

QRC

submission

Working together for a shared future

A large, stylized graphic of a leaf or branch, composed of several overlapping, curved lines. The lines are in shades of grey and green, creating a sense of movement and growth. The graphic is positioned on the left side of the page, partially overlapping the text.

Submission to the Senate Select Committee on Climate Policy

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Executive Summary

- In the 2007/08 financial year, it is estimated that the Queensland resources sector directly and indirectly contributed:
 - \$41.3 billion – or 20 per cent of Queensland's total Gross State Product (GSP); and
 - 191,300 full-time equivalent (FTE) jobs – or 12 per cent of total Queensland FTE employment.
- In principle, the Queensland Resources Council (QRC) supports an emissions trading scheme (ETS) as the most appropriate means of using the discovery powers of markets to identify and implement least cost abatement opportunities.
- An ETS cannot be implemented without consideration of, and in isolation from, the business environment in which affected parties will compete and operate.
- The Carbon Pollution Reduction Scheme (CPRS) will potentially impose a very high carbon liability, very early, on Australian industry. A high price cap, low levels of transitional assistance, and a lack of commercially available and inexpensive abatement technologies, will result in too much 'stick' and not enough 'carrot', resulting in perverse economic and environmental outcomes.
- Coupled with the current uncertainty re future resource demand and prices, high costs (relative to competitors), and a likely disparity between competing nation carbon imposts, the CPRS as proposed will lead to premature shutdowns and will discourage future green and brownfield investment.
- Work commissioned by the QRC and undertaken by ACIL Tasman in November 2008 (and then updated for the detail of the CPRS White Paper) shows that of 10 different mining operations, the impact of the CPRS in conjunction with the (expanded) Renewable Energy Target will be significant, with:
 - 4 of the 10 sites analysed recording earnings so low that their short to medium viability may be compromised with premature shutdowns a risk; and
 - at least 5 out of 10 sites recording earnings so low that they would not be able to cover the capital cost of replicating a site of comparable size, type and location.
- The QRC's specific concerns with the CPRS White Paper include:
 - the scheme proposed in the legislative package is not calibrated with progress toward a global agreement or the availability of low emissions technologies;
 - transition assistance for trade exposed entities is neither inclusive nor adequate;
 - the non inclusion of the coal industry for EITE assistance is a gross anomaly;
 - the EITE carbon productivity contribution (that is, the so called 'decay' of administration permits per annum to eligible emissions intensive trade exposed



[EITE] activities) is counter to the purpose of the assistance scheme and must be removed;

- the treatment of the Queensland black coal-fired electricity generation fleet under the proposed Electricity Sector Adjustment Scheme (ESAS) is grossly inadequate;
 - the proposed price cap of \$40 (increasing in real terms by 5 per cent annually) is dangerously high and will provide little assurance against the adverse impacts of damaging price peaks and volatility; and
 - the proposed interim (2020) target will be extremely challenging.
- To achieve the government's stated policy objective of 'Ensuring that Australia's international competitiveness is not compromised by the introduction of emissions trading' (2007 Election Statement – *Labor's Plan for a Stronger Resources Sector*), the QRC calls for a number of substantive revisions to the CPRS White Paper model.
 - For the resources sector as a whole, QRC supports the following revisions:
 - The Minerals Council of Australia's preferred 'phased auctioning' approach is considered a first-best outcome.

Under a phased approach, all trade exposed firms would be required to purchase a proportion (10 per cent) of their permits in year 1 of a scheme, a proportion which could gradually increase as the scheme is bedded down and as other nations adopt binding emissions reductions. Under this approach there would be no arbitrary emissions intensity thresholds or complicated formulae for determining eligibility.

- As a second best outcome, the QRC supports a more realistic and measured transition than that proposed via the following collective changes:
 - (1) With no exclusions, ensure that all resource sectors and/or 'activities' (including coal mining) that are trade exposed and whose competitiveness will be compromised by higher carbon costs become eligible for at least a 60 per cent rate of effective assistance for a period of no less than 10 years (and subject to review after five);
 - (2) adopt a much lower price cap - closer to A\$20t/CO₂-e (growing at CPI per annum) - from the inception of the scheme;
 - (3) remove the carbon productivity contribution (that is, the 1.3 per cent per annum decay to the quantum of administration permits provided) as this is contrary to the broader policy objective of providing effective transitional assistance;
 - (4) remove those greenhouse gases from the scheme's coverage if they cannot be measured with a high level of certainty; and
 - (5) to assist with long term investment decisions, and in addition to (1), (2), (3) and (4) above being met, promote operational certainty by enacting



the CPRS as soon as is practicable irrespective of considerations about a delayed start to the CPRS.

- Permits should be allocated to captured coal mine owners where cost pass-through is restricted or unavailable; and
 - Appropriate transitional assistance arrangements to Greenhouse Gas Reduction Scheme (GGAS) participants from CPRS commencement until 2020.
- Specifically for the electricity generation sector:
 - A more equitable distribution within a larger assistance pool for black and brown coal generators that reflects the true asset value loss of assets (whilst also taking into account the remaining life of those assets);
 - All existing and proposed State and Commonwealth schemes to be replaced by the CPRS so as to provide a clear carbon price trajectory on which future long term investment decisions can be made; and
 - To alleviate the considerable cashflow concerns that are likely, an auction system that allows deferred settlement for those industries likely to be highly affected because they must purchase permits for operational reasons.

In addition, the capacity to implement low emission technologies (if they exist) during periods of stressed cash flow, and in response to carbon price signals alone, needs to be more closely considered. That is, market failures will occur and a significant role for government that encourages, and not penalises industry will exist. For example, additional and complementary tax incentives such as accelerated depreciation for plant and equipment that abates greenhouse gases should be considered.



1. Background

The Queensland Resources Council (QRC) is a non-government organisation representing companies that have an interest in exploration, mining, minerals processing, gas and energy production. It is the resource industry's key policy-making body in Queensland, working with all levels of Government, interest groups and the community.

The QRC works on behalf of members to ensure Queensland's resources are developed profitably and competitively, in a socially and environmentally sustainable way.

The socio-economic contribution of the Queensland resources sector is significant:

- In the 2007/08 financial year, it is estimated that the Queensland resources sector directly and indirectly contributed \$41.3 billion – or 20 per cent of Queensland's total Gross State Product (GSP).
- In the 2007/08 financial year, it is estimated that the sector directly and indirectly contributed 191,300 full-time equivalent (FTE) jobs – or 12 per cent of total Queensland FTE employment.
- Mining is the dominant economic activity in much of regional Queensland. For example, in Queensland's Central West and North West regions, mining accounts for approximately 90 and 70 per cent respectively of these regions' economies.
- In 2007/08, the sector will pay approximately \$16 billion in wages and salaries to those employed directly and indirectly in the sector.
- In 2008/09, the sector will pay \$4 billion to the Queensland Government in royalties. These royalties are used to fund essential services such as education and health.

2. The QRC position on climate change

The QRC has a clearly enunciated policy position on energy and climate change.

In principle, we believe an ETS is the most appropriate means of using the discovery powers of markets to identify and implement least cost opportunities to reduce emissions. Further, we support the Commonwealth's "three pillars" approach of focussing on:

- (1) reducing emissions at least cost commensurate to our contribution to the problem;
- (2) adapting to change; and
- (3) actively building a global response.

Specifically in relation to coal:

- The industry is playing its part through practical action under its COAL21 initiative and the voluntary \$1 billion COAL21 Fund, in demonstrating the technical and economic viability of the major low emissions coal technologies;
- As global demand for coal is expected to grow by two per cent a year to 2030¹, it is imperative that the technology to capture and store the CO₂ that is generated is proven as quickly as possible. Australia has a leadership role in this field – in developing the technology,

¹ International Energy Agency, World Energy Outlook 2008 Edition



demonstrating it in Australia as part of a contribution to the international effort, and helping to disseminate it globally; and

- The coal industry has welcomed significant government commitments to funding low emissions technologies in Australia with further commitments anticipated.

3. The uncertain operating environment for resources

The CPRS cannot be implemented without consideration of, and in isolation from, the business environment in which affected parties will compete and operate.

Government's immediate concern must be to ensure the ongoing viability of current operations whilst encouraging behavioural changes and efficient market responses en route to the new carbon economy.

Significant issues that must be considered in designing and implementing an optimal ETS include:

- (1) The global economic slowdown has restricted access to capital and significantly decreased resource demand and prices, resulting in lowered margins;
- (2) higher input costs coupled with an increase in global supply capacity has increased competitiveness pressures;
- (3) there is heightened uncertainty in relation to whether global competitors are going to take positions at the United Nations Conference of the Parties at Copenhagen (COP15), or in the design of their own domestic carbon abatement schemes, that impose comparable carbon liabilities on competing industries.

