

Queensland Energy Conference
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Accelerating low-emission generation in Queensland

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Good morning ladies and gentlemen.

I would like to begin my remarks by acknowledging the traditional owners of the land upon which we meet today.

I also wish to thank Tonkin Corporation for their work in organising this conference.

As the peak representative body for more than 160 companies with interests in the Queensland minerals and energy sector, the QRC is often asked to contribute to business and community forums.

The forums are as wide-ranging as conferences of this nature, Parliamentary committees and Ministerial working groups through to regional gatherings where people are simply coming to terms with what's happening in their communities.

In recent months, we've had more than our normal share of appearances.

In the wake of the global financial crisis, the subsequent loss of more than 3000 positions across the Queensland resources sector and the steadily intensifying debate over the design of the federal emissions trading scheme, we've been kept busy.

Now, we find ourselves in a state election campaign, where the Treasury is preparing for a budget deficit, and for the first time in its history, Queensland has voluntarily surrendered its Triple-A credit rating.

I say voluntarily in the sense that the state government has opted at this stage not to implement policies – such as cutting back capital spending, slashing services or selling assets – to overcome the prospective deficit.

We are also in the second half of a financial year, where despite all the gloom, the Queensland resources sector is still forecast to generate \$3.6 billion in royalties for taxpayers.

Minerals and energy royalties are the biggest domestic revenue stream at the state government's disposal this year. And for the next three years, a conservative Queensland Treasury forecasts the sector will generate more than \$2 billion a year in royalties.

Putting that into an historical context, in the midst of a major global downturn, minerals and energy production in Queensland will deliver royalty contributions well in excess of anything delivered in the past.

Last financial year, the industries we represent contributed almost 20 per cent of the Queensland economy and about 12 per cent of total full-time equivalent employment. It will be interesting to see how well those numbers hold up in a predicted environment of economic contraction.

The latest data from the Australian Bureau of Statistics confirms mining, minerals processing and oil and gas production are now directly responsible for the employment of more than 50,000 Queenslanders.

According to an ACIL Tasman report for the state government, the flow-on of jobs from the sector results in around 220,000 full-time equivalent positions dependent on the health of the minerals and energy sector in Queensland.

The QRC's membership is among the most diverse of any industry association in the country.

We bring together companies and individuals involved in the mining of coal and metals; minerals processing, oil and gas production, electricity generators and explorers, along with the vast array of companies providing services to the Queensland resources sector.

Around the QRC Board table, senior executives otherwise engaged in fierce competition for domestic and global sales of their products agree without hesitation on the role of their peak representative body.

The QRC works to secure an environment conducive to the long term sustainability of the minerals and energy sector in Queensland.

Where else would you get, as we did less than two weeks ago at the first QRC Board meeting for 2009, the top echelons of the state's coal, coal seam gas, minerals processing and electricity generation sector in the same room discussing the QRC's approach to the Federal Government's Carbon Pollution Reduction Scheme. More on that subject shortly.

Twelve months ago at this conference, I reported on what I had learned during a tour of North America that might contribute to our understanding of other efforts to reduce greenhouse gas emissions from traditional energy production.

I came away from that experience enthused by energy efficiency initiatives driven by governments such as the province of British Columbia in Canada.

The BC government has stipulated that half the growth in electricity load to 2020 must be satisfied by energy efficiency and conservation. This approach and the target have won the support of experts in both government and non-government sectors. Achieving the target means a range of measures.

These include tough new building codes for houses and commercial buildings, incentives to throw out energy-inefficient appliances, rebates for efficient lighting, funding for 'energy managers' to work with large commercial and industrial users of electricity and pricing that encourages electricity conservation.

Both Canada and the United States have excellent efficiency and conservation programs in place that Australia could learn from.

I also remarked that the United States was not championing the global leadership that one might expect in dealing with the world's twin challenges of energy security and climate change.

I compared the United States' determination in the 1960s to put a man on the moon with the reality of low-emission technology programs such as FutureGen being shelved – at least overtly – for cost reasons.

I compared the Apollo space program's commitment in today's terms of \$US136 billion with the previous Bush administration's commitment of a few billion dollars a year to low-emission technology development.

In 1961, President John F. Kennedy declared it was in the national interest of the United States of America to become the dominant force in outer space. In 2009, President Obama has signalled a start to putting energy security and greenhouse gas mitigation back on his country's agenda.

Both issues may be perceived as less pressing than global economic recession but they have not been overlooked in the *American Recovery and Reinvestment Act of 2009*.

