

Final Plan Attachment 5.7

Australian Gas Networks Customer Insights Report A Report by Deloitte

May 2016



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Deloitte.



Australian Gas Networks Customer Insights Report

Victorian and Albury Stakeholder Engagement Program May 2016

Background

Australian Gas Networks (AGN) operates natural gas networks in Victoria, South Australia, Queensland and small centres in New South Wales and the Northern Territory.

Across Victoria AGN is one of three natural gas distributors, and in Albury is the sole distributor, providing gas to approximately 650,000 customers across both jurisdictions. The focus of this report is on customers across the Victorian and Albury distribution network, incorporating:

- Central business district, northern suburbs, outer eastern suburbs and southern suburbs of Melbourne
- Mornington Peninsula
- Rural communities in the northern, eastern and north-eastern regions of Victoria
- South-eastern rural townships in Gippsland
- Albury.

In the Victorian and Albury networks, approximately 30% of the average retail gas price paid by residential customers and 22% of the average retail gas price paid by small business customers is made up of distribution charges from AGN.¹

Regulation and the gas industry

Australian Gas Networks is a monopoly business in the regions it operates in Victoria and Albury, and as such is required to submit an Access Arrangement Proposal for 2018-2022 period to the Australian Energy Regulator (AER) on or before 1 January 2017. The AER will make a revenue determination based on AGN's proposal with a view of ensuring that Australia Gas Networks is meeting the long-term interests of its Victorian and Albury gas consumers. In November 2012 the AER applied changes made by the Australian Energy Market Commission (AEMC) to the National Electricity Rules to all network service providers, including gas distributors. The changes require organisations to have an increased focus on the nature, quality and extent of consumer engagement (and stakeholders more broadly), including addressing consumers' concerns in their Access Arrangement Proposals. The voice of gas customers and stakeholders is therefore a key input that will help shape AGN's 2018-2022 Access Arrangement Proposal for the Victorian and Albury networks.

AGN has designed a stakeholder engagement program to help understand consumer concerns and priorities as they plan the Victorian and Albury gas distribution network of the future. This report highlights the key findings from the research phase of the program conducted in March 2016, however AGN will undertake further engagement in the lead up to and beyond submission of the Victorian and Albury networks Access Arrangement Proposal.

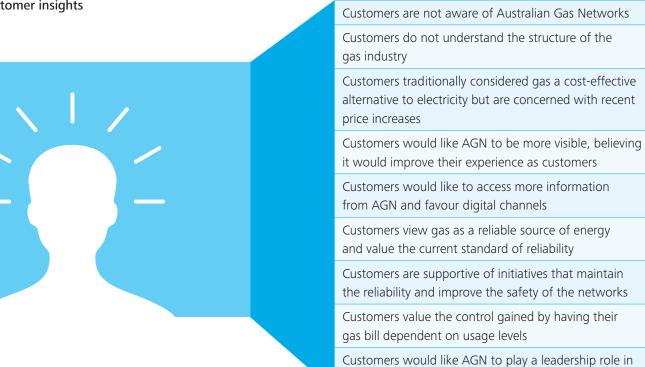
Contents

Stakeholder Engagement Program overview	5
Methodology and themes	8
Customer insights	10
Next steps	31

How AGN engaged



Customer insights



minimising environmental impact

4 Australian Gas Networks customer insights report

Stakeholder Engagement Program overview

Scope

AGN's Stakeholder Engagement Program is designed to identify the needs, priorities and concerns of current and potential gas customers and AGN stakeholders to develop a business plan that meets their long term interests. The program is also consistent with the requirements of the National Gas Objective (NGO) and the AER's Consumer Engagement Guidelines.

More information about the Stakeholder Engagement Program is available in AGN's 'Victoria and Albury Stakeholder Engagement Strategy' document, which can be downloaded from stakeholders.agnl.com.au.

The Program, which commenced in November 2015, has four phases as detailed in Figure 1.

Strategy phase

AGN leveraged the approach applied during the recent South Australian stakeholder engagement program while incorporating lessons learnt. AGN developed a Scoping Paper to guide discussions on key stakeholders, potential issues and the methods for engagement. The Scoping Paper was circulated with internal and external stakeholders namely:

- St Vincent de Paul
- Consumer Utilities Action Centre
- Australian Industry Group
- North Link
- Master Plumbers Association
- Council of the Ageing
- AGL
- Origin Energy
- Energy Australia
- Simply Energy
- Lumo Energy
- Alinta Energy.

Feedback from these stakeholders was incorporated into the Victorian and Albury Stakeholder Engagement Strategy. The Strategy detailed the set of research objectives which were used by AGN and APA Group² (APA) to identify components of the investment plans to be discussed with customers and stakeholders.

AGN also established two external reference groups to challenge, guide and review the process of developing and implementing the Stakeholder Engagement Program:

- The Victorian and Albury Reference Group includes members from peak bodies representing a wide range of community and consumer interests as well as industry and business customers
- 2. The Retailer Reference Group includes representatives from all major retailers to provide guidance, feedback and insights to AGN particularly with respect to matters where there is a natural crossover with retailers, such as vulnerable customers, terms and conditions for network access and tariff design.

Research phase

This report presents the findings and insights from the research phase during which AGN conducted customer workshops (facilitated by Deloitte). AGN will respond to the insights as it develops the 2018-2022 Access Arrangement proposal for the Victorian and Albury networks to submit to the AER on or before 1 January 2017 (the implementation phase).