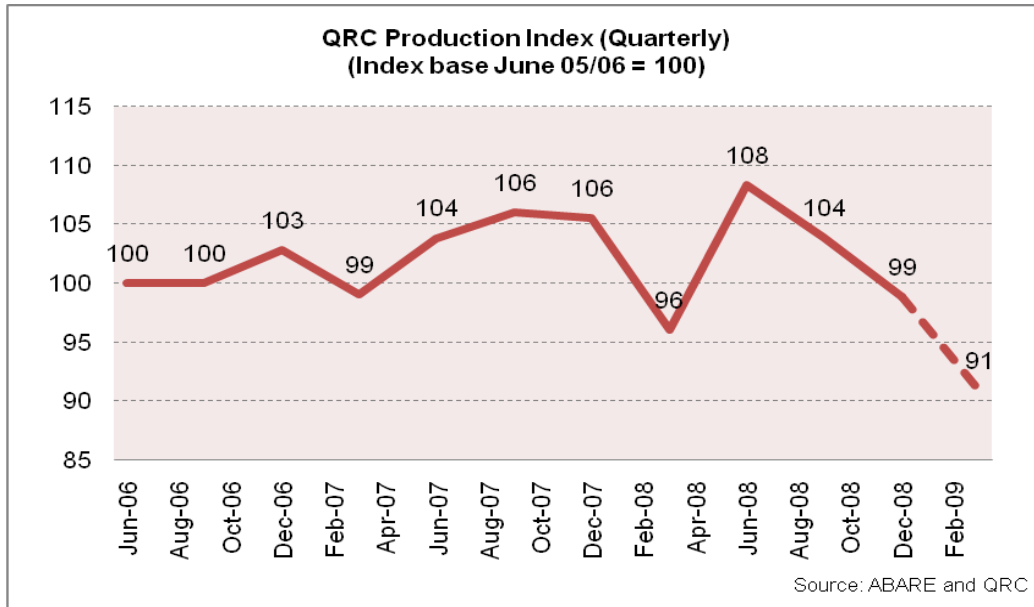
3.1 Global economic slowdown: implications for the Queensland resources sector

The marked deterioration in the global economy and in resource demand and prices from mid 2008 to today (and in likelihood beyond) has been severe.

The QRC Production Index (**Chart 1** below) consists of Queensland's production of the most significant minerals and energy commodities (by value of production). Between June 2008 and March 2009, resource production in Queensland is expected to drop 17 per cent, with the outlook for recovery highly uncertain.



Chart One: The QRC Production Index



This fall in global resource demand is reflected in global resource prices. The QRC Price Index (**Chart 2** below) consists of the same basket of commodities as the above production index. Between December 2008 and June 2009, the resource price index is expected to fall by 59 per cent.

Chart Two: The QRC Price Index



Table 1 below lists in order of magnitude the major trading partners of the Queensland resources sector. Japan is by far the largest customer – consuming approximately one third of the total amount



of resources exported from Queensland each year. Of significant concern is the deep recession Japan is forecast to encounter in 2009 and into 2010.

Table 1: Queensland's Major Trading Partners

	GDP (Annual percent changes)		
	2008	2009 (f)	2010 (f)
Japan	-0.7	-5.8	-0.2
India	7.3	5.3	7.1
Korea	4.1	3.5	na
Taiwan	3.8	2.5	na
Germany	1.2	-1	0.4
UK	0.7	-1.5	0.8
Brazil	4.3	2.2	4.2
France	0.8	-1.8	2.2
China	9	7.5	8.1

Source: International Monetary Fund

The implications of the slowdown will be significant for the Queensland resources sector, with the following occurring:

- Reduced staffing (5,000 positions have been lost in Queensland between end October 2008 and early April 2009);
- Economic mine lives are being re-evaluated (care and maintenance provisions enacted and closures occurring);
- Deferral of uncommitted capital;
- Reduced exploration expenditure (survey and anecdotal evidence points to a possible 40-50% decline²);
- Scarce capital is being directed to higher quality projects (increasingly not in Australia);
- Strong cost focus to maximise margin and conserve cash resources; and
- Continued work on advanced projects to ensure start-up is possible when markets improve.

3.2 Higher input costs and falling market share

For coal at least, Government statistics estimate that the industry has experienced significant increases in input costs since 2002, with no signs as yet that these costs are falling despite a decrease in global demand.

Chart 3 shows that costs in coal mining have increased by 35 per cent for underground operations, and 61 per cent for open cut operations between 2002 and 2008. These cost increases are a function

² Macarthur Coal presentation to CEDA Event, 5 March 2009, draft findings of Australian Institute Geologists survey April 2009, and Australian Bureau of Statistics publication 8412.00



of scarcity of inputs (labour, tyres etc), deeper and more difficult to access seams, as well as poor policy decisions that have led to inefficiencies in the operation of markets – notably transport. There is also a propensity to treat the minerals sector differently due to its perceived capacity to pay. Recent examples include:

- the advent of take or pay contracts in hard infrastructure provision where the mining proponent accepts 100 per cent of risk and cost burden in return for access to infrastructure such as rail and ports;
- increases in royalties in Queensland and NSW without industry consultation; and
- an expectation that government' responsibilities for the provision of soft infrastructure such as housing, health and child care services can be devolved to industry.

For sectors such as coal, these cumulative cost burdens have placed the industry in the highest quartile of global costs.

Chart 3: Australian Coal Industry Costs Index

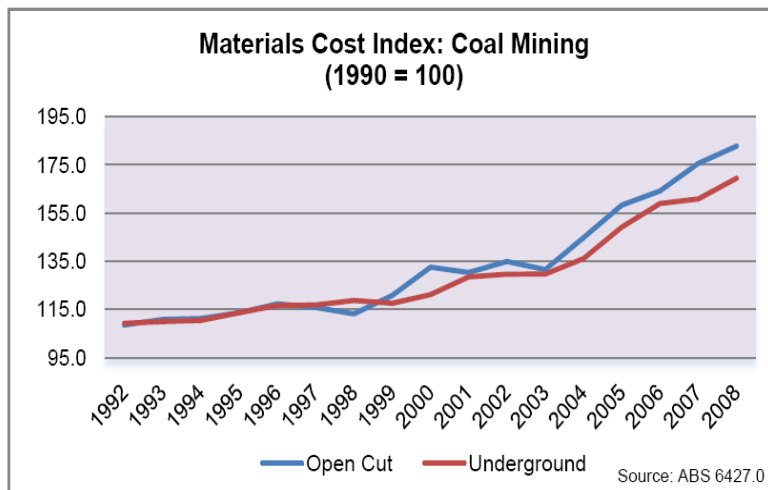
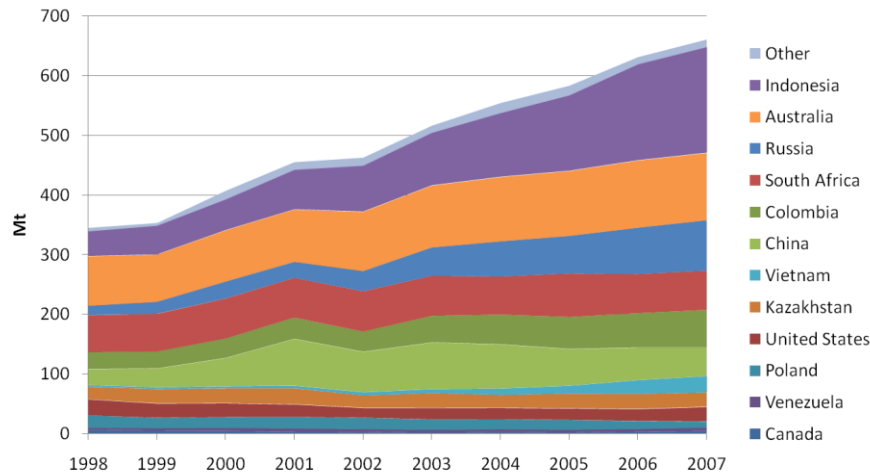


Chart 4 demonstrates that in the past seven years, Australia has already lost 15 per cent of its export thermal coal market to Indonesia as a result of infrastructure bottlenecks. In the competitive global coal market, any further impediment to Australian exports could see Australia lose more market share to coal producers like Indonesia, China, Colombia and South Africa.

**Chart 4: Global Market Shares of Coal**

Source: ABARE

3.3 *Uncertainty in relation to whether global competitors are going to incur comparable carbon costs*

In relation to the COP15 (The United Nations Conference of the Parties), the current global economy may undermine efforts in achieving a comprehensive Global Protocol.

As such, competing countries to the Australian metallurgical and thermal coal sectors such as Indonesia, South Africa, Columbia and China are unlikely to accept binding targets in Copenhagen – with perhaps the exception of Canada and the United States (metallurgical). The emergence of more progressive domestic carbon abatement policies outside of COP15 arrangements is likely to be hindered by current macroeconomic uncertainties.

The QRC believes it is inevitable that implementation of the proposed CPRS, in the current uncertain environment, will lead to a number of operations experiencing significant decreases in earnings that will compromise cashflow. In the absence of readily accessible and implemented abatement technologies, and comparable liabilities on competitors, short to medium term commercial viability will be threatened. Job losses and carbon leakage are therefore real risks.

Of potentially greater significance, however, in terms of economic consequence, is the impact that the CPRS may have on future brown and greenfield expansions. The QRC believes that whilst earnings may be such that an existing operation remains viable, earnings will be too low for a number of operations to consider investment in a new or expanded of an operation of comparable size, type and location.

These assertions have been verified by ACIL Tasman in an analysis of 10 Queensland resource companies. This is discussed below in more detail.



4. The impact of the CPRS White Paper on the Queensland resources sector

The QRC in October 2008 commissioned ACIL Tasman to independently assess the impact of the CPRS Green Paper, including the impact of the proposed Emissions Intensive Trade Exposed (EITE) assistance measures (i.e administrative allocation of permits), on the future earnings of ten different Queensland mining and minerals processing operations (those that could reasonably be categorised as EITE, under a number of different scenarios).

