Chapter 4

Australia's future prosperity exposed

Introduction

4.1 This chapter of the report summarises evidence obtained on emissions intensive trade exposed industries during the Senate Select Committee on the Scrutiny of New Taxes inquiry into the carbon tax.

4.2 A trade exposed industry can be defined as one that is 'constrained in their ability to pass through costs due to actual or potential international competition'.[1]

4.3 Evidence was provided on the potential consequences for the Australian economy, jobs and the environment. There is concern that Australian investment and jobs will shift offshore to locations where carbon pricing is yet to take hold. The potential for carbon leakage with no net gain to the environment and in fact the serious risk of net detriment was raised during the inquiry.

4.4 This chapter also considers the impact of trade exposure to Australia's farming and manufacturing industries.

Carbon leakage

4.5 The *Garnaut Climate Change Review: Final Report* defined carbon leakage as:

> ... a loss of competitiveness and relocation of trade-exposed, emission-intensive industries as a result of carbon penalties applying in some countries but not others.[2]

It also stated:

> Trade exposed, emissions-intensive industries represent a special case. All other factors being equal, if such enterprises were subject to a higher emissions price in Australia than in competitor countries, there could be sufficient reason for relocation of emissions-intensive activity to other countries. The relocation may not reduce, and in the worst case may increase, global emissions. This is known as the problem of carbon leakage.[3]

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1 Australian Government, *Carbon Pollution Reduction Scheme: Australia's Low Pollution Future* White Paper Glossary, December 2008, p. 16.

2 Professor Ross Garnaut, *Garnaut Climate Change Review: Final Report*, October 2008, p. 230.

3 Professor Ross Garnaut, *Garnaut Climate Change Review: Final Report*, October 2008, p. 316.

4.6 The Grattan Institute describes carbon leakage as occurring only when:

- carbon pricing makes an Australian industry internationally uncompetitive;
- in its new overseas location, the industry emits more greenhouse gases per unit of production;
- there are no offsetting government policies to support the Australian industry.[4]

4.7 This definition seems unduly restrictive. Clearly, the mere fact of providing compensation does not offset the problem of leakage, as that compensation has a net cost to the community. In other words, imposing a tax and then offsetting its effect through compensation will still make the community worse off, so long as providing the compensation is not costless. As all taxes and transfers impose some economic case, the mere fact that the outcome is neutral in terms of the industry directly affected does not mean the community is no worse off.

4.8 As a result, in considering the impact on specific sectors, the key issue is whether industries within those sectors are likely to lose competitiveness. While compensation may reduce the resulting loss to shareholders, it will not, in those cases, prevent Australia's national income from declining.

4.9 Additionally, it is important to note that the compensation provided typically does not reduce the carbon tax that will be imposed on the marginal unit of output – that is, it leaves some share of output affected by the tax. Indeed, that is crucial if the tax is indeed to change behaviour. As a result, there can be a loss in competitiveness, and harm to national income, even if the bulk of an industry's emissions are initially exempt from the tax.

4.10 It is important to note that carbon leakage may occur even without the physical relocation of economic activity or capital to an overseas country. For example, carbon leakage can occur if:

- carbon pricing in Australia means a scaling down of production in Australia, to the advantage of production in other countries, even if the physical assets and some production remains in Australia, or;
- carbon pricing lowers demand for carbon-intensive fossil fuels, thus putting downward pressure on their global price. In this event, countries without carbon pricing may increase their demand for the more economically attractive fossil fuel energy sources. For example, if carbon pricing were quarantined to developed countries, then the price of oil and gas would likely drop, encouraging developing countries to use more of these inputs, and give effect to an indirect form of carbon leakage.

4 Grattan Institute, *Submission 26*, *Attachment 1*, p. 10.

Specific industries

4.11 This section of the report outlines the potential impact of the carbon tax / emissions trading scheme on key Australian industries. This part of the report provides a summary of the concerns that were put to the committee during the inquiry process. The industries that appeared before the committee at hearings and those that made submissions are representative of key industries for Australia's economy.

Australia's mining and resources industries

4.12 The Minerals Council of Australia has put forward its views on the likely impact of a carbon tax on its members and this important industry. According to the Council, Australia's mineral sector will face carbon costs nearing $30 billion by 2020, while '(o)nly 10 per cent of minerals sector exports will receive transitional safeguards to protect their competitiveness'.[5]

4.13 The Council estimates that the carbon costs to just three minerals could be more than $25 billion to 2020. Over the period to 2012-21 the possible cost for the coal sector alone will exceed $18 billion. For gold, the likely liability is to be $2 billion and for nickel it will be around $1.34 billion, up to 2020.[6]

Coal

4.14 The Australian coal industry has also expressed concern about the potential impact of a carbon tax on its future.

4.15 Australia uses both brown and black coal. Black coal, is Australia's largest export and is expected to earn over $60 billion in export income in 2011-12.[7] On the domestic front, over 54 per cent of Australia's electricity is derived from black coal. With the addition of brown coal, 76 per cent of domestic electricity production comes from coal.[8] Importantly, the coal industry employs over 40 000 people and supports a further 100 000 jobs indirectly.[9]

4.16 The Australian Coal Association expressed concern about Australia moving ahead of its competitors:

> The government's proposed carbon-pricing timetable will have Australia moving ahead of its competitors, involving significant risks to our economy. Australian action on climate change too far ahead of global action, particularly by competitors in developing countries, would be costly

