

MCA GOLD FORUM

SUBMISSION ON A NEW CARBON PRICING SCHEME

MAY 2011

MCA Gold Forum

The MCA Gold Forum, established under the auspices of the Minerals Council of Australia, represents the gold production and processing industry which operates in all Australian states and the Northern Territory. Member companies include all of Australia's major gold producers and together account for an overwhelming share of Australian gold production and exports.

Summary Points

Australia's gold sector is a major exporter and major employer in remote and regional Australia.

- The gold sector is Australia's third largest export earner and is expected to contribute nearly \$17 billion to Australia's export income in 2011-12, exceeding the combined value of wheat, beef and veal, wool, dairy and wine exports¹.
- The Australian gold industry employs nearly 14,000 Australians directly in all Australian states and the Northern Territory, predominantly in regional and remote locations where the mining operation is often the single largest employer and contributor to the local and regional economy.
- The gold sector is a significant vocational trainer and employer of indigenous peoples.
- The gold sector supports a further approximately 40,000 indirect jobs.
- Expenditure on gold exploration in Australia currently exceeds \$600 million per year, exceeding all other commodities in the metals sector and, in the total Australian minerals sector, second only to expenditure on petroleum exploration.²
 - Expenditure on gold exploration is discretionary and highly mobile; exploration expenditure can be quickly redirected to other countries.

Gold is widely produced, trades like a financial instrument and Australia producers have no control over domestic or international prices.

- According to the British Geological Survey, gold is produced in more than 90 countries.³
- The gold sector is fully trade exposed and Australian producers have no capacity to influence prices.

¹ ABARES, *Australian Commodities*, March 2011, p.189.

² ABARES, *Minerals and Energy Major Development Projects*, October 2010.

³ British Geological Survey, *World Mineral Production 2005-2009*, 2011.

Gold production globally is becoming increasingly emissions intensive.

- As global deposits are depleted, the grade of ore bodies is steadily declining, making gold harder to win, thus increasing the emission intensity of extraction.
 - As a consequence, the exposure to carbon costs will become an increasingly important factor influencing investment choices between competing nations.
- There will be an impact on all categories of Australian producers. On the one hand, large, low cost but low grade operations will bear a substantial new cost disadvantage. On the other, higher grade, small but high cost mines with lower carbon intensity will bear lower carbon costs but have limited capacity to bear such costs due to smaller margins between revenue and costs.
- Australian gold producers generated greenhouse gas emissions of approximately 5 million tonnes in 2010.
 - This equates to less than one percent of Australia's total carbon emissions and 0.001 percent of total global carbon emissions.

The proposed carbon pricing scheme is a re-run of the CPRS.

- The proposed carbon pricing scheme is based largely on the flawed Carbon Pollution Reduction Scheme (CPRS). Because the flawed CPRS approach fails to consider a sector's 'trade exposure', the gold sector will be denied necessary transitional safeguards.
- The CPRS Emissions-Intensive Trade-Exposed (EITE) approach failed to consider gold production as an integrated production process.

Australian gold producers face a \$2.1 billion burden that no competitors will face.

- Under the proposed scheme, the gold sector will face carbon costs of more than \$2.1 billion by 2020. Mines in other major producing countries, including China, the USA, Indonesia, Peru, Russia, Canada, South Africa and Ghana, will not face any such costs in the near term.
 - Moreover, the only other region to adopt carbon pricing – the European Union – is providing 100 per cent free permits to its gold sector.
- In a highly competitive global gold mining sector, Australian gold producers will be at a significant disadvantage compared to gold producers in other countries.
- Average costs for the industry have been escalating. Australia is now positioned at the upper end of the third cost quartile with many operations experiencing cost pressures.

Australia has no monopoly on gold reserves and investment will inevitably shift to countries with no carbon costs.

- Existing operations will lose competitiveness; mine lives will be reduced. International capital is mobile and future investments will be directed abroad.
- With only 12 per cent of global gold reserves, Australia has no unique natural endowment of gold.⁴ Gold producers have choices as to where they direct exploration and project development funding.
- Australia's gold sector will inevitably contract, but global emissions will not fall as production increases in nations without comparable carbon costs.
- The flawed carbon pricing scheme will be a permanent drag on the competitiveness of the Australian gold sector.
 - Its adverse impact will accelerate as carbon prices rise and gold prices correct from current levels.

There is a better approach.

