

DEVELOPING AUSTRALIA'S GAS RESOURCES RESPONSIBLY

**David Knox, Managing Director and CEO
Santos Ltd**

28 October 2013

**Citi Industry Funds Day –
Who Votes Your Shares?
*Connecting Boards with Industry, Public Sector & Super Funds***



Developing Australia's gas resources responsibly

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Ladies and gentlemen, it is a pleasure to have been asked to speak to you today at this unique and innovative event that Citi has created. I say this because it is important that business leaders engage with their investors, but it is also important that they engage with all of their investors. And this event quite importantly allows business leaders to extend our reach and our dialogue.

As business leaders we work every day to maximise the value we provide to our shareholders, and I am conscious that many of you in the room today who are representatives of Australia's industry, public sector and super funds – also work tirelessly to maximise the retirement outcomes for your members.

In this way I believe we are very much aligned. We are both interested in growing value for those we serve, and we both seek to do that over the long-term.

Traditionally my discussion with investors, and my conversations around value is focussed on operational results, including our company's financial performance, and of late it has been dominated by the significant progress we are making on the two transformational projects – our PNG LNG Project and our GLNG Project in Queensland.

These projects are both coming closer to completion with PNG LNG due to deliver its first cargoes in 2014, and GLNG in 2015. And we call them transformational because they will truly deliver a significant step-change to both production and cash flow – ultimately delivering greater returns for shareholders.

This step change is remarkable. Today, Santos is exporting around 300,000 tonnes of natural gas per annum from Darwin LNG. The gas of course is chilled and put onto ships as liquefied natural gas or LNG. Once GLNG and PNG LNG are fully ramped up – Santos will deliver over 3 million tonnes of LNG per annum into the Asian markets. That's just under 1000% growth – as I said transformational.

But it is certainly the case that my industry's dialogue with investors is expanding well beyond the operational.

So today, I would like to go beyond that traditional brief and address three key issues that are critical to delivering a sustainable future for Santos, and more broadly the long-term future of the gas industry here in Australia.

These issues are also those that today are often top of mind to many Australians when they think of the gas industry, and as a result are no doubt of interest to this audience and the individual members you represent.

These three topics are:

- First, the importance of acting responsibly;
- Secondly, a set of principles that will help deliver a licence to operate for our industry; and
- Thirdly, the opportunity available to Australia if our natural gas resources can be developed both profitably, sustainably, and in an acceptable manner to all Australians.

The importance of acting responsibly



1. The importance of acting responsibly

So, let me start with the importance of acting responsibly.

There is no doubt in my mind that all CEOs and all companies want to do the right thing, the responsible thing and in doing so gain the trust of everyone they engage with.

Traditionally this trust could be earned by delivering the numbers that shareholders have sought. By focussing on operational results and financial performance - the company would be doing the right thing, they would be acting responsibly and in their shareholders' interests, and from a long-term or legacy perspective – the company and its CEO would have made a difference.

Today my conversations with investors more and more often cover our potential impacts on the communities in which we operate – both economic, environmental and social – and importantly these discussions cover how we address those potential impacts. The old values you might say are important but are no longer sufficient.

For an energy company, and for my company – financial performance is far from the end of our story. What determines success, or failure for companies both locally and globally is also greatly dependent on gaining trust.

Whether it be drilling a well in the outback of South Australia, conducting seismic hundreds of kilometres offshore of Western Australia, or treating water from a coal seam gas well in the Pilliga in New South Wales - the range of people who have an interest in how we do things, who are impacted by our operations – and who depend on that trust - is tremendously broad.

This is not about numbers. This is about people. There are farmers whose land we are operating on, customers who we have long-term agreements to deliver energy to, indigenous groups who are concerned about the impact our operations may have on their heritage, and governments who expect us to deliver a secure and affordable supply of energy to their state and indeed the nation.

In fact all of these different people have expectations of Santos, and often high ones. And certainly these expectations are ones that we must

meet, but my personal view is that our industry must do more than just meet those expectations, we must work to provide enduring and positive value to the communities in which we operate.

This is a view that I hold to, that drives me, and it is a clear value that underpins our culture at Santos.

But again remember we are talking about people. And so, we can't add up that positive value on a spread-sheet. Communities don't operate like that. Nor can we simply ask communities to trust us when we proclaim loudly that they will be better off. You can't just make people love what you are doing.

