

21 April 2009

The Secretary
Senate Select Committee on Climate Policy
PO Box 6100
Parliament House
CANBERRA ACT 2600

via email: climate.sen@aph.gov.au

Dear Mr Hawkins

SENATE SELECT COMMITTEE ON CLIMATE POLICY

Xstrata welcomes the opportunity to make a submission to the Senate Select Committee's Inquiry on Climate Policy. No part of this submission is confidential. Supplementary information has also been included for consideration by the Committee that provides greater detail on the likely impacts of the CPRS on two of our four Australian commodity businesses, coal and copper.

Xstrata is a global diversified mining group that maintains a significant position in seven major international commodity markets: copper, coking coal, thermal coal, ferrochrome, nickel, vanadium and zinc, with a growing platinum group metals business, additional exposures to gold, cobalt, lead and silver, recycling facilities and a suite of global technology products. Our operations and projects span 19 countries and provide employment for approximately 68,340 people worldwide¹, including 12,800 at our Australian operations.

We recognise that climate change is a reality that presents social, economic and environmental risks and requires global action. To this end Xstrata supports the three pillars of the Government's climate change policy for Australia which are reducing Australia's carbon pollution, adapting to the impacts of unavoidable climate change and contributing to shaping a global solution.

The Carbon Pollution Reduction Scheme (CPRS) is the principal policy tool and market intervention aimed at reducing Australia's carbon pollution as a contribution to the reduction of global emissions. We understand that the key objective of the CPRS is to take early effective action to reduce emissions² and provide assistance to households and business as the economy transitions to a low carbon profile. The Government has also committed to an expanded national renewable energy target and further investment in carbon capture and storage and energy efficiency measures.

¹ Xstrata plc Annual Report 2008 (includes the average number of employees 40,049 and) and the average number of contractors was 28,291)

² The Government has made an unconditional commitment to a 5 per cent reduction in Australian emissions below 2000 levels by 2020 and a long term commitment to a 60 per cent reduction by 2050.



Xstrata is supportive of an appropriate Australian scheme which leads to reductions in global emissions and introduces a carbon cost that is shared across the community. However, Xstrata's position is that the scheme must not prejudice Australian trade competitiveness causing the loss of Australian output and jobs simply to have the capacity and emissions developed elsewhere. Xstrata believes any scheme should also be complemented by measures to support the development of a wide range of technologies including low emission technologies for fossil fuels and renewable energy.

Xstrata believes that there are fundamental flaws in the design of the proposed CPRS. The principal flaw is that the proposed Scheme will result in an impost on emission intensive export industries which, in the absence of a global protocol, reduces these industries' ability to compete internationally and results in carbon leakage with no net emissions benefit. This effect is exacerbated by the full auctioning of permits, which means that even if export industries do achieve emission reductions in line with overall Scheme goals, they will still be penalised.

Importantly, the Scheme in its present form will lead to business closures, reduced Australian investment and potentially higher global emissions as Australian exports are replaced by those from other countries with higher emissions.

Although the CPRS has attempted to address this in some ways, for example through partial and temporary permit allocation to emission intensive trade exposed industries or, in the case of the coal sector, the inadequate \$750million adjustment package, the fundamental flaw remains that imposts are being applied to Australian export industries whilst competitors will be largely unaffected.

Based on internal analysis, Xstrata estimates the CPRS in its current form will impose the following additional costs based on carbon liability on our Australian business from the commencement of the scheme:

| | Permit Price \$25 A\$ million pa | Permit Price \$40 cap A\$ million pa | Comments |
|-------------------------|-------------------------------------|--------------------------------------|---|
| Xstrata Coal | 151 | 265 | Includes coal sector adjustment assistance. Does not include carbon pass through for electricity. |
| Xstrata Copper | 15 | 25 | Assumes smelting and refining eligible for 60% assistance |
| Xstrata Zinc | 13 | 21 | Assumes lead smelting eligible for 60% assistance and coke production 90% assistance |
| Xstrata Nickel | 1 | 2 | |
| Xstrata Australia Total | 180 | 313 | |



Xstrata's analysis suggests that the net impact of the proposed Scheme will be that significant numbers of its operations in Australia are at risk, with attendant potential impacts on jobs, many in regional parts of Australia. In particular, Xstrata Coal has identified four coal operations which will be at risk as a result of the costs associated with the scheme. These operations currently employ approximately 1,000 Australians directly and support an estimated 3,000 jobs indirectly. These closure risks described above are from the commencement of the scheme; as the cost of carbon increases over time more operations will be placed at risk.

