MINERALS COUNCIL OF AUSTRALIA

SUBMISSION ON THE ISSUES PAPER FOR THE CLIMATE CHANGE AUTHORITY'S 2014 CAPS AND TARGETS REVIEW

MAY 2013

The Minerals Council of Australia is the peak industry organisation representing Australia's exploration, mining and minerals processing industry, nationally and internationally, in its contribution to sustainable development and society. The MCA's strategic objective is to advocate public policy and operational practice for a world-class industry that is safe, profitable, innovative, and environmentally and socially responsible attuned to its communities' needs and expectations.

MCA member companies produce more than 85 per cent of Australia's annual minerals output, and accounted for about 62 per cent of Australia's merchandise exports in the year to June 2012.

The minerals industry recognises that its past success and future prosperity is dependent on a sound and expanding national economy, an educated and cohesive society and a sustainable natural environment.

For this reason, the minerals sector supports public policy settings aimed at the following objectives:

- sustainable economic growth characterised by low inflation, low interest rates, fiscal prudence, and a skilled and productive workforce;
- a sound, fair and stable society, where effort is encouraged and rewarded and a helping hand extended to those in need; and
- a sustainable natural environment, reflecting national consistency and balance in policy settings.

The MCA recognises that the future of the Australian minerals industry is inseparable from the global pursuit of sustainable development. Through the integration of economic progress, responsible social development and effective environmental management, the industry is committed to contributing to the sustained growth and prosperity of current and future generations.

The Australian minerals industry is an industry of considerable size and economic and social significance, benefiting all Australians both directly and indirectly.

The mining and minerals processing sector:

- underpins vitally important supply and demand relationships with the Australian manufacturing, construction, banking and financial, process engineering, property and transport sectors;
- has contributed over $600 billion directly to Australia's wealth over the past 20 years;
- is in the top five producers of most of the world's key minerals commodities, including
  - the world's leading producer of bauxite, alumina, rutile, ilmenite, zircon and tantalum;
  - the second largest producer of, uranium, lead, zinc and lithium;
  - the third largest producer of gold, diamonds, iron ore, manganese, nickel and niobium;
  - the fourth largest producer of black coal and silver; and
  - the fifth largest producer of aluminium, brown coal and copper.
- directly and indirectly employs some 894,200 Australians, many of whom are in sparsely populated, remote and regional Australia; and
- is responsible for significant infrastructure development – since 1967, the industry has built 26 towns, 12 ports and additional port bulk handling infrastructure at many existing ports, 25 airfields and over 2,000 kilometres of railway line.

Summary

- There is no case to increase Australia's 2020 target of minus 5 per cent on 2000 levels. Action by other nations has been patchy at best and does not meet the conditions set by the Australian Government to justify an increase in the target.
- Treasury modelling demonstrates that the *existing* minus 5 per cent target will already impose higher economic costs on Australia than almost any other developed nation.
- The existing target also involves a larger reduction against business-as-usual projections than for most other nations.
- Australia has been wrongly cast, both in Australia and abroad, as a laggard in efforts to slow the growth of greenhouse gas emissions. Australia was one of the few nations that fully met (or exceeded) its obligations under the first commitment period of the Kyoto Protocol. The reality is that Australia's economy has become substantially less emissions intensive over the last two decades.

Preamble

The global nature of the climate change challenge requires that the solution must be internationally aligned. This global response must be centred on three equal and fundamental public policy principles: environmental effectiveness, economic efficiency and social and political acceptability.

Measures that are not global are unlikely to be environmentally effective. Measures that are not internationally broadly based are unlikely to be economically efficient. Failure to meet these goals undermines social and political support for action.

At the same time, countries around the globe aspire to improve their standards of living. There is a strong relationship between economic growth and energy demand and between greenhouse policies and energy security.

The Minerals Council of Australia (MCA) has consistently argued that a comprehensive measured transition to a low emissions global economy requires the alignment of three key policy pillars:

- a global agreement for greenhouse gas emissions abatement that includes emissions reduction commitments from all major emitting nations;
- market-based policy measures that promote the abatement of greenhouse gas emissions at the lowest cost without compromising the competitiveness of Australia's internationally traded sector; and
- substantial investment in a broad range of low emissions technologies and adaptation measures.