It commits around \$US790 billion to rescuing the US economy. An important component of the Obama program is support for low-emission and renewable energy technology development.

Direct investments in government and university research and development programs of around \$US35 billion are being complemented by tax credit schemes for conservation and alternative energy programs valued at some \$US17 billion.

It would appear that the United States is back in the game, and that's good news for Australia and Queensland in particular.

As you are probably aware, Queensland has three carbon capture and storage projects under way.

Each brings a different approach to the question of how to deliver a cost-competitive and reliable electricity supply while making significant inroads into greenhouse gas emissions.

Construction is progressing on the 200 million dollar Callide oxy-fuel pilot project near Biloela.

A target date of 2010 is in place to demonstrate the separation and storage of carbon dioxide using technology with the potential for retrofitting to existing coal-fired power stations.

The Callide project is a product of industry and government collaboration, with the coal industry contributing under the banner of the COAL21 Fund.

The voluntary fund was established by the Australian black coal industry in 2006 to provide \$1 billion over its first 10 years to commercialise low-emission power generation technologies. It is the only industry fund of its type in the world.

In Queensland, \$300 million has been earmarked by COAL21 along with 300 million from the state government for the construction of a new generation commercial scale coal-fired plant incorporating carbon capture and storage.

The commercial go-ahead for the ZeroGen project is still subject to deliberations of the Queensland Clean Coal Council, chaired by the Premier.

Obviously as a consequence of the state election, the work of that Council has been delayed. However, I can tell you that there is strong global interest in seeing this project take over from where FutureGen in the United States left off so unceremoniously.

Queensland state-owned electricity generator Tarong Energy is also collaborating with the CSIRO on a post-combustion carbon capture trial near Kingaroy. This trial is looking to capture an initial 1500 tonnes of carbon dioxide a year, again with obvious potential to extend the lives of existing coal-fired power stations throughout Australia.

Let me just remind you that our fleet of coal fired power stations is (pre-CPRS) valued at more than \$40 billion.

Of course, the successful deployment of carbon capture and storage technologies is equally important to the longevity of gas-fired plants – currently the fastest growing segment of the Australian electricity generation sector.

The relevance of these technologies to gas fired plants is why the 'clean coal' slogan of the past has been dropped in favour of low-emission technologies. In terms of support for the development of low-emission power generation technologies in Australia, it is clearly in Australia's national interest that we accelerate the process.

The coal industry is vital to Australia's economic future, and despite the immediate outlook, global demand for the most reliable energy fuel on earth will revive, and probably more quickly than many expect.

Indeed, the drop off in demand for coal has principally been in coking coal used for steel making, whereas demand for thermal coal appears to be holding up quite well.

Forecasts of a doubling in global electricity production by 2030 mean that it is incumbent on countries like Australia to take the lead in making coal more environmentally friendly.

Coal is mined in more than 70 countries, and China has committed already to the domestic consumption of 3.5 million tonnes annually by 2015.

As Professor Ross Garnaut pointed out in his report to the Australian Government:

'If we cannot succeed in commercialising carbon capture and storage, there will be severe, negative impacts on parts of the coal mining sector and on coal-based power generation.'

Read into that assessment, big troubles too for an Australian economy that has taken coal for granted as a cheap domestic power source and as a 60 billion dollar a year export industry.

Professor Garnaut also made a strong case for the public funding of the research and development needed to achieve the eventual goal of zero emissions from commercially-viable fossil fuel power generation.

He pointed out that 'commercially successful CCS could turn the coal and coal-based electricity generating areas into regions of strong expansion and prosperity'.

Frankly, while their rhetoric is very supportive, the \$500 million on the table from the Rudd government for low-emission coal technology is not enough if we are serious about reducing emissions and protecting jobs.

In the meantime, the cause of low emission coal technology is not helped when the Federal Leader of the Opposition, Malcolm Turnbull, goes on national television last night and, in the interests of talking up something called 'bio-char' states that 'the technology that we're all putting so much faith in, carbon capture and storage, isn't proved at all. There isn't one clean coal power station with carbon capture and storage anywhere in the world,' said Mr Turnbull.

The first point I would make in response to Mr Turnbull is that all the elements of CCS technology, being carbon capture power plants, compression and piping and storage of carbon dioxide all exist and have been demonstrated for some years.

There are dozens of projects around the world demonstrating the various components of CCS technology. The challenge has always been to integrate all those elements.

It must have escaped Mr Turnbull's attention that a fully integrated CCS power plant (i.e. with storage) was inaugurated last September by the Vattenfall company in Germany. Siemens have recently committed to another fully integrated CCS project.

