

Delegate Report from the World Gas Conference 2015

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Background

The Delegates are extremely grateful for the learnings, experiences and networking opportunities provided from attending the World Gas Conference (WGC) 2015. We have prepared this report to share our insights with the Australian Gas Industry Trust (AGIT) Board.

This report has three sections; firstly, we focus on the Gas Industry illustrating the similarities and differences between Australia and other gas markets, along with our key take home messages and insights. The report will then advise of our conference insights, focusing on what worked well and areas for improvement. Finally, the report will provide the AGIT Board with some personal experiences of our time at the conference and in Paris.

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The Gas Industry

Gas Market Dynamics and Political Factors

Visiting this year's WGC in Paris, provided a great opportunity to gain insights into international gas markets, which is timely given the increasing influence they now have on Australia's domestic and export gas markets.

While much can be learned about this subject from reading endless numbers of research studies, the opportunity to hear experiences first-hand enabled access much richer information - including the sense of the urgency around particular issues, the depth and breadth of challenges faced in different regions of the world and other nuances that can be difficult to obtain from reading reports in isolation.

Gas markets throughout the world are in an unprecedented state of flux, and there are valuable lessons to be learnt from situations that have unfolded throughout the world.

Take Europe for example, where gas is struggling to remain competitive due to:

- cheap coal and nuclear power generation (relative to gas and other energy sources);
- concerns regarding the reliability of some of their gas supplies due to delivery risks (real and perceived) that have arisen from the Russia-Ukraine conflict; and
- ambitious environmental policies (by world standards) which either subsidise or provide other policy support to renewables

Unfortunately, as a result of these factors, gas market share is declining in Europe and in our discussions with gas policy stakeholders they indicated that it was difficult to engage European policy-makers to consider improvements to energy policy settings that encourage gas market growth. The European experience is not a favourable one and perhaps provides insights to manage future challenges regarding in other regions around the world, including Australia.

The United States of America's (USA) outlook for gas, in contrast to Europe, is assured and aspirational, and rides on the back of the commercialisation of vast new gas supplies as part of their 'shale gas revolution' in recent years. This new source of gas is cheap by international standards, wholesaling at around \$4 MMBTU domestically, and presents itself as a key game-changer in international gas markets, as the USA turn their focus to targeting export markets for the first time in Europe and potentially Asia.

Another recent shift in the market also noted at the WGC are last year's deals which saw Russia commit to supplying substantial quantities of gas to China at a significant discount to current international gas market prices. Market commentators have speculated that this may represent a strategic response by Russia to the USA's gas export plans.

Gas buyers in Europe, and Asia, who are paying much higher prices for gas (\$9 – \$11 MMBTU) are hopeful that these changes will result in ongoing downward pressure on the gas prices they pay.

Australia, soon to become the world's largest exporter of liquefied natural gas (LNG), is currently benefiting from the significant Asian demand for gas and higher prices. The multi-billion dollar question for Australia is, can we continue to grow our export markets?

The IGU's 'Prospects for Natural Gas' report presented at the WGC poses some interesting food for thought in response to market or socio-political dynamics, such as the ones discussed above. The report outlines five key recommendations to enhance the future prospects for gas, which have some relevance for Australia:

- **Continue to bring down costs** – a recommendation has obvious relevance to Australia in an increasingly competitive international gas market, and is critical as a means of unlocking further growth in our export and domestic gas markets.
- **Continue to reduce the environmental impact of natural gas** – again there is obvious relevance for Australia given the likely strengthening of our national greenhouse emission reduction targets over time and because gas is increasingly being labelled as not green enough by environmental and other influential lobbies in Australia and abroad. Blending biogas into gas pipelines to make gas progressively greener was one of a number of initiatives that were discussed at the WGC.
- **Embrace innovation and renewables** – perhaps influenced somewhat by the European market's challenges (noted above), the IGU calls for the gas sector to 'explore synergies with renewables in power, heating and transportation', rather than being considered in isolation or as competitive forces to the detriment of each other. A focus on new product offerings in this space may become of increasing importance in the Australian context if more ambitious renewable policies become a firmer proposition into the future.
- **Reduce interdependencies** – the IGU report interestingly notes that 'too large dependency on a single supplier and/or single buyers is perceived by decision-makers to carry risks and may thus be ultimately detrimental to the position of gas in the energy mix'. There are obvious learnings in this recommendation for Europe as a gas buyer regarding its traditional dependence on Russian supplies. From an Australian perspective, as a country with vast local gas reserves, this advice would support a focus on increased development of local supplies to grow the size of the gas market and the number of producers.
- **Demonstrate and advocate** – another recommendation that is critical to the success of Australia's export and domestic gas sectors, both from obtaining the social license to develop our vast gas supplies and selling more gas to our domestic customers. Communication and advocacy received considerable focus at the WGC and is explored in greater detail in the section below.