As such, we contend the Clean Energy Future package fails these objectives and thus the articulated objectives of reducing emissions and improving Australia's carbon competitiveness. Instead, there should be a phased approach which recognises the need for a transition for those sectors of the economy which are trade-exposed i.e. unable to pass on carbon costs because their foreign competitors (either in overseas markets or the domestic market) will not confront similar carbon costs.

In the absence of a global agreement in the near term, the imperative for all nations is to sustainably reduce the production and consumption of greenhouse gas emissions without compromising international competitiveness, energy security and economic growth, improved living standards and poverty alleviation.

Much of the national debate about Australia's response to climate change has lacked perspective and balance in the past. Australia has been wrongly cast, both in Australia and abroad, as a laggard in efforts to slow the growth of greenhouse gas emissions. The reality is that Australia's economy has become substantially less emissions

intensive over the period 1990-2012. At the end of Kyoto Protocol's target period (2008–12) Australia's greenhouse gas emissions per $A billion of real GDP had declined by 68 per cent since 1990[1]. By 2020, Australia's greenhouse gas emissions intensity is projected to be 77 per cent below the 1990 level[2].

Australia's mineral sector has been a part of the steady improvement in emissions intensity. In 2011, emissions from aluminium smelting had fallen by 41.4 per cent as compared to 1990, whilst production had increased by 58 per cent[3]. Also, while coal production has increased by 117.1 per cent since 1990, fugitive emissions from coal production have increased by only 51.8 per cent over the same period[4].

The scale of the challenge for Australia should not be underestimated. Substantial reductions in emissions will be difficult, particularly until low emissions technologies are developed to commercial reality. Our geography, resource endowment and robust economic and population growth outlook mean that the abatement of greenhouse gas emissions will be more expensive for Australia than for most other developed nations. That is not an argument for inaction but an acknowledgement of the importance of a measured transition to a low emissions economy.

The Climate Change Authority 2014 Review

Targets

Australia must be part of the global response to climate change, but unilateral action will be ineffective in addressing climate change and may also cause undue damage to the Australian economy. The minerals industry urges caution and care from the Climate Change Authority (CCA) as it considers its recommendations on the nation's emissions target and the Clean Energy Future scheme's caps over the coming decade.

There are two important developments for the CCA to consider.

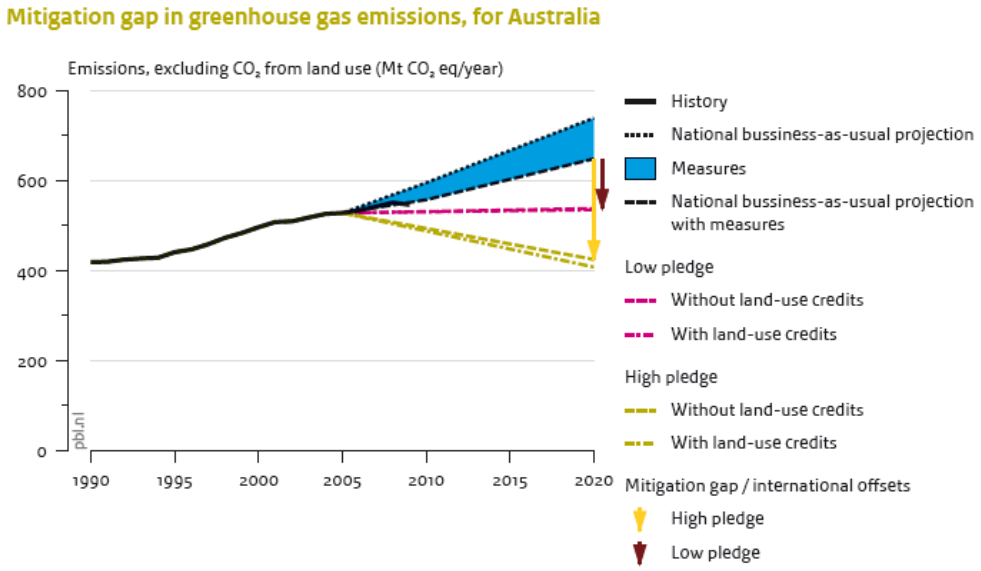
First, the slow progress of international negotiations towards a new global agreement. The CCA is working at a disadvantage that it is required to make recommendations before the expected resolution of a new agreement at the United Nations Framework Convention on Climate Change's Committee of Parties in 2015.

