

Appendix A – The findings and recommendations of the 2011 Inquiry into Domestic Gas Prices, prepared by the previous Economics and Industry Standing Committee (2008–2013), to the extent that they are relevant to the current inquiry’s terms of reference 1 and 2.

1.1 Findings

Findings	APPEA response
<p><i>Finding 1</i></p> <p><i>Differences in historical information on the demand for natural gas in Western Australia as between the main providers of such information are of concern. There is a need for demand, supply and price information to be of good quality and a review of the methodology, assumptions and historical database would appear to be warranted.</i></p>	<p>The market for the supply of natural gas is typically subject to long term contracts between buyers and sellers. The WA market is characterised by a limited number of both buyers and sellers. Care would need to be exercised in not impacting on the negotiated outcomes between buyers and sellers in providing greater information on contracts.</p>
<p><i>Finding 2</i></p> <p><i>In recent years, the production side of the Western Australian domestic gas market has become highly concentrated. Such concentration raises legitimate concerns about the level of competition and effectiveness of this market.</i></p>	<p>WA has experienced a diversification of the domestic gas market due to projects in the Perth Basin.</p> <p>There is an increased interest in gas from the private sector due to technological advancements and an increased push to meet emission reduction targets.</p> <p>Investment in the development of gas supplies is very costly and long term in nature. This will limit the number of producers in the market capable of bringing new supply on stream. One of the key factors in determining if new investments are undertaken is the stability of the fiscal and regulatory regime that impacts development. If it is perceived that the fiscal and</p>

	<p>regulatory environment is not supportive, or is subject to change, the level of investment in new developments will be limited as market participants look at opportunities in more favourable locations.</p>
<p>Finding 3</p> <p><i>The demand for natural gas for use in Western Australia has expanded annually by an average of around 30 terajoules per day since the first year of recorded sales (1977) on the APPEA data base.</i></p>	<p>WA Government decisions to phase out coal power generation by 2030 means gas demand will continue to rise as renewables does not have the capacity to fully replace coal-fired power generation.</p> <p>AEMO’s 2022 WA GSOO notes a tightening of the supply and demand balance in the WA gas market. To address this tightness, it is imperative that new supply be brought forward. To facilitate this the fiscal and regulatory environment must be supportive and stable over the long term to provide clear signals to market participants that long term investments can be profitable and sustained.</p>
<p>Finding 4</p> <p><i>Some factors that drive domestic gas prices are self-correcting. The rapid economic growth recently witnessed in this state, largely as a result of demand from the mining sector, has produced increases in energy prices that to some extent, will in turn dampen the future demand for domestic natural gas. This will have some flow-on effect on prices.</i></p>	<p>‘Self-correcting’ factors that drive domestic gas prices are best able to ‘self-correct’ when Government does not interfere in the market, avoiding unintended consequences.</p>
<p>Finding 5</p> <p><i>On the balance of the evidence received and the economic and other forecasts available, the Committee considers that demand for natural gas in Western Australia will, over the next few years continue along its historic upward trend implying an annual compound growth in</i></p>	<p>Gas demand in WA continues to increase.</p>

<p><i>demand of 2.6 per cent to 2030. This figure is in contrast to 3.5 per cent annual compound growth projected by the Department of Mines and Petroleum. The difference between the historic upward trend and the DMP forecast accumulates to approximately 279 terajoules per day by 2030.</i></p>	
<p><i>Finding 6</i></p> <p><i>The low supply scenario included in the Department of Mines and Petroleum’s 2010 gas supply and demand outlook is unlikely to materialise. Western Australia is adequately endowed with a gas resource sufficient to satisfy domestic demand and any supply shortages are not likely to be caused by a lack of accessible reserves.</i></p>	<p>WA reserves and resources are sufficient to meet the demand of both WA and international trading partners. Only when industry is permitted to reach its full potential will the supply increase.</p> <p>It is not the lack of accessible reserves that will cause an imbalance in supply and demand, it is the impact of interventions in the market which dampen the signals to invest in new supply capacity that will ultimately impact the shortfall in supply. Motivating greater supply of gas from onshore reserves has significant potential in meeting demand in the long term. Facilitating the development of these resources will increase the supply for domestic consumers and also provide an opportunity for greater exports which benefit international trading partners as well as the wider community through increases in government revenues.</p>
<p><i>Finding 7</i></p> <p><i>Although proposed future expansions of effective gas processing capacity are evidence of suppliers responding to market signals, the lack of new capacity since around 2007 has put the adequacy of gas processing capacity of the state at risk. This lack of new capacity is inconsistent with a well functioning market and is a significant contributing factor to recent price rises.</i></p>	<p>Well-functioning markets will determine the level of investment in supply based on the demand and availability of resources. WA is not limited in the potential supply of gas to the domestic and international markets. Price signals assist in bringing forward new supply as well as allocating resources to their highest value use thereby maximizing the benefits to all market participants.</p> <p>Significant new processing capacity has been developed since the DGP was formalised in 2006, with inclusion of the infrastructure requirement. The</p>