- There is a better, fairer way. Trade exposure should be the principal criterion when determining the Australian gold sector's eligibility for transitional safeguards.
 - That approach is used in the European Union emissions trading scheme which provides substantial transitional assistance for European gold producers.
- An Australian carbon pricing scheme must not impose costs on trade exposed exporters like the Australian gold producers ahead of international competitors. Australia should follow other nations and adopt a phased approach to the introduction of auctioning of permits.
- This approach should afford Australian gold producers the same level of assistance as other global gold producers.
- This should only be adjusted once Australia's overseas competitors introduce similar carbon pricing regimes.

⁴ Geoscience Australia, *Australia's Identified Minerals Resources 2009*.

Gold is a major export earner and contributor to the Australian economy.

- The gold sector is Australia's third largest export earner, forecast to contribute \$17 billion to Australia's export income in 2011-12.⁵
 - To put this into context, the value of gold exports in 2011-12 is forecast to exceed the combined value of wheat, beef and veal, wool, dairy and wine exports.

Top Australian Commodity Exports 2011-12

Rank	Commodity	Value (A\$Billion)	Cumulative Value (A\$Billion)
1	Iron Ore and Pellets	63.1	63.1
2	Coal	61.2	124.3
3	Gold	16.8	141.1
4	Crude Oil	13.8	154.9
5	Alumina/Aluminium	11.6	166.5
6	Copper	10.9	177.4
7	LNG	9.2	186.6
8	Wheat	4.6	191.2
9	Nickel	4.6	195.8
10	Beef and veal	4.3	200.1

Source: ABARES, *Australian Commodities*, March Quarter 2011: 2011-12 Forecast.

- Not only is the gold sector a major export earner, the sector is also a major employer, particularly in regional and remote areas, with the industry employing nearly 14,000 Australians directly and supporting a further approximately 40,000 indirect jobs.

⁵ ABARES, *Australian Commodities*, March 2011.

- Gold is mined in all States and the Northern Territory, with Western Australia the largest producer, followed by NSW and Queensland.
- Most gold mining operations are located in regional or remote areas.
- The gold sector is a major direct contributor to local, state and Federal government revenues through taxes, royalties and rates.
- Expenditure on gold exploration in Australia currently exceeds \$600 million per year, exceeding all other commodities in the metals sector and, in the total Australian minerals sector, second only to expenditure on petroleum exploration.⁶
 - Expenditure on gold exploration is discretionary and highly mobile; exploration expenditure can be quickly redirected to other countries.

Current gold price levels should not be used as a likely indicator of future price movements.

- The real (i.e. 2011 Australian dollars) gold price has averaged less than A\$800 per ounce for much of the last 20 years, only consistently breaking above A\$1000/oz in the last three years in response to the parlous state of global economies and gold's traditional role as a convenient store of wealth in times of economic uncertainty.
- It should not be used as the basis to judge eligibility for a scheme likely to be in place for 5 decades.

The carbon pricing scheme is a re-run of the Carbon Pollution Reduction Scheme.

- The proposed carbon pricing scheme is based largely on the flawed Carbon Pollution Reduction Scheme.
 - The Government has made it clear that transitional industry arrangements under the scheme will be based on the Emissions Intensive Trade Exposed (EITE) program developed under the CPRS.

⁶ ABARES, *Minerals and Energy Major Development Projects*, October 2010.

- Because the flawed CPRS approach fails to consider a sector's 'trade exposure', the gold sector would be denied any transitional safeguards.

The gold sector's treatment under the CPRS demonstrates the scheme's flaws.

- Independent analysis by Energetics Pty Ltd for the gold sector demonstrated that the sector met the threshold as 'moderately emissions-intensive' and was thus eligible for transitional safeguards.⁷
 - But under the flawed CPRS definition of 'activity', the gold sector would receive no assistance under a CPRS-style approach.
- Under the CPRS EITE program, the Department of Climate Change defined the extraction of gold as a separate process from that of processing or 'ore comminution'.
 - This artificial and contrived division of the gold production process saw the overall emissions intensity fall below the trigger for assistance under the CPRS EITE program.
- This splitting of the activity is not justified, not least because there is no saleable intermediate product produced between extraction and processing. In the Australian gold sector no mined gold ore is sold or bought (as an intermediate product) prior to undergoing processing.
- Moreover, the emissions intensity of gold mining will continue to grow, as the industry (globally) is forced to mine lower grade ores.
 - The emissions intensity of the gold sector is projected to increase to **1067 tCO₂/\$m** by 2011 and continue to rise thereafter (See Attachment I).

⁷ Energetics Pty Ltd, *Assessment of the Australian Gold Industry's Emissions Intensity*, December 2008.

Under a CPRS re-run, Australian gold producers will face carbon costs totalling more than \$2 billion by 2020.