5 Minerals Council of Australia, *Submission 57*, p. 24.

6 Minerals Council of Australia, *Submission 57*, p. 24.

7 Mr Ralph Hillman, Executive Director, Australian Coal Association, *Committee Hansard*, 9 June 2011, p. 39.

8 Mr Ralph Hillman, Australian Coal Association, *Committee Hansard*, 9 June 2011, p. 39.

9 Mr Ralph Hillman, Australian Coal Association, *Committee Hansard*, 9 June 2011, p. 39.

> and without benefit to the global climate. For example, coal not produced here as a result of the carbon price would simply be replaced with production by overseas competitors, none of whom have or plan to have a similar tax on coal mining, a classic case of carbon leakage. It follows that, whatever the carbon price policy mechanism adopted, it must include measures to preserve the competitiveness of Australia's trade exposed industries, including coal mining. These measures should also address the impact of pricing carbon on coalmines that face contractual rigidities preventing them passing on costs of emission permits to power station customers.[10]

4.17 The Association provided a more specific outline of its concerns in the context of the future of the coal industry:

> **Mr Hillman:** Global demand for coal is out there. It is determined by Japan, China, India and the United States, the big coal users.
>
> **CHAIR:** It is not reducing, is it?
>
> **Mr Hillman:** No, it is projected to grow quite strongly. You have to assume that if we close a mine here or diminish a mine's output here for any reason, that that production will be taken up by a competitor. A very good example of this was in 2004 as the sudden uptick in global demand for coal occurred and infrastructure constraints in Australia prevented us from meeting that demand. We were advantaged by the price increase, which was partly driven by our inability to respond to demand. The Indonesians picked it up. Because they have a much more flexible infrastructure arrangement for getting coal from mine to ship, they picked up 15 per cent of our thermal coal market and pushed us from No. 1 to No. 2 in the export stakes.
>
> **CHAIR:** But to the extent that there is just a shift and substitution internationally of production in Australia. It might be simplistic, but on the face of it there does not appear to be any resulting reduction in emissions.
>
> **Mr Hillman:** That is right. If the coal is produced elsewhere, the emissions will go up elsewhere. If you assume that the emissions from a tonne of Australian coal, broadly speaking, are not vastly different from those from other countries—and it may even be better because of more efficient mining techniques and higher quality coal—emissions will just go up elsewhere and probably to a greater extent.
>
> **CHAIR:** And if we want to reduce global greenhouse gas emissions then whatever we do to emissions in terms of reductions domestically will not make much difference. If we reduce emissions in Australia in a way that increases them potentially in other parts in the world, we are not actually—
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> **Mr Hillman:** It does potentially, but it is hard to measure that. Australian coals are very good quality. They have a high thermal content and generally

10 Mr Ralph Hillman, Australian Coal Association, *Committee Hansard*, 9 June 2011, p. 39.

> a low ash content, which means they are generally more efficient coals than, say, Indonesian steaming coals.[11]

4.18 In order to affirm the importance of the coal industry to Australia, the Coal Association has taken to advertising its policy position in major national daily newspapers.

4.19 In addition to the Australian Coal Association, the committee also heard evidence from Anglo American Coal.

4.20 Anglo American's position on the carbon tax is:

> ... we do not support the federal government's proposed carbon pricing mechanism in its current form. The proposed carbon pricing mechanism will severely impact Anglo American. The value of our four planned new mines would be significantly reduced, putting at risk $4 billion of investment, more than 3,200 jobs and $5.7 billion of ongoing royalty payments to state governments. This is not because of an unwillingness to respond to permit price signals by reducing emissions; it is because the absence of readily available mitigation technologies means that for a period of up to 10 years we will be unable to sustainably reduce our emissions below current levels.[12]

4.21 The global producer noted the potential risk of carbon leakage caused by the impact of the carbon tax:

> **CHAIR:** You talked about the potential of not going ahead with mines or having to close mines or losing market share. If you were to lose market share, where would you lose market share to?
>
> **Mr Barlow:** In terms of metallurgical coal, which is our main business, right now I know there are major developments in Mozambique, in Mongolia and in Indonesia. They are the major three areas. As well as that, in North America, Canada is reopening a number of metallurgical coal mines. The US have industry there, but they have been limited by ports, and they are putting in place more port capacity to allow them to export more coal.
>
> **CHAIR:** Are any of those competitors going to face a carbon tax or a price on carbon—
>
> **Mr Barlow:** They are not going to face a carbon tax in terms of fugitive emissions. Clearly, in Canada and the US, there is always talk, but fugitive emissions are not included. In terms of Mongolia and Mozambique, which are probably the two main competitors, I am unaware of any discussion.

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11 Senator Mathias Cormann, Chair, Senate Select Committee on the Scrutiny of New Taxes and Mr Ralph Hillman, Australian Coal Association, *Committee Hansard*, 9 June 2011, p. 43.

12 Mr Anthony Barlow, Head of Resource Development and Operational Excellence, Anglo American Metallurgical Coal Pty Ltd, *Committee Hansard*, 1 September 2011, p. 40.

