



Measures to improve the transparency of wholesale prices in the gas market

ACCC recommendations

Australian Competition and Consumer Commission
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1. Introduction

In March 2017, the then Prime Minister announced a number of measures to help deliver “cheaper, more reliable gas” in the east coast, one of which was a direction to the Australian Competition and Consumer Commission (ACCC) and the Gas Market Reform Group (GMRG) to work together to:¹

“...advise on options to quickly improve transparency in the gas market, to facilitate competition between producers and information for purchasers. The scope will include the full supply chain – producers, transporters, retailers.”

On 19 April 2017, the Commonwealth Treasurer also directed the ACCC to conduct an inquiry into the gas market (the Inquiry), the objectives of which are to monitor the supply of and demand for natural gas and transportation services, improve the transparency of gas supply arrangements, and support the efficient operation of the market.²

In keeping with these directions, the ACCC and GMRG provided the COAG Energy Council with a joint paper on measures to improve the transparency of the east coast gas market (the Joint Paper) in December 2018. In the Joint Paper, it was noted that, while the transparency of the market is improving, there are still a number of significant information gaps and asymmetries, which are adversely affecting the efficient operation of the market and the efficiency with which gas, infrastructure services and other resources are allocated.

The Joint Paper contained a number of recommendations relating to the publication of short-term gas prices and export prices. It also noted that the ACCC would provide further advice in the first half of 2019, on whether the LNG netback price series and information on prices payable under long-term gas supply agreements (GSAs) should continue to be published once the 2017-2020 Inquiry has ended and, if so, who should be responsible for publication of this information.

Price reporting in the ACCC's Gas Inquiry 2017-20

The ACCC has published a range of pricing information as part of the current inquiry into the East Coast Gas Market, including:

- Prices invoiced by gas suppliers to C&I users under existing GSAs, and under recently executed GSAs
- Prices expected to be paid in future supply periods under all GSAs in force, and under recently executed GSAs
- Prices in offers from gas suppliers to gas users, and in bids from gas users to gas suppliers, for the supply of gas in future periods
- Prices in offers relative to contemporaneous expected LNG netback pricing for the relevant period of supply (at the time the offer was made)
- LNG netback prices.

In developing the recommendations below, the ACCC considered the views of gas users on which of the different price series were likely to provide the most benefit to gas users. Broadly speaking, gas users indicated that forward-looking information on agreed prices and LNG netback prices provides the most utility in terms of assisting them to form price expectations and negotiate for the supply of gas.

The remainder of this paper outlines the ACCC's recommendations and provides guidance regarding their implementation.

¹ Hon. M Turnbull MP, Measures agreed for Cheaper, More Reliable Gas, 15 March 2017.

² Hon. S Morrison MP, Inquiry for Improving the Transparency of Gas Supply in Australia, 19 April 2017.

2. Summary of recommendations

To support the efficient operation of the gas market and the efficient allocation of gas and other resources, the ACCC recommends that the following wholesale gas price related transparency measures be implemented following the conclusion of the ACCC's Inquiry.

Recommendations:

Expand the AER's wholesale gas market reporting function to include:

- 1) the publication of a monthly LNG netback price series to relevant locations in Australia, such as Wallumbilla and a clear description of the framework and inputs used, and
- 2) reporting on the wholesale gas prices payable by domestic gas users to gas producers and retailers in future supply periods under GSAs with a term of at least 12 months.

To mitigate the risk of coordinated conduct between gas suppliers, the AER should report the wholesale gas prices on an anonymised and aggregated basis. The aggregation rule employed by the AER should ensure that there are at least three gas suppliers.

The ACCC's publication of the LNG netback price at Wallumbilla, which commenced in October 2018 at the request of domestic gas users, provides market participants in the east coast with a reference price that can be used in domestic gas supply negotiations. LNG netback prices are currently an important factor that influence domestic wholesale gas prices. Continuing to publish this information would decrease information asymmetries, and help address the bargaining imbalance between gas suppliers and buyers.

The ACCC's publication of forward-looking wholesale gas prices in long-term GSAs throughout the Inquiry has provided important pricing information to the market that was not previously available. Consultation with gas users has highlighted the importance of this information being available to them in forming price expectations. Without this information, gas buyers would have to rely on information from older GSAs that they are a party to and the limited number of offers they receive from gas suppliers when assessing the reasonableness of an offer. Making wholesale gas price information publicly available will improve transparency in the gas market, in turn:

- promoting more effective competition between gas suppliers
- aiding the price discovery process and the efficient trade and allocation of gas
- helping to reduce the bargaining imbalance between gas suppliers and buyers
- enabling gas users to make more informed investment decisions.