But we can and must engage with all of the people our operations touch, to understand the challenges, concerns and needs of all our stakeholders, and then design and implement our projects accordingly.

Engaging is important. But, in our industry, we must be realistic – engagement will not appease everyone. There are some who believe that fossil fuels should play no role in our energy future and are committed to preventing development at any cost.

But it should not deter our resolve. Ultimately it is true engagement on both sides that will bring communities, employees, and some opponents onboard. And it is the Santos way of genuinely committing to engagement, and taking the time to do it properly, that has ensured we

have a positive reputation in the communities in which we operate, or have operated for some 20, 30 or 40 years.

Rather than forcibly pushing out or imposing our own solutions, no matter how well intentioned they may be, this approach is essential to operating effectively at the local level, and also to delivering a successful, long-term gas industry in Australia – and one that will be around not just for the next few years but the next 100.

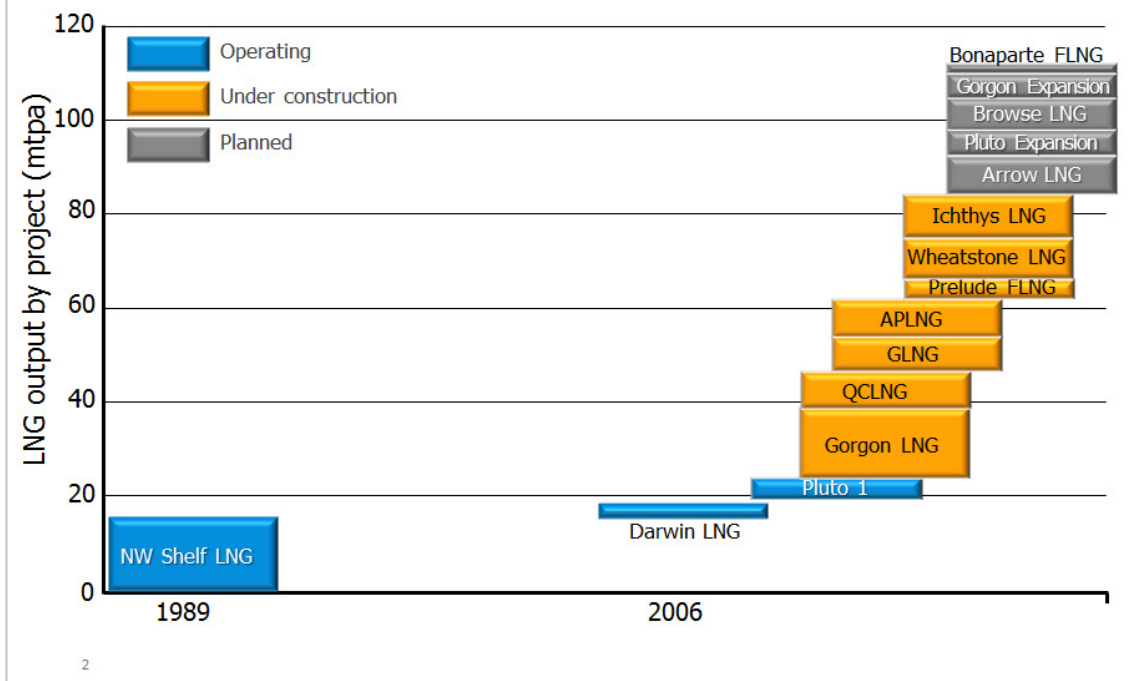
As I have said, this is about acting responsibly – and, supplying Australia and Asia's growing needs for energy is our responsibility too. Energy after all can be the source of progress and prosperity – not only does it power our homes and underpin our manufacturing industry, but access to energy lifts living standards for families and provides opportunities for businesses both in Australia, in Asia and around the globe.

2. The principles of responsible operations

This leads me to the second point of my discussion with you today – that being the key principles that I believe are essential to responsible operations in our industry here in Australia.

Now responsible operations have always been important to Australia's oil and gas industry. But the industry has recently gone through a significant step change, which has raised the importance of doing things in the right way.

Australia's LNG revolution



As you can see from this timeline, we are witnessing a transformation in Australia's energy sector through the rapid growth in Australian LNG. For nearly 20 years, Australian LNG was essentially a one-horse race. Turning the clock forward to 2018, and in just five years another seven projects currently under construction will be online.