> **CHAIR:** How does our coal production in Australia compare in terms of the level of fugitive emissions or other emissions? If activity were to shift from Australia to Mozambique, Mongolia or other places, would there be a difference in the emissions footprint?
>
> **Mr Barlow:** In terms of the emissions footprint from burning coal, we would not think there would be much of a change at all.
>
> **CHAIR:** So we would lose economic activity—
>
> **Mr Barlow:** Correct.
>
> **CHAIR:** and we would lose investment but there would not be any beneficial impact on global emissions?
>
> **Mr Barlow:** Correct.[13]

4.22 The response of the coal industry to the carbon tax was that:

> The proposed scheme places an arbitrary cost on Australian exporters that is not aligned with the cost being borne by competitors.[14]

The gold industry

4.23 According to the Minerals Council of Australia, the impact on Australia's minerals will be:

> The principal beneficiaries of the CPRS-style scheme will be Australia's competitors in global commodities markets. Most of Australia's competitors across major commodities are developing nations that have no plans to introduce a comparable carbon price.[15]

4.24 The Minerals Council of Australia Gold Forum made a separate submission on the potential impact of a carbon tax on its industry. The gold industry is 'Australia's third largest export earner and is expected to contribute nearly $17 billion to Australia's export income by 2011-12'.[16] The industry directly employs nearly 14 000 and supports another 40 000 Australians in all states and the Northern Territory, mostly in regional and remote communities.[17]

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13 Senator Mathias Cormann, Chair, Senate Select Committee on the Scrutiny of New Taxes and Mr Nicholas Barlow, Anglo American Metallurgical Coal Pty Ltd, *Committee Hansard*, 1 September 2011, p. 40.

14 Mr David Peevers, Rio Tinto Australia Manager, stand alone reported comments in Perry Williams, Andrew Cleary and David Crowe, 'Carbon tax triggers price rises', *Australian Financial Review*, 12 July 2011, p. 12.

15 Minerals Council of Australia, *Submission 57*, p. 25.

16 Minerals Council of Australia Gold Forum, *Supplementary Submission 57A*, p. 3.

17 Minerals Council of Australia Gold Forum, *Supplementary Submission 57A*, p. 3.

4.25 Expenditure on exploration is around $600 million per year.[18] This exceeds the amount spent on commodities in the minerals sector and in the total Australian minerals sector this outlay is second only to petroleum exploration.[19] According to the Gold Forum, this expenditure is 'discretionary and highly mobile'.[20] With more than 90 countries producing gold:

> The gold sector is fully trade exposed and Australian producers have no capacity to influence prices.[21]

4.26 While the Australian gold industry will face a $2.1 billion impost by 2020, the gold industries in major producing countries such as China, the United States, Indonesia, Peru, Russia, Canada, South Africa and Ghana will not face such costs 'in the near term'.[22] Importantly, the European Union will provide 100 per cent free permits to its gold sector.[23]

The magnetite industry

4.27 The Australian iron ore industry is undergoing a transformation with the emergence of magnetite as an additional ore export to the traditional form of iron ore, haematite. Haematite is typically dug up and shipped abroad. Magnetite by contrast is dug and then processed through an energy intensive process to be more refined than haematite.

4.28 The emerging magnetite industry is a new but important source of employment in the mining industry:

Table 4.1: Contribution of the magnetite industry[24]

Capital expenditure	Employment (construction)	Employment (ongoing)	Royalties (A$)	Annual export revenue (A$)
$11.9 billion	8,750 jobs	2,580 jobs	$345 million	$6.3 billion

4.29 One of the unusual features of magnetite is its emissions here in Australia compared to overseas:

18 Minerals Council of Australia Gold Forum, *Supplementary Submission 57A*, p. 3.

19 Minerals Council of Australia Gold Forum, *Supplementary Submission 57A*, p. 3.

20 Minerals Council of Australia Gold Forum, *Supplementary Submission 57A*, p. 3.

21 Minerals Council of Australia Gold Forum, *Supplementary Submission 57A*, p. 3.

22 Minerals Council of Australia Gold Forum, *Supplementary Submission 57A*, p. 4.

23 Minerals Council of Australia Gold Forum, *Supplementary Submission 57A*, p. 4.

24 Magnetite Network presentation to the Senate Select Committee on the Scrutiny of New Taxes, 29 April 2011.

> We expect that our emissions in Australia will be approximately 10 times the emissions of a similar sized haematite operation. However, it is important that these Australian emissions be put in the context of the global steel production value chain, which I mentioned earlier. Across that global value chain, magnetite has substantially lower emissions than haematite. The higher emissions in Australia are more than offset by savings from using magnetite in steel production overseas.[25]

4.30 The introduction of a carbon tax in the absence of an international agreement and appropriate industry assistance could lead to a perverse outcome:

> A carbon pricing scheme which taxes emissions in Australia without any capacity for recognising overseas savings would see our industry—which will produce lower global emissions and more Australian jobs—taxed more than our competitors. This would be a perverse outcome from both an economic and environmental perspective.[26]

Industry reaction to the carbon tax

4.31 The Minerals Council of Australia made a swift and decisive response to the impact of the carbon tax on its industry, specifically one of Australia's most important:

> It will impose the highest carbon price in the world, compromising the competitiveness of Australia's export and import competing sectors without environmental benefits.[27]

4.32 The impact of the carbon tax on the bottom line of the minerals industry will be substantial:

> Under the carbon tax package, the minerals industry will face costs of $25 billion between 2012 and 2020.[28]

4.33 According to the Minerals Council of Australia, the government's scheme will hit Australia in a manner that is not comparable with other countries:

> The Government and Greens are imposing costs that none of our international competitors face, and cannot be justified in transitioning the Australian industry to a low carbon future.[29]

4.34 The impact could see carbon leakage affecting one of Australia's key industries:

> It will simply export investment, jobs, global market share and emissions offshore.[30]

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25 Mr Simon Corrigan, Member, Magnetite Network, *Committee Hansard*, 29 April 2011, p. 56.