AGN has used the principles, approach and lessons learnt from the South Australian Program to help deliver the Victorian and Albury Stakeholder Engagement Program. AGN plans to continually engage with stakeholders in Victoria and Albury and other regions served by their natural gas distribution networks to remain up to date with evolving customer and stakeholder needs and issues. Importantly, AGN will continue to use outputs from these programs in the development of future region-specific stakeholder engagement programs (ongoing engagement phase).

² APA Group operate and maintain AGN assets under a long term operating management agreement.

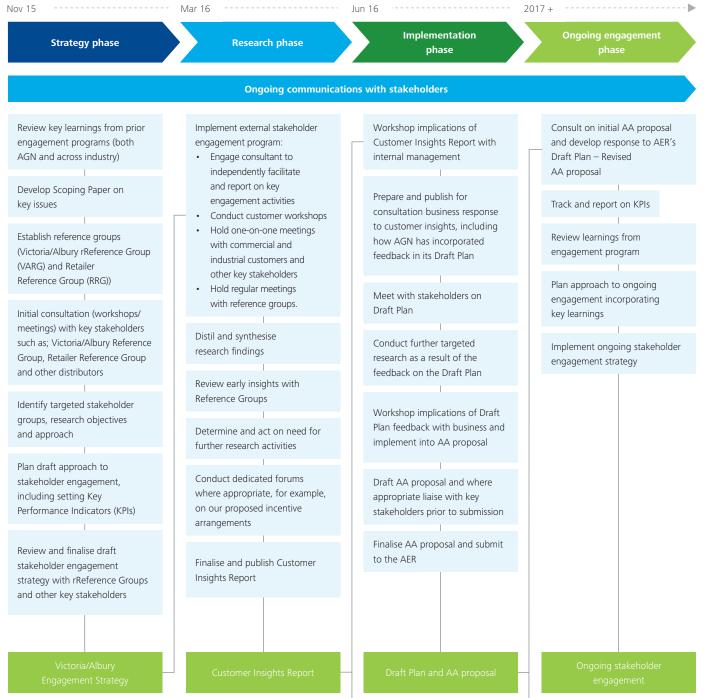


Figure 1: AGN's Victorian and Albury Stakeholder Engagement Program

Our role

AGN engaged Deloitte to assist with the design and delivery of a comprehensive yet 'fit-for-purpose' engagement program based on our customer-centric project methodologies and experience with the regulatory environment.

Specifically, Deloitte was responsible for:

- Ensuring the engagement activities were independent
- Ensuring the research findings accurately reflected the views and priorities of Victorian and Albury gas customers and stakeholders
- Recruiting a representative sample of Victorian and Albury gas customers to participate in the workshops
- Designing and facilitating the workshops with the AGN senior management team
- Developing workshop materials (including educational materials)
- Collating, analysing and reporting the workshop data.



Ben Wilson AGN CEO presenting at Customer Workshop, Shepparton 21 March 2016

Methodology and themes

The research methods were chosen and designed during the strategy and research phases in consultation with AGN and sought to build an evidence-based program using customer-centric techniques.

Research objectives

During the strategy phase, Deloitte worked with AGN and APA senior management to refine the research objectives, and potential topics for consultation. The strategy document was subsequently provided to the AGN Reference Groups for review and comment.

The major research objectives were to:

- Assist AGN's customers and the community more generally understand the natural gas market, including AGN's role and the application of the regulatory regime to AGN's business
- Ensure AGN's business plans and 2018-2022 Access Arrangement is more generally consistent with the long-term interest of customers and stakeholders.

Research themes

The engagement activities and research questions were organised around the following consultation topics:

Research them	Description
Customer experience	Customer service and communication channels
Network safety and reliability	Asset programs to maintain gas supply reliability and improve public safety
Tariff structure	Gas price tariff structure
Environmental commitment and reporting	Customers' expectations on the environment

Table 1: Research themes for Victorian and Albury workshops

Research method

During the research phase, customer workshops with residents and small to medium business customers were held in March 2016, in metropolitan Melbourne, regional Victoria and Albury. The objective was to test AGN's proposed initiatives and gather insights to understand customer needs, issues and preferences.

AGN outlined areas of the network where it considered investment is justified. They prepared a series of scenarios to test proposed initiatives with customers in the workshops. The scenarios explained the proposed initiative and associated price implications (estimates of cost per customer).

AGN provided workshop participants with a preliminary view on the direction of future prices before they made decisions on potential investments. The preliminary forecast indicated that AGN expects to decrease gas distribution prices over this period, however AGN was not able to quantify the magnitude of the reduction, nor did AGN give any indication as to the movement in the price of the other elements of the gas supply chain.

More information about the research method and objectives is available in AGN's 'Victoria and Albury Stakeholder Engagement Strategy' document, which can be downloaded from stakeholders.agnl.com.au.

Sampling

Six workshops were held in metropolitan and regional areas in Victoria and Albury with 78 network users (gas customers) including residents and small to medium businesses. These locations were selected to ensure representation across both Melbourne metropolitan and regional customers. Workshop participants were recruited to include a range of customer demographics including of gender, age, household income and reliance on natural gas by an independent and accredited market research agency.

Attendees were incentivised to participate, in accordance with common market research practices.

The findings of this report are based on the feedback received at the workshops from residents and businesses located in Victoria and Albury.

Workshop	Participants
Albury/Wodonga – residents and SMEs	12
Richmond – residents	10
Shepparton – residents and SMEs	14
Cranbourne – residents and SMEs	15
Preston – residents	15
Morwell – residents and SMEs	12
Total	78

Table 2: Participant breakdown by workshop location

Analysis

Information collected in the workshops was analysed to identify nine customer insights.