The rapid rise of coal seam gas or CSG reserves and production, has here in the East of Australia, been a catalyst for this transformation. The result is that three of the seven LNG projects under construction (Santos' included) are CSG to LNG projects homed in Gladstone.

And while CSG production in Australia is not entirely new – it actually started in Queensland more than 15 years ago, a CSG to LNG project is of a much larger scale.

Producing natural gas from coal seams at scale is an intensive industrial process, generally imposing a larger environmental footprint than conventional gas development.

More wells are needed, a lot of water is produced in the process and must be handled appropriately, and techniques that sound ominous such as hydraulic fracturing are sometimes required to boost the flow of gas from the well.

Essentially, CSG production at the scale being developed and proposed is new to Australia, and new to Australians. And, for an industry used to operating hundreds of kilometres offshore or in the middle of the desert, the challenge of working in harmony with landowners, farmers and indigenous groups – brings with it, its own new challenges.

Despite this, I am confident that our industry has the expertise to effectively deal with these challenges. But to ensure that we succeed there are five key principles that I believe if applied across all onshore oil and gas operations, will work to greatly increase the confidence and trust of all our communities.

These principles provide a framework for protecting the environment and the communities in which oil and gas operations take place. They are simple, but they are powerful.

Principles of responsible operations

1. Operating safely



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We have the energy.

They are:

1. Operating safely.

From the design to the construction and operation of any facility, and through the preparation of a safety plan for each and every operation - the safety of employees, contractors and the local community must remain a priority.

Planning is essential to good safety performance, but in an industry that is changing and changing rapidly, there are always new safety challenges that require vigilance, leadership and ongoing improvement.

One area that I am particularly conscious of is the introduction of many thousands of new people into the industry that has accompanied the rapid development we have seen in recent years.

It is not only the numbers of new people that is amazing – for instance last year our industry created tens of thousands of new jobs, but we are also hiring people from different sectors and from other countries. The result is a myriad of safety cultures and experiences that must be managed.

Success will involve effectively addressing human psychology, workplace interaction, decision making in major hazard environments and the ongoing engagement and commitment of teams, especially those working on the front-line.

In essence it will require strong leadership and I can assure you that the oil and gas industry's leaders understand the job ahead and are committed to breaking through the performance plateau.

Principles of responsible operations

2. Protecting the environment



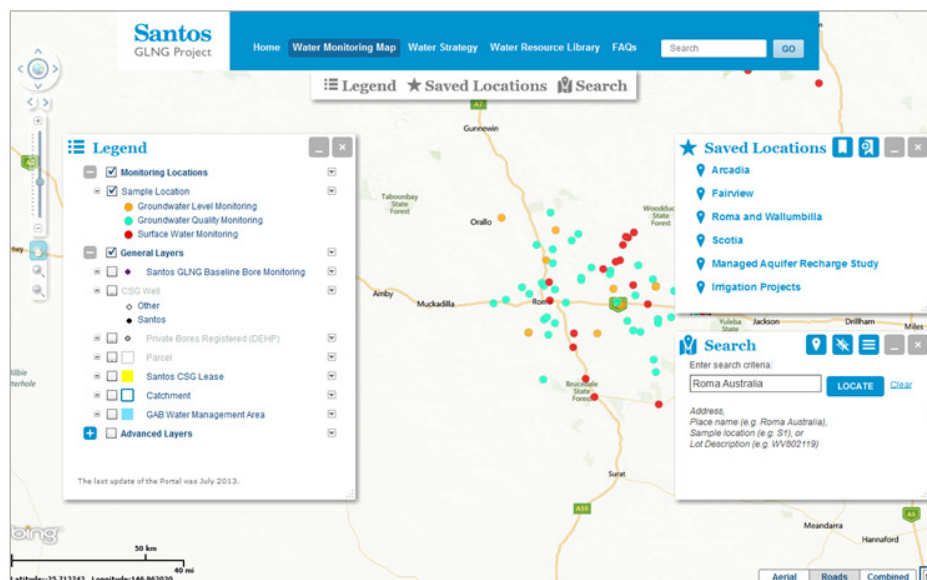
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We have the energy.

2. Protecting the environment.

In developing this country's natural gas resources we must ensure that our operations are designed to minimise the impact on water, on emissions and on local ecology.

The science tells us this is possible, but we cannot simply tell people that and get on with the job.

Principles of responsible operations



www.santoswaterportal.com.au

Santos' GLNG Project in Queensland is a good example of how we have addressed the community's concerns about the impact of a CSG project on ground water.

