

East Coast Wholesale Gas Market and Pipeline Frameworks Review: Stage 2 Draft Report

The AEMC is recommending a roadmap for gas market development on the east coast of Australia. The suggested changes to wholesale market design, pipeline access arrangements and information transparency should give market participants more flexibility to trade gas. This will become increasingly important as the market adapts to the new supply and demand dynamics associated with LNG exports. Greater flexibility in market arrangements and lower transactions costs should also benefit large users as well as being reflected in the retail prices paid by residential customers.

A Vision for a liquid wholesale gas market

The gas industry on the east coast of Australia is undergoing a transformation. The development of an LNG export industry and increased penetration of coal seam gas has driven an unprecedented increase in gas demand and supply, with consequential impacts on patterns of gas flows and wholesale gas prices.

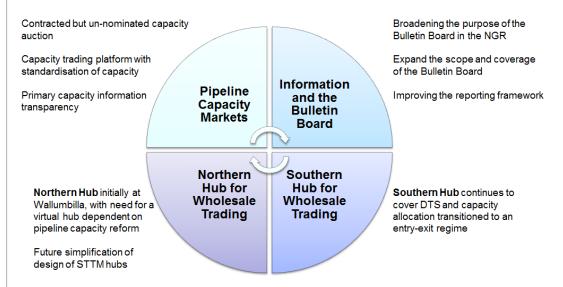
These factors have led to a renewed focus on market development and improvements in the fundamentals of gas trading arrangements.

To guide this development the COAG Energy Council has developed a Vision for Australia's future gas market. A key outcome of the Vision is the establishment of an efficient and transparent reference price for gas. An efficient reference price requires a liquid market with many parties buying and selling gas.

Promoting the Vision of a liquid wholesale gas market will lead to lower barriers to entry, promote competition and increase efficiency. Liquid trading markets promote the efficient allocation of gas and act as a credible alternative source of supply to bilateral contracts. Liquid and transparent markets are also fundamental to consumers being able to know whether the price of gas reflects underlying demand and supply conditions.

The AEMC's recommended roadmap to achieve the Vision

The market development package developed by the Commission is a set of inter-related recommendations relating to **wholesale gas trading markets**, **pipeline access** and **information provision** that mutually reinforce each other and form a roadmap for the future development of the market.



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Changes to wholesale gas trading markets

The Commission's recommended pathway for market development seeks to concentrate trading at two points on the east coast, one in Victoria and the other in Queensland.

Two primary pricing points have been recommended as the Commission is concerned that multiple trading locations unnecessarily split liquidity and reduce benefits to participants of a liquid wholesale market. Prices at the two hubs would reflect the differing market conditions in the two regions which have both significant sources of supply and demand:

- In Queensland, demand is primarily driven by LNG production and large users (including gas-fired generation) and there is significant conventional and unconventional gas production.
- In Victoria, gas consumption is primarily by residential customers, and so driven by day-to-day weather and the seasons. There is also significant offshore production, which is increasingly important for domestic demand across the east coast.

Participants would be able to buy and sell gas at the hubs in three main ways: exchangebased trading, bilateral "over-the-counter" trades, and traditional long-term contracts. Price discovery would initially occur via the exchange, with reference prices likely to be produced and published by price reporting agencies as the market develops. This would establish the preconditions required for financial risk management products to develop.

Reforming the existing DWGM arrangements to develop a Southern hub

The Commission recommends the following changes be made to the existing Victorian DWGM to allow liquid trading to develop in southern Australia:

- implementation of exchange-based trading, similar to the Wallumbilla Gas Supply Hub, giving participants greater flexibility in how they buy and sell gas, underpinned by a mandatory residual balancing mechanism providing security of supply; and
- development of a system of entry and exit rights for capacity allocation, in order to improve market-led investment signals in pipeline capacity. Collectively, these enhancements would allow gas to be traded independently of its location in the hub.

These arrangements would therefore represent a "virtual" trading hub. Virtual hubs allow for title transfer of gas anywhere within the definition of the hub, obviating the need to purchase point-to-point pipeline capacity and maximising trading liquidity. This is more appropriate in the relatively compact and meshed Victorian transmission system than seeking define and trade pipeline capacity on a point-to-point basis.

Evolutionary development of the Wallumbilla GSH to provide a Northern hub

Wholesale commodity trading of gas is already undertaken at Wallumbilla in Queensland through the Gas Supply Hub (GSH) arrangements. Located at the intersection of numerous pipelines connecting a range of producers, users and other facilities (including storage), the Commission considers that Wallumbilla remains the most appropriate location for the development of a liquid northern trading hub.

Trading at the Wallumbilla GSH has been hampered to date by physical constraints within the hub. AEMO has been undertaking a work program to address the issue and is recommending that the Energy Council approve the introduction of "Optional Hub Services" arrangements. These aim to promote and facilitate the trading of hub services to allow participants to access a single trading point, in a similar manner to the Commission's recommendations regarding the trading of pipeline capacity (see below).

Although such a Northern trading market would initially be a physical hub, meaning that shippers would require access to pipeline capacity to the specific hub location, the trading arrangements would be harmonised across the two markets as much as possible. Furthermore, if the recommended initiatives to facilitate the trading of hub services and pipeline capacity prove ineffective at promoting gas market liquidity, the northern hub should then be expanded, either over the full Wallumbilla compound or more widely over pipelines in south-east and/or south-west Queensland.