To collect the views of participants a number of research methods were used:

- An affinity process was used to solicit individual thoughts and visually group themes for a group-wide discussion on the energy (specifically the gas) industry
- Group discussions were facilitated by Deloitte, providing rich insights as workshop participants challenged each other and AGN subject matter experts in considering the proposed initiatives
- Quantitative analysis was undertaken for the support of proposed initiatives through:
 - A worksheet activity to allow participants to independently vote for their chosen investment option for each initiative
- At the end of the workshop, participants then prioritised (ranked) their chosen initiatives.

Workshop participants were provided with a level of education that enabled them to make an informed decision about the costs and benefits of the proposed initiatives. This education was provided by AGN and APA subject matter experts in the workshops with the aid of visual and text-based materials (such as printed fact sheets and an on-screen presentation). It was evident that customers required time to ask questions and engage with subject matter experts in understanding AGN's role in the industry. This finding will be detailed further in the Overarching insights section of this report.



Customer Workshop, Tralagon 30 March 2016

Customer insights

Overarching insights

1. Customers are not aware of Australian Gas Networks

Most participants (91%) had not heard of AGN prior to being involved in the stakeholder engagement program (refer Figure 2) with only two of the 78 attendees were able to accurately articulate AGN's role as a gas distribution business when asked.

These outcomes are not unexpected given AGN's position in the natural gas supply chain and that customers generally deal with their retailer instead of the distributor.

Have you heard of Australian Gas Networks prior to today's workshop?

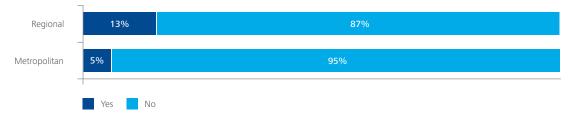


Figure 2: Proportion of participants who had heard of Australian Gas Networks, by location

2. Customers do not understand the structure of the gas industry

Not only are customers unaware of AGN as an organisation, but they do not understand the breakdown of the gas industry and the regulatory model under which AGN operates.

On the most part customers were unaware of the divisions in the gas supply chain across production, transmission, distribution and retail. They did not know that separate businesses owned and operated different elements of the gas supply chain, such as AGN's role as the owner of the gas distribution network. Attendees also did not understand the role of their retailer.

Even after explanation, it was noticeable in discussions that the regulatory model was a difficult concept for some customers to fully comprehend. As an example, at times during the workshop, participants questioned the rationale behind why they were asked to pay for work conducted on the network and why AGN was not responsible. However an increasing awareness of the regulatory model allowed them to better understand their contribution.

"I saw [Australian Gas Networks] on a sticker on my gas meter."

Regional SME

"I want to know more about the supply chain and how you fit into the system."

Metro Resident

"So if I call Energy Australia [for a gas fault], I'm not actually calling Energy Australia, I am calling Australian Gas Networks. So I am your real consumer."

"I know you're in business, and in business to make money, but why do I take a hit? Why don't you take a hit? Why don't you pay for [the investment]?"

Metro Resident

"If you own all of the infrastructure, we are paying for you to profit."

Metro Resident

3. Customers traditionally considered gas a costeffective alternative to electricity but are concerned with recent price increases

Prior to any sharing of information or discussion, each workshop began with an activity to gauge the thoughts customers have when first thinking about natural gas. The cost of gas was a recurring theme, only behind uses of gas (e.g. 'cooking', 'hot water', 'heating') as the most common item raised by workshop participants. They showed with common responses like 'bills' and 'price' that the price they paid for the fuel is front of mind. In general, customers perceive that gas has traditionally been a cheaper alternative to electricity and the general consensus across the workshops was that is still the case.

However, in all workshops a prevalent theme was that customers have the perception that the costeffectiveness of using gas has been eroded in recent years as price rises have eaten into its price advantage over electricity. Customers were still generally accepting of what they currently pay for gas, although had a sense of uncertainty over the recent upwards trend and where that might take the cost of their bill into the future.

Given the interest that participants showed towards their gas costs, during the workshop discussions customers welcomed hearing that AGN is forecasting the distribution element of their gas bill to fall within the next access arrangement period. However, this information was unexpected and initially met with some scepticism given the perceptions that all prices increase over time and that gas prices have risen in recent years. Participants were satisfied after AGN representatives explained the composition of its business expenditure and that the expected decreases in gas distribution prices were driven by by changes in global economic conditions that are expected during the next access arrangement period. "It used to be [cheaper than electricity]. Where I'm living right now it's not. My last bill was as high as my electricity bill." Regional Resident

"Compared to when gas was first on the market many moons ago, it was a cheap alternative to electricity. But as the years have gone by it's cheaper to heat your house with electricity than gas ducted heating."

Metropolitan Resident

"Why is it going to get cheaper? Nothing is ever going to get cheaper."

Regional Resident

"I thought [the breakdown of the gas bill price] looked interesting. Why isn't stuff like that on our bill? If you raise your visibility, it allows us to look at your charges on your website and ask [our retailers] why their prices aren't going down."

Metropolitan Resident

Customer experience

4. Customers would like AGN to be more visible, believing it would improve their experience as customers

As discussed in *Overarching insights*, Victorian and Albury customers are unaware of who Australian Gas Networks is and the role that it plays in the gas supply chain.

Given their lack of prior knowledge, workshop participants appreciated gaining an understanding of AGN's role in the gas supply chain and believe that this is information that should be available to all customers.

Participants believed this could be achieved by increasing the visibility of AGN and its role. The consensus across the workshops was that if customers could be equipped with some background knowledge, they would then know where to look for more information if they required or desired.