Europe facing stagnant or declining demand

The European market has a strong base in existing gas demand in the domestic, industrial and electricity generation sectors; however that base going forward is under threat, and is showing either stagnant or declining demand.

Drivers for this change are varied, but appear to centre on wide-scale renewables and greenhouse gas reduction policies throughout major European markets such as Germany and the United

Kingdom (UK). Investment in renewable generation is displacing significant gas generation capability and leading to stagnant or declining gas demand. The result is that much of the European market (seen as a whole) is moving out of an investment phase in new large gas generation and transmission projects, as well as in investment in LNG import facilities. Of course, pockets of investment remain.

In this context, the European gas industry is struggling to find a market and a voice in the greenhouse and renewables debate; however a key area of potential growth is in the transport sector.

Despite declining demand, ensuring diversity of gas supply sources appeared a key challenge for Europe. This is brought about due to concerns with on-going supply from Russia due to the current geopolitical situation. As a result, there is still some need for investment in alternative pipeline infrastructure as well as new LNG terminals. As noted above, Europe is also considering the development of local sources of non-conventional gas and is also viewed as a potential market for shale gas from the USA.

LNG Production and markets

International LNG was viewed increasingly as an alternative to the transportation of gas via pipelines in some parts of the world. This is being driven by improved flexibility of LNG shipping and volatility in Russia's political relationships with customers in Eastern Europe. Australia's contribution to meeting ongoing global demand was recognised as we move towards becoming the largest exporter of LNG when the projects under construction at Gladstone and in Western Australia come on line.

Analysis presented indicated that although LNG prices will fluctuate, international demand for LNG is expected to remain strong over the near to medium to term. Asia will continue to grow as a demand source as individual countries seek to diversify their gas supply. Although competition from US shale gas will soften, the growth impacts may not be as strong as initially expected. Europe and South America are emerging as new demand options for this emerging source of supply. South America's demand is expected to grow and despite stagnating or declining demand in Europe, its LNG import requirements are likely to increase as it seeks to diversify its supply sources.

The decoupling of LNG prices from oil is still expected to continue and there were views expressed about the emergence of an Asian LNG trading hub.

Comparisons with Australia's Third Party Access

A further observation would be the varying levels of maturity of gas market regulation and across the European market, in particular in relation to transmission infrastructure. One surprise was the vastly different drivers for regulation and reform, and the very different market problems that this regulation is seeking to solve. In the UK (and in some other western European countries) the market liberalisation process, including the introduction of new regulatory frameworks for pipelines commenced over 20 years ago. These reforms were put in place to improve competition and promote market development and are considered as contributing to delivering a transparent liquid

gas market. They were part of a package of measures that also included the restructure and privatisation of elements of the industry.

In contrast, across much of Europe, third party regulation of transmission pipelines is in the early stages of reform, largely focussing on the separation of vertically integrated businesses, which are predominantly state-owned. Natural monopoly infrastructure, to the extent it is regulated for price, is often regulated by quasi-government bodies.

In Australia, a robust national third party access regime has been in place for almost two decades, with separation between market and transmission elements, and price regulation through independent regulatory bodies. Of particular interest, was the degree to which price regulation is being applied as a blanket condition for all gas infrastructure assets. This is used to effectively *protect* pipeline businesses from changing market conditions, in particular declining demand and changing gas supply patterns.