	<p>issue is now around enabling resources to be processed through available ullage.</p>
<p><i>Finding 8</i></p> <p><i>The commitments to establish domestic gas processing facilities at the Gorgon, Macedon and Devil Creek projects will increase the supply of domestic gas. If historic rates of demand growth are maintained, this should ease the current capacity constraints that have contributed to recent price rises [sic].</i></p>	
<p><i>Finding 9</i></p> <p><i>The government needs to consider measures that will improve liquidity, transparency and competition in the Western Australian domestic gas market. There is also a need to consider other measures including the ongoing role of the state’s gas reservation policy so as to ensure that adequate supplies of gas are available to the domestic market.</i></p>	<p>When the WA gas market is less costly, complex, and difficult to operate in, a diverse range of operators will engage in the market, increasing competition and driving down prices. Increased competition, with minimal and efficient regulatory oversight leads to great transparency as industry participants are self-motivated to provide accurate and timely information, as required. The open and competitive nature of the free market ensures that buyers and sellers have access to multiple options, enabling them to make informed decisions based on price, quality, and reliability. Moreover, the market facilitates increased liquidity by allowing for the most efficient operations to reap the financial benefit of leading operations. Ultimately, maximising market freedom and flexibility promotes a fair and efficient allocation of resources, fostering a vibrant and robust gas industry.</p> <p>The gas reservation policy for offshore producers to supply specified portion of their production to the domestic market has been a long standing and stable policy. It is this stability in policy that has allowed producers to invest with confidence knowing they will be able to generate the returns required to cover the high costs and long-lived nature of their investments.</p>

	<p>Creating a similar environment for onshore producers to invest with confidence knowing that the policy regime will be consistent into the long-term is essential in bringing forward new supply. It is only with new supply that domestic consumers will be able to have the supplies they require at a price which enables them to be competitive.</p>
<p><i>Finding 10</i></p> <p><i>Based on data published by the Department of Mines and Petroleum, the average price of all domestic gas contracts in Western Australia in 2009/2010 is calculated to be \$3.70 per GJ. However, prices for gas under new contracts have recently been reported to be in a range of approximately \$5.55 to \$9.25 per GJ.</i></p>	
<p><i>Finding 11</i></p> <p><i>Based on data published by the Department of Mines and Petroleum, the growth in total value of gas sold in the domestic market has exceeded the growth in quantity sold. This means that the average price of gas is increasing. This Committee has estimated that the incremental value of gas (value of the additional gas sold) in 2009/10 was in the order of \$13.80 per gigajoule.</i></p> <p><i>This figure is greater than the prices seen for new gas contracts because total value also reflects income earned from increases in the prices and a tightening in terms and conditions of existing contracts.</i></p>	<p>Increasing investment in new supply is the only effective mechanism to address constraints on the supply of gas to the market.</p>

<p><i>Finding 12</i></p> <p><i>The prices of new domestic gas contracts in Western Australia are at least double those of the eastern states.</i></p>	
<p><i>Finding 13</i></p> <p><i>Structural differences exist between the eastern states' and Western Australian domestic gas markets, which need to be considered when comparing price differences across jurisdictions.</i></p>	
<p><i>Finding 14</i></p> <p><i>Some of the structural differences that contribute to lower gas prices in the eastern states would be difficult or impossible to replicate in the Western Australian market. These include:</i></p> <ul style="list-style-type: none"> <i>• multiple sources of supply much closer to major centres of demand and pipeline infrastructure;</i> <i>• an integrated transmission pipeline sector that enables competition between four gas producing states;</i> <i>• oil fields (particularly in Victoria) that are still rich in associated gas;</i> <i>• a significantly greater reliance upon coal-fired power generation;</i> <i>• the absence of an alternative (LNG export) market for gas.</i> 	