26 Mr Simon Corrigan, Member, Magnetite Network, *Committee Hansard*, 29 April 2011, p. 57.

27 Media release, Minerals Council of Australia, *Carbon tax package*, 10 July 2011.

28 Media release, Minerals Council of Australia, *Carbon tax package*, 10 July 2011.

29 Media release, Minerals Council of Australia, *Carbon tax package*, 10 July 2011.

4.35 Under the carbon tax, the minerals industry is not receiving the assistance available to other sectors:

> Ninety per cent of Australia's minerals exports receive no safeguarding under this scheme. They will pay the full carbon price ahead of their international competitors.[31]

4.36 One of Australia's leading miners had this to say about the government's carbon tax:

> We have to keep earning our position. We have to keep our costs competitive. Things like the mineral resources tax and the carbon tax really hurt that situation.[32]

Queensland Nickel

4.37 Queensland Nickel raised concerns that the implementation of the proposed carbon tax as it now stands will place them at a significant trade disadvantage to their overseas competitors.[33] Queensland Nickel is a 100 per cent value-add manufacturing/processing plant with a turnover of $1.1 billion per year.[34] Queensland Nickel is one of the top 500 emitters – it is number 48 on the government's list.[35] Its operations, located in Townsville, provide the largest amount of private employment in North Queensland as well as significant regional benefits through payments to government, Queensland Rail, Townsville port operation and a number of local businesses and community sponsorships:[36]

> An independent assessment of direct industrial and consumption effects, commissioned by the Townsville Enterprise group and conducted in January 2009, estimated the impact of closure of Queensland Nickel and the loss of then 750 direct jobs would result in approximately 2,396 jobs lost within the Townsville community. Since the purchase of the plant by Mr Palmer we have increased our workforce from 550 when he took over to 900 direct employees now and a further 200 contractors, resulting in a direct positive impact and no doubt a bigger financial impact if we were to change at the moment.[37]

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30 Media release, Minerals Council of Australia, *Carbon tax package*, 10 July 2011.

31 Media release, Minerals Council of Australia, *Carbon tax package*, 10 July 2011.

32 Ms Gina Rinehart, Executive Chairman of Hancock Prospecting, stand alone reported comments in Perry Williams, Andrew Cleary and David Crowe, 'Carbon tax triggers price rises' *Australian Financial Review*, 12 July 2011, p. 12.

33 Mr Trefor Flood, General Manager, Queensland Nickel Pty Ltd, *Committee Hansard*, 5 August 2011, p. 35.

34 Mr Trefor Flood, Queensland Nickel Pty Ltd, *Committee Hansard*, 5 August 2011, p. 35.

35 Mr Trefor Flood, Queensland Nickel Pty Ltd, *Committee Hansard*, 5 August 2011, p. 37.

36 Mr Trefor Flood, Queensland Nickel Pty Ltd, *Committee Hansard*, 5 August 2011, p. 35.

37 Mr Trefor Flood, Queensland Nickel Pty Ltd, *Committee Hansard*, 5 August 2011, p. 35.

4.38 Queensland Nickel's concern is that the clean energy bills, as they stand, will force them into a loss situation with serious impacts on their operations and the region while at the same time providing an advantage to their high emitting overseas competitors:

> The policy intent is to direct assistance to Australian businesses and Queensland Nickel is the only Australian owned nickel producer. The other two are multinational companies. A single definition for nickel would grossly under compensate Queensland nickel and deliver a windfall gain to at least one of the multinationals because they would average all the emissions across them, divide them by 3 and lift one out of an area where they are not compensated.
>
> ...
>
> Overall Queensland Nickel has significant concerns about the clean energy future bill. The government is embarking on a massive development program and obviously manufacturing will pay for it. Regional areas, due to increased distribution costs, will be hardest hit, and we are in a regional area. Queensland Nickel's significant contribution to regional development, investment and employment is put at risk by the proposed bill, increasing the impact in the Townsville region.
>
> ...
>
> In short, because there is no current reduction opportunity that would enable Queensland Nickel to utilise, say, the three-for-one offer that is currently out there in the proposed clean technology program, and in the absence of a fair and equitable definition for nickel, the impact of the carbon price on the business will be serious in the short term and could be catastrophic in the long term.[38]

4.39 The witness explained that the fact that the carbon tax would result in an unlevel playing field would lead to these potentially negative outcomes.

4.40 At the time of writing this report the price of nickel was falling rapidly, with expectations that it will fall further.[39]

Overall impact on Australia's competitors: a free kick to competitors

4.41 According to the Minerals Council of Australia, '[t]he principal beneficiaries of the carbon pricing scheme will be Australia's competitors in global commodities markets'.[40] The reason that the Minerals council was able to reach this position is that,

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38 Mr Trefor Flood, Queensland Nickel Pty Ltd, *Committee Hansard*, 5 August 2011, p. 36.

39 Source: http://www.bloomberg.com/news/2011-09-23/copper-drops-to-lowest-in-a-year-as-nickel-tin-plunge-on-recession-threat.html & http://www.abc.net.au/rural/news/content/201109/s3326709.htm (accessed 3 October 2011).