The ACCC recommends the use of an 'aggregation rule' when the AER is reporting on wholesale gas prices. This aggregation rule would require the AER to determine whether information on wholesale gas prices in GSAs, over the relevant period, was from at least three gas suppliers, and, if not, to further aggregate the data (such as across supply regions or time periods) to ensure this threshold is met.

The application of this aggregation rule is an important measure to prevent coordinated conduct between gas suppliers. In addition to providing greater information to gas buyers, increased price transparency can also provide a basis for gas suppliers to more effectively coordinate their pricing. By requiring published data to be aggregated from three suppliers,

the aggregation rule will minimise the risk that the price transparency measures inadvertently enable coordinated conduct between gas suppliers.³

These recommendations fit well with the AER's existing functions in the National Gas Law and the National Gas Rules, although some amendments to these instruments will be required to give effect to these recommendations. Consideration should be given on how to amend the AER's reporting requirements to allow for an appropriate and holistic set of roles and responsibilities. The additional workload required to fulfil both recommendations is significant, so the AER would need to be funded and resourced appropriately in order to perform these duties.

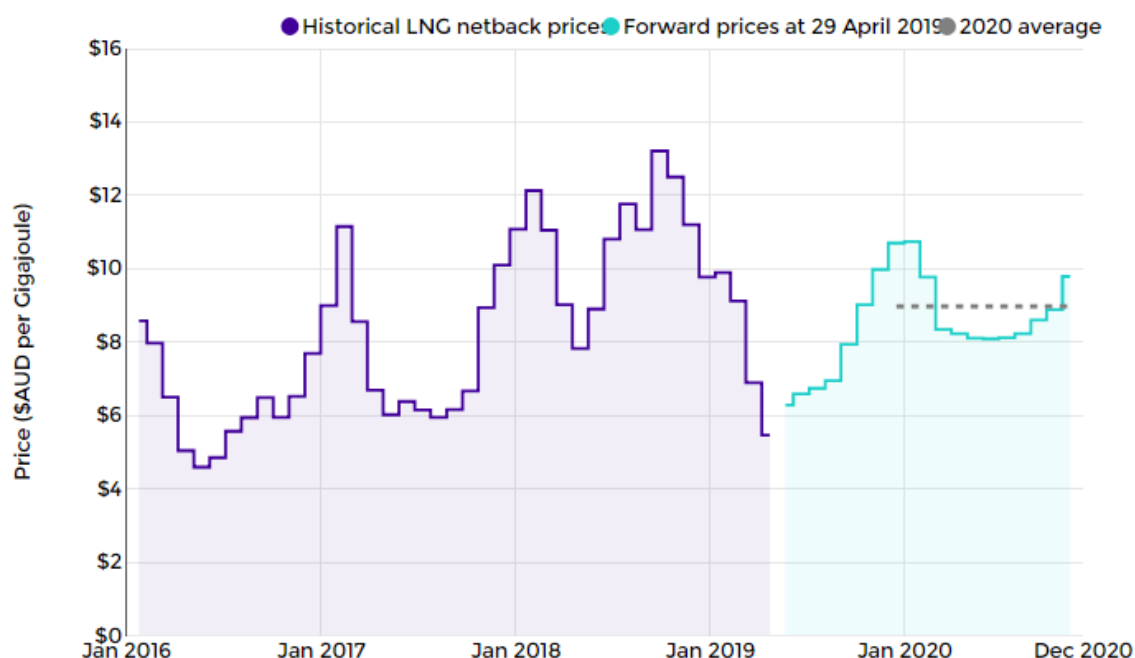
3. Implementing the recommendations

This section provides guidance on how the ACCC has calculated and published LNG netback prices and the wholesale gas prices payable under longer-term GSAs, and highlights a number of factors that the AER may wish to consider in implementing the recommendations. However, the AER should undertake its own process to assess how best to implement the recommendations.

3.1. LNG netback price series

There are various ways in which LNG netback prices can be calculated. The ACCC's current approach to calculating LNG netback prices (see box 3.1 and chart 3.1) is influenced largely by observations of how LNG producers considered LNG prices in their decisions to supply the domestic market and by the availability of data necessary for calculating LNG netback prices. However, both of these factors, and other relevant considerations, may change over time.

Chart 3.1: LNG netback prices



³ If the information is aggregated across at least three producers, it will be impossible for one party to work out the actual prices payable under GSAs entered into by another party without access to the private market information of the other party.

