Santos

Success in the New Energy Market

Kevin Gallagher

Note: All values are US dollars unless otherwise stated. Oil prices are in 2018 dollars.

Premier, Minister Canavan, distinguished guests, ladies and gentlemen…

Welcome to Adelaide and the premier event of the year for Australia's oil and gas industry.

I'd like to take this opportunity to congratulate South Australia's new Premier, Steven Marshall, and his government, following their election in March.

The industry has always enjoyed strong bipartisan support in South Australia and we look forward to that continuing over the next four years.

South Australia is an industry pioneer, with a history of exploration dating back to the late 1800s.

It's also home to Santos and the mighty Cooper Basin, which has not only been producing oil and gas for more than 50 years, but where production is actually starting to grow again.

When we last gathered for APPEA in Adelaide five years ago, the industry was riding high.

The oil price was over $100 a barrel, the Queensland LNG investment boom was well under way and prospects were good for the start-up of the Gladstone LNG projects.

At APPEA in 2014, the oil price was even stronger at about $110 a barrel.

The east coast domestic market was awash with ramp gas coming on to fill the LNG plants and prices were less than A$4/GJ, below the cost of production.

When we met again in 2015, the oil price was just over $60.

By the time Santos GLNG shipped its first cargo from Gladstone in October 2015, the oil price was below $50 before reaching just under $30 in January 2016.

It had been 14 years since oil prices were this low.

Many had forgotten that our industry is a cyclical one and to succeed, you have to be resilient <u>throughout</u> the cycle.

For Santos, the situation at the end of 2015 was life threatening.

When the first GLNG cargo left Gladstone, GLNG had famously spent around $10,000 a minute for the previous seven years.

For the next two years the oil price hovered around the $50 mark.

Today it is more than $70.

The industry is in a much healthier place.

For Santos, these higher oil prices mean higher margins because we've done the hard yards to make our business resilient in a lower oil price world.

Our portfolio is cash flow positive throughout the oil price cycle at around $35 a barrel.

Which is good for customers both in the domestic market and in the LNG export market.

If you want to put downward pressure on gas prices, cutting the cost of supply is a good place to start.

We have been very careful to make sure this discipline is sustainable to position Santos as the lowest cost onshore developer.

In particular, we are determined to maintain our safety performance by focusing intensely on the critical risks and controls.

Across the industry, the focus has been the same – to rebuild resilience, safely, over the cycle.

The need for the industry to reset our cost base, however, made each of us more inwardly focused and less engaged with our external environment.

That has come at its own cost.

Public trust and confidence in the corporate sector is at an all-time low.

As gas and electricity prices rose last year, we experienced that lack of trust, and its consequences, first hand.

In early March 2017, AGL delivered "shock advice", as described by the Australian Financial Review, that "eastern Australian manufacturers will be left short of gas this winter unless the new $80 billion Queensland LNG industry diverts gas away from export to sell it to local users."

In the same article, it was reported that AGL had quoted an industrial customer A$20/GJ for a two-year contract, tripling its 2016 gas price.

None of us was prepared for the community outrage that followed.

We focussed too much on who was to blame and not enough on being "part of the solution".

We failed to recognise that the federal government would have to act in response to its constituents.

Within just three months, gas export controls were introduced.

Worse was that – as an industry – we were divided.

Disunity in the pursuit of individual self-interest undermined the position of the gas industry as a whole.

Meanwhile, those same activists who vehemently opposed gas exploration and development under <u>any</u> circumstances were suddenly saying Australian gas shouldn't go offshore.

The public debate was ripe for opportunism, and that remains the case today.

There has never been a more important time for the industry to unite behind a common purpose.

This is a great industry to be in and one that Australians have good reason to be really be proud of.

Australian gas is improving the lives of hundreds of millions of people in Asia where about five million people die prematurely every year because of air pollution.

Last year the Chinese government demonstrated its commitment to cleaner air by ordering heavy manufacturers in two provinces and 26 cities to switch from coal to gas.

As a result, we saw LNG demand grow in China last year by a phenomenal 48 per cent.

Between now and 2040, the International Energy Agency expects natural gas to grow more than any other energy type, to a market share of more than a quarter of all global energy demand.

As well as the need to clean up air pollution, population growth and rapid urbanisation across Asia will also drive demand for LNG.

And as a lower carbon alternative to coal, natural gas will continue to play a key role in the pathway to lower carbon emissions.

Here at home in Australia, our weather makes renewables a viable part of our power generation mix.

However, it will be decades before battery technology makes them reliable and affordable without natural gas.

Gas is the natural complement to renewables because it's the only clean and reliable source of energy capable of being switched up and down quickly to deal with peaking demand and the intermittency of wind and solar.

If all of Australia's LNG exports from next year were used to replace legacy coal-fired power generation in Asia, the emissions saving would be 300 million tonnes a year.

That's three times the size of Australia's 2030 emissions reduction target under the Paris Agreement.

Indeed, if gas were to replace all of Australia's coal-fired power generation, 90 per cent of Australia's Paris emissions reduction target would be met with this single measure.

