the price impact and recent changes in their energy bills. 	<ul style="list-style-type: none"> We will maintain our existing tariff structures across the next AA period, which structures have a high degree (70% to 90%) of variability. Our Final Plan does not include alignment of pricing zones – providing all customers with a price decrease. This approach was supported by customers. Our Final Plan provides for lower prices on average over the next five years, compared to current prices.
Network Access	<ul style="list-style-type: none"> Our RRG provided several iterations of feedback on our Terms and Conditions. 	<ul style="list-style-type: none"> Our Final Plan reflects the feedback received from the RRG on our Terms and Conditions; <ul style="list-style-type: none"> where we agree, we have incorporated feedback; and at times we did not agree with the feedback and have provided an explanation as to our position.

Expenditure

Consistent with stakeholder feedback, our expenditure is focused on improving safety and maintaining the reliability of supply of natural gas.

We are proposing to invest \$344 million in operating expenditure (opex) and \$555 million in capital expenditure (capex) over the next AA period. Expenditure is consistent with that spent over the current period and is essentially a 'stay-in-business' plan.

Our expenditure forecasts have been developed using an approach similar to that approved by the AER for our South Australian network in 2016.

Operating Expenditure

Our forecast opex is expected to be \$344 million over the next AA period, which is 4% (or \$14 million) above current levels, in the context of 10% growth in customer numbers and increased input costs. We have also included an initiative to expand our marketing program by \$5 million over the next AA period.

Importantly, on a per customer basis, forecast opex over the next AA period is lower than that incurred over the current AA period and also below the opex allowance in the current AA period.

Figure 9: Total Expenditure Breakdown

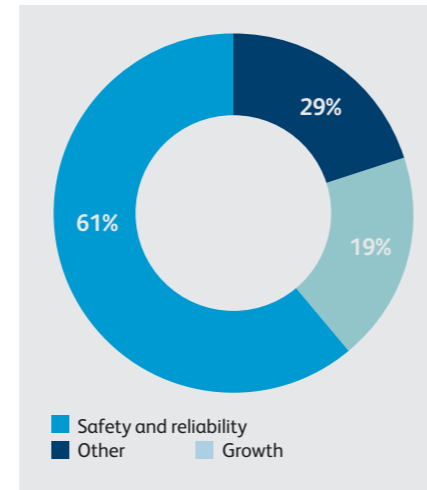


Figure 10: Operating Expenditure (\$2017, million)

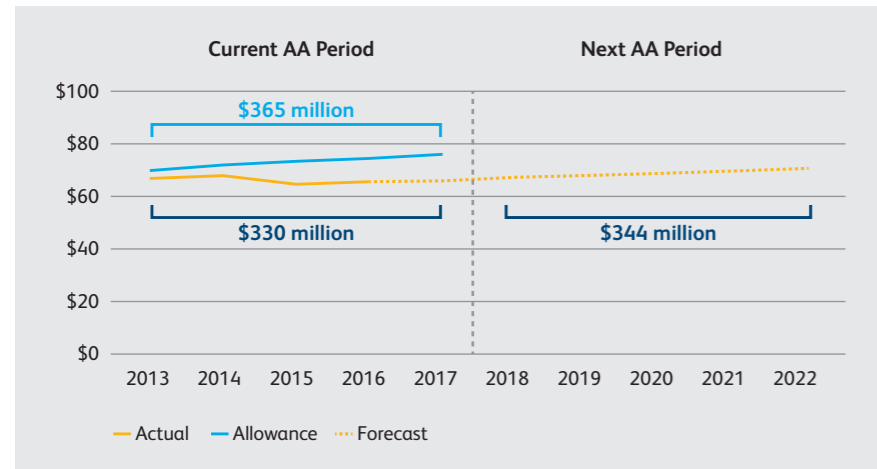
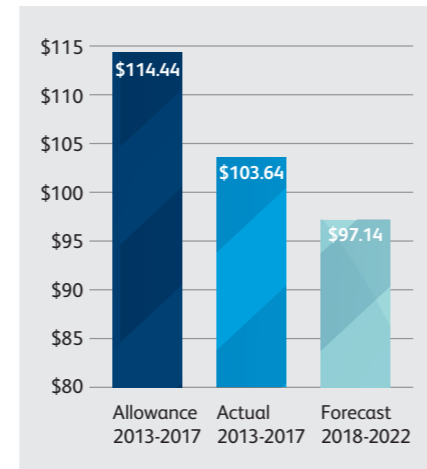