The AER may wish to adopt the ACCC's approach to deriving LNG netback prices (the steps involved in calculating LNG netback prices, and the data required, are outlined in box 1 and on the ACCC's website).⁴

Box 3.1 — ACCC approach to calculating LNG netback prices

1. LNG shipping costs are subtracted, or 'netted back', from a measure of 'landed' Asian LNG prices to derive a price for LNG loaded onto LNG tankers as at the port of export ('the FOB price')
 - Data on historical Asian LNG prices are obtained from a data provider — the ACCC uses the Japan Korea Marker (JKM) from Platts (but notes the availability of other price measures)
 - Data on forward prices in LNG futures market are obtained from a market exchange — the ACCC uses data on the JKM futures market from the Intercontinental Exchange (ICE)
 - Data on current and future LNG shipping costs between Gladstone (where the east coast LNG producers are located) and North Asia (the primary market for Australian LNG) are sourced from a data provider – the ACCC sources current shipping costs from Platts and future shipping costs from Argus Media
2. The FOB price is converted from USD per MMBTU to AUD per gigajoule.
 - Exchange rate data, used to convert Asian LNG and LNG shipping prices from USD to AUD, is obtained from the Reserve Bank of Australia.
 - MMBTU are converted to GJ using a standard conversion ratio (a ratio of 1:1.055).
3. The costs of converting natural gas to LNG are netted back from the FOB price to derive an LNG plant inlet price (that is, the price of gas at the point it enters the LNG production facility)
 - Data on short-run, marginal liquefaction costs is obtained from the LNG producers – the ACCC obtains this information using its information gathering powers under section 95ZK of the Competition and Consumer Act 2010 (Cth) (CCA).
4. The costs of transporting natural gas from Wallumbilla to Gladstone are netted back from the LNG plant inlet price to derive an LNG netback price at Wallumbilla.
 - Data on the costs of transporting gas from Wallumbilla to the LNG export facilities are obtained from the LNG producers – the ACCC obtains this information using its information gathering powers under section 95ZK of the Competition and Consumer Act 2010.

Relevant considerations for publishing an LNG netback price series

In determining how to implement the recommendation to publish an LNG netback price series, the AER may wish to consider the following:

- How often should LNG netback prices be reported?
 - More frequent the publication of an LNG netback price series would provide greater benefit to market participants, but would require greater resources.
 - The ACCC updates the price series on a fortnightly basis.
- What LNG netback prices should be published?
 - The ACCC currently publishes both historical and forward-looking LNG netback prices — the former provides information to market participants on trends in pricing, whereas the latter provides forward-looking information to guide future negotiations for gas.

⁴ ACCC, Guide to the LNG netback price series – October 2018.
<https://www.accc.gov.au/system/files/Guide%20to%20the%20LNG%20netback%20price%20series%20-%20October%202018.pdf>

- The ACCC currently publishes forward prices over a period up to 24 months into the future, which reflects that there is insufficient data on future prices available to publish prices further into the future. However, liquidity growth in LNG markets is likely to lead to more data being available and the AER may wish to periodically reconsider whether it can publish prices over a longer forward period.
- The AER may also wish to assess the merits of LNG netback pricing derived from different price markers, such as Brent oil prices, as LNG contracts can be linked to these price markers (and they might have greater data availability).

The ACCC considers that weighing up the relevant considerations and determining how best to publish LNG netback prices is a complex task that will require considerable resources. Moreover, the ACCC considers that there is merit in periodically reviewing any approach adopted, to ensure that it remains fit-for-purpose and reflective of all market developments.

The approach adopted by the AER should be communicated clearly to relevant stakeholders and market participants, with a clear explanatory document accompanying the series.⁵

3.2. Wholesale gas prices in gas supply agreements

The ACCC considers that a two-pronged approach to reporting on GSA prices will best address information asymmetry in the gas market and assist gas buyers in negotiating for gas supply.

- The first aspect involves publishing information on prices payable, for a given supply period, under all GSAs (with a term of 12 months or more) as well as recent GSAs (see table 1).
- The second aspect involves publishing time series data, in a chart, on prices payable, for a given supply period, under all GSAs (with a term greater than 12 months) entered into in the previous 18 months (see chart 2).