How can an industry with a product which can do so much to improve the lives of so many people – and contribute to reducing emissions faster than any other – be losing the PR battle?

Until we win back public support by developing gas resources in a way that works for the community, they will not accept a growing Australian LNG industry.

This means ensuring:

- Australians share in the wealth generated from gas development;
- Their own energy future is secure and affordable, including jobs in energy-intensive sectors; and
- The environment is protected.

Those who want to shut the fossil fuel industry down will have a free run until communities right across Australia trust us on these issues.

Part of the problem is that we are not sufficiently engaged in the PR battle – and we don't engage early enough.

Building community trust must start in the planning stages for exploration programs, long before development commences – so that when activists come knocking on the door, or popping up on social media, local communities already know us and trust us as a smart, safe industry.

They will be inoculated against the misinformation of our opponents.

Curing the disease spread by misinformation is much more difficult and is where we find ourselves in both Narrabri and the Northern Territory shale province.

Governments have a role to play as well as industry, but if we want the support of governments, we have to unite behind achievable policy goals.

As is true with everything in life, sometimes that requires compromise.

What we need most from governments right now is access to new gas supply sources for development.

To help governments deliver this for us, we need to address the relationship between the domestic gas market, particularly on the east coast, and the LNG export industry.

Australia ranks 13th in the world for gas reserves with identified resources of around 280,000 PJ.

To put that in context, at today's production rates that's close to 70 years of supply from identified resources.

If prospective resources were to come to fruition, there would be enough gas for many hundreds of years.

There should never be a gas shortage in Australia.

However, a patchwork of restrictions across the nation is preventing access to natural gas resources – both onshore and offshore.

While the Northern Territory's lifting of the moratorium on hydraulic fracturing is welcome, there is much more to be done.

For example, New South Wales draws 95 per cent of its gas from other jurisdictions.

This is where Santos' Narrabri Gas Project could be developed to support the 300,000 manufacturing jobs, one million households and 33,000 businesses in New South Wales that rely on affordable, reliable supplies of natural gas.

No less than 13 inquiries in Australia this decade have looked at the environmental safety of the onshore gas industry, including hydraulic fracturing.

All of them have concluded that the risks can be properly managed and the industry can be developed in a safe and environmentally sustainable way.

This is also the experience of all of us in this room.

In these circumstances, we owe it to Australians to unlock the incredible wealth from their natural gas resources.

Wealth that comes in the form of jobs and business opportunities from our own activities and from the downstream industries that develop around the availability of a reliable, competitively priced domestic gas supply.

Wealth that comes from LNG export income for the nation and the more than $4 billion in taxes and royalties paid by the industry each year (2015-2016).

Australia's gas resources are of a scale capable of supporting rising living standards for generations – if we work together to get the settings right and regain the trust of our communities.

Industry and governments have always had to work hard, together, to make the gas industry successful in Australia.

Coal seam gas production in Queensland 20 years ago was just 4 PJ a year.

This year it will be about 1300 PJ, contributing more than 60 per cent of total east coast gas production.

It's hard to believe today, but the problem for gas 20 years ago – before the China boom – was that it had no market to go to.

PNG gas, Gorgon gas, Browse gas, Queensland coal seam gas – all were said to be "stranded".

On the east coast, Australian domestic gas supply was largely a by-product of liquids production in Bass Strait and the Cooper Basin.

On the west coast, domestic gas demand was driven purely by the 1979 take-or-pay contract entered into by the State Electricity Commission of Western Australia (SECWA), which committed to buy 400 TJ/day for 20 years starting in 1985.

To get this gas to market, SECWA also funded and built the Dampier to Bunbury gas pipeline.

For many years, SECWA paid for a lot of gas it didn't need.

But this contract underwrote the investment in the North West Shelf Project ahead of the first LNG cargoes to Japan in 1989.

On the west coast and the east coast, gas producers and governments were pleading with manufacturers to come to the Pilbara, to Gladstone, to Melbourne and Geelong, and elsewhere.

There were simply not enough large-scale industrial gas users to take our gas.

Without the North West Shelf Project and the Dampier to Bunbury pipeline, there would have been no west coast domestic gas market as we know it today.

The domestic gas market was not big enough, nor could it ever have been big enough, to underpin the massive offshore production investment needed to develop the North West Shelf.

On the east coast, gas abounded at low prices around $3/GJ, mostly associated with Bass Strait and Cooper Basin oil and condensate production.

Then, in the late 1990s, Chevron and Oil Search proposed a pipeline from PNG to Queensland as their preferred way to monetise PNG gas resources.

But gas buyers were few and far between.

At industry's request, the Queensland government mandated that 13.5 per cent of electricity sold in the state had to be generated from gas.

This was not enough to support investment in a gas pipeline from PNG to Queensland, but it was enough for the green shoots of a tentative coal seam gas industry.

In the early 2000s it became clear that, while they were expensive to develop, Queensland's coal seam gas resources were much bigger than first thought, but the domestic market remained small.

As the China boom developed, and the oil price climbed to a high of $150 a barrel in 2008, previously "stranded" gas became economic.