The full report (*CPRS Impacts on EITE Mining/Processing Activities (Queensland Case Studies) November 2008*) is available upon request. A summary of the major findings of this analysis is at **Attachment 1**.

The financial model that was used to undertake this analysis was then re-run with the White Paper settings and a number of assumptions applied by the Commonwealth Treasury, to provide an updated assessment of the impact of the CPRS on the same 10 operations. Detailed 'site-by-site' findings of the White Paper analysis are at **Attachment 2**.

Covering aluminium, alumina, two thermal coal, two coking coal, two non-ferrous ore, a non-ferrous smelting and a non-ferrous refining site, and applying conservative assumptions in relation to future revenues, carbon costs, input costs, and new plant costs, the analysis found that the design and quantity of assistance proposed in the White Paper will not be adequate for a number of these operations to sustain levels of EBITDA (earnings before interest, tax, depreciation and amortisation) to allow further investment and/or sustain adequate earnings to remain commercially viable.

Key Findings – Modelling of the CPRS White Paper and Impacts on Ten Different Sites

Operation	Direct FTE Employment	Short to medium term commercial viability	Invest further
Aluminium (Australia wide)	5,000 Australia wide	May be compromised	Might not be expected
Alumina (Australia wide)	6,900 Australia wide (plus 2,000 involved in bauxite)	May not be compromised	Might not be expected
Black coal – export coking (opencut) operation in QLD	250	May be compromised	Cannot be determined
Black coal – domestic thermal (opencut) operation in QLD	450	May not be compromised	Might be expected
Black coal – export coking (longwall) operation in QLD	250	May be compromised	Might not be expected
Black coal – export thermal (opencut) operation in QLD	100	May be compromised	Might not be expected
Non-ferrous metal ore (underground) operation in QLD	tbc	May not be compromised	Cannot be determined
Non-ferrous metal ore (opencut) operation in QLD	tbc	May not be compromised	Cannot be determined
Non-ferrous ore smelting operation in QLD	300	May not be compromised	Might be expected
Non-ferrous ore refining operation in QLD	300	May not be compromised	Might not be expected



In summary, and looking specifically at the impact of the CPRS - in conjunction with the (expanded) - Renewable Energy Target:

- 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 5 out of 10 sites recorded earnings so low that they would not be able to cover the capital cost of replicating a site of comparable size, type and location.

Whilst in reality it is difficult to say with confidence whether the CPRS alone would cause premature shutdowns or deter more investment as a host of other external and internal drivers factors would be considered, the modelling does provide an indicative assessment based *on all things being equal*.

5. QRC's concerns with the CPRS White Paper

5.1 ***The scheme proposed in the legislative package is not calibrated with progress toward a global agreement or the availability of low emissions technologies***

The 'unconditional' five per cent 2020 target will impose **net** carbon costs on the Australian business sector of \$14.5 billion in the first two years, and nearly \$34 billion over the first four years (assuming \$A25t/CO₂-e start price). These cost burdens are not comparable with, or linked to, actions by other major emitters, and take no account of the limited availability of low emissions technologies.

For example, and specifically in relation to fugitive emissions from coal mining, whilst some abatement options are available at reasonable cost for 'methane rich' coal seam gas emissions from underground mines (typically much more gassy than opencut mines), around half of the methane emissions are contained in mine ventilation air, for which economic abatement options are currently not available. The research and development (R&D) costs associated with the technologies to address these emissions are very high – thereby bringing into question the policy merit of significant carbon liabilities when this signal alone is unlikely to be effective in addressing the market failures and facilitating the R&D spend that is required.

Further, the cost burden will be imposed on Australian business and householders irrespective of whether there is a global agreement achieved in Copenhagen in December 2009.

5.2 ***Transition assistance is neither inclusive nor adequate and the EITE carbon productivity contribution should be removed***

The White Paper made some revisions to the proposed EITE thresholds to:

- 90 per cent allocation of permits for activities above 2,000 t CO₂-e/\$m revenue or 6,000t CO₂-e /\$m value added; and
- 60 per cent free allocation for activities between 1,000t – 1,999 t CO₂-e/\$m revenue or 3,000 to 5,999t CO₂-e/\$m.

These thresholds are arbitrary, will be largely ineffective in maintaining competitiveness, and will create considerable distortions.

The Minerals Council of Australia's preferred 'phased auctioning' approach is considered a first-best outcome to address these concerns.



Under a phased approach, all trade exposed firms would be required to purchase a proportion (10 per cent) of their permits in year 1 of a scheme, a proportion which could gradually increase as the scheme is bedded down and as other nations adopt binding emissions reductions. Under this approach there would be no arbitrary emissions intensity thresholds or complicated formulae for determining eligibility.

As a second best outcome, and with no exclusions, government should ensure that all resource sectors and/or 'activities' (including coal) that are trade exposed and whose competitiveness will be compromised by higher carbon costs become eligible for at least a 60 per cent rate of effective assistance for a period of no less than 10 years (and subject to review after five).

Government has decided that a 1.3 per cent reduction in the quantum of free permits (i.e the decay function) to be made available to EITE industries is fair as it is less than the national 5 per cent national contribution, but still high enough for EITE industries to make a contribution.

Given that the number of free and auctioned permits and the price of these permits will increase year on year as abatement targets are 'ratcheted up' (at a time when competing countries are unlikely to face comparable carbon costs), the decay function should be removed completely as it undermines the effectiveness and purpose of the broader policy objective. Even if deemed an EITE industry, these industries will still be liable for 10-40 per cent of their emission permits, therefore ensuring that companies 'make a [substantive abatement] contribution'.

5.3 The non inclusion of the coal industry for EITE assistance is a gross anomaly

Despite qualifying for a 60 per cent allocation of administrative permits, coal mining will be unilaterally excluded from receiving such assistance. The industry will instead qualify for \$750 million (over five years) under the following two fund arrangements:

- Coal Mining Transitional Assistance Fund (\$100 million per annum for five years to mines with an emissions intensity greater than 0.1 tonnes CO₂-e per tonne of output); and
- Coal Mining Abatement Fund (\$50 million per annum for five years, open to all mines, but subject to 1:1 co-funding from industry).

The QRC's independent estimate is that at an average price of A\$28t/CO₂-e between 2010 and 2014, the scheme would impose greater than \$6.5 billion in scope 1 carbon liabilities on the coal industry.

If a 60 per cent allocation of permits were be granted for scope 1 direct and scope 2 indirect emission liabilities (i.e one permit per MW/hr consumed), assistance would be approximately \$4.1 billion (over 5 years).

In effect, \$750 million in assistance out of the \$6.5 billion in outlays means that the industry receives an effective rate of assistance of 12 per cent.

Further a \$28t/CO₂-e average price is potentially a conservative figure. The White Paper assumes Treasury's CPRS -5 global emissions price of US\$23t/CO₂-e in 2010, growing at four per cent per annum. In effect, the Australian carbon price, assuming the A\$ approximates US70c during this time, could be nearer to A\$36t/CO₂-e – marginally lower than the proposed price cap of A\$40t/CO₂-e in 2010.

Government's rationale for not treating coal like other eligible EITE activities was recently outlined by the Department of Climate Change before a recent Senate Economics Committee hearing:



- In most industries, the variation between the most emissions intensive and the least emissions intensive is quite tight – falling between five and 10 per cent;
- With coal the variation is a factor of 1,000 with approximately 90 per cent of mines falling below the 1,000 tonnes per million dollars of revenue threshold – hence if the industry average approach was taken (with free permits allocated on the basis of production, not emissions) government would be overcompensating and actually providing more permits than those mines actually had liability, and that would apply for around 90 per cent of the mines in the industry;
- Because the emissions intensities of some gassy sites exceeds 4,000 or 5,000 tonnes per million dollars of revenue, government has decided to skew the distribution from the above mentioned the Funds to the most gassy mines;
- Whilst the final design parameters have not been determined, the intention would be that it would be essentially those over 1,000 tonnes per million dollars of revenue or something similar — i.e. allocate it to the most gassy mines and then provide the other \$250 million which is designed to assist emission reduction technologies.

It is of no great surprise that the faults of the Government's already flawed EITE assistance are exacerbated when applied to the unique situation of coal. To discount the industry's calls for a more substantive level of assistance by virtue that it fails to meet an already subjective, flawed and arbitrary methodology is incomprehensible. Due to its high fugitive emissions and significant trade exposure, the industry warrants transitional assistance at a level comparable to that of other eligible EITE activities.

Further issues of note include:

- Global market share is likely to be ceded to competitor countries that will not have emissions targets in the foreseeable future. This will result in job losses in Australia and no reduction in global greenhouse emissions;
- Coal mines that are directly tied to domestic power stations face closure because they are unable to pass on emissions trading costs:
 - Australia has ten such mines (Queensland one) which may not be able to pass on these costs because they are locked into long term supply contracts.
 - Where cost pass through is not possible the mines should receive permit compensation; where it is, the power station should receive permits from the Electricity Sector Adjustment Scheme.
 - Closure of any of these mines could result in disruptions to electricity supply.
- There is little opportunity for abatement of fugitive emissions from coal mining and it will be at least five years before it is possible to accurately estimate fugitive emissions from Australia's open cut coal mines;
- No country in the world can measure or directly estimate at site open cut fugitive emissions. Australia will be the first, and possibly only, country in the world to include fugitive emissions in an ETS; and



- Owner/operators of Coal Seam Methane (CSM) power stations generally rely on revenue from the NSW Greenhouse Gas Reduction Scheme (GGAS). The Federal Government has proposed that this scheme should end upon introduction of the CPRS, however no transitional arrangements have been proposed. This will result in perverse economic and environmental outcomes as these stations are at risk of being closed and methane being flared rather than used.