Thus as a guide, the CCA should pay regard to the conditions on national action established before the Copenhagen/Cancun meetings. The Australian offer of minus 5 per cent reduction in emissions on 2000 levels was unconditional. In particular, any shift to a minus 15 per cent commitment would involve major developing economies committing to substantially restraining emissions and advanced economies taking on commitments comparable to Australia.

These conditions have not yet been met. Only Australia, the European Union, Norway and Switzerland have agreed to ratify Kyoto's second commitment period. The second commitment period of the Kyoto Protocol only covers 15 per cent of global emissions.

[1] Department of Climate Change and Energy Efficiency, "Australia's emissions projections 2012", March 2013.
[2] Deloitte Access Economics, "Long term economic and demographic projections", November 2011.
[3] Australian Aluminium Council, "Aluminium smelting greenhouse performance, 2010.
[4] Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education, "Australia's national greenhouse accounts", April 2013.

Australia is making a contribution. Of the emissions reduction pledges made by those countries that intend to ratify Kyoto's extension, Australia made the most generous offer of a 47 per cent cut from business-as-usual projections[5]. The European Union's offer to cut emissions is only 23 per cent off business-as-usual projections (BAU).[6] Australia's own analysis of anticipated commitments in March 2009 noted that "Australia faces higher economic costs, relative to most other developed countries, due to its large share of emission- and energy-intensive industries and a dominance of low cost coal in the electricity generation… Australia's costs are higher than both Japan's and the European Union's despite it being allocated smaller percentage reductions from 1990 levels".



Source: http://www.pbl.nl/en/publicaties/2012/analysing-the-emission-gap-between-pledged-emission-reductions-under-the-cancun-agreements

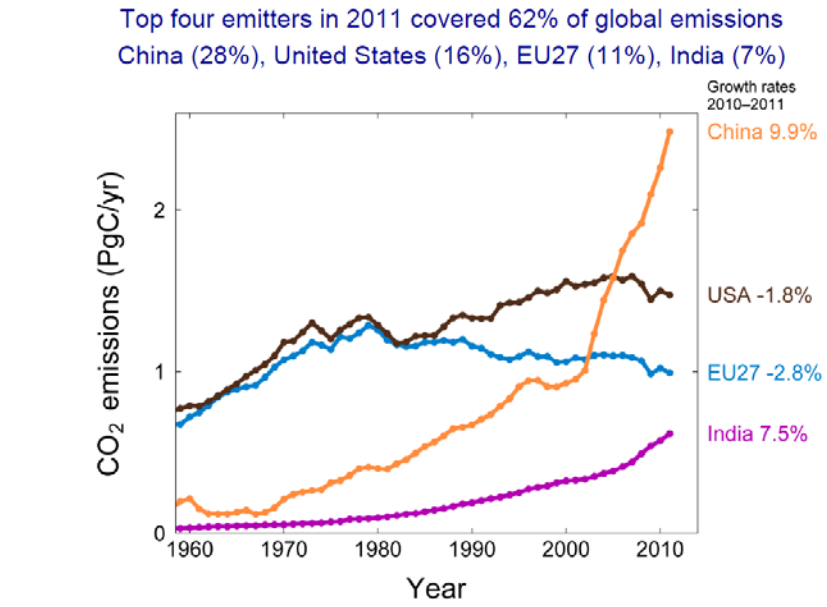
Of the few countries that committed to cutting emissions between 2013 and 2020, Australia's cuts are the largest in the developed world when compared against BAU emissions projections.