And of course as I mentioned earlier, a similar project will be operating next year at Callide.

Mr Turnbull's comments are disappointing given his past support for CCS technology. I have no problem with him being excited by the shiny new bio-char technology, but he does not have to do so by talking down a technology that is so crucial to the sustainable future of Australia's largest export industry.

Let me now re-direct my sights back onto the Federal Government.

The QRC is troubled over the change in direction of the Federal Government's White Paper on the Carbon Pollution Reduction Scheme as it relates to black coal electricity generation.

The QRC is proud to count among our members several Queensland-based black coal electricity generators.

We share their concerns that the proposed White Paper approach to assistance for electricity generators now funnels assistance to the most inefficient coal-fired generation assets.

As we have said in a letter sent to Prime Minister Rudd last month, we can only attribute this fundamental policy shift from the Green to the White Paper as the result of a lack of consultation with black coal-fired generators.

The Commonwealth's policy objective in the Green Paper was to provide once-and-for-all compensation to coal-fired generators 'to ameliorate the risk of adversely affecting the investment environment'.

We find this difficult to reconcile with the White Paper's proposal to effectively exclude compensation for black coal generation assets.

Queensland's coal-fired generation fleet is characterised as relatively newer and lower in emissions than the national average.

Under the White Paper's approach of providing short-term compensation to highly emissions-intensive generators – in particular the brown coal generators in Victoria – Queensland is short-changed on both counts.

Engaged by the Commonwealth Department of Climate Change, consultants ACIL Tasman identified that emissions trading will impose a \$6 billion asset loss on Queensland's generation fleet over just the first 10 years of the CPRS.

The CPRS White Paper proposes to provide just one per cent – perhaps as little as \$60 million – in compensation to Queensland generators for that loss of asset value.

By contrast, Victorian brown coal-fired generation assets are expected to receive \$3.4 billion in direct assistance, representing approximately 75 per cent of asset losses.

To adequately address the Commonwealth's policy objective with respect to the black coal-fired generation investment environment, the QRC is urging the Commonwealth to refine its White Paper framework along the following lines:

- increasing the quantum of assistance
- re-aligning the allocation of assistance and
- supporting continuing investment in Queensland generation.

First, the Commonwealth's own analysis shows that the *quantum* of assistance significantly understates the reduction in asset values of coal-fired electricity generators.

QRC supports the level of direct assistance taking into account the disproportionate loss in asset value over the entire remaining lives of existing generation assets.

Second, the *allocation methodology* needs to reflect the reality of the difference in emissions performance between strongly affected coal-fired generators.

The White Paper seeks to apply a uniform emissions intensity profile for all installed coal-fired generation, which assumes away key differences in asset age, emissions efficiency, fuel source or consequential impact on asset valuations.

The QRC would prefer the use of an average emissions intensity for all Australian generation plant, calculated at the node and with compensation reflecting remaining asset life.

These improvements could be easily implemented within the current White Paper framework.

Third – and this is critical in the context of what this conference is examining today – compensation should not stymie much needed investment in new low-emissions generation technologies.

Clearly, unless assistance more closely reflects the scheme's impact on asset values, the ability of individual Queensland generation companies to invest in the next generation of low-emission technologies will become increasingly limited.

As we – and our generator members see it – if the White Paper proposal is implemented without these three improvements, there is a real risk of perverse market outcomes being concentrated in Queensland's electricity generation sector.

That would compromise future investment, current profitability and employment opportunities surrounding this important exporter to the national electricity market.

And sadly, the proposed treatment of Queensland black coal generators could well have adverse effects for the pioneering low-emission generation projects that I referred to earlier.

On the broader thrust of the CPRS, the QRC believes an emissions trading scheme is the most appropriate means of establishing a price for carbon and using the discovery powers of markets to identify and implement least cost opportunities to reduce emissions.

The Commonwealth's 'three pillars' approach of reducing emissions, adapting to change and actively building a global response is a sensible division of effort between prevention, cure and international leadership.

In October last year, QRC commissioned consultants ACIL Tasman to independently assess the economic impact of the Government's CPRS Green Paper.

By assessing the likely impact on the future earnings of 10 different Queensland mining and minerals processing operations under a number of scenarios, we were able to gain an indicative assessment of whether shutdowns might occur and whether further green and brownfield investments could be deterred.

We also asked ACIL to look at the pros and cons of the proposed emissions intensive trade exposed (EITE) assistance measures. That is, the quantity and means by which the free permits will be granted.