5.4 The level of assistance to Queensland's black coal-fired electricity generation fleet under the proposed Electricity Sector Adjustment Scheme (ESAS) is inadequate

The power generation sector is the single largest contributor to greenhouse gases, with 50 per cent of all CPRS carbon liabilities expected to fall on this sector. **For most generators, these carbon liabilities will be exorbitant and the cost of carbon permits will constitute approximately 50 per cent of existing total revenues.** This in turn will result in significant cash flow issues that may compromise the capacity of some firms to fulfil debt covenants.

Compounding these pressures is the decision to provide the black coal generators with a disproportionately low level of compensation. Despite estimates that the CPRS will impose a \$3 billion direct asset loss on Queensland's black coal-fired generation fleet over their remaining lives, it is inexplicable that they will only be compensated for two per cent (or \$60 million out of the total \$3.9 billion in nominal terms) of this asset loss under the proposed assistance measures during the first five years of operation of the CPRS.

By contrast, and despite having very high emissions intensities, Victorian brown coal-fired generation assets are expected to receive \$3.4 billion in direct assistance, representing approximately 75 per cent of asset losses associated with the introduction of CPRS.

The consequences of not aligning compensation to asset value loss or remaining asset life will be significant with the following outcomes possible and/or likely:

- Premature shutdowns of existing plant as financial returns fail to meet risk adjusted thresholds leading to price spikes and power outages;
- Marked deterioration of the comparative advantage between cleaner coal fired technologies and less efficient coal plants will lead to adverse investment signals – resulting in Australia becoming a less desirable destination for inbound investment. With Australian industry reliant on reliable and inexpensive power to maintain its own comparative advantages, and given the need for substantive new capacity in Queensland and Australia generally, this presents a considerable economy-wide risk; and
- The implementation of yet another substantive and competing policy reform will lead to greater uncertainty that will discourage investors from investing in Australia.

5.5 The proposed price cap of \$40 per tonne of CO₂-e (increasing in real terms by 5 per cent annually) is too high and will provide little assurance against damaging price peaks and volatility

There is a critical need for a moderated price cap. Other emissions trading schemes have shown considerable price volatility in their early stages. For example, the EU carbon price trebled in the first few months of its scheme.



5.6 The proposed interim (2020) target will be extremely challenging

A 5 per cent reduction in emissions (off 2000 levels) by 2020 represents a reduction of 250 million tonnes (Mt) (or 32.5 per cent) of CO₂-e off a business-as-usual projection. By way of comparison, Queensland's total emissions in 2006 were 170.9 Mt, with electricity generation being the largest single emitter (49.8 Mt). Further, Australia's entire electricity and transport emissions were 277.2 million tonnes CO₂-e in 2006. A 15 per cent cut represents a reduction of more than 300 million tonnes of CO₂e off business-as-usual projections.

6. Improving the White Paper package

For the resources sector

The QRC continues to work closely with the peak industry associations – notably the Minerals Council of Australia, the Australian Coal Association, and the Australian Aluminium Council, in developing a collegiate and consistent industry wide response to the White Paper.

Consistent with the representations made to this committee and in other fora by these peak bodies, the QRC supports the following improvements:

- The CPRS cannot operate in isolation from the business environment in which affected parties will compete and operate. The effect will be perverse economic and environmental outcomes. The solution is to have a scheme that imposes carbon costs, and/or alternatively gives transition assistance, commensurate to cost and competitiveness impacts.
- The MCA's preferred 'phased auctioning' approach has particular advantages in this context and is considered a first-best outcome.
- As a second best outcome, the QRC supports a more realistic and measured transition than that proposed via the following minimum changes:
 - (1) With no exclusions, ensure that all resource sectors and/or 'activities' (including coal mining) that are trade exposed and whose competitiveness will be compromised by higher carbon costs become eligible for at least a 60 per cent rate of effective assistance for a period of no less than 10 years (and subject to review after five);
 - (2) adopt a much lower price cap - closer to A\$20t/CO₂-e (growing at CPI per annum) - from the inception of the scheme;
 - (3) remove the carbon productivity contribution (i.e the 1.3 per cent per annum decay to the quantum of administration permits provided) as this is contrary to the broader policy objective of providing substantive transitional assistance;
 - (4) remove those greenhouse gases from the scheme's coverage if they cannot be measured with a high level of certainty; and
 - (5) to assist with long term investment decisions, and in addition to (1), (2), (3) and (4) above being met, promote operational certainty by enacting the CPRS as soon as is practicable irrespective of considerations about a delayed start to the CPRS.



- On equity and energy security grounds, permits should be allocated to captured coal mine owners where cost pass-through is restricted or unavailable. Where pass through is available (fully or partially) then the generator should be compensated under the Electricity Sector Adjustment Scheme (ESAS).
- The CPRS Bill should outline transitional arrangements in the form of assistance to GGAS participants from CPRS commencement until 2020. One method of doing this would be to grandfather the obligations under GGAS into the CPRS which would maintain support for utilising gas that would otherwise be wasted and give commercial effect to long term investments such as CSM power stations.

For the electricity generation sector

- A greater quantum of assistance that is more equitably distributed amongst black and brown coal generators that reflects the true value loss of assets (whilst also taking into account the remaining asset life of those assets);
- All other existing and proposed State and Commonwealth schemes must be replaced so as to provide a clear carbon price trajectory on which future long term investment decisions can be made; and
- To alleviate considerable cashflow concerns, an auction system that allows deferred settlement for those industries likely to be highly affected.

More generally, the capacity of both sectors to implement low emission technologies (if they exist) during periods of stressed cash flow, and in response to carbon price signals alone, needs to be more closely considered. As stated, the quantum of 'scope 1' carbon liabilities alone will place a significant strain on company cashflows which in itself will prevent companies from adopting abatement technologies.

Further, and given issues in relation to availability and suitability, a carbon price signal alone is unlikely to be entirely effective in promoting the adoption of new abatement technologies. That is, market failures will still occur and a continuing role for government will exist via complementary tax incentives (for example, accelerated depreciation of plant and equipment that is used to abate greenhouse gases) and the like.



Attachment 1

Executive Summary – CPRS Impacts (Green Paper) on EITE Mining/Processing Activities (Queensland Case Studies) November 2008 (as prepared by ACIL Tasman)

Key Points

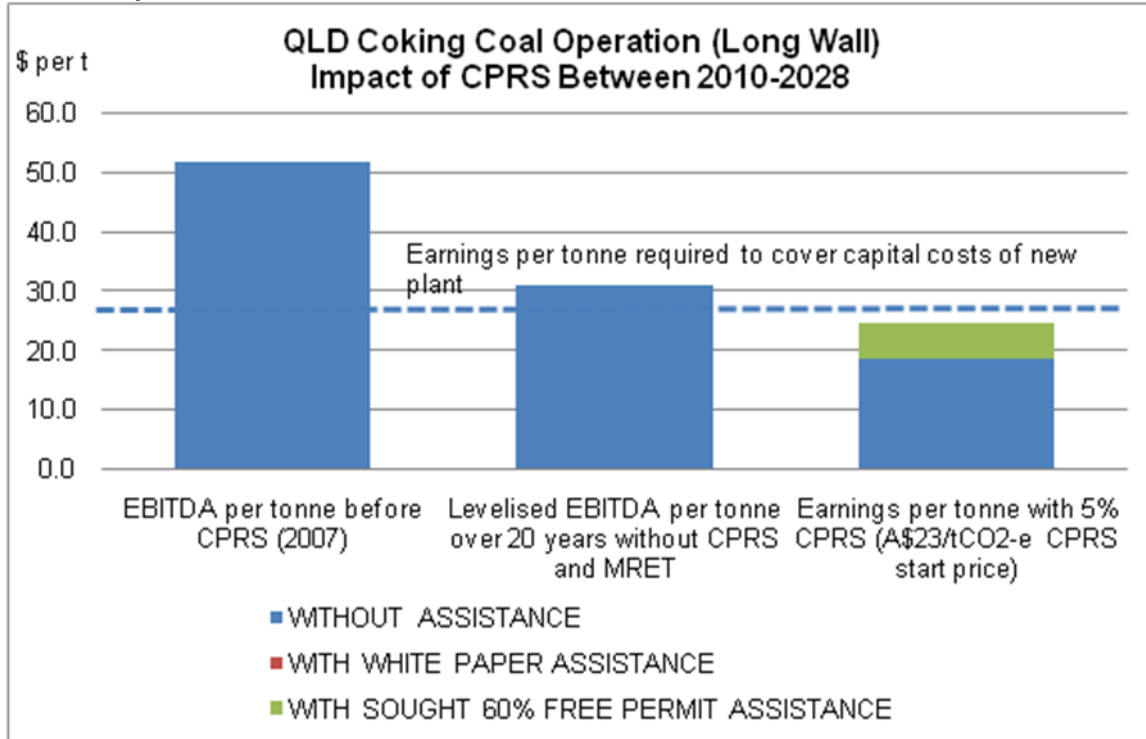
- The assistance scheme proposed in the Green Paper and a variant in a subsequent discussion paper would strongly discourage new investment in emissions-intensive trade exposed industries. Investment would be discouraged even in the reference scenario, which is based on moderate assumptions.
- Widespread premature shut-downs of existing operations could occur in the medium-term future under more pessimistic scenarios than the reference scenario. Some shut-downs might occur, particularly beyond 2020, even in the moderate reference scenario.
- The quantitative analysis has shown that elimination of erosion of assistance rates in the schemes proposed by the Government would ameliorate the deficiencies of those schemes.
- The assistance scheme in the Green Paper involved several arbitrary elements that had not been analytically supported. Economically sound outcomes could be realised only in extremely unlikely multiple coincidences of circumstances.
- The Green Paper's proposal to reduce assistance over time at a pre-determined rate, even if no or little progress is made in competitor countries to apply emissions restraints, is inconsistent with the economic case for assistance and the Government's aims of reduction of carbon leakage and smoothing the transition to a low-carbon economy. The extent of the inconsistency would increase with the tardiness of competitor countries in adoption of meaningful measures to constrain emissions.
- A modified version of the assistance scheme proposed by the Garnaut Review would be the most attractive from an economic perspective. This scheme clearly ranked second from the perspective of owners of the operations modelled.
- From the perspective of the owners of the operations studied, a scheme capping the impact of emissions pricing on value added at 3 per cent would be the most attractive of the schemes modelled. This scheme ranked second behind the modified Garnaut scheme from an economic perspective.
- Criticisms of a scheme capping the impact of emissions pricing on value added in respect of the magnitude of assistance and adjustment burden borne by others have been contradicted by results of the qualitative and quantitative analysis.