Australia's emissions cuts are the largest at 47 per cent, followed by Norway at 43 per cent, Belarus at 41 per cent, then the European Union at 23 per cent. The lowest offer was from Ukraine at 6 per cent. Australia's offer to cut emissions is more than double the 27 nations of the European Union.

[5] UNFCCC data for Australia: Kyoto II emissions target commitment (1990), 395 Mt (that is, minus 5 per cent off 416 Mt); business as usual (2020) 739 Mt. Australian 1990 baseline is 416Mt, see UNFCCC Report of the Review of the Initial Report of Australia at http://unfccc.int/resource/docs/2009/irr/aus.pdf . 2020 business as usual projection from http://www.pbl.nl/sites/default/files/cms/publicaties/pbl-2012-analysing-the-emission-gap-between-pledged-emission-reductions-500114021.pdf citing UNFCCC submitted National Communications http://unfccc.int/resource/docs/natc/aus_nc5.pdf . Estimates have ranged as high as 816Mt.

[6] UNFCCC date for EU-27: Kyoto II emissions target commitment level (1990), 5564 Mt (that is, reduction expressed as minus 20 per cent on 1990 levels); business as usual (2020) 5769 Mt.

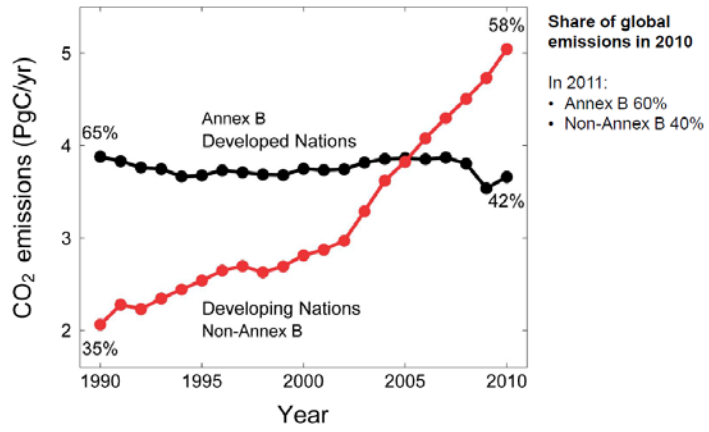
The second important factor is the changing face of the global emissions profile. The key source of growth in global emissions – developing countries – are also not bound by Kyoto despite now accounting for nearly 60 per cent of global emissions, and rising.



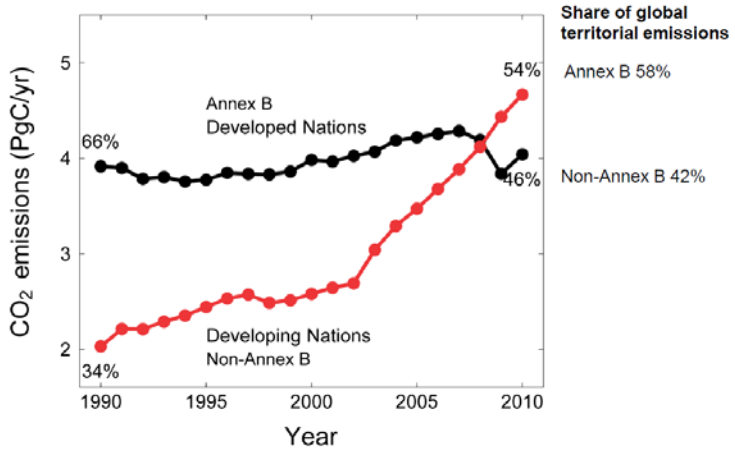
Source: Global Carbon Project Presentation December 2013. http://www.globalcarbonproject.org/carbonbudget/12/files/carbonbudget2012.pdf

The Kyoto Protocol was written when developed world emissions both historically and in the immediate future were the leading contributor to the emissions stock. This was the genesis of the "common but differentiated responsibilities and respective capabilities" approach embodied in Article Three and produced the two-tiered obligations. Whatever the reasons for that action now, the changing of emissions underscores the need for an agreement that requires a significant contribution from the developing world. The International Energy Agency notes that while Australia's consumption emissions grew 1.8 per cent a year from 1990, China's grew 6.8 per cent.