40 Minerals Council of Australia Gold Forum, *Submission*, August 2011, p.18.

'[m]ost of Australia's competitors across major commodities are developing nations that have no plans to introduce a comparable carbon price.'[41]

4.42 The table highlights the main competitor countries to Australia across a range of commodities None of the countries in this table impose a carbon tax on their mineral sectors or are likely to do so in the foreseeable future:

Table 4.2: Australia main commodity competitors, none with a carbon tax[42]

Key commodities				
Iron ore	Brazil	India	South Africa	Canada
Thermal coal	Indonesia	Russia	South Africa	Colombia
Met. coal	USA	Canada	Russia	Poland
Copper	Chile	Peru	Indonesia	Canada
Gold	China	USA	Russia	South Africa
Aluminium	China	Russia	Canada	USA
Nickel	Russia	Indonesia	Canada	Philippines
Zinc	China	Peru	USA	India
Lead	China	USA	Peru	Mexico
Manganese	China	South Africa	Kazakhstan	India
Silver	Peru	Mexico	China	Bolivia
Tin	China	Indonesia	Peru	Bolivia
Uranium	Kazakhstan	Canada	Namibia	Russia

Source: ABARES, *Australian Commodity Statistics* 2010.
*Data for Iron ore, coal and copper concentrate are based on 2009 export statistics.
Data for aluminium, nickel, zinc, lead, manganese, silver, tin and uranium is based on 2009 production statistics.
Nickel, zinc, lead, silver and tin are mine production statistics.
Data for gold is based on production and drawn from *GFMS Gold Survey 2011*.

Liquefied Natural Gas

4.43 The Australian Petroleum Production and Exploration Association (APPEA) has expressed concern about the impact of a carbon tax on their members. The domestic petroleum production and exploration industry is worth around $26 billion.[43] The industry employs around 15 000 people directly.[44]

4.44 As APPEA has stated:

> A point overlooked in recent discussions on this issue is the fact that Australia's LNG projects face fierce global competition. Australia's major LNG competitors include: Qatar, Indonesia, Malaysia, Trinidad and Tobago, Oman, the United Arab Emirates, Egypt, Equatorial Guinea, Nigeria, Algeria and Brunei. In the future, they will also include PNG and Russia, and could even include the US on the back of their enormous shale gas development in recent years. This is, I am sure you would agree, an

41 Minerals Council of Australia Gold Forum, *Submission*, August 2011, p. 18.

42 Minerals Council of Australia Gold Forum, *Submission*, August 2011, p. 18.

43 Ms Belinda Robinson, Chief Executive Officer, Australian Petroleum and Production Exploration Association, *Committee Hansard*, 9 June 2011, p. 17.

44 Ms Belinda Robinson, Australian Petroleum and Production Exploration Association, *Committee Hansard*, 9 June 2011, p. 18.

> eclectic list of countries. In addition to exporting LNG, the one thing they have in common is that very few are taking action to put an effective price on carbon; indeed, many are likely to be at the bottom of the list of countries who will be taking action in the foreseeable future.
>
> Let me emphasise this point. All of Australia's current major LNG competitors have not taken on binding emission reduction obligations and do not have policies that place an effective carbon price on their LNG exports.[45]

4.45 The potential for Australian produced and exported LNG to be replaced with that from competitor countries may in fact contribute to increased global greenhouse gas emissions:

> **CHAIR:** ... I understood the research which I have read, which was commissioned by APPEA, to show that for every tonne of emissions from producing LNG in Australia you could save five to nine tonnes of emissions, from memory, in China by displacing coal, and about four tonnes of emissions in Japan.
>
> **Ms Robinson:** That is right. They are the projects that I am referring to. There were actually three.
>
> **CHAIR:** Can you just talk us through that research and modelling?
>
> **Ms Robinson:** There are three different research projects. One looked at emissions on a lifecycle basis of LNG coming from the North West Shelf and going into Japan, one looked at LNG coming from the North West Shelf and going into China and one looked at coal seam gas to LNG going into China, assuming a substitute for coal. They came up with different numbers. The lowest number was that for every tonne of emissions created as a consequence of producing LNG in Australia, around 2½ to nine tonnes are saved when used to generate electricity in those countries. There is a large range there, because that depends on the nature of our projects, and it depends on the nature of the electricity generation and the assumptions that are made around the electricity generators in those countries. Nevertheless, under any scenario, for every tonne of emissions that we produce through the production of LNG here we are making at least twice that amount—up to nine times that amount—in assisting the world to reduce its global emissions. That needs to be understood and framed as part of our policy objectives.[46]

4.46 APPEA's reaction to the government's carbon tax was direct and to the point:

> ... the carbon policy announced today recognises the role of gas within Australia but does little to protect the competitiveness of Australia’s gas

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45 Ms Belinda Robinson, Australian Petroleum and Production Exploration Association, *Committee Hansard*, 9 June 2011, p. 11.

46 Senator Mathias Cormann, Chair, Senate Select Committee on the Scrutiny of New Taxes and Ms Belinda Robinson, Australian Petroleum and Production Exploration Association, *Committee Hansard*, 9 June 2011, p. 13.

> export industry and much to secure a strong future for liquefied natural gas (LNG) producers in Qatar, Malaysia, and Indonesia.[47]

4.47 The potential for APPEA's members to reduce emission should not be forgotten:

> The export gas industry rejects the politically motivated label of 'big polluter' when for every tonne of emissions produced in liquefying natural gas, up to nine and a half tonnes are removed from the atmosphere when substituted for coal in customer countries.[48]

4.48 Mr Grant King, the Managing Director of Origin Energy noted that:

> It is puzzling that one industry that Australia could turn up and genuinely be able to demonstrate an impact on global emissions is LNG and yet that industry is receiving less assistance than others.[49]

4.49 The government's carbon tax appears to have moved little from the CPRS:

> The Government's policy treatment of LNG appears to be unchanged from the outcome announced in November 2009 and:
>
> - Will initially see LNG producers receive up to 66 per cent of their permits, with this allocation decaying to 50 per cent;
> - Will be reviewed in 2014-15, adding further uncertainty to LNG producers contemplating major investment decisions; and,
> - Narrowly defines LNG (it only considers emissions from the LNG plant itself rather than the whole production process) and significantly reduces the degree to which producers can access free permits.[50]

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47 Media Release, Australian Petroleum and Production Exploration Association, 2009 re-run will not reduce emission where most needed, http://www.appea.com.au/images/stories/media/110710_2009%20re-run%20will%20not%20reduce%20emissions%20where%20most%20needed.pdf (accessed 12 July 2011).