<p>Finding 15</p> <p><i>There are a number of structural advantages currently enjoyed by eastern states' gas markets that the Western Australian government should pursue. These include:</i></p> <ul style="list-style-type: none"> • <i>mechanisms that promote greater liquidity and transparency, such as official secondary trading markets; and</i> • <i>the facilitation of greater competition among producers through the development of new supply sources including unconventional gas deposits.</i> 	
<p>Finding 16</p> <p><i>An increase in domestic gas prices from historical levels is inevitable given the recent surge in production costs. Even so, insufficient competition amongst upstream producers is currently generating excessive prices.</i></p>	<p>Prices will vary depending on market conditions, the supply of and demand for a product, and the cost of producing that product. Facilitating new supply into the market is essential to ensure that the market is adequately served over the long term.</p> <p>It is understandable that prices will increase due to higher cost of input factors (labor, equipment), 'low hanging fruit' is gone - offshore, future developments are further and deeper, and regulatory costs have increased, in particular around emissions reduction requirements.</p>
<p>Finding 17</p> <p><i>Despite the inherent differences in the respective markets, LNG prices do impact domestic gas prices in Western Australia. It is now highly likely that the recent rise in local gas prices has created an environment where—for certain contracts—domestic prices will trade at or above LNG netback equivalent levels.</i></p>	

<p><i>Finding 18</i></p> <p><i>Prices that persistently reach or exceed LNG netback values reflect an absence of adequate competition and are inconsistent with a well functioning domestic gas market. Under such circumstances, some form of policy intervention in the market is appropriate</i></p>	<p>If a market is well-functioning, higher prices will induce greater supply. If, however, interventions in the market reduce the signals to the market to provide that supply, or impact on market participants certainty in being able to make long term investments, then it is likely that the supply and demand balance will be tighter than desired.</p>
<p><i>Finding 19</i></p> <p><i>The Domestic Gas Reservation Policy is an essential policy instrument for ensuring that an appropriate level of gas is supplied into the local market to achieve reasonable price outcomes.</i></p> <p><i>This instrument should be part of a suite of policy responses, the primary aim of which should be to improve the overall level of liquidity, competition and transparency in the Western Australian domestic gas market.</i></p>	<p>The domestic gas reservation policy imposes economic costs and inefficiencies on WA households and businesses. However, it has been a long-standing and consistent policy that has provided business with the stability required to undertake long-term investments in gas supply. The key to unlocking further gas supplies to the domestic market is to provide long-term policy stability to facilitate the development of new gas fields that can supply the domestic market and also be able to further increase access to international markets.</p>
<p><i>Finding 20</i></p> <p><i>In the absence of a gas reservation policy it is unlikely that LNG producers would develop adequate domestic gas processing facilities.</i></p>	
<p><i>Finding 21</i></p> <p><i>There is no evidence to suggest that the state's current approach to domestic gas reservation obligations has deterred LNG producers from</i></p>	<p>This has changed dramatically since adjustments were made to the onshore DGP in 2020.</p>

<p><i>pursuing development opportunities in Western Australia.</i></p>	
<p><i>Finding 22</i></p> <p><i>Domestic gas reservation obligations remain a valuable tool for policy makers to ensure that a proportion of the state’s gas reserves are supplied to local consumers in volumes and at prices that are consistent with a well functioning market.</i></p> <p><i>However, this policy requires delicate handling to ensure that market outcomes reflect those of a well functioning competitive market.</i></p>	<p>It is imperative that Government energy policy be cautiously considered as intervention distorts the natural balance of the market. Government is best placed to limit itself from unnecessary interference in the market and allow consumers and producers to determine the most efficient price and use of gas resources.</p>
<p><i>Finding 23</i></p> <p><i>Floating LNG (FLNG) technology enables project proponents to conduct all aspects of production at sea in commonwealth waters. This greatly reduces the formal powers of the state government to negotiate a domestic gas supply commitment under the state’s reservation policy.</i></p>	<p>When policy creates a difficult and restrictive regulatory environment to industry investment, it drives away future opportunities. Having a stable and inviting regulatory environment is the optimal approach for Government to attract investment.</p>
<p><i>Finding 24</i></p> <p><i>The parameters for commercial viability, as it pertains to the supply of gas reserved from LNG projects for the domestic market, need to be clarified. Acceptable parameters for commercial viability might include, but not be restricted to:</i></p>	