Figure 11: Operating Expenditure per Customer (\$2017)



Capital Expenditure

Our forecast capex is \$555 million over the next AA period, which is approximately 6% (or \$36 million) below current levels. This reduction is driven mainly by the completion of our mains replacement program by the end of the next AA period. Other key components of our capex forecast include the ongoing nationalisation of our IT capabilities and the forecast connection of around 16,000 new customers to our network each year.

Our proposed capex is consistent with meeting our regulatory obligations and with the feedback received through our stakeholder engagement program, particularly around maintaining reliability and improving safety. The composition of our program is detailed in Figure 13.

Figure 12: Capital Expenditure (\$2017, million)

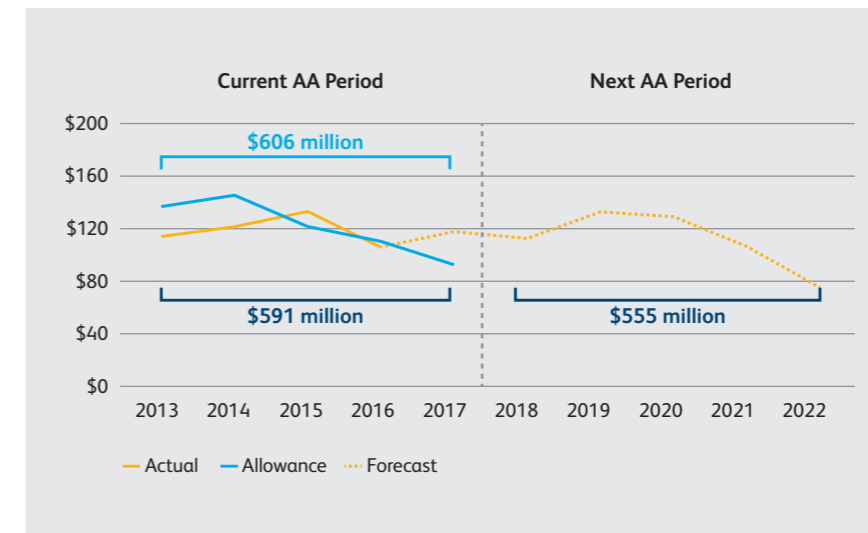
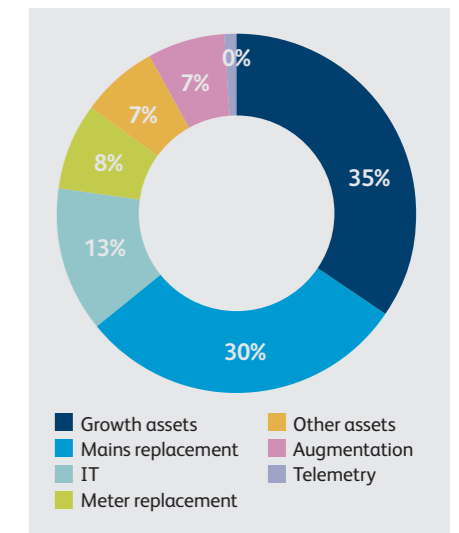


Figure 13: Composition of Capital Expenditure



¹ Note: all dollars provided are in \$2017 terms unless otherwise stated.

Other Key Elements of Our Plan

Financing Costs

The cost of financing our operations is our single largest cost, accounting for around 40% of the revenue recovered by the business.

We are seeking to receive a fair and reasonable rate of return on the investment we have made on the networks. This is essential in order for us to attract the necessary funding from our shareholders and debt providers to continue to invest over the next AA period.

We are proposing a significant reduction in the rate of return, from 7.39% (nominal, post-tax) to 5.28% for the next AA period. This reduction reflects the easing of financial markets following the global financial crisis.

Our forecast rate of return has been developed using the approach most recently adopted by the AER in network decisions. This yields a return on debt of 4.42% and a return on equity of 6.58%.