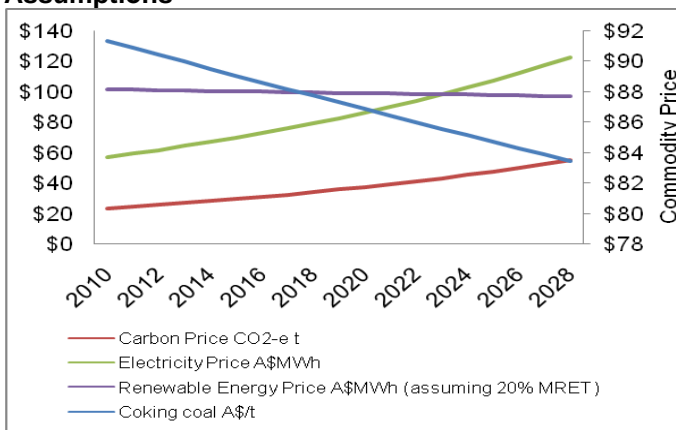
Attachment 2

Applying the QRC (ACIL Tasman) Financial model to assess the impacts of the CPRS White Paper on 10 Queensland EITE Mining/Processing Activities

Case Study #1 Results



Assumptions



Particulars

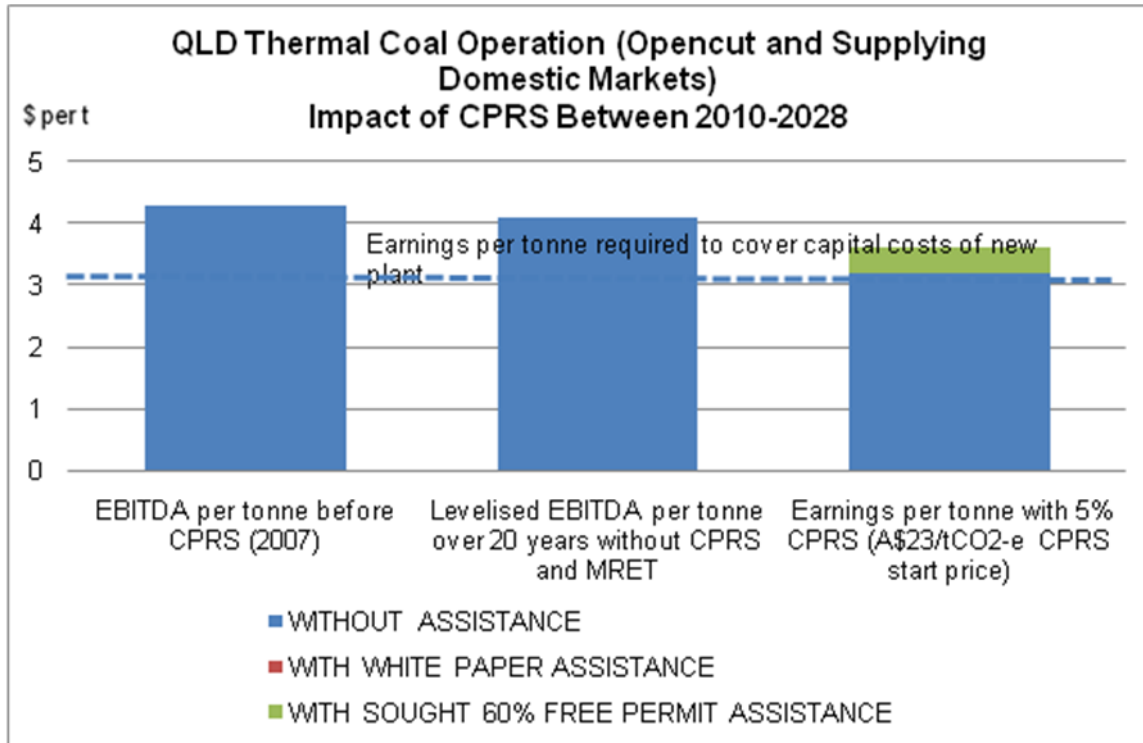
- 250 employees excluding contractors
- 3.6 million tonnes produced in 2007
- \$36 million in scope 1 carbon permit liability in first year plus other associated scope 2 carbon costs – notably diesel and electricity
- A very 'gassy' site (i.e fugitives) (0.4 emissions per tonne of production) but with limited abatement. Eligible for Fund assistance.

Key Findings

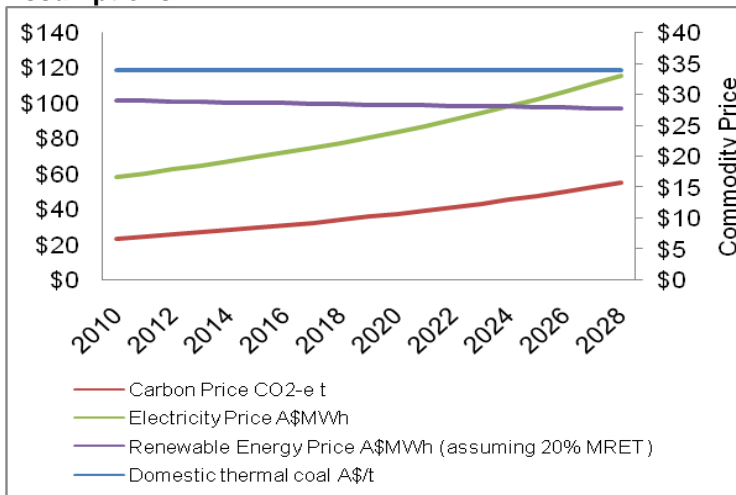
- EBITDA (levelised between 2010 and 2028) **without** CPRS and MRET would be high enough over the next 20 years to cover the cost of new plant
- EBITDA (levelised between 2010 and 2028) **with** CPRS and MRET and with a 60 per cent administrative allocation of permits would not be high enough to cover the cost of new plant
- The short to medium term viability of this site may be compromised and investment of a 'like' plant might not be expected as a result of the CPRS and MRET
- This site would benefit from the deployment of abatement technology



Case Study #2 Results



Assumptions



Particulars

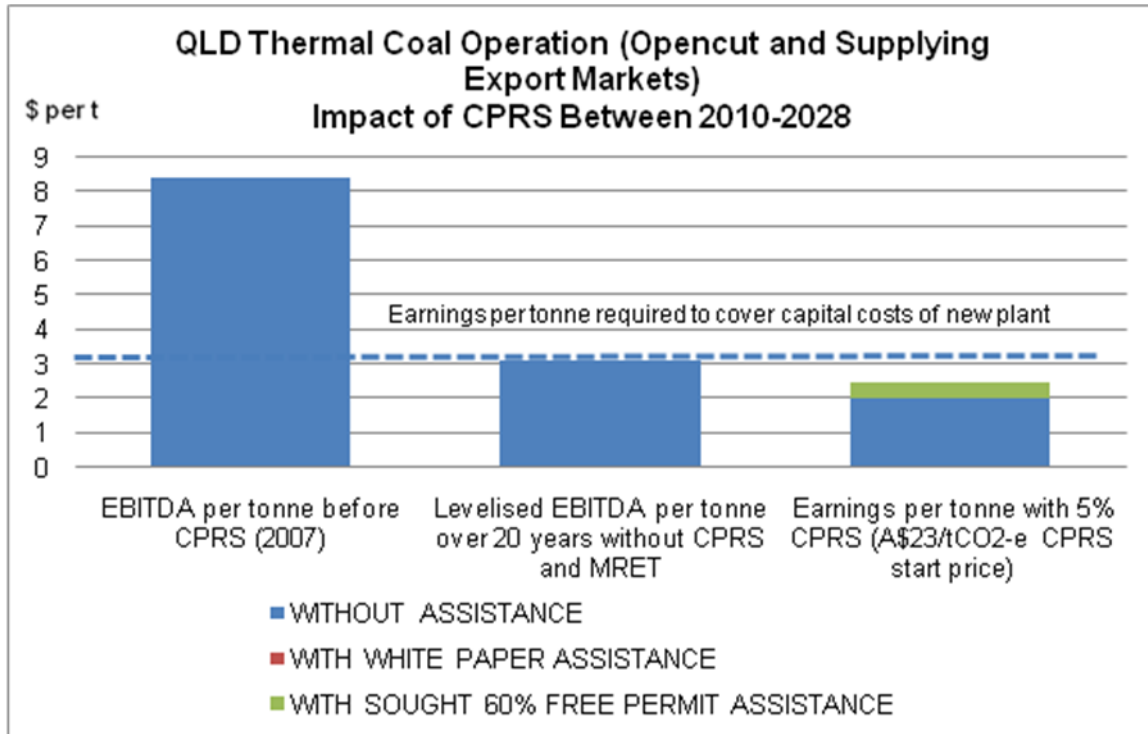
- 450 employees excluding contractors
- 9.8 million tonnes produced in 2007
- \$6.3 million in scope 1 carbon permit liability in first year plus other scope 2 costs (diesel, electricity etc)
- A relatively 'un-gassy' site (i.e fugitives) (0.02 emissions per tonne of production) but with limited abatement opportunities

