Changes in regulated retail gas prices in NSW from 1 July 2012

June 2012

All household and small business gas customers in NSW (retail customers) can choose their retail supplier. However, customers can also choose to remain on regulated retail gas prices with the standard retailer in their area.

In 2010, we agreed Voluntary Transitional Pricing Arrangements (VTPAs) with 4 standard gas retailers in NSW for the period 1 July 2010 – 30 June 2013.[1] Each standard retailer sets their regulated retail gas prices in line with their VPTA, and we monitor their compliance.

The standard retailers have proposed increases in regulated retail gas prices from 1 July 2012. The proposed price increases incorporate: [2]

- small increases in the retail component of regulated retail gas prices (the 'Retail Component')
- the pass through of gas distribution network prices as approved by the Australian Energy Regulator (the 'Network Component'), and
- the impact of the Commonwealth Government's carbon pricing mechanism which commences on 1 July 2012 (the 'Carbon Component').

We have reviewed the standard retailers' pricing proposals and consider that they are consistent with the VTPA. As a result, regulated retail gas prices for a typical residential customer will increase by 9% to 15% across NSW from 1 July 2012. The price increases for individual customers will depend on their standard retailer and their annual consumption. These price increases are larger than we estimated in 2010[3], due to the introduction of the carbon price and larger than expected increases in gas distribution network prices.[4]

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1 Refer to Appendix A for standard retailers and their supply areas.

2 The VPTAs specify that 'default' gas retail prices (or regulated prices) will be comprised of R+N+C, where R refers to the Retail Component, N refers to the Network Component and C refers to the Carbon Component.

3 IPART, *Review of regulated retail tariffs and charges for gas 2010-2013 – Final Report*, June 2010, p 4.

4 Gas network distribution prices are charged by network businesses for transporting gas through the distribution network to homes and businesses in NSW. These prices are regulated by the Australian Energy Regulator (AER) and passed through into retail prices.

In section 1 below, we outline how we assessed the standard retailers' proposals on the Carbon Component and what impact the Carbon Component will have on typical customer bills. In section 2, we set out the increases in regulated retail gas prices from 1 July 2012 as a result of the Retail, Network and Carbon Components.

1 The introduction of a carbon price from 1 July 2012

From 1 July 2012, the Commonwealth Government's carbon pricing mechanism will impose direct costs on around 500 entities in Australia by requiring them to pay for their carbon emissions under the *Clean Energy Act 2011* (Cth) (Act).[5]

Many of these liable entities will be part of the gas supply chain that delivers gas to households and businesses in NSW. This means that these entities are liable for the costs of carbon emissions associated with extracting gas, transporting it over the transmission and distribution networks, and its consumption by retail customers. While upstream gas producers and network operators will be liable for the emissions associated with their facilities, natural gas retailers will be liable for the downstream emissions associated with their customers' usage of gas. (Refer to Appendix B for further details.)

The direct cost impact of the carbon price on regulated retail gas prices in 2012/13 is a function of the cost of carbon emissions from 1 July 2012 (legislated at $23/tonne CO_2, in 2012/13) and the amount of emissions at each stage of the supply chain. Retailers have proposed increases in gas prices to reflect these additional upstream and downstream costs.

The carbon pricing mechanism will also result in indirect costs, such as increased operating costs. AGL and ActewAGL have proposed increases in gas prices to reflect these additional operating costs.

5 In the fixed price period (1 July 2012 – 30 June 2015), carbon permits will be issued at a fixed price to entities who are liable under the *Clean Energy Act 2011* (Cth).

1.1 Retailers' proposed Carbon Components

The standard retailers proposed[6] increases in retail gas prices to reflect the additional costs resulting from the carbon price from 1 July 2012 (Carbon Components) as follows:

- Origin Energy proposed to pass through $1.48/GJ to its Albury and Murray Valley customers and $1.55/GJ to its Country Energy customers (the Wagga Wagga area and Tamworth)
- ActewAGL proposed to pass through $1.66/GJ to its NSW/ACT border[7] and Shoalhaven customers, and
- AGL proposed to pass through $1.70/GJ to its Sydney, Wollongong, Newcastle and inland NSW customers.[8]

The different increases proposed by the retailers reflect differences in the carbon intensity of gas supplied to different parts of NSW, including the emissions associated with gas extraction and transportation from gas fields. The cost of supplying gas to customers from gas fields with higher carbon intensities is likely to be relatively more following the introduction of the carbon price. Also, the different increases reflect estimates of the indirect impact the carbon price will have on retailers operating costs.