This contrasts with the Australia regulatory regime which applies regulation through a competition policy lens, and therefore considers the particular market conditions of infrastructure before applying regulation. Australian pipeline businesses in particular are also exposed to market and volume risks, which they manage through contracts, and are not protected through regulatory structures. In this respect, the Australian third party access regime appears to be an effective and more mature regime that has supported investment and competitive market outcomes to date.

Gas industry is still struggling to find a clear and coherent voice – some thoughts on why and possible solutions

There was a clear consensus at the WGC that the natural gas industry is struggling to find a clear and cohesive voice. If we are not able to raise our voice then we will not be able to demonstrate our value proposition to customers and secure public confidence in natural gas projects. Customers around the world are becoming more discerning about their energy supply and marketing and communications have become more critical than ever. Observations noted included that given most of the natural gas industry have a technical background we tend to speak to customers using technical language when we should be using more customer friendly language to communicate the benefits of natural gas. When speaking to customers we should talk about how gas contributes to communities rather than talking about the properties of natural gas. This will drive higher levels of engagement in customers and lead to more support for our industry across the entire supply chain.

We also need to diversify the channels we use when we interact with customers and move away from traditional media to more modern platforms such as digital media and social media. If we can reposition the way we talk to customers we can increase our credibility and garner greater support for our projects thereby addressing the sustainability risks that our industry faces. This means that smart and sophisticated marketing and communications will play a more important role than ever before in the ongoing sustainability of our industry.

This is very relevant as there was a strong view expressed by several stakeholders that, in a global sense, gas can be viewed as a “destination fuel” rather than a “transition fuel” in a lower carbon environment. In this sense, it was highlighted that if the global gas industry is going to be effective in demonstrating its future role (particularly in advance of the COP 21 meeting) it needs to form clear and consistent messages.

Productivity improvements and innovation are critical as gas competes for its share in the energy mix

Another common theme discussed at the WGC is the perceived lack of innovation in the natural gas industry compared to competing fuels such as renewables and electric technologies. While other energy industries have made technological advances in both the produce range they offer and the productivity of existing products, the natural gas industry has been moving at a far slower pace. The applications of natural gas are still relatively limited and natural gas appliances are not considered “modern” enough.

Customers want to have more control over the energy that they use to power their households and businesses and innovation can play an important role in giving customers this control. This is critical given the fact that there is a general trend of natural gas consumption decreasing in both the residential and commercial/industrial sectors and we cannot rely on traditional uses of natural gas to sustain and grow our industry.

New technologies such as residential fuel cells will play an increasingly important role in driving demand for natural gas. While these technologies are still generally not economic for residential households they are becoming increasingly so. For example, the cost of a residential fuel cell has dropped by almost 50% in recent years with further cost efficiencies to come. In Japan, gas powered air conditioning (where the compressor is driven by a gas engine) is becoming increasingly popular in commercial properties. These are being marketed as a tool to reduce peak electricity demand in both summer and winter. This technology is not yet economic for residential developments but significant effort is being invested into decreasing the cost of producing gas powered heat pumps to develop a viable residential market.

The Role of Customer

There were varying experiences between delegates on the voice and role of the customer.

In the policy, strategy and human capital streams, there was little to no focus on customers. Focus on the place of gas in the renewable debate and finding a mechanism for the industry to promote itself as the greener alternative to coal generation, was not focused on obtaining the support of constituents or customers. From the Australian experience with coal seam gas (CSG), we have seen that obtaining the support of the community and the consumer is vital to the success or otherwise of a project. When these themes were discussed in the policy and strategy streams, the focus was on increasing throughput and ensuring that governments and policy makers remain onside.

However, from the marketing streams, it appears that the numbers of engaged customers are increasing, and are more discerning with respect to price, quality and services. A key theme from these sessions focused on the need for industry to speak more clearly to these customers and understand our customers’ needs so that our industry can develop and offer customers innovative services and products that they value.

On the exhibition floor, exhibitors highlighted their consumer engagement tools which varied dependent on the infrastructure involved. One memorable example was the Turkish Community Information Van which has been developed to engage the Turkish community and develop support

for a natural gas pipeline from Russia to Turkey. The van will drive ahead of gas infrastructure being connected, and engage with communities via a range of interactive tools that will educate and demonstrate the benefits of natural gas to Turkish communities to avoid any miscomprehension or apprehension regarding natural gas. Ultimately, it will also promote natural gas in an effort to increase consumer connections to the Turkish distribution network.