As part of the ACCC's Gas Inquiry 2017-20, the ACCC has published data on the prices forecast to be paid under GSAs in the following calendar year (see table 1).⁶ To provide information on trends in wholesale gas prices, the ACCC has also published prices paid by gas users under invoices issued by gas suppliers.⁷

Table 3.1: Prices agreed under GSAs for 2019 wholesale supply

Origin of producer supply / Destination of retailer supply	Average gas commodity price (\$/GJ)	Gas commodity price range (\$/GJ)
Producers (QLD)	8.36	7.63 – 8.52
Producers (VIC only)⁸	9.72	9.31 – 10.71
Producers (VIC and SA)	9.37	8.71 – 10.71
Retailers/aggregators (VIC)	10.66	9.00 – 12.51
Retailers/aggregators (QLD)	11.76	9.85 – 12.23

⁵ An example of the form this could take is provided in the ACCC's *Guide to the LNG netback price series – October 2018*. <https://www.accc.gov.au/system/files/Guide%20to%20the%20LNG%20netback%20price%20series%20-%20October%202018.pdf>

⁶ An example is available on p. 93 of the ACCC's Gas Inquiry December 2018 Interim report. <https://www.accc.gov.au/publications/serial-publications/gas-inquiry-2017-2020/gas-inquiry-december-2018-interim-report>

⁷ An example is available on p. 70 of the ACCC's Gas Inquiry December 2018 Interim report. <https://www.accc.gov.au/publications/serial-publications/gas-inquiry-2017-2020/gas-inquiry-december-2018-interim-report>

⁸ Specifies the average of prices under GSAs entered into by producers that only produce gas in Victoria.

The ACCC's approach to publishing GSA prices, as in table 1, is outlined in box 2. This involves publishing information on volume weighted average prices for a particular forecast supply period under all GSAs (with a term greater than 12 months) that will be in force over that period, as well as recent GSAs that will be in force over that period. The lowest and highest prices are also published. This will provide information on the likely range of prices for a future supply period.

Box 2 – Reporting on prices under all and recent GSAs

The steps and data involved in preparing this information are as follows:

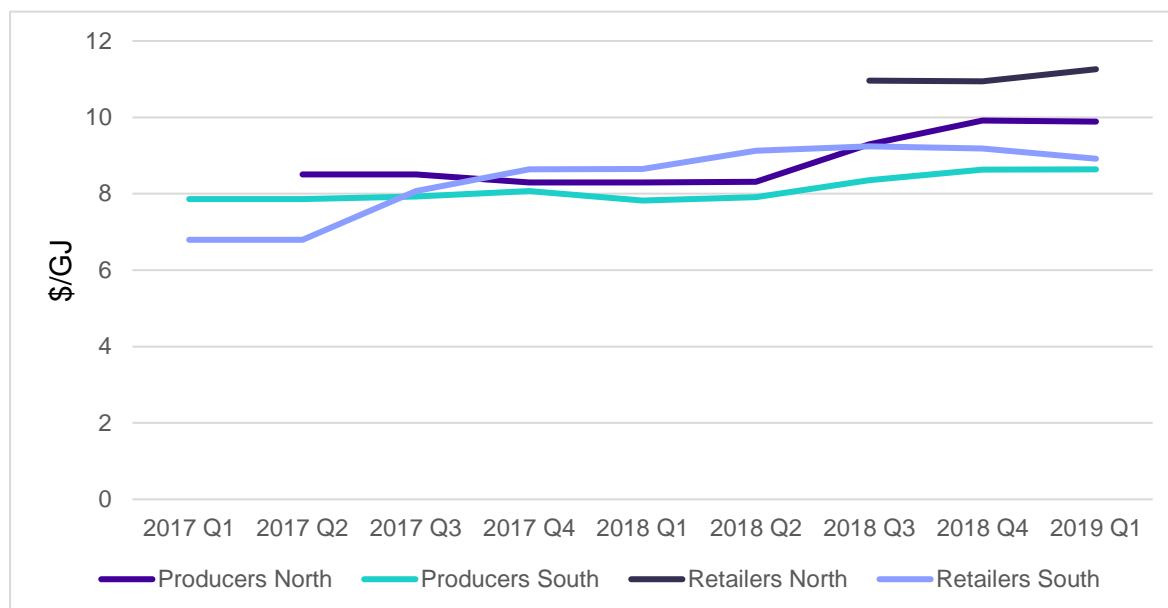
1. Data from GSAs are entered into a central database, including data on pricing and quantity of supply in each supply period (i.e. year) in the GSA.
 - GSAs are acquired from gas suppliers — both gas producers and retailers — by the ACCC using powers under section 95ZK of the CCA.
2. Information for relevant pricing variables — including Brent Oil future prices, exchange rates and CPI — is entered into the database and used to derive prices likely to be paid under GSAs. This includes:
 - Brent crude oil prices, acquired through a subscription to Bloomberg Data Service.
 - LNG prices, sourced from the Intercontinental Exchange.
 - CPI data, acquired from the Australian Bureau of Statistics.
 - Exchange rate data, acquired from the Reserve Bank of Australia.
3. Volume-weighted average prices are derived using prices in GSAs (including those derived using pricing variables).