<ul style="list-style-type: none"> • <i>a price that covers the cost of production and provides an industry-recognised reasonable rate of return.</i> 	
<p><i>Finding 25</i></p> <p><i>If the gas reservation policy does not lead to a reduction in domestic gas price beyond LNG netback, the government should consider additional options to create a functioning market for gas-on-gas competition in Western Australia, including a regulated auction or limiting specific fields to domestic use (as per Queensland’s Prospective Gas Production Land Reserve policy)</i></p>	<p>The most effective way of ensuring gas is available in the domestic market is to facilitate the development and supply of gas from onshore gas fields through long-term consistent policies that make investment attractive to market participants.</p>
<p><i>Finding 26</i></p> <p><i>The current process underpinning the application for and renewal of retention leases lacks sufficient rigour and enables the stockpiling of gas reserves by incumbent producers. These reserves may include fields that are suitable for the development of domestic supplies.</i></p>	
<p><i>Finding 27</i></p> <p><i>While arguments can be made in support of the continuation of joint marketing in the current Western Australian domestic gas market, it is plausible to claim that the practice has</i></p>	

<p><i>facilitated a reduction in competitive tension between gas producers.</i></p> <p><i>This may have contributed to the increasingly stringent contractual terms and conditions that some gas buyers have been reportedly facing and the higher prices being realised in this state.</i></p>	
<p>Finding 28</p> <p><i>The introduction of a Short Term Trading Market (STTM) will improve the efficiency of the Western Australian wholesale gas market by promoting a level of transparency, competition and liquidity currently lacking.</i></p> <p><i>Whilst there are challenges facing the establishment of a STTM in Western Australia, these should not be seen as insurmountable</i></p>	<p>Government should engage an independent authority to establish a pricing hub (similar to Moomba Pricing Hub or the Wallumbilla Pricing Hub in the east coast gas market) for short term/spot sales. This will support greater price transparency and liquidity in the WA market.</p>
<p>Finding 29</p> <p><i>The establishment of a Gas Market Bulletin Board and Gas Statement of Opportunities (GSOO) is likely to enhance the efficient operation of the Western Australian wholesale gas market.</i></p> <p><i>The Committee supports the introduction of these measures and urges the Minister for Energy to expedite the implementation process for each.</i></p>	
<p>Finding 30</p>	

<p><i>The Committee finds that gas storage is important to the development of a more liquid and mature gas market in Western Australia and strongly supports the Gas Supply Emergency Management Committee’s recommendations relating to gas storage.</i></p>	
<p><i>Finding 31</i></p> <p><i>The distribution sector is a natural monopoly and usually requires ongoing regulatory oversight.</i></p> <p><i>The Committee is satisfied with the current regulatory regime for distribution networks in Western Australia.</i></p>	
<p><i>Finding 32</i></p> <p><i>The government needs to consider policies that will mitigate the impact on retail residential gas bills that will emanate from the recent increases in the wholesale price of gas and from any move towards cost-reflective tariffs in gas and electricity.</i></p>	
<p><i>Finding 33</i></p> <p><i>Unconventional gas developments have the potential to significantly improve the level of upstream competition in the domestic gas market.</i></p>	<p>APPEA strongly recommends that Government immediately rectify this unfortunate situation and prioritise <i>Finding 33</i> with the utmost urgency, establishing the necessary regulatory framework to permit unconventional resource development.</p>