For example, participants suggested that if they were adequately informed about changes to distribution costs set by AGN as part of its five-year arrangement, they would be better equipped to deal with their retailer when negotiating their retail contracts. Participants also particularly wished to have the ability to access information across key concerns such as planned outages, safety issues and upgrades, and environmental impact and policy.

5.Customers would like to access more information from AGN and favour digital channels

Customers indicated that they would like to use multiple communication methods to interact with AGN. They generally prefer 'real-time' digital channels for greater immediacy and convenience but still favour more traditional communication methods for planned interruptions to their gas supply. The AGN website was the most heavily favoured channel, rating highest of any channel across 12 interactions (regarding industry information, AGN reports and policies, and long-term plans) and in the top three preferences for the remaining interactions. Customers want to be able to access all information across all topics via the website if they desire.

Through discussion, participants indicated that they preferred not to have a direct relationship with AGN, however, when seeking notification regarding potential interruptions to gas supply, customers strongly preferred being contacted by text message (SMS) for instant and direct communication.

Although there was a tendency towards favouring digital channels in general, participants also valued traditional written communication for important information around the industry, network, gas supply chain and the tariff structure. They tended to also favour postal information for planned asset works (such as planned outages, mains replacement and meter replacement).

In relation to *Insight #1*, that customers were not aware of AGN, workshop participants showed interest for more visibility around the natural gas industry, supply chain and AGN via television due to its accessibility and its reach in society.

For more complex issues around gas connections or reporting gas leaks, customers showed some preference towards the personal touch of communicating with someone via a call centre. They also supported greater awareness of important safety matters (such as 'Dial Before You Dig') through various media channels and that this visibility should be increased (refer to *Insight #7* which highlights the importance of improving safety).

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Το	pic	AGN website	Email	SMS/text message	Mobile app	Social media	Letter in the mail	Σ	Radio	Community workshops	Call centre	No preference
The natural gas supply chain	(•	•	•	•
AGN operations				•	•	•			•	•	•	•
Future plans for the natura gas network	al				•					•	٠	•
Availability of natural gas in my area	(•	•		•
Awareness of AGN and location of assets			•	•		•	•		•	•	٠	
Gas connections	(•			•	•		
Gas appliances and running costs				•					•	•		•
Tariff/pricing structure					•				•	•	•	•
Meter read programs						•		•	•	٠	•	
Gas leak reports								•	•	•		•
Planned outages								•	•	•	•	•
Unplanned outages										•		•
Mains replacement								•	•	•	•	•
Meter replacement								٠	•	٠	•	•
Gas fitters, plumbers and appliance retailers in my a	rea							•	•	•		•

Table 3: Customer communication preferences

Top 5 channels						
1	Website					
2	Letter					
3	Text message (SMS)					
4	Email					
5	Mobile					

Table 4: Most preferred customer communication channels

"I think it's about having an avenue back to you. If I shop at a supermarket, they don't know who I am either – but at the same time the consumer has an avenue back to the supermarket."

Regional Resident

"I suppose that's where as a network there's no real visibility. If you raise your visibility, it allows us to look at your website and ask retailers questions."

Metropolitan Resident

Network safety and reliability

6. Customers view gas as a reliable source of energy and value the current standard of reliability

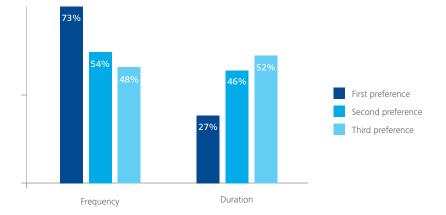
All 78 workshop attendees stated they were satisfied with the current level of reliability of their gas supply, with very few customers (6%) recalling a gas outage to affect them in the past two years, although the cause was unclear. The general consensus across all customer groups was that gas is a more reliable service than other sources of energy, such as electricity. At every workshop the outage from the 1998 Longford gas explosion was recalled, highlighting that the infrequency of outages (in particular of such duration) means that when the do occur they remain in the memory of many customers.

Given the very high level of gas supply service, it is understandable that no participants supported investment to deliver a level of reliability beyond what they currently experienced. Although participants did not want to invest in improving reliability, they do value the current level of reliability, and are supportive of investment that maintains it.

Only one participant was prepared to receive a reduced level of reliability in return for a saving on their gas bill. These responses give a strong indication that customers would like AGN to maintain the current level of reliability into the future. Customers have a slight preference towards longer infrequent outages over more frequent short outages Workshop participants undertook a choice exercise to assess their attitudes towards the duration and frequency of potential gas outages. They were able to designate which of the two factors was the biggest concern and would cause the larger disruption to their lifestyles.

Although both frequency and duration received significant consideration, the majority of participants indicated that AGN should focus more on minimising the frequency of outages, particularly in the case of planned outages where they are provided with adequate notice. The choice exercise asked participants to place three preference votes between the minimisation of either frequent or lengthy outages. Although the total spread indicates a small preference to minimising the frequency of outages, the insight is clear when looking at their preference scores. The majority of participants (73%) indicated the minimisation of frequency as their first preference.

This insight is not surprising when we consider the level of reliability that most participants currently experience, and the relative dependence they have on their gas supply in Victoria and Albury. During discussions it was clear that customers do not want to see an increased level (frequency) of outages, rather they would like the status quo to continue.



Do you prefer AGN reduces the risk of more frequent but shorter outages, or longer duration outages at a lower frequency?