Incentives

We are a strong supporter of effective, outcome-based incentive arrangements as a way of promoting the long-term interests of our customers. Consistent with our recent South Australian AA Proposal, we are proposing to strengthen the incentive arrangements to apply in Victoria and Albury over the next AA period. More specifically we are proposing to:

- Retain the existing Efficiency Benefit Sharing Scheme – which provides continuous incentives to lower opex.
- Re-introduce a Capital Expenditure Sharing Scheme – which provides continuous incentives to lower capex.
- Introduce a Network Innovation Scheme – which will facilitate improved investment in network innovation.

These incentives benefit customers by rewarding the business for making cost savings. The majority of these benefits get passed back to customers in subsequent AA periods. Innovation incentives encourage the business to investigate new technologies, which could ultimately benefit all users through, for example, lowering emissions and/or costs.

Our incentive mechanism proposal follows a sustained period of stakeholder consultation on this issue.

Demand

Our gas demand forecasts have been based on the same methodology used by the AER for our South Australian network.

The residential forecasts are driven by expected new dwellings growth in Victoria and Albury as provided by the Housing Industry Association.

Both residential and commercial forecasts are impacted by the increase in wholesale gas costs driven by the ongoing development of the gas export industry in on the east coast of Australia. This results in declining consumption per connection over the next AA period.

The continued growth of our network is in the long-term interests of our customers as our costs are spread over a larger customer base (resulting in lower prices) and also results in lower emissions.²

Financing costs



2.11%

2.11% drop in financing costs, down from 7.39% to 5.28%

Incentives



Introducing a CESS and NIS. Strengthened incentives, informed by stakeholders

Network growth



16,000

Expected network growth of 16,000 gross new connections per year

Carbon emissions



5.4TN

of CO2 saved per new customer per annum²

² Based on a customer using gas instead of mains electricity for hot water, cooking and heating, and assuming emissions factors from the Department of Environment, National Greenhouse Accounts Factors, August 2015.

Network Revenue and Pricing

Our network revenue (expenditure plus a return on and of our investment) is recovered by charging retailers for transporting gas through the network.

Despite our commitment to improving safety and network performance, we are proposing that the total revenue to be recovered over the next AA period remains consistent with that recovered over the current period. As our customer base is growing over the same period, distribution prices paid by customers will fall as our costs (revenue) is spread over a larger number of customers.

Reduction in distribution prices on 1 January 2018

11%

Overall, our distribution prices will be lower, on average, in real (excluding inflation) terms over the next five year period, relative to current prices.

More specifically, our Plans provide for a 11% decrease in the distribution price on 1 January 2018 followed by 2.5% per annum increases in each year from 2019 to 2022 (before inflation).

Customer savings – residential



\$40

Average residential customer savings in 2018[#]

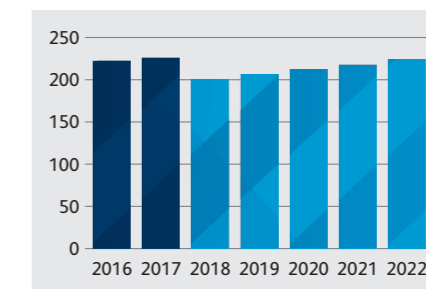
Customer savings – commercial



\$185

Average residential customer savings in 2018[#]

Figure 14: Total network revenue (\$2017, million)



Customer savings – industrial



\$3,698

Average residential customer savings in 2018[#]

[#] These annual savings in \$2017 are based on the weighted average distribution price savings across each of our tariff zones assuming average usage of 50 GJ for residential customers, 323 GJ for commercial customers and 3,315 GJ for industrial users

Next Steps

Our Plan has been submitted to the AER for its consideration. We intend to engage with stakeholders on an ongoing basis, including during the AER review process.

The AER will also seek stakeholder feedback during its own review process, including in response to an AER Draft Decision on our AA Proposal. The key dates for the review of our AA Proposal are set out in Figure 15 and include:

- 3 March 2017 – AER seeks stakeholder feedback on our AA Proposal;
- 29 June 2017 – AER to release its Draft Decision on our AA Proposal;
- 14 August 2017 – AGN to respond to the AER Draft Decision with a Revised AA Proposal;
- 12 September 2017 – AER seeks stakeholder feedback on the AER Draft Decision and AGN Revised AA Proposal; and
- 30 November 2017 – AER to release its Final Decision.