The data outlined in table 1 provides a snapshot of GSA prices at a point in time. However, the ACCC considers that the AER should also publish time series data to provide information to the market on trends in GSA prices.

Over the course of the inquiry, the ACCC has published time series data on wholesale gas prices invoiced to gas users by gas suppliers. Feedback from gas users, however, suggests that data on invoiced prices has less utility than data on prices agreed under GSAs.

For this reason, the ACCC recommends that the AER also publish time series data on prices agreed under GSAs. Chart 2 below provides an example of how the AER could publish this data.

Chart 3.2: Trends in GSA prices for supply in 2019



Note: Data is published only for those periods in which the aggregation rule is satisfied.

The approach adopted by the ACCC to prepare chart 2 is outlined in box 3.

Box 3.3 – Reporting on trends in GSA prices

The steps for preparing chart 2, and the necessary data, are as follows:

1. Data from GSAs is entered into a central database, including data on pricing and quantity of supply in each supply period (i.e. year) in the GSA.
 - GSAs are acquired from gas suppliers by the ACCC using powers under section 95ZK of the CCA.
2. Information for relevant pricing variables (including Brent crude oil future prices and CPI) is entered into the database and used to derive prices likely to be paid under GSAs. This includes:
 - Brent oil prices, acquired through a subscription to Bloomberg Data Service.
 - LNG prices, sourced from the Intercontinental Exchange.
 - CPI data, acquired from the Australian Bureau of Statistics.
 - Exchange rate data, acquired from the Reserve Bank of Australia.
3. For a given supply period, for each data point in the chart, a volume weighted average price is derived based on all GSAs entered into in the previous 18 months. For example, for a supply period of 2019 and a data point as at 30 June 2019, an average price would be derived based on likely prices payable under GSAs for supply in 2019 that were entered into in between 1 January 2018 and 30 June 2019.
4. This data would be presented in a time-series chart (see chart 2).

Relevant considerations for publishing prices in gas supply agreements

In assessing how to implement the recommendation to publish the wholesale gas prices payable under GSAs, the AER may wish to consider the following:

- How often should GSA prices be reported?

- More frequent reporting on GSA prices would provide market participants with more timely, relevant data. However, the number of contracts entered into annually is relatively low, which will limit how frequently GSA prices can be updated given the aggregation rule. More frequent reporting will also require greater resourcing.
- As a starting point, the AER may wish to consider reporting on GSA prices semi-annually.
- Should reported GSA prices be based on all GSAs or recent GSAs?
 - There is a trade-off between reporting on prices payable under all GSAs compared to those under recently executed GSAs — the former provides a more comprehensive view of prices agreed for supply in a given supply period, whereas the latter provides more contemporary information to guide users in obtaining gas supply.
 - Chart 2 presents pricing information based on GSAs executed in the 18 month window prior to the reporting date.
- What GSA prices should be reported?
 - Throughout the current inquiry, the ACCC has reported only on gas commodity prices in GSAs, without including other charges such as those for transporting gas. While this provides a degree of comparability across a range of GSAs, many of which do not include transport charges (as gas is delivered to the buyer on an ex plant basis), it does not necessarily provide information to gas users on the total contract price payable under all GSAs.⁹ Since many gas users purchase gas on a delivered basis (to their facility), there may be utility in publishing information on delivered gas prices.
 - The AER may wish to consider reporting on total delivered prices payable by gas buyers, in different states, for the supply of gas under those GSAs that deliver gas to the buyer's facility, or to a location close to the buyer's facility.
- How should GSA pricing data be disaggregated?
 - There are several ways in which GSA price data could be disaggregated — such as regionally (for example, Queensland/NT and the Southern States) or by supplier type (for example, producers and retailers).
 - While publication of data would be subject to the aggregation rule, the AER should disaggregate, at a minimum, by Queensland and the Southern States and by producers and retailers.

3.3. There will be a need for additional resourcing

Implementing the recommendations outlined in this paper will impose a resourcing burden on the AER.

Initially, the AER will need to consider how best to implement the recommendations, including establishing processes/procedures and governance arrangements. On an ongoing basis, the AER will need additional resourcing to implement the recommendations outlined in this paper, including obtaining the relevant information from gas suppliers, and to periodically review how the measures are reported.

The ACCC therefore recommends that the AER be sufficiently resourced to implement the recommendations outlined in this paper.

⁹ Gas purchased on an ex plant basis is delivered to the buyer at a location adjacent to the gas well or the gas processing facility.