Figure 3: Summary of the emphasis customers want AGN to place on reducing frequency or duration of outages, by vote preference

Should outages be required due to planned works or gas fault, the majority of customers would prefer maintenance schedules to be aligned and accept a longer duration of outages if it meant a reduced frequency, rather than put up with multiple instances of dealing without their gas supply. Participants felt that if they were informed about a planned outage (even of a long duration), they would be able to alter their plans and subsequent gas usage to accommodate the outage. The general consensus for these customers was that one to two weeks' notice in advance would be sufficient, ideally with a reminder two or three days out from the outage. The concern participants placed on the duration of outages was generally dependent on their use of natural gas within their home or business. Participants were sensitive to the time of year, in particular were concerned about lengthy outages during winter when they have a high reliance on gas for heating. They preferred outages for planned works to occur at more convenient times, such as in the middle of the day and during the warmer months, where there would be a lower impact to their daily routine.

"If it was going to go out because of multiple works, I'd rather it all go out in one go rather than three hours here and three hours there."

Regional Resident

"You can deal with [an outage] for short periods, say one or two hours, because you can reheat the house up after that. But if [the outage] lasted a whole day you'd need to go somewhere else with a young family."

Metropolitan Resident

7. Customers are supportive of initiatives that maintain the reliability and improve the safety of the networks It was outlined to customers that the majority of AGN's expenditure program is centred on either maintaining the level of reliability or maintaining and improving network safety. As such, a significant component of the workshop focused on discussing key reliability and safety initiatives that AGN is planning on including in its upcoming Access Arrangement Proposal. In each case, a subject matter expert spent some time to outline the background and purpose of the proposed activity and the estimated costs involved with the various options proposed.

The projects discussed were:

In	itiatives	Risks	Options	Estimated cost	
1.	Complete remaining 300kms (approx.) of Victorian mains replacement program	Safety and reliability	Option A: Complete program	\$6.00 per annum	
			Do nothing	-	
2.	Dandenong transmission pipeline duplication to provide supply to region once capacity reached	Reliability	Option A: Construct new transmission pipeline	\$1.00 per annum	
	in 2019		Do nothing	-	
3.	Suite of numerous smaller projects to support reliability (Mornington Peninsula peak, Echuca, Heidelberg/	Reliability	Option A: Undertake works to upgrade assets	\$3.00 per annum	
	Ivanhoe, Cranbourne growth, Traralgon Trunk Main)		Do nothing	-	
4.	Ensuring public awareness of AGN's assets to prevent damage when	Safety and reliability	Option A: Update Dial Before You Dig form	\$0.10 per annum	
	someone is unwittingly working in proximity		Option B: Target marketing (trade magazines) and Option A	\$0.50 per annum	
			Option C: TV/radio campaign, Option A and Option B	\$3.00 per annum	
			Do nothing	-	
5.	Gaining access to meters when they are otherwise inaccessible on a property	Safety and reliability	Option A: Take action to access meter by increased communication and/or relocating meter	\$0.50 per annum	
			Do nothing	-	
6.	Fit thermal safety devices to gas meters to improve fire preparedness	Safety	Option A: Fit devices in bushfire areas only	\$0.50 per annum	
			Option B: Fit devices to all new and replacement meters	\$3.60 per annum	
			Do nothing	-	

Following both an explanation of the circumstances and then discussion with AGN representatives and other workshop participants, customers were generally supportive of the proposed initiatives to maintain the level of reliability and improve the level of safety of the network. Although customers were conscious that the costs would be passed through to them in their bills, they expressed support as they could understand the greater benefits to network reliability and public safety. Customers were asked to vote for the initiatives that they were supportive of AGN undertaking (mindful of the cost impact), by completing a worksheet independently to other participants. Participants were then asked to rank the initiatives that they supported in order of importance. The results of which are outlined in Figure 4, proving AGN with guidance as to both total and relative levels of support.



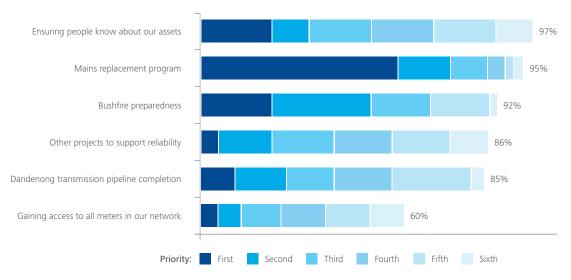


Figure 4: Total workshop support of AGN's proposed initiatives, broken down by preference rank

Customers were supportive of investments that maintained or improved the level of safety of the gas network

AGN's largest safety expenditure focuses on replacing gas mains using a risk-based approach. During the 2018-2022 Access Arrangement period AGN is forecasting to replace approximately 300km of gas mains, with the majority in inner Melbourne (including the central business district). This work will complete a larger gas mains replacement program that has been running throughout Victoria for a number of years.

Overall, customers felt strongly that the program was a necessary investment into the Victorian gas network to improve the safety of the network and maintain the existing levels of reliability into the future. Initially there was some concern from regional participants as they were concerned they were paying for investments which will be to the benefit of individuals and businesses in the Melbourne CBD. However after they were reminded of the regulatory framework in which AGN operates, and that investments in their own area had been spread across other regions, they tended to be more supportive of the proposed initiative.

Although the mains replacement program was the most expensive investment option presented to workshop attendees (at an estimated average impact to gas bill of \$6.00 per annum) it still received very strong support with 95% approval at both regional and metropolitan workshops respectively (refer Figure 5). Importantly, of all the initiatives proposed mains replacement was also the highest priority for all customers. Do you support the paying up to \$6.00 more on your gas bill to complete approximately 300kms of the mains replacement program? If so, please rank in comparison to other initiatives:



Figure 5: Total workshop support for mains replacement program, broken down by preference rank and location

How come the cost is not distributed by region? If these plans are for Melbourne then I'd expect them to pay more in the CBD, but you expect us in the township to pay too.