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6 If standard retailers wish to pass through a 'Carbon Component' under the VTPAs, they must demonstrate how they have calculated the Carbon Component and that the Component is reasonable. The VTPAs do not specify a particular methodology that the retailers must use to calculate the Carbon Component.

7 These are customers on the NSW/ACT border and in Queanbeyan who are served by the Jemena and ActewAGL gas distribution networks respectively.

8 AGL submitted a revised proposal on 31 May, which included the recovery of $1.70/GJ including $0.05/GJ for the additional operating costs related to the introduction of the carbon price. AGL's original proposal included the recovery of $1.78/GJ, including $0.13/GJ for additional operating costs.

1.2 IPART's assessment of the retailers' proposed Carbon Components

We consider that the standard retailers have demonstrated that their proposed Carbon Components are reasonable in accordance with the VTPA, and reflect the additional costs that they are likely to incur as a result of the introduction of the carbon price.

In assessing their proposals, we note that:

- There is limited publicly available information on the carbon intensity of certain gas supply facilities. For instance, emissions factors for third parties (eg, emissions for transmission pipelines and gas fields) are confidential.
- Some of the relevant regulatory instruments for the carbon pricing mechanism (eg, the instrument specifying methods for calculating the potential greenhouse gas emissions embodied in an amount of natural gas[9]) are still in draft form and subject to change.
- There is typically more than one methodology available for businesses to calculate their carbon emissions under the Act.

Where possible standard retailers have used publicly available information[10], and have provided alternative sources of information where this better reflects the likely costs incurred as a result of the carbon price.[11]

Box 1 provides an overview of how we assessed the standard retailers' proposals.

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9 *The National Greenhouse and Energy Reporting (Measurement) Determination 2008* (Cth) is being amended to specify methods for calculating the potential greenhouse gas emissions embodied in an amount of natural gas under the Act. The amendments are still under consultation.

10 For example, the standard retailers calculated the 'downstream emissions' (embodied emissions for which they are liable) using the emissions factor attributed to natural gas distributed in a pipeline as set out in the NGA Factors (July 2011). This calculation uses emissions factors that are the same as the deemed emissions factors contained in the consultation draft amendments to the *Measurement Determination (National Greenhouse and Energy Reporting (Measurement) Amendment Determination 2012 (Cth))*.

11 For example, Origin submitted confidential information on the emissions intensity of gas fields that are used to supply its Albury/Murray Valley and Country Energy customers. Origin has access to this information because it either operates these gas fields or is a participant in a joint venture that operates these fields.

Box 1 IPART's assessment of the standard retailers' Carbon Component proposals

Our assessment of the standard retailers' proposals involved the following steps:

- We considered how the Act is likely to impose liability on the various elements of the gas supply chain (including whether gas suppliers are directly liable to surrender carbon permits) and the extent to which any carbon related costs associated with gas distribution will be captured in gas network distribution prices.
- We considered each retailer's estimates of its individual carbon cost components, and compared the methodology proposed by them for calculating upstream and downstream emissions costs with methodologies used to calculate liability under the Act.
- Where possible, we compared the information and calculations provided by retailers against publicly available information.
- We compared information provided by retailers to assess whether the cost differences resulting from different methodologies were material and, if so, whether they could be justified (for example, if they could be justified as a result of gas being sourced from different fields). We used different sources of information to assist with this task.
- We assessed whether the proposed recovery of additional indirect carbon costs:
  - is consistent with the retail margin in our 2010 review of regulated gas prices; and
  - reasonably reflects efficient incremental operating costs given the information provided by retailers, information that is publicly available, the treatment of operating costs in previous regulatory decisions and the allocation of costs between customers.

1.3 Impact of the Carbon Component on retail prices and customer bills

The inclusion of a Carbon Component in regulated retail gas prices from 1 July 2012 will increase prices by 5.5% to 9.0%.

Table 1 summarises the percentage and dollar increase in a typical regulated residential customer's annual bill in each standard supply area as a result of the pass through of the Carbon Component. For business customers that typically use more gas per annum, the impact in dollar terms is likely to be higher.