<p><i>Finding 34</i></p> <p><i>While tight and shale gas have fundamentally altered the supply and demand balance in the U.S., the production process has generated environmental concerns regarding water use and treatment methods.</i></p>	<p>Independent scientific programs have found with high confidence, that unconventional gas resource developments have low to very low potential for negative environmental impact. Potential impacts from other pathways “can be mitigated through ongoing compliance with existing regulatory and management controls.”¹</p> <p>Naturally occurring water in aquifers and water injected for hydraulic stimulation of shale formations are not physically connected.</p>
---	---

1.2 Recommendations

Recommendations	APPEA response
<p><i>Recommendation 1</i></p> <p><i>That the Department of Mines and Petroleum review the methodology, assumptions and historical database of natural gas supply and demand (including average price information) for Western Australia to confirm the veracity of this information.</i></p>	
<p><i>Recommendation 2</i></p> <p><i>The Office of Energy expedites the introduction of more reliable gas demand and supply forecasts for Western Australia that take price sensitivity and trends into account.</i></p>	

¹ ‘Impact assessment- for the Beetaloo GBA region - Geological and Bioregional Assessment: Stage 3 synthesis’

<p><i>Recommendation 3</i></p> <p><i>The flexibility within the state’s domestic gas reservation policy should be maintained unless an independent cost-benefit analysis demonstrates that a strict reservation of 15 per cent of the gas from each LNG project for the domestic market represents a more valuable and efficient use of the resource.</i></p>	<p>Flexibility in the DGP vital to industry.</p>
<p><i>Recommendation 4</i></p> <p><i>The government establishes an independent Gas Market Monitor to oversee the operation of the local wholesale gas market. Modelled on the Queensland Gas Commissioner and reporting to the Minister for Energy, the Gas Market Monitor’s primary duties would be to:</i></p> <ul style="list-style-type: none"> • <i>publish an annual gas market review that includes price-sensitive supply/demand forecasts and identifies deficiencies in the operation of the market;</i> • <i>facilitate discussion between government and market participants on how to address identified market inefficiencies; and</i> • <i>provide the basis for ministerial and departmental discussions with LNG producers before future domestic reservation obligations are finalised.</i> 	<p>Government should engage an independent authority to operate the oversight and reporting requirements of industry participants to address this recommendation.</p>

<p><i>Recommendation 5</i></p> <p><i>The Department of State Development commence discussions with the North West Shelf Joint Venture to obtain a commitment from the joint venturers that production capacity at the Karratha Domestic Gas Plant will continue at current levels, as per the terms of the existing State Agreement, until at least 2025.</i></p> <p><i>Scope should remain open within the agreement to allow third party gas processing at the Karratha Gas Plant should North West Shelf reserves prevent full production capacity from being maintained after 2020.</i></p>	<p>The committee notes the importance of maintaining production from the NWS, and yet changes to the DGP in 2020 restricts onshore contributions which could assist in maintaining supply levels.</p> <p>APPEA recommends the committee reaffirms the previous inquiry’s recommendation 5 and allow onshore operations to contribute to the backfilling of gas to the NWS (and other significant infrastructure).</p>
<p><i>Recommendation 6</i></p> <p><i>Under the terms of the State Agreement, the Minister for State Development confirm with the Gorgon joint venturers and advise Parliament on:</i></p> <ul style="list-style-type: none"> • <i>the current date by which the Barrow Island domestic gas processing plant is expected to be built to its full 300 terajoules per day capacity; and</i> • <i>the potential of this facility to process third party gas as an interim measure.</i> 	
<p><i>Recommendation 7</i></p> <p><i>Even with reduced formal powers, the state government should do all it can to obtain a commitment to the domestic gas market,</i></p>	<p>The Government has not encouraged commitments to the domestic gas market and has actively discouraged third party contributions by intervening into gas markets with the onshore export ban which discourages investment, exploration, and production.</p>