Regional Resident

Customers are supportive of initiatives to significantly improve public safety around gas assets

AGN explained to customers that their assets are sometimes subject to damage resulting from third party contact. This typically occurs when people accidentally strike the gas pipes whilst digging or working in close proximity to their location. A lack of awareness of the location of gas assets often creates a risk to community safety and resultant outages due to third-party strikes.

AGN presented three options for raising the awareness of the location of their assets, which leveraged the existing 'Dial Before You Dig' (DBYD) program. Although most customers were unaware of the location of gas pipes within their own property, they were generally familiar with DBYD and its purpose. After hearing of the safety risks and typical disruption to supply and costs involved with fixing damage caused by a thirdparty working too close to gas infrastructure, almost all participants (97%) considered it worthwhile to improve awareness in some way – the highest support of any initiative (refer Figure 4). The four options presented targeted raising awareness amongst different stakeholder groups and had varying price implications:

- Option A A minor improvement in 'Dial Before You Dig' forms, by making AGN more visible, at a cost of \$0.10 per annum to the average customer's bill
- Option B A targeted marketing campaign focused on trade magazines aimed at reaching those most likely to come in contact with AGN's assets, at a cost of \$0.50 per annum to the average customer's bill
- Option C A comprehensive mass market campaign consisting of television and radio advertising, at a cost of \$3.00 per annum to the average customer's bill.
- Option D Do nothing, at a cost of \$0 per annum

Although there was mixed sentiment as to which approach was the more effective for the risk and the cost, there was a general leaning towards the comprehensive approach to improve public awareness despite the price. Half of participants (49%) believed that the risks of accidental damage to assets warranted the highest cost approach with a comprehensive focus on public awareness through the full suite of initiatives. Roughly a quarter (28%) of participants thought that the type of people that are likely to work around assets should be targeted directly. Although believing the safety risks were worth mitigating further, approximately one in five (21%) participants thought that targeted marketing or television campaigns would not be required. These respondents generally believed that the targeted marketing through trade magazines or similar would be only reaching tradespeople who 'should already know about DBYD' and a television campaign would be an excessive approach. During the discussions, participants also generated some other channels to increase awareness. Some believed that television is being superseded as a medium to reach most households and instead the focus should be placed on digital channels, such as the use of social media. Attendees who were more knowledgeable about the type of excavation work which would put gas assets at risk believed that there should be a push to go right to the source and place DBYD awareness material within or on the machinery.

"What is the proportion of cases that are caused by tradies? Surely these people know anyway, so will this really make any difference?"

Metropolitan Resident

"I've sat in excavators for most of my life and I've never seen reference to 'Dial Before You Dig' in excavators. They always have 'Look Up and Live' for power lines, but nothing for gas. That's all you need to do, teach people. Just like what's above you, below will kill you just as quick."

Regional Resident

Do you support paying more on your gas bill to increase public awareness of AGN's assets to improve safety? If so, please choose which option you prefer:

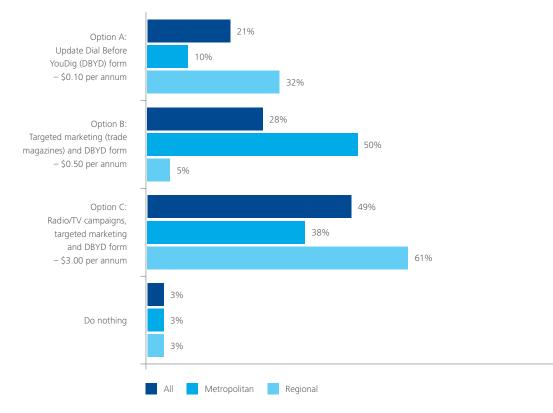


Figure 6: Total workshop support for improving public awareness of AGN's assets by investment option by location

Customers support investment that seeks to minimise fire risk

AGN presented participants with a newly available shut-off valve that can be fitted to the gas meter to reduce the risk of gas escaping during a fire. The valve is designed to shut down the flow of gas from the meter during extreme heat, typically caused by bushfire.

Participants were highly supportive of this initiative with 92% of participants indicating support for AGN fitting the devices to reduce the risk of fire (refer Figure 4). During the discussions, participants revealed a perception that bushfire risk in Victoria has been increasing over time.

AGN presented three options for the installation of the meters:

• Option A – Fit the fire shut-off valve to meters in high risk 'bushfire zones' at a cost of \$0.50 per annum on the average customer's bill.

- Option B Fit the fire shut-off valve to all new and replacement meters across the Victorian distribution network, at a cost of \$3.60 per annum on the average customer's bill.
- Option C Do nothing at a cost of \$0 per annum

If customers could be sure that there does exist a significant risk and that it could be prevented effectively by these measures, they showed support (63%) for a rolling installation of safety devices to all new and replacement meters in all areas (as well as in bushfire areas) (refer Figure 7). This sentiment was expressed consistently across the workshops, however more strongly in the regional areas (76%) than the metropolitan locations (50%). Do you support paying more on your gas bill to improve fire preparedness by installing safety devices? If so, please choose which option you prefer:

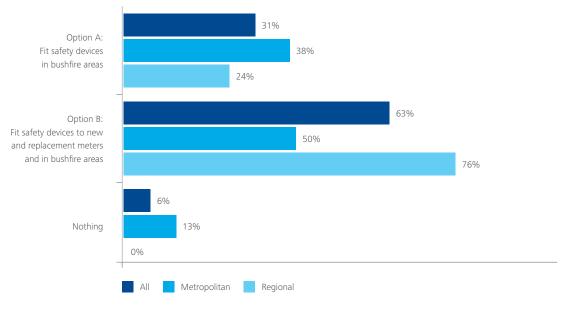


Figure 7: Total workshop support for fire preparedness by investment option

"If a house is burning and the gas stove catches fire, the device won't stop the gas."