Customers in the Albury/Murray Valley, NSW/ACT border, and Wagga Wagga/Tamworth areas typically consume more gas per annum than customers in the Shoalhaven and AGL standard supply areas. The higher dollar increases in bills in these areas partly reflects this greater consumption.

Table 1 Increases in regulated retail gas bills for typical residential customers as a result of the carbon price

	%	$pa
AGL (Greater Sydney region and Central NSW)[a]	6.0 %	$43
Country Energy (Wagga Wagga and Tamworth areas)[b]	7.1%	$55
Origin Energy (Albury/Murray Valley area)[c]	9.0%	$75
ActewAGL (NSW/ACT border and Shoalhaven)[d]	5.5-7.4%	$29-89

a A typical customer using 23GJ of gas per annum. Impact on bills includes GST.

b A typical customer in Wagga Wagga using 32GJ of gas per annum. Impact on bills includes GST.

c A typical customer using 46GJ of gas per annum. Impact on bills includes GST.

d A typical customer using 40GJ, 49GJ and 16GJ of gas per annum in the Capital, Queanbeyan and Shoalhaven regions respectively. Impact on bills includes GST.

Note: This does not include the impact of the carbon price on the costs of operating and maintaining the gas distribution network. These additional costs will be captured in gas network prices that are regulated by the AER.

Source: Standard retailers' proposals and IPART analysis.

In addition to the carbon price there will be other cost drivers, such as rising gas distribution network prices and inflation that will contribute to higher regulated retail gas prices from 1 July (discussed in Section 2).

Low and middle income households will receive carbon price compensation from the Commonwealth Government. Our analysis indicates that the Commonwealth Government's assistance package will adequately compensate the large majority of low-income households for the impact of the carbon price on their electricity and gas bills.[12]

12 IPART, *Changes in regulated electricity retail prices from 1 July 2012 – Final Report*, June 2012, section 6.5.

2 Changes in regulated retail gas prices from 1 July 2012

Standard retailers have proposed increases in regulated retail gas prices from 1 July 2012[13]. We have reviewed the standard retailers' proposals and consider that they are consistent with the VTPAs. The proposed price increases incorporate:

- Small increases in the Retail Component as allowed under the VTPAs[14].
- The pass through of gas distribution network prices as approved by the AER.[15] In some cases, the increase in gas distribution network prices are significant (see below).
- The Carbon Components that we consider to be reasonable (as set out above).

The changes in regulated retail gas prices from 1 July 2012 will vary for a typical residential customer of the four standard retailers as follows:

- 14.8% for AGL customers, which translates to an extra $106 per annum for a typical residential customer bill.[16]
- 10.4% for Origin Energy's Murray Valley customers, which translates to an extra $117 per annum for a typical residential customer bill.[17]
- 11.6% for Origin Energy's Country Energy customers (the Wagga Wagga area), which translates to an extra $93 per annum for a typical residential customer bill.[18]
- 8.8% to 14.5% for ActewAGL's ACT/NSW border and Shoalhaven customers, which translates to an extra $46 to $142 per annum for a typical residential customer bill.[19]

The impact in dollar terms for business customers will be larger given that they typically use more gas per annum.

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13 Clause 4 of the VTPA outlines the process that standard retailers must follow for varying regulated retail gas prices.

14 The VTPAs provide for small increases in the retail ('R') component of regulated prices. In some cases, for example, for AGL these increases were to be at or below inflation (as measured by the previous year's CPI).

15 These distribution network prices incorporate the small impact that the carbon price will have on the cost of operating and maintaining the gas distribution network. Jemena's network prices incorporate a carbon cost of $0.10/GJ, or around $2.30 per year for a typical AGL customer.