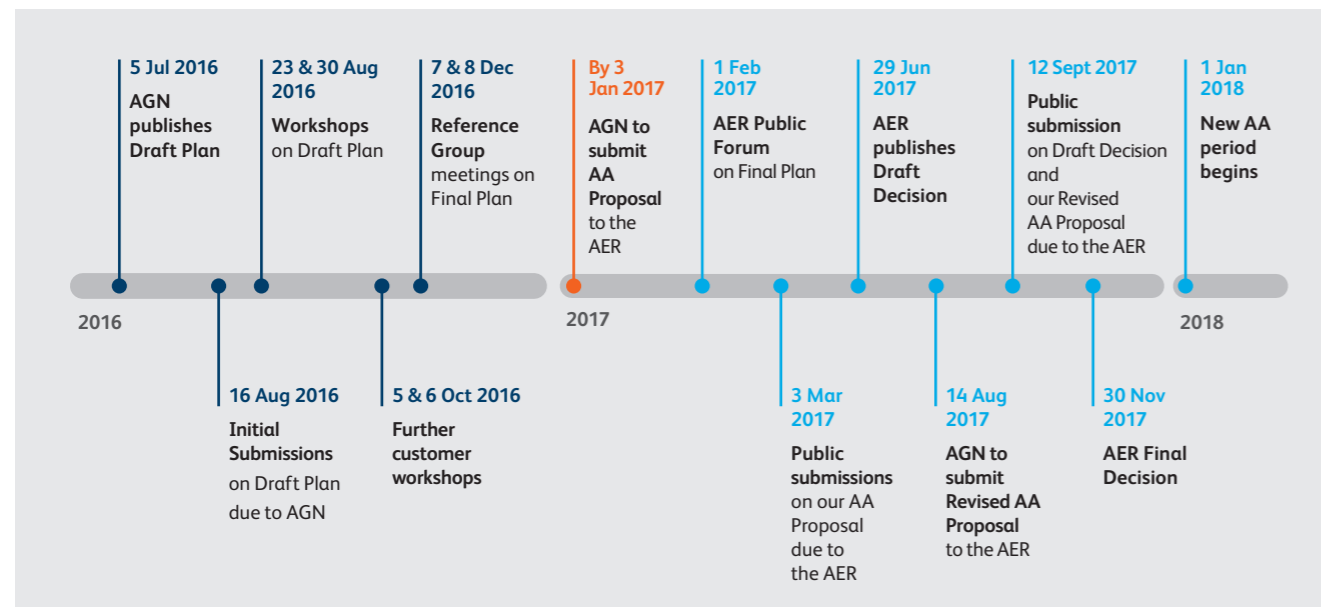
We are keen to continue to receive any feedback on our Plan directly from our stakeholders and customers at any point in the future. You can provide your feedback through the following options:

- Online – visit www.australiangasnetworks.com.au/our-business/have-your-say to lodge your feedback online;
- Email – send your feedback to haveyoursay@agnl.com.au;
- Post – send your submission to:
Craig de Laine (General Manager Strategy and Regulation)
Australian Gas Networks
Level 6, 400 King William Street
ADELAIDE SA 5000
Phone: (08) 8227 1500
- In Person – feel free to contact us at haveyoursay@agnl.com.au to arrange a time to discuss your feedback in person.

Our Final Plan delivers an upfront price cut, continuous service improvement, lower costs and lower carbon emissions.

We believe our Final Plan delivers for customers, is underpinned by effective stakeholder engagement and is capable of being accepted by the Australian Energy Regulator.

Figure 15: Historical and Future Key Milestones



Gas leaks and emergencies:

Gas leaks:
1800 427 532
(1800 GAS LEAK)

New connections and general enquiries:
1300 001 001

Media enquiries:
(08) 8227 1500

Corporate Head Office:

Australian Gas Networks Ltd
Level 6 , 400 King William Street
Adelaide, SA
Australia 5000

(08) 8227 1500

haveyoursay@agnl.com.au

australiangasnetworks.com.au

Have your say:
[australiangasnetworks.com.au/
our-business/have-your-say](http://australiangasnetworks.com.au/our-business/have-your-say)