48 Media Release, Australian Petroleum and Production Exploration Association, 2009 re-run will not reduce emission where most needed, http://www.appea.com.au/images/stories/media/110710_2009%20re-run%20will%20not%20reduce%20emissions%20where%20most%20needed.pdf (accessed 12 July 2011).

49 Mr Grant King, Managing Director of Origin Energy, stand alone reported comments in the *Australian Financial Review*, 12 July 2011, p. 12.

50 Media Release, Australian Petroleum and Production Exploration Association, 2009 re-run will not reduce emission where most needed, http://www.appea.com.au/images/stories/media/110710_2009%20re-run%20will%20not%20reduce%20emissions%20where%20most%20needed.pdf (accessed 12 July 2011).

Manufacturing

4.50 The government's package made it clear that they intended to shift electricity consumers behaviour at both a domestic and commercial level by raising the cost of electricity.

4.51 It should be noted that there are hundreds of thousands of small and medium businesses across Australia that will not receive assistance under the government's scheme. Many of these businesses are energy intensive and cannot become more efficient. However, at the same time, they will not be in a position to fully pass on their additional costs down the supply chain. These are costs that these businesses will have to absorb.

4.52 The manufacturing sector in Australia is already struggling with current exchange rates and a substantial drop in international competiveness. The introduction of a carbon tax will compound these problems even further through a government initiated change.

4.53 The Minerals Council of Australia in its appearance before the Joint Select Committee on Australia's Clean Energy Future on 27 September 2011 provided a summary of the overall impact on the manufacturing industry as a result of the carbon tax.

> **Mr Pearson: …** I can tell you that the minerals sector opposes the passage of this, the clean energy future legislation. … in all measures, the proposed legislation will put forward the world's biggest carbon tax. The carbon price will be the highest. It will be $23 ahead of, that's 50 per cent higher than the EU price, two and a half times the New Zealand price and nearly twelve times the price that applies in the regional greenhouse gas emissions trading scheme that operates in the north-east of the United States.
>
> The tax take per capita will be the world's highest. The tax take will be many, many times higher than applies in the European Union in the past and in the six years of its operation to date and in the, as we look forward.
>
> The transition period for industry to adjust will be the world's shortest.
>
> In the European Union, there will be an industrial firm will not buy all of its permits until 2027. In Australia, there will be hundreds of industrial firms, including in our own sector which will buy all of its permits from day one.
>
> So 25 years transition for the European industrial firm. No transition for the Australian industrial firm.
>
> The level of assistance to trade exposed industry will be the weakest in the world. 75 per cent of exporting firms of European exports, merchandise exports, will be covered by free permits after they start auctioning off permits in 2013.
>
> About 20 per cent of Australian exports will be exported by firms that will receive assistance.
>
> The safeguards for jobs in the manufacturing sector and mining sector will be far inferior to those in the EU. 14.6 million Europeans work in

manufacturing jobs that will receive free permits after 2013. Nine per cent of manufacturing jobs, their firms will receive assistance under the jobs and competitors under this scheme.

The cost burden on Australian exporting and importing competing industries will be the harshest in the world.

I can think of other average firm, you can call it the joint select committee PTY LTD. In the first three years of this scheme, that firm and think of a firm with an identical emissions operating in Australia and in Europe – the Australian firm will pay for one million tonnes of Co2 per year, that Australian firm will pay $72 million. It's receiving no assistance, as we've said before, very few Australian firms will. So $72 million burden for the Australian firm. The same, the very same industrial firm in the EU, receiving no free permits because of its trade exposure but receiving, will pay AU$14 million.[51]

Aluminium

4.54 By its own admission, Australia's aluminium industry is carbon intensive:

Our alumina refineries, aluminium smelters and rolling mills are emission-intensive and trade-exposed. By their very nature they represent a significant carbon footprint. However, the price we receive for our product is governed by the international aluminium price. Until the vast majority of our international competitors adopt carbon pricing, we will not be able to pass an Australian carbon cost on to our customers; hence, our trade exposure.

It is likely that a carbon price would need to be in place for something like 70 per cent to 80 per cent of global production before it would be built into the international commodity price.[52]

4.55 Australia's aluminium industry is impressive.

Currently Australian facilities are globally competitive. We are the largest producer of bauxite. We are one of the two largest producers of alumina along with China and we are the fifth largest producer of aluminium. Unlike other processing industries in Australia, we have natural advantages, including mineral resources and energy resources, that ensure that we can compete in global markets, we will be able to compete in the future if we get the policy right, and we will see growth in these industries. The aluminium industry is Australia's largest process export earner. We

51 Mr Brendan Pearson, Deputy Chief Executive, Minerals Council of Australia, *Proof Committee Hansard*, Joint Select Committee on Australia's Clean Energy Future Legislation, 27 September 2011, p. 71.

52 Mr Tim McAulifffe, General Manager – Climate Strategy and Federal Government Relations, Alcoa of Australia, *Committee Hansard*, 29 April 2011, p. 18.