"I think the way that the bushfire problem is escalating in this country, I'm quite happy to pay the \$3.60. I really am. This is going to be a major issue in the future. And our firefighters are not going to be able to stop these fires."

Regional Business

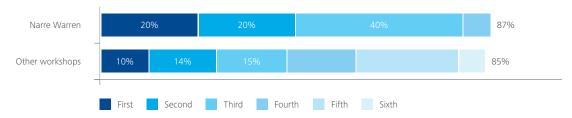
Customers are supportive of network upgrades to retain reliability levels

Generally, there was strong support from workshop participants for AGN to undertake key projects to maintain reliability at current levels. These initiatives either came in the form of upgrading capacity to meet customer growth or undertaking work to replace assets where required.

The Dandenong to Crib Point transmission augmentation is the largest project that AGN is looking to undertake to ensure reliability of services. The capacity of the current pipeline is projected to be fully utilised by 2019, but a proposed duplication will maintain supply to the existing 160,000 customers in the region and accommodate the predicted organic growth of a prospective 65,000³ customers by 2036.

The majority of participants (85%) were prepared to pay to support the maintenance of the existing level of reliability of the network, with the understanding that upgrades to meet population growth are necessary investments for the supply of gas for Victorian residents into the future. There was a significant bias given to the project priority by attendees at the Narre Warren workshop (the only group to live within proximity of the pipeline in question). Around 80% of Narre Warren residents ranked the Dandenong duplication pipeline in the top three projects from a priority perspective, compared to 40% of participants from other parts of Victoria and Albury (refer Figure 8).

When discussing proposed projects to maintain reliability due to customer growth, initially some participants questioned sharing in the costs to provide access to new customers. They wanted to understand why existing gas users were being asked to subsidise the costs of expansion, while others benefit by having gas supplied in an area they chose initially without gas, and AGN benefits by expanding its asset base. These participants were satisfied when AGN representatives explained firstly that the primary driver was to maintain reliability to existing customers, and the economies of scale benefits by expanding the network.



Do you support the paying up to \$1.00 more on your gas bill to duplicate the Dandenong transmission pipeline? If so, please rank in comparison to other initiatives:

Figure 8: Total workshop support for Dandenong transmission duplication, broken down by preference rank and location

When discussing the work undertaken to maintain the reliability of the network, AGN also presented a sample of smaller initiatives to provide participants with an indication of its broader expenditure profile. By name, the following initiatives were outlined to attendees as examples of the broad types of work AGN is looking to undertake during the next Access Arrangement period:

- Capacity upgrade to Mornington Peninsula to meet peak demand
- Augmentation by 2021 of the Echuca network to meet 190 new connections per year
- Augmentation around Ivanhoe/Heidelberg to complete ongoing mains renewal without affecting Austin Hospital supply

- Reinforcement to network in Cranbourne region to support 3,000 new connections per year, with potentially up to 40,000 new connections in 20 years
- Reinforcement of Traralgon trunk main by 2020 to provide 15 years' of load growth, meeting 200 new connections per year.

The total level of support for this combined set of projects (86%) was in line with the similar (but more expansive and expensive) Dandenong transmission pipeline duplication. Although customers were willing to contribute via their bill to support these projects, because the projects tended to be smaller and more localised customers tended to rank them as a far lower priority than the initiatives with far-reaching reliability or safety benefits (refer Figure 4).

³ APA internal modeling

"[The Dandenong duplication] has to be done otherwise it will catch up to the next generation."

Metropolitan Resident (Narre Warren)

"If this is about growth, theoretically the more customers you have the cheaper it should be [for the rest of us]."

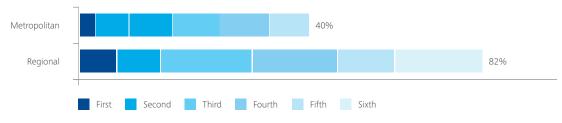
Metropolitan Resident

Customers are less supportive of initiatives when network assets are within the control of individuals AGN advised workshop attendees that property alterations or other changes in circumstances can mean gas meters become inaccessible for some meter reads and safety checks, requiring AGN to take action to gain access or to move the meter to a more appropriate position. In contrast to the customer support of projects to maintain the reliability of gas supply and improve public safety around tangible risks, there were more mixed sentiments across the metropolitan and regional locations when assets were within the control of individuals.

Overall, participants had the lowest level of support for the proposed initiative whereby AGN would take action to reach gas meters inaccessible due to property fencing or similar. A comparatively low 60% of participants supported the initiative (refer Figure 4) when they believed individual customers to be responsible. This result marks a significant deviation from the general trend of Victorian and Albury participants strongly favouring proposals (an average support rate of 86% across all six initiatives). Although at an aggregate level there is modest support for this initiative, there is a disparity between metropolitan and regional participants in this instance. Regional customers were supportive of this investment, with 82% of participants supporting AGN making investment to gain access to inaccessible meters. In contrast metropolitan customers were against the initiative, with only 42% support (refer Figure 9).

Regional customers were more interested in discussing what the solution would look like and under what circumstances contractors are unable to access meters. They did not wish for the supply to be restricted to anyone with an inaccessible meter and were interested in exploring methods to be contacted about upcoming meter reads.

Conversely, there was a general consensus of a 'user pays' approach amongst metropolitan participants who believed that the property owner should be responsible for footing the bill if AGN is unable to reach the gas meter.