- Australian gold producers generated greenhouse gas emissions of approximately 5 million tonnes in 2010. This equates to one percent of Australia's total carbon emissions and 0.001 percent of total global carbon emissions.
 - The Australian gold sector is already seeking ways to improve energy efficiency and reduce carbon emissions. This is an ongoing quest by the gold sector.
- Recent discoveries are trending towards large lower grade deposits which can only be exploited using more efficient (but energy intensive) ore processing technologies associated with large scale operations.
- The additional burden of the proposed carbon pricing scheme will pose substantial risks to jobs, exploration expenditure and new investment in the gold sector. There is a pipeline of more than 30 gold projects with an aggregate value estimated at almost \$6 billion currently planned or under feasibility study in the Australian gold sector.⁸

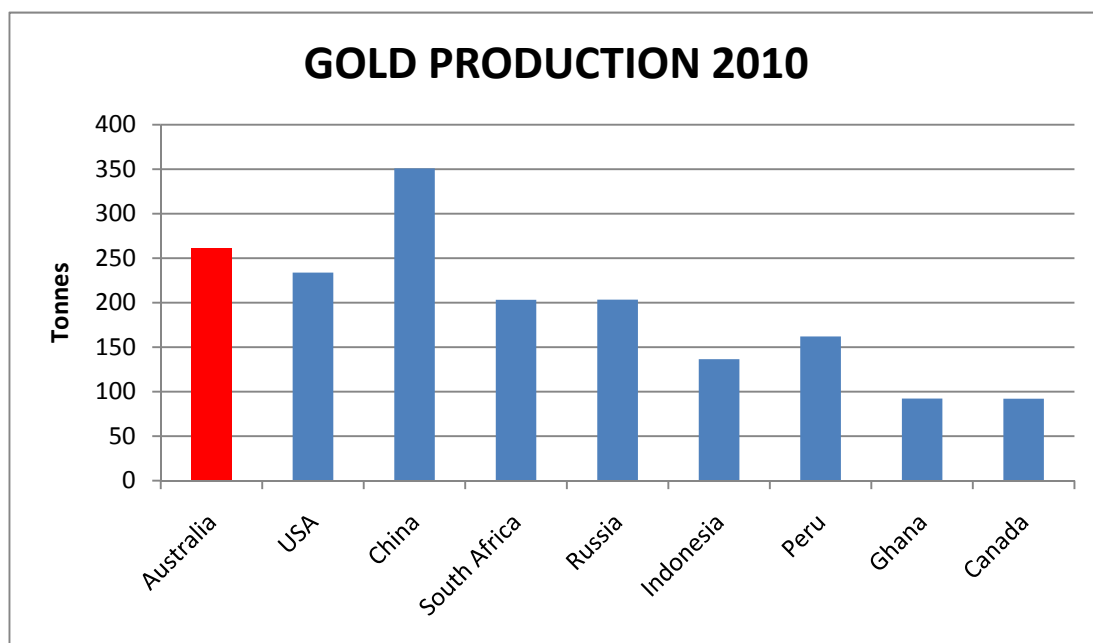
The gold industry is fully trade exposed and will be unable to pass on these carbon costs.

- The gold sector is one of Australia's most trade exposed sectors.
- Gold is treated like a financial instrument and trades in a spot market where customers have no connections with producers.
- The source of gold is irrelevant to purchasers who can buy anywhere in the world with little variation in transaction costs.
- Australian gold producers have no control over the domestic or international price received for the gold they produce.

⁸ ABARES, *Minerals and Energy Major Development Projects*, October 2010.

None of Australia's major offshore competitors face carbon costs.

- Although Australia is the world's second largest gold producer, it faces fierce and increasing competition from developing nations which are unlikely to face a carbon price signal over the next decade.
 - A large share of global gold production takes place in developing nations unlikely to face a carbon price in the next decade.
 - Even developed nations involved in gold production – the United States and Canada – have rejected carbon pricing schemes for the foreseeable future.
- With only 12 per cent of global gold reserves, Australia has no unique natural endowment of gold.⁹ Gold producers have choices as to where they direct exploration and project development funding.



Source: GFMS Gold Survey 2011

- China is the world's largest gold producing country with its 2010 production 35 per cent greater than that of Australia.
- Even the European Union, while not being a large gold producer in global terms – has classified its gold sector as trade exposed and at risk of carbon leakage.