> generate more than $11 billion in export earnings. In international markets our major competitors include China and the Middle East.[53]

4.56 The aluminium industry is not only important in the context of its size and export earnings, but because of the employment that it generates across the country:

> It employs about 17,000 people directly and you could use some standard sort of economic multipliers to take that out to probably 60,000 or so people directly and indirectly. They are predominantly in regional areas—Gladstone, the Hunter Valley, Geelong, Portland in Victoria, Tasmania and southwest Western Australia.[54]

4.57 The graph below is a representation of the potential impact that a carbon tax could have on an Australia's aluminium industry. While Australia is in the second quartile at the moment for production capacity, the potential for that competitive position to be damaged is real:

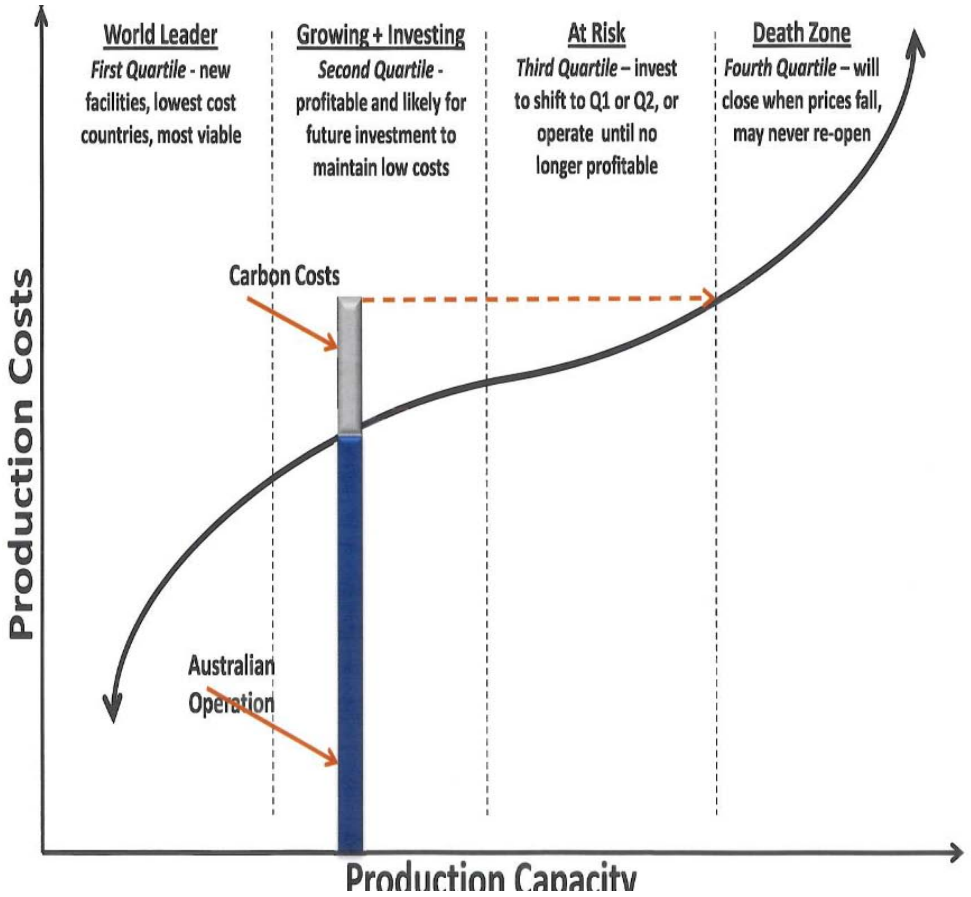
> **CHAIR:** Can you talk to us about the current economic circumstances in which your industry operates and in which a carbon tax would be introduced if it does indeed come into effect on 1 July 2012?
>
> **Mr Prosser:** Eighty per cent of our product is exported. Like a lot of industries exposed to those international markets, the Australian dollar is making it a harder environment at the moment than it would at other times. Despite that, these facilities can be confident that they could compete in global markets. As to the magnitude of what is being proposed, it would be sufficient in 2012 to shift these facilities up the global cost curve, but looking out over investment time frames it would make it very difficult for those owners to invest in those facilities. Without sustaining investment it is a matter of time before there would be some closures in the industry.[55]

53 Mr Miles Prosser, Executive Director, Australian Aluminium Council, *Committee Hansard*, 17 May 2011, p. 18.

54 Mr Miles Prosser, Australian Aluminium Council, *Committee Hansard*, 17 May 2011, p. 18.

55 Mr Miles Prosser, Australian Aluminium Council, *Committee Hansard*, 17 May 2011, pp 20–21.

Graphic 4.1: Aluminium industry and production costs[56]



4.58 Given the predicament facing Australian industry, the potential movement of investment offshore would most likely be into the Asian region:

> **Mr McAuliffe:** I am happy to provide some figures on this. It is available through analysts and so on, but I will do that. It is part of other stuff that would not be appropriate to share. If you look at aluminium production, in 2000 China had about 12 per cent of global production; in 2010 it has in excess of 40 per cent. To coin a phrase, there is a gorilla in the marketplace. China's growth has been stunning. Of course, that will affect the sorts of dynamics that we were just talking about regarding metal prices.
>
> **CHAIR:** How does the emissions intensity of aluminium production in Australia compare with the emissions intensity of equivalent aluminium production in China?
>
> **Mr McAuliffe:** It depends on aspects of the facilities: their age, their technology and also their power supply. I will answer in two parts. If you

56 Projections of the impact of a carbon price (4 graphs), tabled by Mr Miles Prosser, Executive Director of the Australian Aluminium Council, at a public hearing in Canberra on 17 May 2011