Further the Scheme will reduce exploration and investment in new mines threatening the future growth of the resources sector.

Xstrata's concerns could be addressed through a combination of the following amendments to the CPRS:

- Recast the scheme so that it is more in line with other international trading schemes
 where there is a phased approach to coverage, permit allocation and auctioning. The
 result would be a more measured and effective means to calibrate the Australian
 scheme to international developments, avoiding perverse economic outcomes.
- Extend the EITE assistance, at least at the 90% level, to all export sectors and calibrate the level of permit allocation over time with the development of global schemes.
- Adopt a significantly lower price cap from the commencement of the scheme to support
 a more measured transition for the Australian economy and thereby avoid unintended
 economic consequences.

These amendments would prevent export industries from being overly prejudiced in the absence of a global scheme thus allowing the commencement of a market based emissions trading scheme whilst not resulting in excessive carbon leakage.

If the current flaws in the CPRS are not adequately addressed, Xstrata believes that the stated objective of the CPRS will not be achieved. Indeed, there is a real chance that the environmental outcome could be worse where carbon leakage occurs to countries which are unlikely to adopt carbon constraints for decades to come. This would also occur at the expense of Australian jobs and potentially sustainable local industries.

Yours sincerely

Peter Coates Chairman

Xstrata Australia



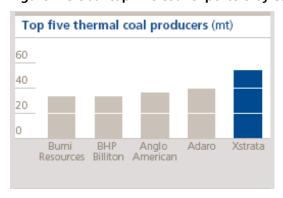
IMPACT OF THE PROPOSED CARBON POLLUTION REDUCTION SCHEME (CPRS) XSTRATA AUSTRALIAN OPERATIONS CASE STUDIES

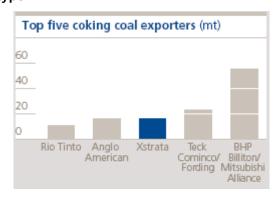
XSTRATA COAL SECTOR CASE STUDY

Overview

Headquartered in Sydney, Australia, Xstrata Coal is the world's largest exporter of thermal coal and the world's third largest exporter of coking coal. In 2008, Xstrata Coal had total managed production of 100Mt of black coal from 30 coal mine operations, the majority of which are in Australia.

Figure 1 Global top five coal exporters by coal type.





Source: Xstrata plc Annual Report 2008

In Australia Xstrata has over 20 coal operations, employing almost 7,000 Australians and supporting a further 20,000 jobs.

Xstrata Coal has invested over A\$3 billion in Australia since 2002. The benefits to the Australian community of Xstrata's coal operations, over and above employment, are considerable. For example, in 2009, Xstrata Coal contributed A\$617 million to NSW and Queensland Governments in royalties, purchased A\$2billion in goods and services and contributed A\$10 million via community programs to the Australian economy.

The Xstrata Coal business remains committed to the Xstrata Group's long term strategy of growth and diversification and has a A\$8 billion pipeline of potential projects in Australia with the potential to provide additional employment for 4,000 Australians.³

³ Include construction phase and permanent ongoing workforce.



Global Coal Markets

In 2008 Australia exported 261Mt of black coal earning approximately A\$46 billion in export revenues making it Australia's single largest commodity export and a key contributor to the economy.⁴ In a global context however Australia represents only 28% of total internationally traded coal and 6% of total global coal production.

Global coal markets are highly competitive with Australia vying for market share against Indonesia, South Africa, Colombia, Russia and China which are unlikely to introduce a price on carbon in the foreseeable future.

In 2005, Indonesia overtook Australia as the world's largest thermal coal exporter. Indonesia's market share is growing whilst Australia's is shrinking. However Indonesian coal is of lower quality which results in higher specific emissions when combusted.

Figure 2: Thermal Coal Global Market Share 1990-2008







Source: Xstrata Coal

Coal like many mineral commodities is a cyclical industry and the period during the initial drafting of the carbon pollution reduction scheme 2007/08 coincided with one of the biggest resources booms on record. The unprecedented speed and severity of the global financial crisis in the second half of 2008 dealt a severe blow to global economic growth and led to sharp and sudden declines in the price of most of Xstrata's commodities.⁵

From April 2009, reported Japanese term thermal coal contract prices dropped from US\$125/t to US\$70/t while reported metallurgical coal contract prices have plummeted from US\$300/t reportedly to under US\$130/t. These headline contract prices apply to only a portion of export sales whilst the remainder trades at spot coal prices which are currently below the contract price.