The first thing we did is measure - we did this because in order to measure the potential impacts of our work we need a clear "line in the sand" before we begin, and then a consistent program of monitoring as work progresses.

So, we set out to undertake what must be one of the largest and most comprehensive groundwater impact studies ever completed in Australia,

collecting baseline data across hundreds of water bores across the project's tenements.

This work was done to model the impact of our project and in essence it found that the drawdowns would be minimal and present no significant impact on users, ecosystems or the Great Artesian Basin.

The second thing we did is disclose this data. Our findings were assessed by the Queensland and Federal governments and confirmed by the Queensland Water Commissions' own report.

That is, the independent regulators agreed with our findings.

The third and final part to our approach has been to engage with communities about our findings. When we first started talking to the community there were significant calls for more information and transparency. In response to this we have created an online water portal where anyone can access up to date results of our water monitoring across hundreds of locations across our operations in Queensland, including levels, pressures and quality of both surface and groundwater.

We actively discuss these results with landowners, with communities and with anyone who has a concern - to help them understand what it means.

Ultimately, what this approach has led to is a greater understanding amongst the community of our approach to strict water management.

But it has also led to the identification of opportunities. We are now working with communities and councils to identify opportunities to reuse treated water, be it for irrigation or to recharge local aquifers.

Most of our opponents don't think of our industry as creating more water ... they think quite the opposite actually. But in places like Roma in Queensland we are working to do exactly that.

Principles of responsible operations

3. Treating people with respect



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3. Treating people with respect.

I've mentioned the importance of engagement already, but it is critical that operators don't just pay lip service to this concept. Successful engagement requires the recognition that it is people that a project must engage with. In our experience this means early engagement, listening and providing sufficient opportunity for people to provide comment on plans and express concerns.

Now if you're a farmer in Queensland or New South Wales, and we're going to be drilling multiple wells on your property, you're going to want to have a say as to how that is done. And it is fair to say that on almost

every occasion, after sitting down and discussing things like where we'd like to drill wells, where we would like to run pipelines and roads, the result is that we incorporate the feedback, develop a new plan and consult again.

For Santos this principle also means that we always seek agreement to access someone's land. My view is that without full support from a landowner you cannot have a sustainable approach to your operations. And our experience tells us that after engaging appropriately in most cases very few people actually are opposed to our development. To be clear, we will only go on a farmer's land to drill a well with their agreement.

In Queensland today we have more than 680 agreements with over 300 landowners – a demonstration of the support we have garnered from local communities over time and with much hard work.

Principles of responsible operations

4. Limiting our footprint



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We have the energy.

4. Limiting our footprint.

Our companies, and our projects have the opportunity to really be innovative and design and develop projects that act to challenge the status quo, and reduce the footprint we place on the environment and local communities.

This is the result that I believe leaders can and must inspire in their project teams, contractors and all of their employees for both onshore and offshore projects.

One example of this is the use of multi-pad directional drilling. Instead of drilling six, 12 or 20 wells in different locations, many kilometres apart, this technology allows us to drill multiple wells from one location and fan out in different directions. We are currently using this technology in the Cooper Basin in South Australia, and not only is our footprint at least half the size, but we save about 15-20% in the cost per well.

Another example is a deal our GLNG project has made with our neighbouring project APLNG in Queensland – in fact, the deal was inked just last week. Both proponents share acreage in the Bowen and Surat basins, and had originally designed projects to separately transport gas to their plants on Curtis Island. However through a series of gas swaps we have delivered an outcome with a significantly lower environmental footprint for both companies. The benefits to the community in addition to the financial ones to both companies are significant. Overall this deal will avoid the construction of 140km of additional pipelines, that would have impacted more than 50 landowners and required more than 400 truck movements to transport the pipe.

It is examples like this that convinces me more than ever that our industry doesn't receive its licence to operate from government. It's not gifted to us either by market share, market capitalisation or market dynamics. It's not bestowed by an independent regulator. Instead we must continue to 'earn' that license with communities every day, through our performance, through how we manage our impacts, and through our ability to deliver better solutions for all of our stakeholders.

Principles of responsible operations

5. Making a positive difference to communities



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We have the energy.

5. Making a positive difference to communities

I mentioned this at the beginning of my discussion when I said that ultimately being responsible is not just about meeting the expectations of our communities, but it required working to provide enduring and positive value to those communities.