The Kyoto Protocol is based on the global distribution of emissions in 1990
The global distribution of emissions is now starkly different



Consumption-based emissions =
Territorial emissions plus imported emissions minus exported emissions



Source: Global Carbon Project Presentation December 2013. http://www.globalcarbonproject.org/carbonbudget/12/files/carbonbudget2012.pdf

These important issues will be discussed over the coming years. The CCA should have regard to these approaches at it considers its recommendations on targets.

Caps

In any scheme, the setting of the cap will be an important determinant of the burden of the scheme, acting as a principal driver of the price (along with demand). From 2015-16 Australia's scheme will be linked to the much larger volume European scheme, so the price will tend to reflect the price of the larger pool.

But the price is only one part of understanding the environmental, economic and social impact of the scheme. The other relevant issue, regularly overlooked in analysis and commentary, is the incidence of the scheme (best measured by the revenue generated by the scheme).

Australia's scheme is the most onerous because it has the highest incidence across the economy.

While the Australian scheme will raise net $A7.7 billion (equivalent to an 8 per cent increase in company tax revenue) the European Union scheme will, on current prices raise about $A6 billion, and the Californian scheme under $US 1 billion.

The portion of permits allocated to either trade exposed or emissions intensive industries in all the comprehensive tax/trading system are overall more generous than the Australian scheme. South Korea, for example, is proposing 100 per cent allocation for trade exposed industries.

The details of the seven city pilot sites for trading in China have not been finalised. News reports from China[7] suggest the tax would start from $US1.59.

Schemes with a higher nominal price – Sweden and Switzerland – are narrowly defined oil and fuel taxes and collect less revenue.

	Calendar/ fiscal year	Net Revenue collected ($US m)
North and South America		
Alberta carbon scheme	2010/11	76.8
Bay Area Air Quality Management District GHG fee	2009	1.2
Boulder Climate Action Plan tax	2010	1.8
British Columbia carbon tax	2010/11	748.9
California Air Resource Board cap-and-trade programme	2013	1,000 (est)
Costa Rica carbon tax	2003	182.9
Quebec carbon tax	2010/11	202.1
Regional GHG Initiative (US)	2010	350.8
Europe		
EU scheme third phase	2013 estimate	6,000 (est)
Denmark carbon tax	2008	905.
Sweden carbon tax	2008	3,652.0
Switzerland CO_2 tax	2011	736.4
UK climate change levy	2010/11	1,080.8
Australia carbon price	2012/13	7,690

Sources: ICMM compilations (2013), Government of Alberta (2012), Government of Australia (2011), City of Boulder (2011), Government of British Columbia (2012, Sánchez-Azofeifa et al (2007), Hoerner & Bosquet (2001), Sumner et al (2011), Government of Quebec (2012), RGGI Inc (2011), HMRC (2011), ONS (2012), IMF (2012a), IMF (2012b), World Bank (2012), BEA (2012a), BEA (2012b), Statistics Canada (2012), Federal Reserve Bank of St Louis (2012).

The cap is closely related to the target, it drives changes in the "covered" sector of the economy as that economy makes its long-term transition to low emissions. The covered sector already carries the weight for the uncovered sector and should not carry more. This is another area where the CCA should be careful in its recommendations because of the direct short-term effects.

[7] See http://www.reuters.com/article/2012/01/05/china-carbon-idUSL3E8C5D1220120105

Comparison methods

National commitments should be based on comparable adjustment. The notion of comparable adjustment should provide the basis for a future global protocol. Such an approach should be founded on comparability of effort and sacrifice. While Australia should not seek, or receive, an easy ride in international negotiations, a blueprint for a genuinely comprehensive global response will need to accommodate variable geometry. An approach that is configured on uniformity will mean that the sacrifice will fall disproportionately on certain nations, including Australia. Such a uniform approach is not sustainable.

In important respects, Australia's economic base is different to most other developed nations. In the average OECD nation, resources exports account for just 6 per cent of total exports. In Australia, by contrast, resources exports account for 52 per cent of total Australian exports of goods and services. That proportion is growing, not falling. Such a contrast in economic structure has an inevitable impact on the respective emissions intensity of an economy.