As a result, Australia reaped the benefits of a $200 billion LNG investment boom, including a world-first LNG-from-coal-seam-gas industry in Queensland.

Without Asia's insatiable demand for energy, Queensland's coal seams would not have been developed.

The east coast domestic gas market was not big enough to have supported large-scale investment in these resources.

Rather than being a threat to future domestic gas supply in Australia, the LNG industry has been an <u>enabler</u> for increasing supply and competition.

However, many Australians wonder why their gas is being shipped offshore but becoming more expensive at home.

As we looked inward to deal with the consequences of falling oil prices on our own businesses over the last three years, we did not pay enough attention to what was happening around us.

It was true that state and territory government bans and moratoria on new gas resources were unhelpful.

As was the sudden closure of Hazelwood power station in Victoria, and the Northern power station in South Australia.

But there was also an impact from slower industry investment in sustaining wells, new production and exploration necessitated by low oil prices.

At the same time, the east coast gas market was moving to export parity pricing in a world where gas was no longer a by-product of liquids production, or ramp gas waiting for the LNG plants to come on line.

We did not take our stakeholders with us on this journey and we did not do enough to prepare for the transition.

If we are to maintain and open up access to new gas resources going forward, we will need to again work hard with governments to understand what is politically possible.

Gas export controls that potentially put binding LNG contracts at risk are not a sustainable long-term solution, as the federal government has previously acknowledged.

The Heads of Agreement reached between the Gladstone LNG producers and the federal government last October will ensure the east coast domestic gas market is adequately supplied for the next two years through 2018 and 2019.

This outcome was a good demonstration of our industry working in partnership with government to solve a public policy problem.

Importantly, it mitigated the risk not only to our industry's reputation, but to the long-standing reputation of Australia as a reliable global LNG trading and investment partner.

For the long term, there has never been a more important time for the industry to unite in finding an enduring solution that will work for us, for governments and for both our LNG and domestic customers.

We need to sit down and take a fresh look at policy ideas that have broad community support, but to which we have historically been opposed.

If we refuse to engage in a discussion about national interest tests and domestic gas reservation policies, we might find ourselves squabbling over the spoils of defeat.

When in 2015 the Labor Party announced a national interest test for a seventh and any subsequent LNG trains at Gladstone, the industry reacted with great hostility.

The national interest test was essentially a national cost-benefit analysis of the merits of expanding LNG capacity.

As an industry, we <u>know</u> we can be extremely proud of the benefits the LNG industry has brought to Australians through high-paying jobs, business opportunities and community investments.

We would have nothing to fear from an independent assessment of the national costs and benefits of an LNG expansion that would build public confidence in our industry.

Western Australia has had an informal domestic gas reservation policy since 1979 through various State Agreements, and a formal 15 per cent reservation policy since 2006.

This has not stopped enormous LNG investments.

Queensland has recently held two acreage release rounds, in highly prospective areas, from which the gas produced will be reserved for the domestic market.

The state government was knocked over in the rush to bid.

Unfortunately, the reputation fallout from the east coast gas debate has meant the LNG producers have been unsuccessful, despite sometimes being best positioned to develop this acreage at the lowest cost of supply.

In New South Wales, Santos has already committed to reserve all of the gas from the Narrabri Gas Project for the domestic market.

The reality is that we have been working with domestic gas reservation for a long time.

In April, the Northern Territory government accepted all the recommendations of the Pepper Inquiry into onshore shale gas development, paving the way for exploration and appraisal of a potentially game-changing resource.

Gas users and trade unions have expressed concern that Territory gas might simply flow out of Gladstone as LNG, with no benefit for domestic gas users.

A blanket reservation policy would render development of the NT's shale gas resource uneconomic, since it would prevent the achievement of scale that only an LNG industry can provide to justify the large capital investment required to extract the gas and bring it to market.

However, industry should be open to discussions with governments, gas users, unions and communities about sensible ways to make available an agreed portion of NT gas for the domestic market.

Some will say that this is a retreat by the industry, but it is a necessary step on the journey we need to take to rebuild trust in our industry as part of a longer-term strategy to better engage with the Australian community.

We need to recognise that politics is the art of the possible.

We should want to satisfy the legitimate aspirations of Australians for long-term domestic gas security as part of our social licence for the future development of Australia's enormous resources.

We should also accept that governments cannot step back from the environmental regulation the community demands.

They might then work harder with us to facilitate investment in the strategic infrastructure and the streamlined regulatory frameworks needed to accelerate development of new gas provinces such as the NT's McArthur Basin.

Our opponents are extremely well funded and they are successfully exploiting our failure to build <u>stronger</u> social compacts with the broader Australian community.

There has never been a greater need for us to work together, united as an industry, to combat this threat.

As I said earlier, we have a <u>fantastic</u> product that is improving air quality <u>and</u> lifting hundreds of millions of people out of energy poverty in Asia.

We owe it to all Australians to find a new pathway to unlock the wealth of the nation's massive gas resources for future generations.

The LNG and domestic gas industries are simply too important to Australia for us not to succeed.