Now this is not about providing handouts, or spreading the coin as widely as possible. It is about understanding the impact your business or operation has on a community, and then working not just to mitigate that impact, but to turn it into value for both parties. It is about seeking to understand how your operation can deliver long-lasting benefits to a

community, that will remain once your operation has moved through the life of operations and beyond.

One example of this comes from the central desert region of Australia where we have operated for 20 years producing oil that is trucked to Port Bonython in South Australia and then put onto ships. We've just begun a new \$100 million drilling program in the onshore Mereenie Field, 250 kilometres west of Alice which will again target oil.

Our experience in the region together with some renewed consultation with communities identified the ongoing issue of unemployment locally due to the sheer remoteness and lack of opportunities. Our team believed that we should work hard to address this issue, and that the promise of new investment by companies like ourselves often came and went without a difference being made. But our team thought that we could and should help.

As a result we made it a part of a tender for the civil construction works that the contractor would demonstrate how it would employ local Aboriginal staff. And, Intract Indigenous Contractors, a division of McMahon Services won the contract – mobilising a team, more than half of which were Aboriginal to construct eight lease pads for our drilling rig, and upgrade 20kms of road to provide safe access to the site.

Many of those employed by McMahon on this project have gone on to employment with other companies doing work at Mereenie, illustrating our commitment to developing local people.

While this isn't the biggest project, or the biggest employment numbers, what it shows is real, positive and sustainable change is possible, and innovation in this area can change the way a company operates. At Santos this innovative approach in one of our smaller projects is now just the way we do business.

The final thing I would like to say about these five principles is that they do not work on their own. They require governments with regulations that are consistent with them, and they require an industry that demands high standards to ensure that individual players do not let our communities down.

At Santos, we are working to flesh out these principles so that they provide a more definitive and detailed guideline across our business as to the standards we will adhere to when developing unconventional gas resources.

I believe that over time that the detail behind these simple principles will work to encourage our partners, governments, communities and even our opponents that the oil and gas industry is taking a responsible approach to the development of this country's resources. They will see that in every instance and across every issue, we are doing our utmost to achieve the highest standards of operations, and in some case we will go beyond even their expectations.

The opportunity for Australia



3. The opportunity for Australia

Finally, let me turn to the third part of my discussion with you today, that of the opportunity available to Australia through the sustainable development of our natural gas resources.

This opportunity has arisen because of the rise of Asia. Asia's growth is leading to a sharp increase in the global projections for gas demand. In fact, the global demand for gas is projected to grow 50% faster than any other fossil fuel in the 20 years to 2035.

This resource is also important to Australia. Natural gas is fundamental to Australia's economic prosperity. Today, more than 5 million homes use natural gas. Natural gas supplies nearly half of the energy needs of the manufacturing and construction sectors, and provides over one fifth of the generation capacity in the national electricity market.

This importance of natural gas both for domestic use and for export markets is providing Australia with a large and growing market for our gas resources. And, the gas industry is responding to this opportunity in a way that will benefit the nation.

While much negative talk has been heard in recent times about the decline of the mining sector, or the demise of manufacturing in this country - our industry – the gas industry – is continuing to invest.

In 2013 the industry combined will invest over \$30 billion in capital, and a wave of additional projects provide a promise of future investment that if realised will account for nearly two thirds of all committed investment across all Australian industries between now and 2020.

In addition to the contribution natural gas makes to Australia's economy, it is also a low carbon fuel, and despite what you may hear – addressing climate change is still a global issue that must be addressed. In fact the most recent IPCC report concluded that its more certain than ever that human civilisation is the main cause of global warming, putting the world on track for dangerous temperature rises.

The challenge to ensure that the natural gas industry can deliver on its economic, environmental and social potential is not a lack of gas resources. Based on projected demand, Australia has more than 50 years of known gas reserves and resources to support both domestic and export markets.

The challenge is to ensure that we continue to develop those resources, and in a sustainable manner. Gas in the ground is a valuable resource for sure, but it only has productive value once it is in the pipes.

And if as a nation we don't act responsibly, and bring communities with us, the risk is that the development of our resources will stop. And this is a scenario that neither companies, governments, shareholders or your members would benefit from.

To address this challenge requires a sustained effort from governments and operators to address community concerns. If we are able to do this, Australia will be the winner, and I am confident of this outcome.

Thank you.