Key Findings

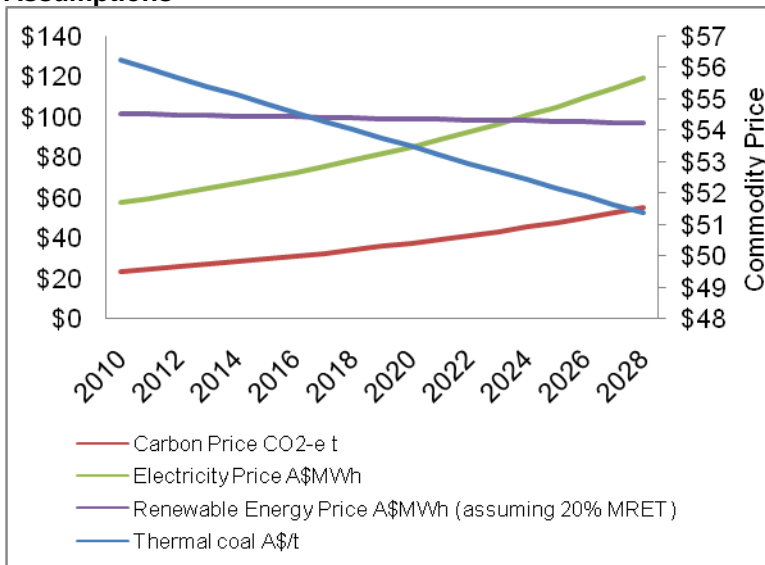
- A 'captured' coal mine supplying to the domestic power industry under a long term contract with limited prospect of being able to renegotiate a long-term (up to 20 year) commercial contract to pass through the impact of the CPRS
- Without cost pass through, EBITDA (levelised between 2010 and 2028) reduced to \$3.20 per tonne produced – which is the same amount needed to cover the cost of new plant if this type of operation was to be duplicated
- With a 60% administration allocation of permits, this site's EBITDA (levelised between 2010 and 2028) would increase to \$3.60 per tonne produced – an amount high enough to cover the cost of new plant
- The short to medium term viability of this site may not be compromised and investment of a 'like' plant may be expected as a result of the CPRS and MRET



Case Study #3 Results



Assumptions



Particulars

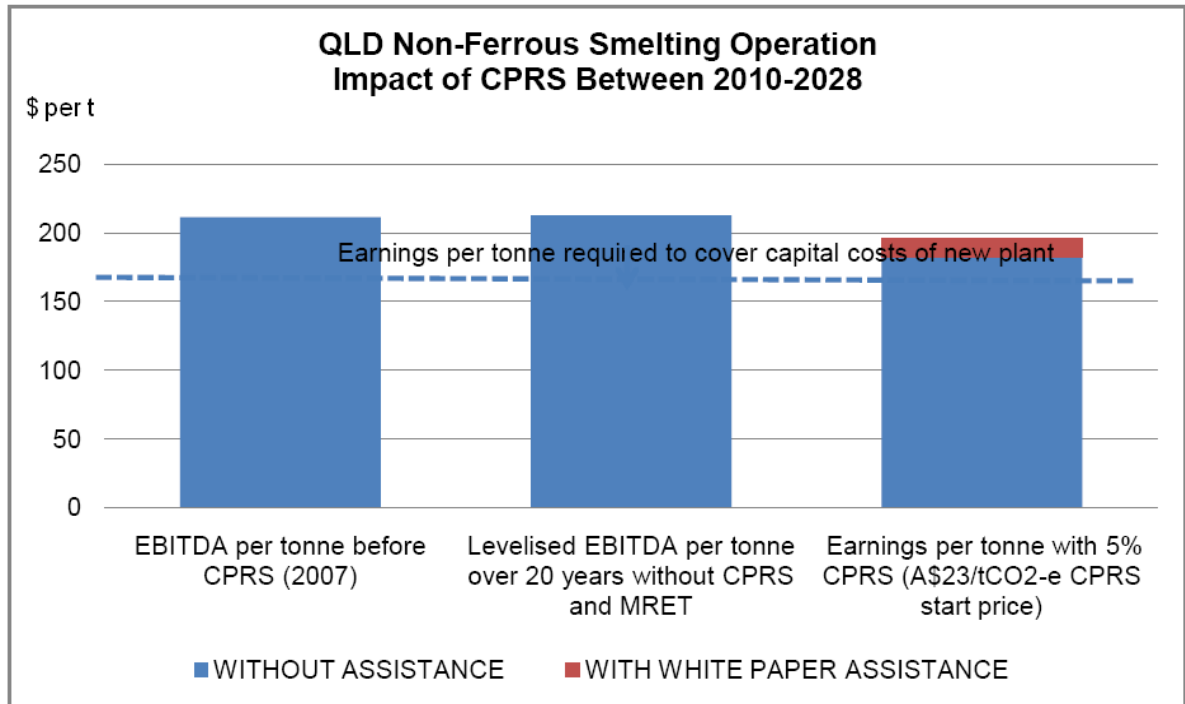
- 100 employees excluding contractors
- 1.9 million tonnes produced in 2007
- \$1.9 million in scope 1 carbon permit liability in first year plus other associated scope 2 costs (diesel etc)
- A relatively 'un-gassy' site (i.e fugitives) (0.04 emissions per tonne of production) but with limited abatement opportunities

Key Findings

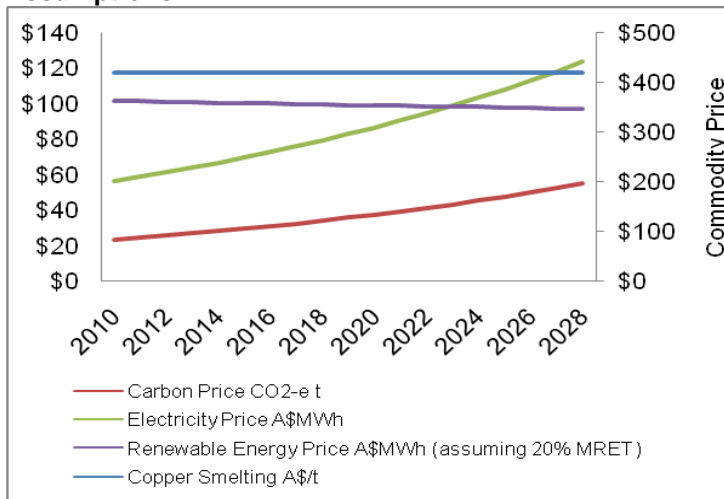
- EBITDA (levelised between 2010 and 2028) **without** CPRS and MRET would be high enough over the next 20 years to cover the cost of new plant
- EBITDA (levelised between 2010 and 2028) **with** CPRS and MRET and with a 60 per cent administration allocation of permits would not be high enough to cover the cost of new plant
- The short to medium term viability of this site may be compromised and investment of a 'like' plant may not be expected as a result of the CPRS and MRET