16 This assumes a typical customer uses 23GJ of gas per annum. Impact on bills includes GST.

17 This assumes a typical customer uses 46GJ of gas per annum. Impact on bills includes GST.

18 This assumes a typical customer in Wagga Wagga uses 32GJ of gas per annum. Impact on bills includes GST.

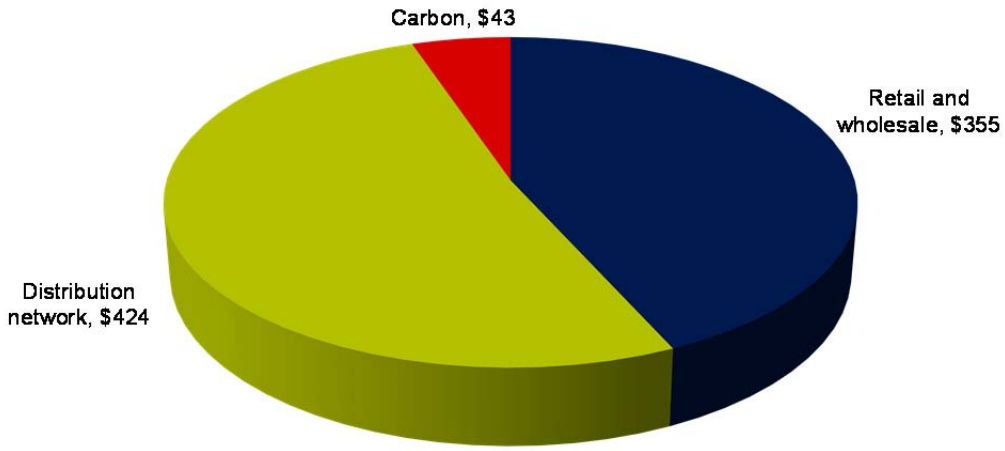
19 This assumes a typical customer uses 40GJ, 49GJ and 16GJ of gas per annum in the Capital, Queanbeyan and Shoalhaven regions respectively. Impact on bills includes GST.

The majority of regulated retail gas customers in NSW are supplied by AGL. The main drivers of the increases in AGL's residential regulated retail gas prices are:

- The introduction of the carbon price, which adds around 6.0% or $43 to a typical residential retail customer bill.
- Increasing distribution network prices which will increase on average by around 13% from 1 July 2012,[20] leading to an increase in residential retail gas prices for a typical AGL customer of 6.7%. (Refer to Box 2 for further detail on gas distribution network prices and how they are determined.)
- Inflation of 3.1%,[21] which will increase retail prices by 2.0%.

Figure 1 shows the make-up of a typical regulated residential retail customer bill in AGL's supply area from 1 July 2012. It shows that the costs associated with the carbon price will represent around 5% of a typical customer bill, or $43 per year from 1 July 2012.[22] The costs associated with using the gas distribution network will represent around 52% of a typical customer bill, or $424 per year from 1 July 2012.

Figure 1 Components of a typical regulated residential retail gas bill in AGL's supply area in 2012/13 ($, including inflation)



Note: Costs calculated for a typical regulated residential gas customer in AGL's supply area using 23 GJ per year. Includes GST.

20 These are the prices charged by Jemena Gas Networks (NSW) for use of its gas distribution network.

21 The VTPAs specify that inflation is calculated as equal to the CPI for the December Quarter 2011 divided by the December Quarter 2010.

22 This percentage is likely to differ in other supply areas due to the underlying network prices.

Box 2 Gas distribution network prices

The costs of operating and maintaining the gas distribution network are reflected in the distribution network prices that operators charge retailers that use the network to serve their retail customers. In most cases, gas distribution network prices are regulated by the Australian Energy Regulator (AER) under an Access Arrangement and are approved annually in accordance with the Access Arrangement. However, gas distribution network prices in the Shoalhaven area are not regulated.

Gas distribution network prices typically make up around half of a customer's retail bill. As retailers can do little to control distribution network costs, the VTPAs allow for these prices to be passed through into retail prices.

For some customers the distribution network price increases from 1 July 2012 are larger than were previously envisaged. For example, gas network price increases for AGL customers (in Jemena's gas distribution network supply area) will increase on average by between 12% and 14% from 1 July 2012, adding around 7% to customers' bills (however gas network prices will only increase by inflation in the Shoalhaven area). This includes the impact of Jemena's successful appeal to the Australian Competition Tribunal (ACT) of the Access Arrangement approved by the AER.[23] The avenues for appeal available to gas network businesses in relation to the AER's regulatory decisions are currently being reviewed. We have made a submission to this review recommending some changes to the arrangements to address the even nature of the current mechanism.[24]

We have concerns around the process by which regulated network prices are varied annually. Under the regulatory framework, network businesses have discretion to set their prices (and components) as long as they meet the average price change and any other pricing principle requirements. This means that they could significantly change the structure and charges to classes of customers from year-to-year, as occurred with Jemena's network prices in 2011/12. Currently, the National Gas Rules require distributors to post network prices on their website by early June for a 1 July implementation. This leaves little time for regulated retail prices to be proposed by standard retailers and approved by jurisdictional regulators and even less time for the retailers to develop their market offers (usually having regard to the regulated retail prices).