As outlined earlier, identical targets do not mean identical sacrifice. Australia must be cautious of simply adopting 2020 targets adopted by other nations (or regions).

Work by economist Warwick McKibbin and others has pointed out that different formulations make the same target appear quite different in stringency. Modelling of the actual macroeconomic impacts of Copenhagen pledges – not all of which have become commitments for the second period – show Australia suffers the largest effects with a 6 per cent reduction in GDP and consumption, followed by Europe (5 per cent), China (4 per cent), US (3 per cent) and Brazil (1 per cent).[8]

The Garnaut Review suggested that targets should embody a "similar adjustment cost" to that accepted by other developed nations. A per capita approach will not work, and will not gain wide support. A method of this, also raised in the Garnaut Review, is the so-called "Contraction and Convergence" model as a basis for a global solution. That model – based on the convergence towards uniform per capita emissions – assumes that the world's population is divided into roughly 200 units of identical geography, resource endowment, stage of development, economic history, growth rates and prospects, access to technology, political preference, and environmental amenity.

While Australia shares the same population as the Netherlands and Denmark combined, that population is spread across a land mass 99.8 times larger. Moreover, consider the differences in the principal contributors to greenhouse gas emissions – GDP and population growth – between Australia and the EU over the last 15 years. Between 1990 and 2005 for example, the population of the European Union-27 grew by 4 per cent. Over the same period Australia's population grew by 19.2 per cent.[9]

An approach based on per capita emissions ignores the complementarity that underpins global commerce. It fails to take account of the fact that nations generate emissions in the production of goods and services consumed by others. A substantial proportion (approximately 33 per cent) of Australia's greenhouse gas emissions is embedded in exports ultimately consumed by others.

In other words, while the emissions are counted against Australia's national total, the product (e.g. beef and sheepmeat) is consumed elsewhere. It is also important to note that Australia is rare amongst developed nations

[8] W. McKibbin, A. Morris, P Wilcoxen, Discussion Paper, *Comparing Climate Commitments: A model-based analysis of the Copenhagen Accord*, The Harvard Project on International Climate Agreements, June 2010.
[9] Minerals Council of Australia, *Submission to the Garnaut Review*, April 2008, citing International Energy Agency, *CO_2 Emissions from Fuel Combustion 1971 to 2005*, 2007 edition.

in that emissions associated with exports are higher than those associated with imports. This suggests that exporting nations are disadvantaged by the current approach to measuring a nation's emissions by production rather than consumption. Put another way, if Australia's emissions were based on emissions consumed rather than produced, Australia's per capita emissions would likely be much lower.

Measurement changes

Ongoing research into the climate change challenge leads to greater sophistication and accuracy of measurement methods. One component of this is "global warming potential" (GWP) of various gases which feeds into calculations about emissions stocks, flows and affects.

In Kyoto's first commitment period the calculations for converting all gases into equivalent carbon dioxide emissions were based on the Second Assessment Report of the Intergovernmental Panel on Climate Change (IPCC). Following a meeting of scientific advisors in Bonn in 2011, at the 2011 Durban Summit, United Nation Framework Convention on Climate Change (UNFCCC) parties agreed to include revised calculations for assessing the global warming potential of greenhouse gases. It was agreed that a second commitment period under the Kyoto Protocol would use the GWPs of greenhouse gases included in the Fourth Assessment Report of the IPCC. Australia has offered to use the revised calculations from 2017.

Critically for Australia, the revised calculation suggested a greater effect from methane than previously estimated – up from 21 times a tonne of carbon dioxide to 25 times. This increase of 19 per cent increase will have material effects on Australia's liabilities and the liabilities of firms operating under any scheme.

Although methane is recognised as a significant greenhouse gas, not all emissions trading/carbon tax schemes – most notably the European Union's – include methane within their scheme frameworks.

The Climate Change Authority should recognise that this anomaly could leave Australian firms at a significant competitive disadvantage to European competitors, despite the linkages between the two schemes.

Minerals Council of Australia
May 2013.