Case Study #4 Results



Assumptions



Particulars

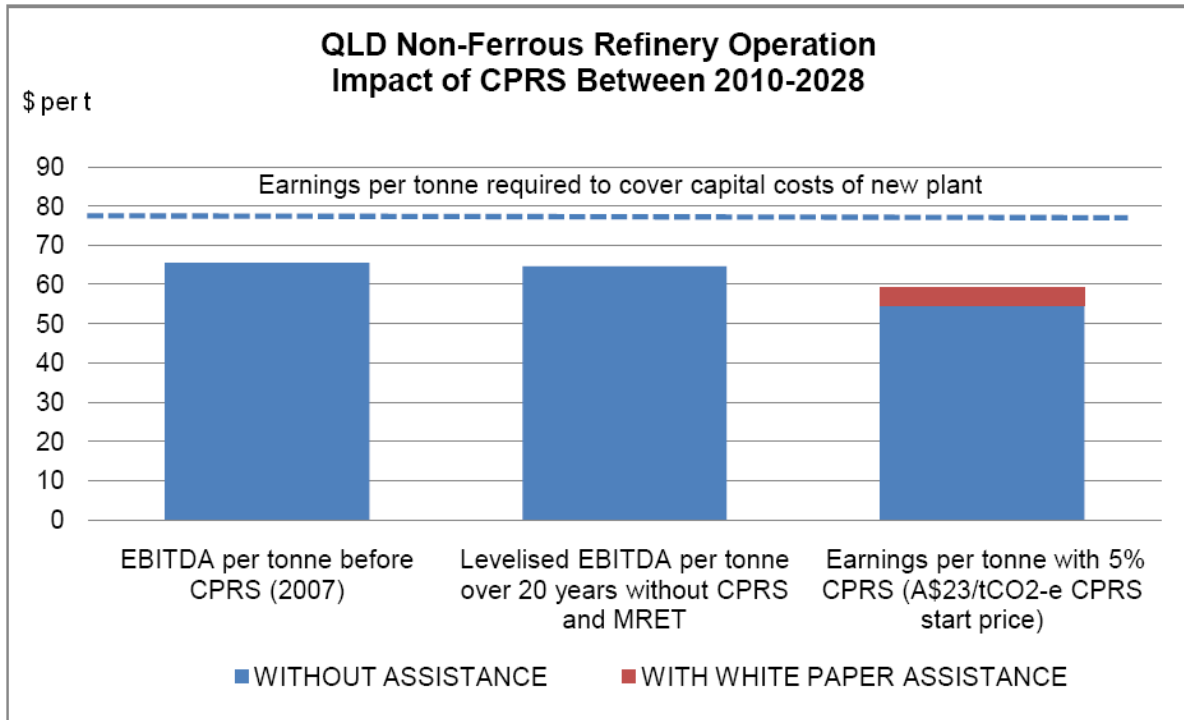
- 300 employees excluding contractors
- 218,000 tonnes produced in 2007
- \$2.4 million in scope 1 carbon permit liability in first year plus other significant scope 2 associated costs – notably electricity
- Estimated that electricity cost by 2020 could rise from \$56MWH (without CPRS and MRET) to \$92MWH (with CPRS and MRET) or an extra \$7.4 million (approximately) in electricity costs per annum

Key Findings

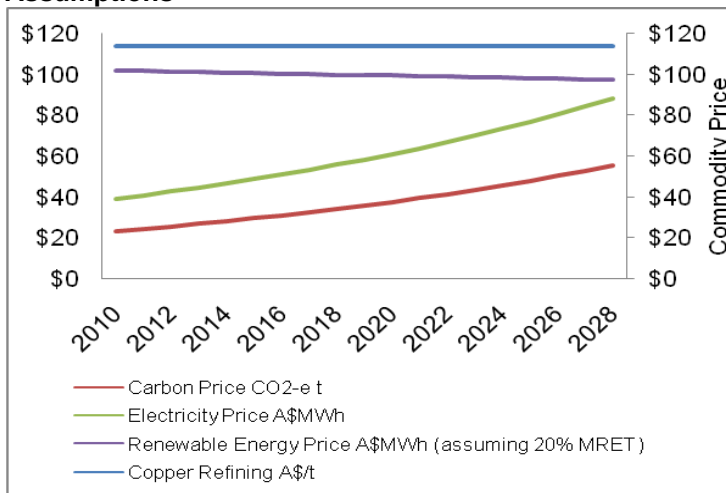
- EBITDA (levelised between 2010 and 2028) **without** CPRS and MRET would be high enough over the next 20 years to cover the cost of new plant
- EBITDA (levelised between 2010 and 2028) **with** CPRS and MRET and with a 60 per cent administration allocation of permits would be high enough to cover the cost of new plant
- The ongoing viability of this site may not be compromised as a result of the CPRS and MRET and expansion may be expected



Case Study #5 Results



Assumptions



Particulars

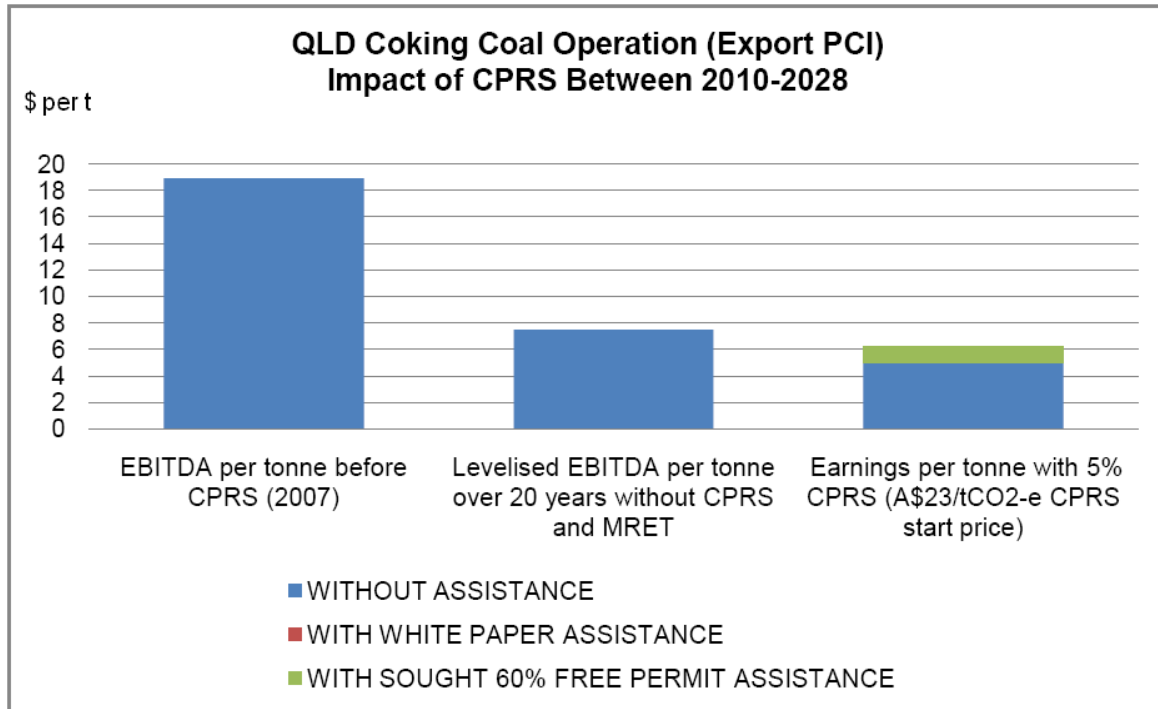
- 300 employees excluding contractors
- 229,000 tonnes produced in 2007
- \$300,000 in scope 1 carbon permit liability in first year (2010) plus significant other associated scope 2 carbon costs – notably electricity
- Estimated that electricity cost by 2020 could rise from \$56MWH (without CPRS and MRET) to \$92MWH (with CPRS and MRET) or an extra \$3.2 million (approximately) in electricity and operating costs per annum.

Key Findings

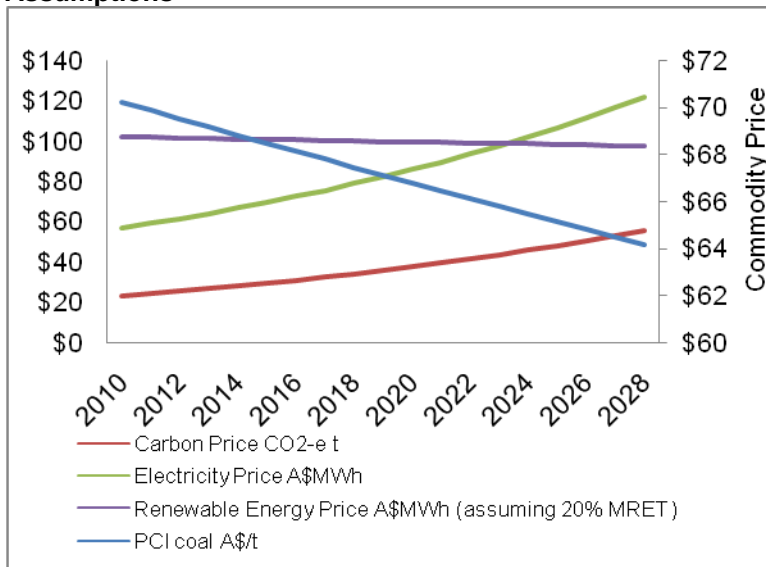
- EBITDA (levelised between 2010 and 2028) **without** CPRS and MRET would not be high enough over the next 20 years to cover the cost of new plant
- EBITDA (levelised between 2010 and 2028) **with** CPRS and MRET and with a 60 per cent administration allocation of permits would not be high enough to cover the cost of new plant
- The ongoing viability of this site may not be compromised as a result of the CPRS and MRET however expansion may not be expected