The financial model used was then re-run by a QRC team with the slightly revised White Paper settings, as well as a number of assumptions applied by the Federal Treasury, to provide an updated assessment of the impact of the CPRS on the same 10 operations.

We covered aluminium, alumina, two thermal coal, two coking coal, two non-ferrous ore, a non-ferrous smelting and a non-ferrous refining site.

Applying conservative assumptions in relation to future revenues, carbon costs, input costs, and new plant costs, the analysis concluded that:

- 4 of the 10 sites analysed recorded earnings so low that their short to medium viability may be compromised, with premature shutdowns a risk; and
- At least 4 out of 10 sites recorded earnings so low that they wouldn't be able to cover the capital cost of building, or replicating a site of similar production, type and location.

Obviously, our immediate concern is ensuring the ongoing viability of current operations whilst encouraging behavioural changes en route to the new carbon economy.

As we found, some operations will experience significant decreases in earnings as a result of the CPRS that will compromise cashflow, and in the absence of readily accessible and implemented abatement technologies, will also compromise short to medium term commercial viability.

Job losses and carbon leakage are therefore demonstrable risks.

The stronger finding of our analysis is of potentially greater significance in terms of economic consequence. That is the impact that the CPRS may have on future brown and greenfield expansions.

The analysis showed that while earnings may be such that the operation remains viable, earnings will be too low for a number of operations to consider expansions of an operation of comparable size, type and location.

Against a background of strong long-term demand for most mineral and energy commodities, competing intra-company interests, and growing global resource sector investment options, lost opportunities in Australia in the longer term appear inevitable.

The QRC has other specific concerns with the White Paper.

While the proposed and unconditional 5 per cent cut in emissions by 2020 appears modest, that translates into 250 million tonnes off projected business as usual emissions.

This will impose significant costs on the Australian economy ahead of the rest of the world, including our trading competitors.

The proposed Australian emissions trading scheme is far broader in coverage and more punitive in carbon liabilities than any other existing or proposed scheme in the world.

We believe the CPRS cannot be implemented without consideration of, and in isolation from, the business environment.

The current version of the scheme cannot be easily calibrated to address critical external factors such as the lack of comparable carbon costs by our competitors, very high input costs, and economic downturns such as that being experienced now.

As such, it has the potential to significantly and adversely impact certain industries within Queensland's minerals and energy sectors.

The solution is to have a scheme that imposes carbon costs, and/or alternatively gives transition assistance, commensurate to the cost impacts of these types of risks.

Despite qualifying for the EITE 60 per cent assistance category, coal mining will be unilaterally excluded from receiving such assistance.

Instead, the industry will qualify for \$750 million over five years under two funding arrangements.

These funds are conditional upon abatement activity being undertaken, which is a unique request compared with the treatment of other EITE sectors. It will also provide a much lower effective level of assistance than if 60 per cent free permits were granted.

At a minimum, coal would have qualified for \$2.4 billion of assistance (at a carbon price of \$25 per tonne) if included in the 60 per cent free permit category.

In short, we believe the same rules that apply to the rest of industry should apply to coal.

The CPRS proposes to include methane, the gas generated by the fugitive emissions from coalmining.

This makes Australia the only jurisdiction to include fugitive emissions from coal mining in their emissions trading or carbon abatement programs.

Methane is extremely difficult to measure, with some companies indicating that current measurement methodologies may overstate emissions by 30 times.

Sadly, the government's CPRS model appears to continue the trend in Australian public policy that the minerals and energy sector can be treated differently from other sectors due to its perceived capacity to pay.

Put simply, the dramatic decreases in global demand and prices, coupled with very high costs, means the industry's capacity to absorb significantly greater cost pressures is now greatly diminished.

Likewise, the ability of the coal mining and black coal generation sectors to support major investment in low emissions technology is substantially weakened.

In short, we think the CPRS remains somewhat 'undercooked' and we are encouraging the Federal government to tread cautiously and to continue its dialogue with industry.

I will draw my comments to a close here with the simple message that the acceleration of low-emission generation is a national priority.

If we are to believe some of the prophets, it's the world's number one priority.

It's an initiative that we have pursued with vigour in Queensland.

We should reject any move towards choking the momentum that we have created through the Callide, ZeroGen and Tarong projects.

Australian governments will naturally need to re-order priorities as the global recession reaches Australia.

However, the development of a new generation of coal-fired power stations in Australia by Australians will not only create new jobs in tough times but also generate export potential on a whole new level.

Thank you.