The CPRS will result in additional costs for Australian operations compared to international competitors. Marginal Australian operations or operations that have high levels of emissions will be at risk of closure. The structural reduction of coal margins will make the Australian coal industry a less attractive investment proposition.

⁴ ABARE Australian Mineral Statistics 2009: December Quarter 2008.

⁵ Xstrata plc Annual Report 2008 pg8.



The imposition of CPRS in Australia, in Xstrata's view, will not have any impact on demand for, or the use of internationally traded coal. .Any lost exports from Australia will be replaced by coal from Indonesia, South Africa, Colombia, Russia or China, resulting in significant carbon leakage.

Fugitive Emissions

No other scheme in the world currently covers fugitive emissions from coal mining. As the government is aware, coal mines are not uniform and the emission profile of a mine will vary from site to site, within the same coal seam and over the life of the mine. The CPRS will be the first time in the world that methane emissions from coal mines have been included as a liable emission source under an emissions trading scheme.

While the CPRS provides A\$250 million for abatement technologies this underestimates the cost, technical and physical limitations on abatement that is achievable from underground and open cut coal mines. The key determinants around utilisation are gas mix, methane concentration and availability of methane over the life of the mine.

By way of example, a preliminary assessment of <u>just one</u> of Xstrata Coal's gassier coal mines in New South Wales estimates that to achieve the maximum possible emission reduction of 70% of total fugitive emissions from the mine would require an upfront capital investment in the order of A\$70 million. This mine would still carry a residual carbon liability in the order of A\$14.5 million per annum under the scheme even after these abatement measures were put in place.

It should be further noted that technologies for treating ventilation air methane, which has very low concentrations of methane, from underground coal mines are only at a pre-commercial stage of development. Apart from pre-drainage of open cut coal mine deposits some years in advance of mining there is currently no way to abate emissions from open cut coal mines once mining has commenced. The economic and technical feasibility of these technologies is still unclear.

Furthermore Xstrata Coal prior to CPRS is investing around A\$250 million to address the company's greenhouse footprint and support research development and demonstration for low emission technologies through the industry's A\$1 billion COAL21 Fund. This level of investment into emission reduction and technology development is not currently being undertaken by coal producers elsewhere in the world.

Coal and the Carbon Pollution Reduction Scheme (CPRS)

The CPRS treatment of the coal sector appears to be at odds with the key contribution the sector makes to the Australian economy and its role in providing secure and reliable power generation in Australia and globally.

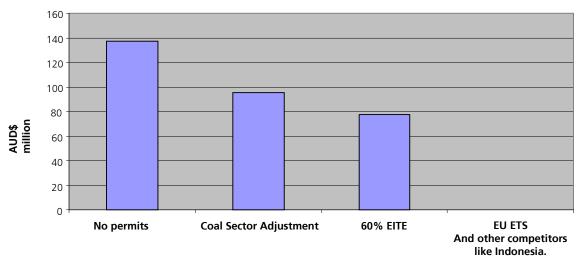


In the absence of significant transitional assistance Xstrata Coal has identified four operations that are at risk of premature closure from the commencement of the scheme. These operations currently provide direct employment for around 1,000 Australians with a further 3,000 indirect jobs.

The government has proposed a A\$750 million coal sector adjustment package over five years that includes A\$500 million cash compensation for gassy mines and A\$250 million for abatement projects. However this equates to only 15% of permits that will be required by the coal industry over just the first five years with the full impact thereafter. This is far below the level of assistance proposed for other export industries. It appears inequitable to single out Australia's largest export industry despite satisfying eligibility criteria for EITE assistance when other fossil fuel exporters will receive this assistance.

The differential in assistance is illustrated below looking at a gassy coal mine operation. While a permit allocation under EITE would provide the greatest level of assistance for coal operations during a transitional period, these operations are still likely to face increased costs compared to international competitors who will not face similar carbon costs in the foreseeable future. A phased approach to permit auctioning in line with progress on a global agreement offers the best chance for a measured transition that limits carbon leakage and negative economic impact on the Australia.