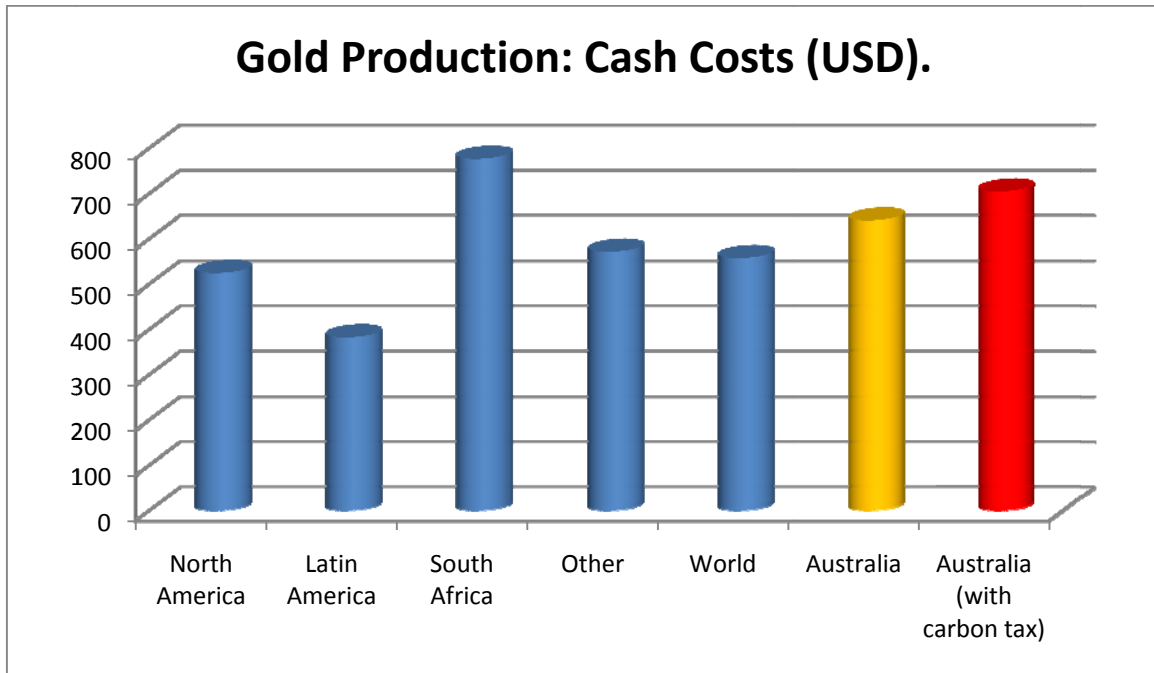
⁹ Geoscience Australia, *Australia's Identified Minerals Resources 2009*.

A unilateral increase in costs will effectively reduce the value of Australian ore reserves, mine life and production and re-direct investment offshore.

- As global deposits are depleted, the grade of ore bodies is steadily declining. In 2010, for example, the average grade of ore mined was 1.5 g/t gold, i.e. one and a half parts per million.¹⁰
- The grade of ore mined and processed is the single largest factor impacting the cost of producing gold.
- For modern, low grade operations, a unilateral carbon price increase between \$20 and \$60 per tonne of CO₂ will raise the cost of gold production by between \$25 and \$60 per ounce.
 - An increase in the cost of \$24/oz is the effective equivalent of a 5 percent reduction in the gold grade of ore processed.
- Some existing gold mining operations are already paying an embedded carbon cost as a result of existing Federal and State renewable energy and greenhouse gas abatement schemes which equate to more than \$20 per ounce of gold produced.
- Put another way, unilaterally increasing the cost structure of Australian gold mines will inevitably translate into a reduction in output and contained metal in reserves and erode project economics and ultimately shorten mine life.
 - This reflects the fact that it will be necessary to raise the grade of ore processed to offset the impact of higher costs. This has the effect of sterilizing an otherwise valuable resource.
- There will be an impact on all categories of Australian producers.
 - On the one hand, large, low cost but low grade operations will bear a substantial new cost disadvantage.
 - On the other, higher grade, small but high cost low margin mines with lower carbon intensity will bear lower carbon costs but have limited capacity to bear such costs.

¹⁰ GFMS, *Gold Survey 2011*.

- With a permanent (and increasing) unilateral increase in costs of Australian production, a reduction in exploration is also an inevitable consequence.
- Existing operations will lose competitiveness, mine lives will be reduced, while international capital is mobile and future investments will be directed abroad.
- Average costs for the industry have been escalating; Australia is now positioned at the upper end of third cost quartile with many operations experiencing cost pressures.



Source: GFMS Gold Survey 2011.