Do you support the paying up to \$0.50 more on your gas bill for AGN to gain access to inaccessible gas meters? If so, please rank in comparison to other initiatives:

Figure 9: Total workshop support for gaining access to gas meters, broken down by preference rank and location

"It depends why I'm paying the extra 50c per year. Am I paying it because [a customer's] gate is locked and they never answer their phones or read their letters?"

Regional Resident

"Can you pass that responsibility of cost onto them? [Gaining access] costs money, so why wouldn't you pass it onto them to bear the communication cost of that?"

Metropolitan Resident

Tariff structure

8. Customers value the control gained by having their gas bill dependent on usage levels

There were mixed opinions with regards to the degree of variability customers are prepared to face in their gas bills.

A workshop activity asked participants to place a vote on their favoured tariff structure, choosing between tariffs structured with different levels of variable and fixed components. The specific options were:

- · High fixed component tariff
- High variable component tariff (similar to the current gas bill structure)
- Capped with excess
- Other.

The majority of respondents (63%) indicated a preference to retain the current style of gas tariff structure, with a high variable component (refer Figure 10). With most of their gas bill based on consumption, they preferred to be able to better manage the bill they pay by controlling their usage. These customers were prepared to deal with seasonal bill fluctuations if it meant that they would pay only for what they used.

Consistent with looking to maintain control over the bill, 11% of participants were supportive of a tariff structure similar to what they are familiar with their mobile telephone provider, which increases the variable amount with a cap (noting the additional charge rates when usage is beyond the cap level). Participants who supported this model were prepared to limit their usage to ensure they remained under the cap with a view of obtaining lower bills. The qualification to this desire is that they want to be able to access their usage at any moment, to inform their actions and allow themselves to diligently manage their supply quota per period.

Overall, three-quarters (74%) of attendees supported a high to very high degree of variability in their gas bill, based on their level of use. These two options together were over three-times as popular as the tariff choice with the high fixed component (23%). Customers who preferred to increase the fixed component were averse to the 'bill shock' from seasonal fluctuations (for example, using far more gas heating in winter compared to summer).

"I've got more control over the variable costs. Unplug things at the wall, how much shower I use. It's down to me."

Metropolitan Resident

"I'd like to track my usage more throughout the period – as frequently as possible – so I could really know how my habits affect my bill."

Regional Resident

"Because our bill fluctuates quite a lot – from \$50 in summer to \$350 in winter – it would be more manageable to have it smoothed out."

Fully fixed Fully variable 3% 63% 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% Fixed Variable Uncapped Other

Which is your preferred tariff structure?

Figure 10: Total workshop support across types of tariff structure



Customer Workshop, Tralagon 30 March 2016

Environmental commitments and reporting

9. Customers would like AGN to play a leadership role in minimising environmental impact

As outlined in *Insight #3*, the workshops started with an activity to find the initial responses from participants when they thought about natural gas. Only behind the uses of gas and cost of gas, the third most frequent theme derived from this activity was the environment. Customers tended to think of gas as a relatively 'clean' and 'efficient' energy source, but had concerns over the damage from gas production (with popular responses such as 'fracking', 'mining').

AGN asked workshop participants what they would want to know in terms of AGN's environment commitments and reporting. There was a strong consensus for AGN to increase its transparency in both the actions of itself, but also in relation to the upstream production and supply of gas. Participants generally wanted to be informed around the level of environmental sustainability and risk of using natural gas. Importantly they also wanted to be able to ensure that the gas they were using was produced and supplied to regulatory environmental standards and their own expectations. Customers were interested to know that the emissions intensity of natural gas generation and combustion was significantly below that of coal and oil products, and thought AGN should promote that message further. In most workshops, the sourcing of coal seam gas via fracking was raised as an issue by a couple of participants. There was a negative connotation associated with this form of gas production and these individuals wanted to know if AGN was using gas from this source. In regional areas, environmentally conscious residents were concerned by the perception that coal seam gas production would damage the land that they enjoyed.

Not only were customers mindful of AGN aiming to mitigate its environmental impact where it could, they also expressed a desire for AGN to be on the front foot to create positive changes to the environment. The thought was if AGN was prepared to use the earth's resources to run its business and generate revenue, then it should also put something back into the environment. Customers not only believed that action like this would improve and restore the environment, but it would also provide a way of AGN improving its branding and public visibility. For example, a suggestion was raised that AGN could sponsor a tree planting program within communities, thereby putting back into the environment and also improving its perception in society.

"I think you should also talk about the environmental impact of upgrade projects."

Regional Business

"I think on the website you should show how the gas is sourced. And if you are saying gas is sustainable, you should show the levels of production and consumption." "You're paying the work off over 60 years, so why can't the environmental plan be as long as the payoff plan?" Regional Resident

"Even though I don't like it, I'm prepared to [pay for projects] because it's infrastructure for the future. I don't think I'm alone in having admiration and loyalty towards organisations that show leadership that do likewise, because it's the right thing to do."

Regional Resident

Next steps

Deloitte understands that AGN will take the insights provided in this report and respond to them as part of the development of its Access Arrangement proposal for the Victoria and Albury networks which is due for submission to the AER on or before 1 January 2017.

As outlined in Figure 1, AGN will share the insights detailed in this report and the subsequent business decisions with the AGN Reference Groups to make a judgement about additional consultation that may be required in the lead up to the Access Arrangement proposal submission.

AGN also intends to release a Draft Plan, outlining its response to the insights in this report during July 2016 to allow for further public consultation prior to the finalisation of its Access Arrangement Proposal.

Further details about AGN's stakeholder engagement strategy and engagement program can be found at stakeholders.agnl.com.au.



Customer Workshop, Preston 23 March 2016

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