The Commission's package of recommendations provides more flexibility to participants in how they buy and sell gas, and establishes the preconditions for financial risk management products to develop

Evolution of Moomba and the Short Term Trading Market hubs

A second GSH at Moomba may represent an appropriate transitional measure to provide trading flexibility until the Victorian and Wallumbilla hubs, and capacity trading, mature. Over time, Moomba could establish itself as a transit point for gas flowing between hubs, particularly given the recent announcement to connect the northern and eastern markets.

Once liquidity has developed at the Northern and Southern Hubs, and in pipeline capacity trading, the Commission recommends the design of the Short Term Trading Market (STTM) hubs then be simplified to purely support transparent and competitive balancing.

Improvements to the pipeline capacity frameworks

A key enabler to the development of liquid trading markets with prices that can respond to short-term shifts in supply and demand will be the ability of pipeline capacity to be traded to those participants that value it most highly. Improvements in pipeline access should therefore improve the liquidity of trading at hubs, the reliability of hub prices, and in turn provide better signals for pipeline investment, and gas consumption and production.

The Commission considers that the current contract carriage model of pipeline access can be improved so that market participants are able to obtain more flexible, lower cost and non-discriminatory access to pipeline capacity between hubs. In order to foster the development of secondary trading in pipeline capacity, the Commission recommends the:

- introduction of an auction for contracted but un-nominated capacity which is currently sold as "as-available" capacity with a regulated reserve price on all pipelines; and
- mandatory creation of capacity trading platforms, to lower the transaction costs associated with trading capacity and through which information regarding all trades would be published. Capacity products would be standardised to facilitate trading.

The Commission is also recommending that the actual price of all primary capacity sales be published. The additional transparency will lower transaction costs and provide participants with confidence that access is being provided on a non-discriminatory basis.

Additional information to support the market

The Commission's recommended approach to the evolution of gas trading hubs is supported by a detailed package of recommendations to enhance the information provided to the market, including expanding the coverage of the existing Bulletin Board.

These recommendations would lead to a wider range of information being provided, enhance the presentation of this information and strengthen the compliance framework. In addition, a regular review process would be introduced to support the Bulletin Board continuing to achieve its objectives.

Benefits of the reform package

The Commission's draft recommendations form an integrated package of reforms to support the achievement of the Energy Council's Vision. Collectively, by enhancing the efficiency of gas markets, the package is a proportionate, but meaningful, response to the issues at hand and should deliver a comprehensive set of benefits to consumers over the longer term, thereby promoting of the National Gas Objective (NGO). Together, the proposed reforms support three key outcomes:

- Establishment of an efficient and transparent reference price for gas that will support the development of risk management tools.
- Ability to trade gas between hub locations.
- Investment in infrastructure that responds to market signals and is facilitated by a supportive regulatory framework.

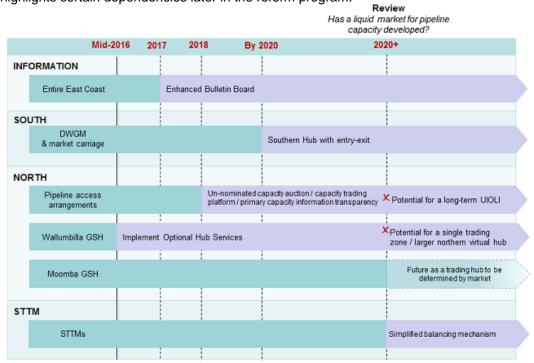
Once in place, these reforms would form a strong foundation for facilitated gas markets and transportation arrangements in eastern Australia, delivering a comprehensive set of benefits to consumers over the long-term in accordance with the NGO.

The recommended package of reforms is proportionate, but meaningful, response to issues in the sector

Implementing the Commission's gas market development package

While the Commission considers that many of its recommendations should be implemented as soon as possible, others will need to be implemented in sequence. The Commission envisages that the implementation of the complete package will occur over several phases, forming a roadmap to guide the development of the market over the next decade. This will be further developed in the Final Report and will include a suggested structure for managing the implementation of this reform program over the coming years.

An overview of the staging of the overall package is set out the diagram below, which also highlights certain dependencies later in the reform program.



Background to the Review

In February 2015 the COAG Energy Council requested that the Australian Energy Market Commission ("AEMC") review the design, function and roles of facilitated gas markets and gas transportation arrangements on the east coast of Australia.

This Review has been conducted in two stages. In July 2015, the Commission published the Stage 1 Final Report, which included recommendations that could be progressed in the short term. Stage 2 of the review (this stage) has more fully developed the roadmap for future gas market development.

Concurrently, the Energy Council, at the request of the Victorian Government, has also asked the AEMC to undertake a detailed review of the pipeline capacity, investment, planning and risk management mechanisms in the Victorian Declared Wholesale Gas Market ("the DWGM Review"). The recommendations in that review form part of an integrated package of reforms consistent with the wider East Coast Review.

The Final Reports for both Reviews will be submitted to the Energy Council in May 2016. This will allow consideration of the findings from the Australian Competition and Consumer Commission's East Coast Gas Inquiry and necessary refinements to the Commission's recommendations to be reflected in the Final Report.

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The Commission's gas market development package will help achieve the Energy Council's Vision and promote the National Gas Objective