<p><i>including from developments using Floating Liquefied Natural Gas (FLNG) technology.</i></p> <p><i>The government should encourage the promotion of third party gas processing to meet such commitments.</i></p>	<p>The WA Government can adjust its policy settings to obtain commitment to the domestic gas market. This would be best achieved through limiting market interventionist/protectionist policies.</p>
<p><i>Recommendation 8</i></p> <p><i>Department of State Development refine, and publish a list of, any general parameters that are deemed to satisfy “commercial viability” as it pertains to domestic gas reservation obligations.</i></p>	
<p><i>Recommendation 9</i></p> <p><i>The review mechanism articulated in Clause 17 (Schedule 1) of the Barrow Island Act 2003 should be regularly enforced until the Gorgon Joint Venturer’s full domestic gas production capacity is contracted.</i></p>	
<p><i>Recommendation 10</i></p> <p><i>To ensure that commerciality provisions applicable to domestic gas reservations are used appropriately, a register of all independent assessments of commercial viability claims should be maintained by the Department of State Development.</i></p> <p><i>Whilst commercially sensitive material should remain confidential, a detailed explanation of the</i></p>	

<p><i>reasoning behind each assessment should be published.</i></p>	
<p><i>Recommendation 11</i></p> <p><i>All future domestic gas reservation agreements should include a review mechanism, similar to that contained in Clause 17 of the Barrow Island Act 2003, which obliges producers to actively and diligently test the market and be subject to independent assessment.</i></p> <p><i>If prices are deemed by such an independent assessor to be commercially viable, producers should be further obliged to enter into contractual arrangements at the most attractive terms available to the producer.</i></p>	
<p><i>Recommendation 12</i></p> <p><i>The Department of Mines and Petroleum should request that the Commonwealth Department of Resources, Energy and Tourism (DRET) respond urgently regarding:</i></p> <ul style="list-style-type: none"> • <i>A detailed update on the status of the 2009 “Review of Policy relating to the Grant and Renewal of Retention Leases”.</i> • <i>DRET’s current position on retention lease management processes.</i> • <i>The merit of subjecting all retention leases with no development plans in place within the next five years to a re-evaluation of commercial viability by the Joint Authority.</i> 	

<ul style="list-style-type: none"> • <i>Ensuring that the supply of gas to the domestic market is included as a priority in the process of renewing or issuing a retention lease.</i> 	
<p><i>Recommendation 13</i></p> <p><i>The government should vigorously pursue the elimination of the joint marketing authority currently granted to the North West Shelf and Gorgon joint venturers when the applications come up for renewal in 2015.</i></p>	
<p><i>Recommendation 14</i></p> <p><i>The Minister for Energy proceed with the introduction of a Short Term Trading Market in Western Australia as a matter of priority.</i></p>	<p>APPEA supports the creation of an independent trading market.</p>
<p><i>Recommendation 15</i></p> <p><i>The Minister for Energy expedite the introduction of a Gas Market Bulletin Board and Gas Statement of Opportunities in Western Australia.</i></p>	<p>The GSOO is an effective and useful tool for gas consumers and producers.</p>
<p><i>Recommendation 16</i></p> <p><i>That the Minister for Energy arrange for a review to be undertaken of identified shortcomings in Western Australia's regulated gas transmission sector with a view to urgently progressing reforms that will overcome the need for gas market participants to trade in gas without first</i></p>	

<p><i>or separately having to enter into long-term transmission contracts.</i></p>	
<p><i>Recommendation 17</i></p> <p><i>That the Office of Energy extends the planned Tariff and Concession Framework Review to cover the retail gas market.</i></p>	
<p><i>Recommendation 18</i></p> <p><i>To encourage the development of unconventional gas, and to ensure it is undertaken in a responsible and environmentally sustainable manner, the Department of Mines and Petroleum should:</i></p> <ul style="list-style-type: none"> <i>• work with all stakeholders to promptly resolve issues in the regulatory, environmental and native title approvals process; and</i> <i>• ensure that Environment Management Plan compliance audits and reviews are undertaken regularly in order to identify and act upon any practices that demonstrate improper or unsafe water management processes.</i> 	<p>Despite the need for a regulatory framework to facilitate unconventional gas exploration, development, and production, Government has failed to provide industry with the necessary guidelines. It is disappointing that Recommendation 18 has been neglected. This has resulted in losses for the WA State Treasury, depriving it of substantial revenues over the past thirteen years. Additionally, unrealised unconventional gas resources can and will alleviate supply pressures, both domestically and internationally.</p> <p>APPEA strongly recommends that Government immediately rectify this situation and prioritise <i>Recommendation 18</i> with the utmost urgency, establishing the necessary regulatory framework to permit unconventional resource development.</p>