Conference Insights

What worked well

The Conference offered delegates a range of options to participate and engage with leaders in their field. There was a good balance between conference presentations and one-on-one interactions with exhibitors. The exhibition space proved an impressive mix of industry players, forms of technology and market support services for existing and new entrant players.

There was ample opportunity to ask questions of industry experts either on the exhibition floor or during presentations. New digital forums such as “Wisembly” were used to engage audience membership and the introduction “Poken” replaced the need to exchange traditional business cards. It allowed for the electronic exchange of contact information and enhanced networking.

The opening gala and closing proceedings allows for networking pre and post the conference in a relaxed setting.

Opportunities for improvement

Facilitation of sessions

The role of “session facilitator” was important to ensure that presentations and questions from the audience remained “on topic” and each presenter had an opportunity to outline their points. There were instances where presentations were rushed as a consequence of time constraints and that could have been avoided with better management.

Another aspect that was not as successful as expected were the “interactive sessions”. These were designed to allow small groups to engage directly with presenters through a mix of formal presentations and direct interactions. While this appeared a good concept, it was not really a constructive forum for delegates. These were held on the exhibition floor, which due to noise and other distractions did not allow effective interactions between presenters and participants. A similar concept, but in a more enclosed area of the exhibition floor, could have worked better. Furthermore, often the presentation did not align with the published topics and time management of presentations in these sessions was particularly poor.

Women in Gas Conference Session

We support the inclusion of a “Women in Gas” session. We appreciated the speakers providing personal insights into their experiences of working in the sector and their key learnings and advice for women embarking on their careers in gas. We were pleased to note the increasing gender balance over time and that some of the issues facing women are being addressed. We would recommend the inclusion of such a session at future conferences, however, there are a number of

practical suggestions we would make to ensure future sessions are remain meaningful to participants. This includes recognising that women's' representation in the sector extends beyond engineering and covers multiple disciplines. Furthermore, there appeared to be a level of "filtering" of questions, which limited participants gaining more detailed insight into some of the issues underlying this topic. It would also be worthwhile exploring opportunities to involve men in these discussions as their support for gender equality and encouraging women to participate and take up leadership positions in the gas industry is also an important way of affecting change.

Food

Food is an important part of the social and networking experience. When people get together to chat, they often talk first about food and good food at a conference leaves a lasting impression on delegates.

Unfortunately, this was a disappointing part of the conference organisation, in particular the limited efforts to cater for specific dietary requirements. This experience, of course, contrasted with the fantastic food on offer in Paris itself and was a missed opportunity to showcase French food and produce to visiting delegates.

Personal Experiences

Networking Opportunities

The conference provided excellent networking opportunities, with the ability to mingle, meet, learn and engage with individuals who appreciate the gas industry and from those who wish to see it grow and develop. The range of people that we were able to meet, from CEO's and other industry representatives, ambassadors, regulators, representatives from non-government organisations and like-minded gas policy enthusiasts who were keen to share their stories and experiences were invaluable. Erin and Stefanie had the (very excited) experience of meeting the Hon. Julie Bishop MP as she promoted the LNG 18 Conference to be held in Perth next year, which was a great highlight of the conference for them!

The exhibition floor provided us the opportunity to ask questions and learn about all things gas, from metering, different infrastructure options, consumer engagement models and of course, decisions on which stand had the best coffee!

We also enjoyed the opportunity to get to know and build ongoing relationships with the AGIT scholars and delegates.

Paris

The delegates thoroughly enjoyed Paris as the conference location, although it did not come without challenges. After learning to navigate the Paris metro, trying to find eateries that provided options to those with specific dietary requirements and finding the greatest crepe added to the experience.

We also enjoyed each other's company with many dinners, targeted shopping expeditions, amusing lunchtime waiters and meals, making the experience richer. The location was a conference bonus, as its charm and beauty were not lost on us.