Carbon cost impact (in red) is based on a carbon price of \$40 per tonne CO_{2e} imposed on a new or modern gold mining operation.

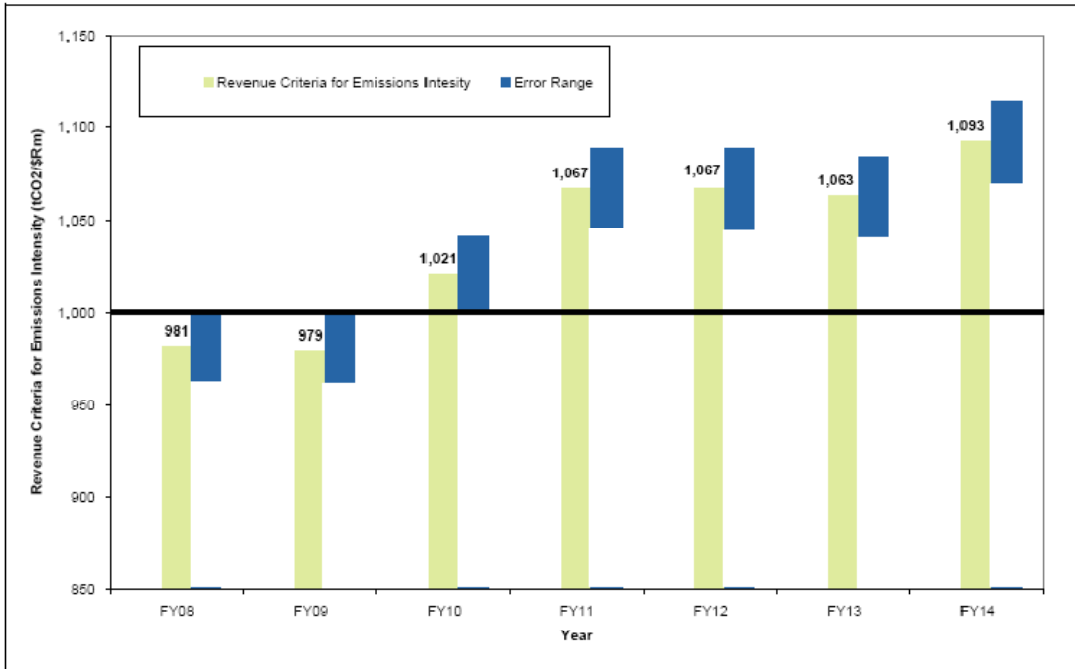
- Australia's gold sector will inevitably contract, but global emissions will not fall as production increases in nations without comparable carbon costs (carbon leakage).

A better transitional approach

- A better balanced approach is proposed to prevent loss of export competitiveness under carbon pricing.
- An Australian carbon pricing scheme must not impose costs on trade exposed exporters like the Australian gold producers ahead of international competitors.
 - Australia should follow other nations and adopt a phased approach to the introduction of auctioning of permits.
 - This approach should afford Australian gold producers the same level of assistance as other global gold producers.
 - This should only be adjusted once Australia's overseas competitors introduce similar carbon pricing regimes.
- Existing carbon pricing schemes are based on a model where trade exposed sectors are safeguarded from carbon costs during a lengthy transitional period
 - In contrast, more than 80 per cent of Australia's merchandise exports – including \$17 billion in gold exports - will face the full brunt of carbon costs from the outset of the scheme.
- It is essential that a firm's trade exposure be considered a primary factor when assessing eligibility for measures to ensure continued competitiveness. The CPRS model fails to do this.
- To put this into practice, Australia should consider the addition of a 'trade intensity' criterion to assess trade exposure.
 - This approach is already used in the European Union.¹¹ More than 70 per cent of EU sectors considered 'at risk of carbon leakage' qualify for support under the trade competitiveness test known as the trade intensity test.
- This approach recognises that exporting firms operating in highly competitive global markets cannot pass on the additional costs to their customers.
- The Australian gold sector should receive the same transitional assistance as the rest of the global gold sector. This should only be adjusted once Australia's competitors introduce similar carbon pricing regimes.

¹¹ The European Union's test for determining industry sectors 'at risk of carbon leakage' (and eligibility for free permits) after 2013 includes three criteria, **only one of which** must be met. The three criteria are i) that production costs increase by 5 per cent of gross value added and trade intensity is above 10 per cent, ii) that production costs increase by at least 30 per cent, and iii) trade intensity of sector is above 30 per cent.

Attachment I: Gold Sector: Projected Emissions Intensity



Source: Energetics Pty Ltd, December 2008