We intend to submit a rule change proposal to the AEMC for electricity and gas network prices to be set earlier with greater consultation with customers and retailers. We will consult with the AER, distributors and retailers before submitting the rule change proposal.

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23 In June 2010, the AER approved the access arrangement that was to apply to the provision of network services by Jemena from 1 July 2010 to 30 June 2015. Jemena subsequently initiated merits review proceedings in the ACT which culminated in the ACT making orders to amend the access arrangement.

24 http://www.ipart.nsw.gov.au/Home/Quicklinks/IPART_Submissions_to_External_Reviews/IPART_Submissions/IPART_submission_to_the_Limited_Merits_Review_Provisions_under_the_National_Electricity_and_Gas_Laws_-_1_June_2012

A Standard retailers for gas supply in NSW

Customers that consume less than 1 terajoule (TJ) per year (around $17,000 per annum) are eligible for gas supply at regulated retail gas prices under a standard form customer supply contract with standard gas retailers in their supply areas.

There are 5 different standard supply areas in NSW:

- ActewAGL's standard supply area, which includes the regions around the NSW/ACT border (including Young, Goulburn, and Yass) and South East NSW (including Shoalhaven).
- AGL's standard supply area, which contains most of the gas customers in NSW, and includes Sydney, Wollongong, Newcastle, Dubbo, Orange, Parkes, and parts of the Riverina.
- AGL Sales' standard supply region, which is located on the NSW - Queensland border.[25]
- Country Energy's (now owned by Origin) standard supply region, which includes South Western regions of NSW including Wagga Wagga and Gundagai and inland cities such as Tamworth.
- Origin Energy's standard supply area, which is situated on the NSW - Victorian border, and includes Albury and the Murray Valley Towns.

[25] AGL Sales (Queensland) Pty Ltd (previously Sun Gas) is a Queensland supplier which also is also the Standard Retailer for a small number of customers located in the Tweed area of NSW. We do not have a VTPA with AGL Sales, rather we monitor the tariffs for these customers and can confirm that its customers are charged the same tariffs as those in South East Queensland.

B Direct impacts of the carbon price on the gas supply chain

Table B.1 Liability imposed by the Act on elements of the gas supply chain

Market segment	Gas
Production/extraction of gas	CO_2-e emissions from gas fields (eg, fugitive emissions and emissions from flaring) will attract liability under the Act if they exceed 25,000 tonnes of CO_2-e per year at the facility level. This will increase the cost of extracting and processing gas. We anticipate that gas field operators will pass-through the cost associated with carbon emissions to gas retailers through their contractual arrangements. The extent to which these costs will be passed through will depend on the particular type of supply contracts in place.
Transmission	Emissions may arise as a result of: ▾ compression of the gas at compressor stations, and ▾ maintenance on pipelines, leakage and accidents. Fugitive and combustion emissions from natural gas transmission will attract liability under the Act if they exceed 25,000 tonnes of CO_2-e per year at the facility level. Emissions arising from accidental releases (as opposed to emissions from fugitives in the ordinary course of gas transportation) would not attract liability under the Act. We anticipate that gas transmission operators will pass-through the cost associated with carbon emissions to gas retailers through their contractual arrangements. The extent to which these costs will be passed through will depend on the particular type of supply contracts in place.
Distribution	Emissions may arise in the course of transporting the gas or as a result of gas leaks and accidental releases. Fugitive emissions from natural gas distribution will attract liability under the Act if they exceed 25,000 tonnes of CO_2-e per year at the facility level. However, emissions resulting from accidental releases would not attract liability under the Act. The AER has approved the pass through of carbon related distribution network costs into network prices which are then passed through as part of the network component of gas retail prices.
Retail	Natural gas suppliers are liable under the Act for emissions embodied in the natural gas sold to their small customers. These are direct costs incurred by retailers resulting from end-use customers burning gas for heating and cooking (combustion). While in theory this liability should fall on each customer (as it does on gas fired generators), for practical purposes the liability has been placed on gas retailers given the large number of small customers. This is the largest element of the Carbon Component that standard retailers are seeking to pass through to customers under the VTPAs.

Source: *Clean Energy Act 2011*, IPART analysis.