Figure 4: Compliance Cost for 2010 - 2014 for a coal mine with average 1MtCO2e emissions pa



Source: Xstrata Coal



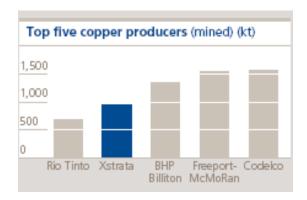
XSTRATA COPPER CASE STUDY

This case study focuses on Xstrata Copper's Queensland copper business, however the comments regarding the impacts of the Carbon Pollution Reduction Scheme (CPRS) also apply to the Xstrata Zinc and Xstrata Nickel mining and processing facilities in Australia.

Overview

Headquartered in Brisbane, Australia, Xstrata Copper is the fourth largest global copper producer with annual attributable production capacity of over one million tonnes. Its mining and processing facilities are located in Australia, Chile, Peru, Argentina and Canada. It also manages a recycling business with plants in USA. Xstrata Copper has a world-class portfolio of six copper development projects located in Peru, the Philippines, Chile, Argentina and Papua New Guinea.

Figure 1: Global top five copper producers



Source: Xstrata plc Annual Report 2008

Xstrata Copper's North Queensland Division is headquartered in Mount Isa and comprises the Mount Isa Mines copper operations consisting of the Enterprise and X41 underground copper mines, the copper concentrator, Mount Isa copper smelter, Ernest Henry Mining open pit copper mine located near Cloncurry, and the Townsville operations comprising the copper refinery, and Townsville port facilities and logistics. The Division's integrated operations have the capacity to produce 300,000 tonnes of refined copper per annum.

Xstrata Copper employs more than 3,500 direct employees and contractors in north and northwest Queensland. In 2008 we contributed A\$1.4 billion to the Queensland economy through the annual wages bill, apprenticeship and youth training opportunities, the purchase of goods and services, annual rates to local councils, corporate social involvement contributions, utility charges and in government taxes and charges.

Since 2003, Xstrata Copper has invested more than US\$144 million in new mining projects and associated infrastructure, plant and equipment in Mount Isa.



Global Copper Markets

Due to its high electrical and thermal conductivity properties, copper is primarily used in the form of wire and tubing. As the global demand for alternative energy sources increases, so too will the demand for copper. For example an 800MW conventional power station would nominally use 100 tonnes of copper, whereas the equivalent capacity in wind power generators would use around 1,200 tonnes of copper. A standard 10 horse-power electric motor uses 6 kg of copper but a high efficiency alternative uses 10kg^6 .

The typical processing route for copper ores into copper metal involves the ore being mined and processed into copper concentrate containing 25 -50% copper. The concentrate is then smelted to produce anode or blister copper containing 99% copper and subsequently refined to copper cathode with a purity greater than 99.99%. Some copper ores can be processed directly to cathode by leaching copper from the ore with acid and then electro-winning the copper from the acid solution.

Market share

Figure 2 presents the global breakdown for the primary production (mining) and refining of copper. Global primary production of copper was 15.6 million tonnes in 2008, of which 885,000 tonnes was produced in Australia. 82% of primary production came from countries which are not likely to be exposed to an emissions trading scheme or carbon tax (non-Annex 1 under Kyoto Protocol) in the foreseeable future. Copper smelting and refining is declining in the western economies (~30% in 2008) with the majority of new capacity being built in China, Africa and Asia. Approximately 60% of the copper mined in Australia is converted from concentrate to cathode and approximately 80% of all production is exported.

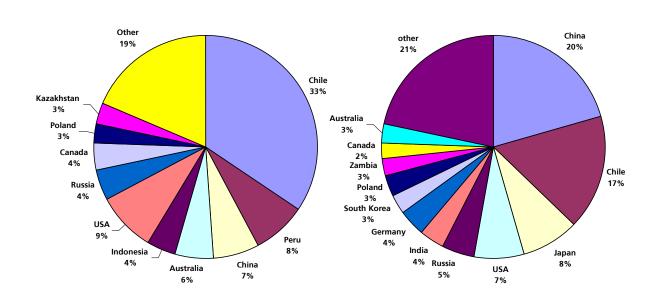
⁶ International Copper Association April 2009