Case Study #6 Results



Assumptions



Particulars

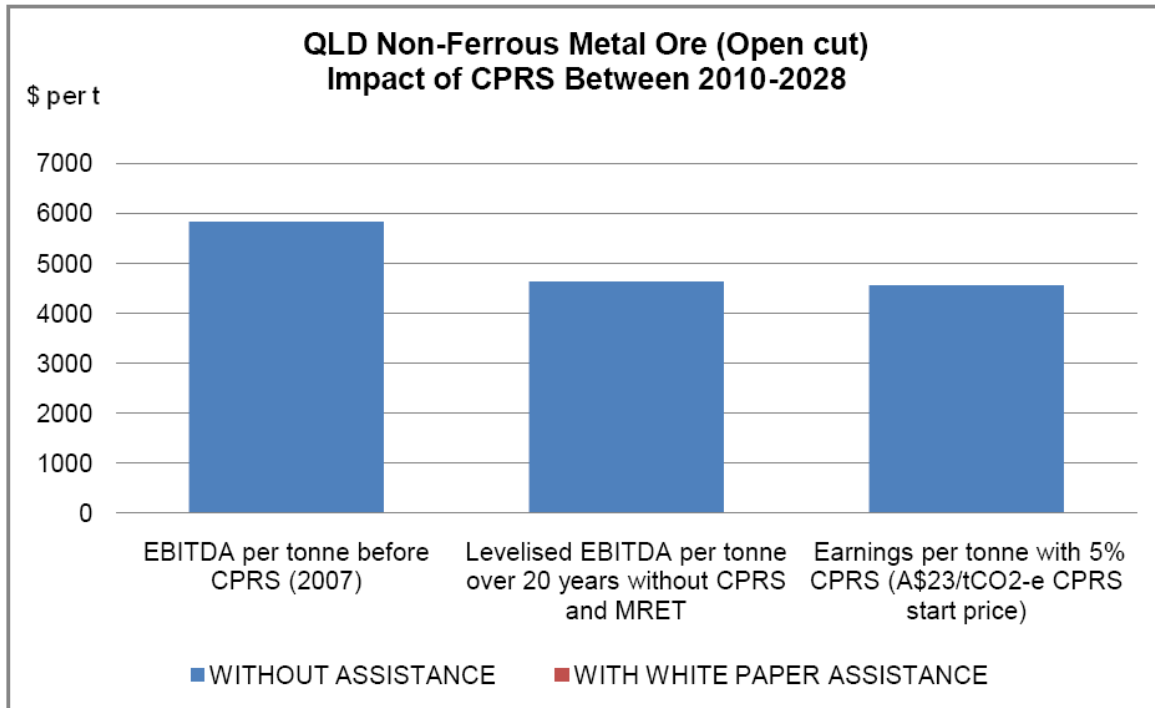
- 250 employees excluding contractors
- 3.8 million tonnes produced in 2007
- \$6.3 million in scope 1 carbon permit liability in first year plus other scope 2 associated costs – example diesel and electricity
- An average site in terms of ‘gassiness’ (i.e fugitives) (0.07 emissions per tonne of production) but with limited abatement opportunities

Key Findings

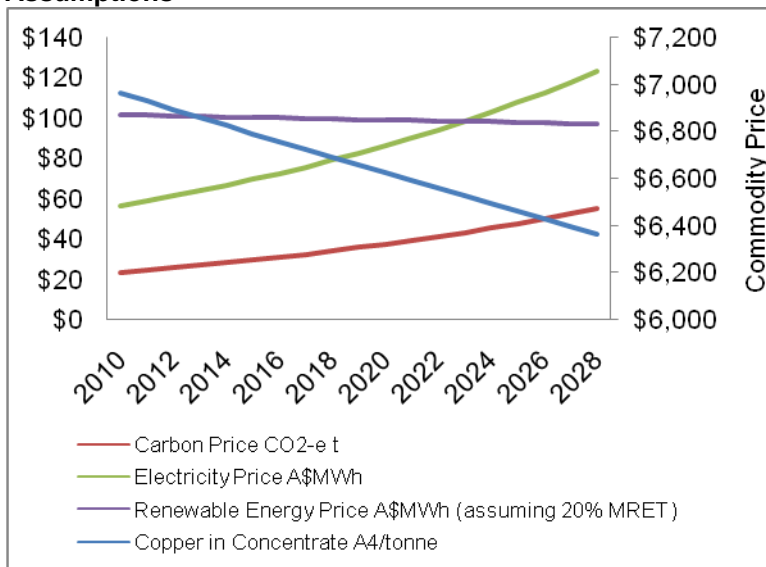
- EBITDA (levelised between 2010 and 2028) **without** CPRS and MRET would be approximately \$7.50 per tonne produced
- EBITDA (levelised between 2010 and 2028) **with** CPRS and MRET and with a 60 per cent administration allocation of permits would see EBITDA increase to \$6.20 per tonne produced (\$5.00 per tonne produced without free permits)
- The ongoing viability of this site may be compromised as a result of the CPRS and MRET. It cannot be determined if earnings would be sufficient to cover the cost of new plant



Case Study #7 Results



Assumptions



Particulars

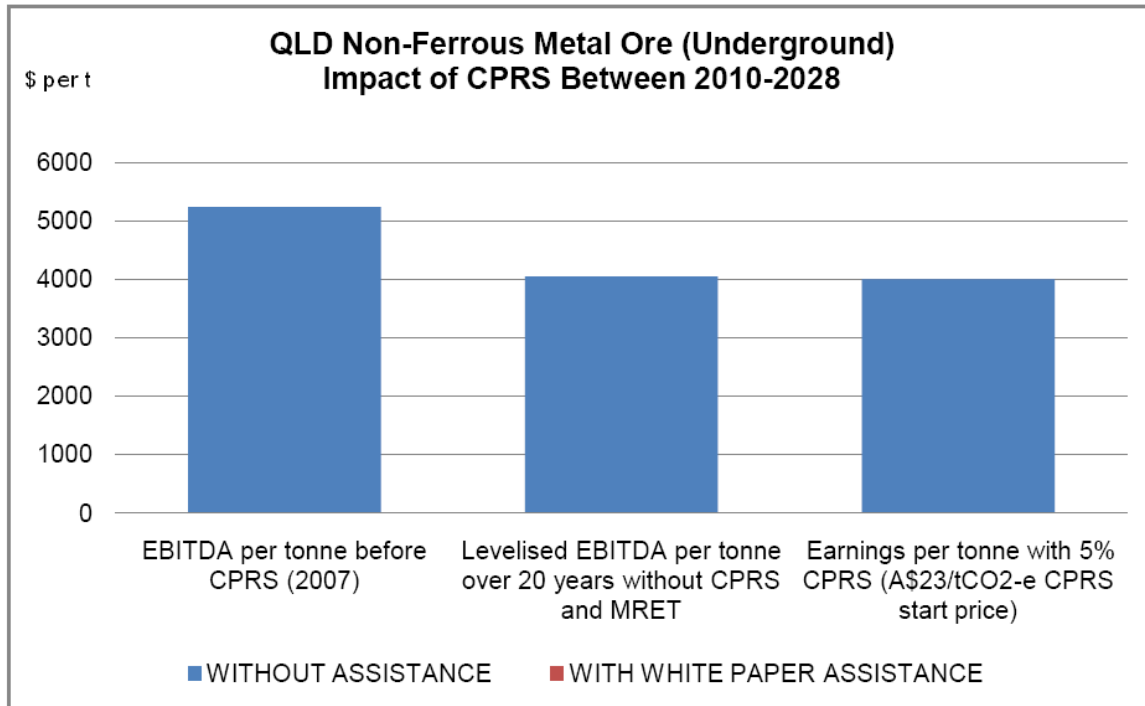
- x employees excluding contractors
- 96,000 tonnes produced in 2007
- \$2.7 million in scope 1 carbon permit liability in first year (2010) plus significant other associated scope 2 costs – notably electricity and diesel.

Key Findings

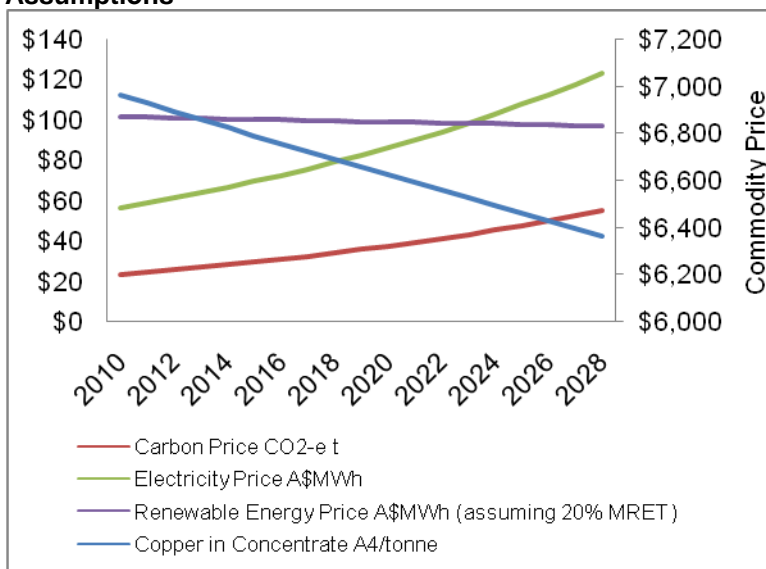
- EBITDA (levelised between 2010 and 2028) **without** CPRS and MRET would be approximately \$5,800 per tonne produced
- EBITDA (levelised between 2010 and 2028) **with** CPRS and MRET and with no administration allocation of permits would see EBITDA decrease to \$4,565 per tonne produced
- The ongoing viability of this site may not be compromised as a result of the CPRS and MRET. It cannot be determined if earnings would be sufficient to cover the cost of new plant



Case Study #8 Results



Assumptions



Particulars

- x employees excluding contractors
- 173,000 tonnes produced in 2007
- \$276,000 in scope 1 carbon permit liability in first year (2010) plus significant other associated scope 2 costs – notably electricity and diesel.

Key Findings

- EBITDA (levelised between 2010 and 2028) **without** CPRS and MRET would be approximately \$4,051 per tonne produced
- EBITDA (levelised between 2010 and 2028) **with** CPRS and MRET and with no administration allocation of permits would see EBITDA decrease to \$4,006 per tonne produced
- The ongoing viability of this site may not be compromised as a result of the CPRS and MRET. It cannot be determined if earnings would be sufficient to cover the cost of new plant