Figure 2: Global Copper Primary Production and Refined Production 2008

Global Copper Primary Production 2008

Global Refined Copper Production 2008



Copyright: Brook-Hunt

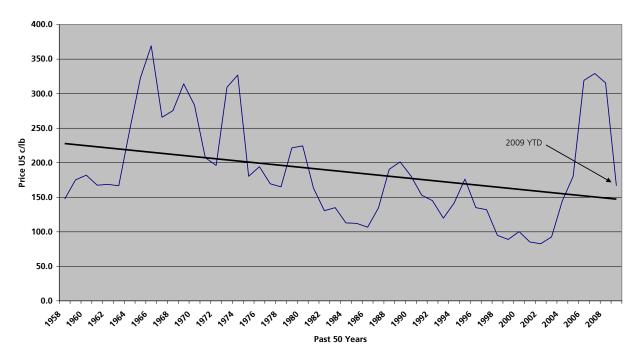
Commodity Pricing

Copper is traded on global metal exchanges on a daily basis. This trading sets daily prices which are the basis for the majority of copper sales contracts globally. Figure 3 shows the copper price trend over the past 50 years in real terms (dollars of 2008). From July 2008 to March 2009 the copper price decreased by 60%.



Figure 3: LME Copper Price History - 1958 - 2008

LME Copper Price - Real \$2008



Source: Xstrata Copper and CRU

Trade Exposure and Cost Competitiveness

Australian copper producers represent 6% of the global copper supply. Australian producers are price takers and the industry is clearly trade exposed with no ability to pass on new cost imposts. A price on carbon will add an additional cost for Australian operations compared to international competitors such as Chile, Peru and China that are unlikely to be subject to a similar carbon constraint in the foreseeable future. As a result, Australian supply competitiveness will be adversely impacted and declining cash margins will reduce investment attractiveness. Furthermore, since 2004 the cost of production has increased significantly due to the rapid increase in prices of most inputs, leaving minimal cash margins at long term average prices (30 year average 150 US c/lb).

To be viable over the long term the mining industry has to be sustainable through the price cycles. The CPRS has been evolved through a period of record high commodity prices and its impact on the Australian mining and processing sector has not been fully assessed.

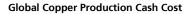


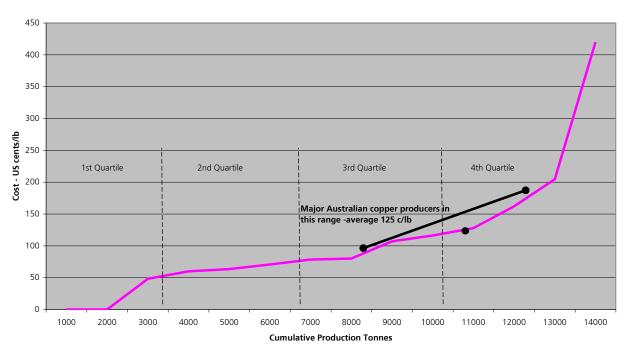
Figure 4 is an indicative international cost curve for global copper supply

- The X axis indicates total market demand
- The Y axis indicates cost per tonne of production.
- The left end of the curve includes copper which is produced as a 'by-product' of other commodities and hence has a zero cost of production.
- Adoption of carbon imposts across all producing countries will lead to the whole cost curve moving upwards and a level playing field being maintained.

As copper production costs are increased at operations (including additional cost of the CPRS), Australian producers will move further up the cost curve. Marginal producers in the fourth quartile will ultimately be forced to shut down. Under this scenario international copper producers not exposed to additional costs will move down the cost curve into a more competitive position. It is important to note that most Australian producers are currently operating in the third and fourth quartile.

Figure 4: Indicative Global Copper Supply Cost Curve





Source: Xstrata Copper and CRU



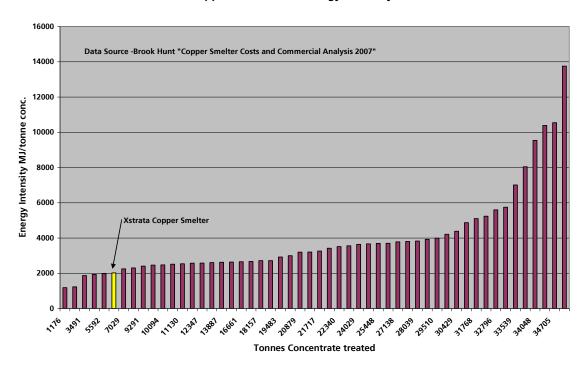
Copper and the Carbon Pollution Reduction Scheme (CPRS)

The CPRS, as currently drafted, will have a significant impact on the sustainability of Xstrata Copper's north Queensland operations. In response to rising energy costs and freight charges Xstrata Copper has pursued high efficiency solutions over many decades in order to sustain its operations. ISASmelt copper smelting and ISAProcess copper refining technologies were developed at our operations. These technologies are world leaders in energy efficiency and represent the technology of choice for a high percentage of new global mining/processing developments.

With the introduction of ISAsmelt technology at the Mount Isa copper smelter, energy input per tonne of metal produced decreased by 80%. Figure 5 shows Xstrata Copper's Mount Isa smelter relative to its global peers in terms of energy intensity performance. Increasing the cost of energy through the CPRS, ostensibly to force further improvements in energy efficiency, will not have an impact at the Mount Isa copper operations as they currently operate at world's best practice. In this case, the CPRS would effectively become an additional impost that would further increase costs and reduce the international competitiveness of the copper business. In its current form, the CPRS does not recognise companies which have invested in or developed world's best practice energy efficiency technologies for their particular industries. EU regulators have made allowances for industry best practice investment in their ETS schemes.

Figure 5: Global Copper Smelter Energy Intensity Ranking

Copper Smelter Net Energy Intensity





Xstrata Copper is currently working within the White Paper EITE qualification process for its copper smelting and copper refining activities. While these activities may be eligible for some assistance under this scheme, the process is complex and it will be some time before their eligibility is confirmed. Even if eligibility is granted, the assistance will leave Xstrata Copper exposed to 40% or 10% of the CPRS cost (depending on level of assistance granted). This exposure will grow annually as the level of assistance decreases at 1.3% per annum. As currently drafted all assistance will cut out after 10 years regardless of the position taken by global competitors.

Mining Impact

Xstrata Copper operates three copper mines in north-west Queensland: the underground Enterprise mine; the 1100 orebody mine at Mount Isa; and the Ernest Henry open pit mine near Cloncurry. The carbon intensity (tonnes CO2-e / tonne of copper) of the open pit mine is 70% higher than the underground operations. This is due to the lower grade ore of the open cut mine which has to mine and process significantly larger volumes of ore to recover the same amount of metal.

After 85 years of mining at Mount Isa, the grade of ore remaining in the resource base is decreasing. The economics of converting these remaining mineral resources into ore reserves, so that they can be mined and processed, is becoming increasingly challenging. The majority of new orebodies discovered in recent decades, in Australia and globally, are large low grade deposits. As a result the energy and carbon intensity involved in mining and processing these ore bodies will increase despite the best practices adopted by miners.

The CPRS, which does not provide any EITE assistance to Xstrata Copper's current mining operations, will place the long term sustainability of its north Queensland operations under even more pressure and will reduce the viability of mining lower grade resources which would otherwise be economical. It also places at risk the likelihood of further investments and project development activities.

CONCLUSION

Xstrata recognises climate change is a reality that presents social, economic and environmental risks that are global and that will require a global solution.

Xstrata supports the development of a comprehensive climate change policy as part of Australia's transition to a low carbon economy, that will ensure:

- long term energy security;
- ongoing economic growth and international competitiveness;
- availability of low emission technologies; and
- abatement of green house gas emissions at least cost.



Xstrata favours a measured approach that aligns the introduction of market based mechanisms to reduce carbon emissions with a comprehensive global agreement. In addition, the Global Financial Crisis and its likely impacts need to be considered as part of the government's approach to addressing climate change.

Xstrata's concerns could be addressed through a combination of the following amendments to the CPRS:

- Recast the scheme so that it is more in line with other international trading schemes
 where there is a phased approach to coverage, permit allocation and auctioning. The
 result would be a more measured and effective means to calibrate the Australian
 scheme to international developments, avoiding perverse economic outcomes.
- Extend the EITE assistance, at least at the 90% level, to all export sectors and calibrate the level of permit allocation over time with the development of global schemes.
- Adopt a significantly lower price cap from the commencement of the scheme to support a more measured transition for the Australian economy and thereby avoid unintended economic consequences.

These amendments would prevent export industries from being overly prejudiced in the absence of a global scheme thus allowing the commencement of a market based emissions trading scheme whilst not resulting in excessive carbon leakage.

If the current limitations in the CPRS are not adequately addressed, Xstrata believes that the stated objective of the CPRS will not be achieved. Indeed, there is a real chance that the environmental outcome could be worse where carbon leakage occurs to countries which are unlikely to adopt carbon constraints for decades to come. This would also occur at the expense of Australian jobs and potentially sustainable local industries.

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