> look at our Western Australian alumina refineries they typically have a carbon footprint of less than half of many of our Chinese competitors.
>
> **CHAIR:** Less than half?
>
> **Mr McAuliffe:** Yes. So here in Western Australia we produce alumina at about 0.6 tonnes of CO^2 per tonne of alumina. Some of the other facilities—not just Chinese—that are growing quickly in developing parts of the world can produce 1.4 tonnes.
>
> **CHAIR:** So which ones are our biggest competitors? You mentioned China, which has been growing fast, at 40 per cent? Who else?
>
> **Mr McAuliffe:** China is a key competitor for growth in particular, but as they get bigger and bigger in the marketplace they become just a fundamentally bigger competitor. Other areas include the Middle East, which is growing significantly, but not so much in Europe. America has lost a fair bit of market share, particularly in aluminium.[57]

4.59 The type of possible industry assistance that might be available is uncertain:

> At this stage we are being asked to consider the CPRS EITE arrangements as being what is being talked about. We have not seen that as being government policy and we have not seen that as a commitment to it. Can I stress that the costs shown in that third graph incorporate that CPRS EITE measure. Even under the CPRS ET measures we will face a substantially higher carbon cost in Australia than the Chinese producers.[58]

4.60 Following the release of the government's carbon tax on 10 July 2011, the Australian Aluminium Council made a number of scathing observations about the government's initiative to tackle climate change. According to the Aluminium Council:

> This imposes a carbon cost on Australian aluminium producers of at least $60 per tonne of aluminium compared to only $8 per tonne in China. Australia's carbon cost will rise every year of the scheme and over the next decade to more than $200 per tonne of aluminium while in China it is not expected to get any higher than $60.[59]

4.61 The permits provided to the aluminium industry under the carbon tax are lower than under the former CPRS. The allocation of permits may be lower to the industry in future years.[60] The cost to the industry will be substantial:

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57 Mr Tim McAulifffe, General Manager – Climate Strategy and Federal Government Relations, Alcoa of Australia, *Committee Hansard*, 29 April 2011, p. 22.

58 Mr Miles Prosser, Australian Aluminium Council, *Committee Hansard*, 17 May 2011, p. 24.

59 Media release, Aluminium Council of Australia, 'Government locks in cost blow-out for Australian Aluminium producers', 10 July 2011.

60 Media release, Aluminium Council of Australia, 'Government locks in cost blow-out for Australian Aluminium producers', 10 July 2011.

> ... the total carbon cost to be paid by the aluminium industry will rise from approximately $120 million in the first year to approximately $400 million in 2020.[61]

4.62 The potential for investment to be hard hit without any environmental benefits is one of the more disturbing features of the government's carbon tax:

> That will have a huge impact on investment. Not only will Australia be discounted as a site for new facilities but existing operations will find it hard to attract the capital needed to maintain viability. If we lose that investment, it costs Australia, but global greenhouse emissions don't reduce they are just shifted elsewhere.[62]

4.63 The harshest impact of the government's carbon tax will fall on regional Australia:

> This is putting jobs in Gladstone, Geelong, Hunter Valley, Portland, Tasmania and Western Australia on the line when no other country is exposing their industry to the same risks.[63]

The steel industry

4.64 Boulder Steel made a submission to the inquiry. It is an Australian publicly listed company.[64] It plans to build a steel plant at Gladstone in Queensland using blast furnace technology capable of producing 5 million tonnes per annum of steel slabs and billets for export.[65] The project will create up to 2 000 jobs during construction and 1 800 long-term jobs once the project is in operation.[66]

4.65 Once it is in operation, the steel plant will emit around 9.51 million tonnes of greenhouse gas each year.[67] Boulder Steel states that this compares favourably with emission rates from the Whyalla and Port Kembla integrated steel plants.[68]

4.66 The steel produced at the plant is for export to the Asia region.[69] Importantly:

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61 Media release, Aluminium Council of Australia, 'Government locks in cost low-out for Australian Aluminium producers', 10 July 2011.

62 Media release, Aluminium Council of Australia, 'Government locks in cost blow-out for Australian Aluminium producers', 10 July 2011.

63 Media release, Aluminium Council of Australia, 'Government locks in cost blow-out for Australian Aluminium producers', 10 July 2011.

64 Boulder Steel, *Submission 70*, p. 2.

65 Boulder Steel, *Submission 70*, p. 2.

66 Boulder Steel, *Submission 70*, p. 2.

67 Boulder Steel, *Submission 70*, p. 2.

68 Boulder Steel, *Submission 70*, p. 2.

69 Boulder Steel, *Submission 70*, p. 2.

> The major competitors of Boulder Steel's proposed steel plant are located in jurisdictions that do not impose a carbon tax or similar penalty on carbon dioxide emissions.[70]
>
> ...
>
> There is unmet demand for Boulder Steel's future steel production in the Asian region and steel plants in other parts of the world would meet that demand, regardless of their environmental credentials.[71]

4.67 In these circumstances, Boulder Steel is concerned with the result as '*[c]arbon leakage is not consistent with the ultimate goal to reduce carbon dioxide emissions on a global scale*'.[72] (Emphasis in original)

4.68 While the government's Clean Energy Package includes the carbon tax, it also has support for emissions-intensive trade-exposed industries. According to the company, however:

> Boulder Steel disagrees with any arbitrary annual decline of free-issue permits unless linked to similar carbon dioxide reduction programs in competing jurisdictions. This decline is particularly inappropriate for a steel plant built with best practice energy and greenhouse gas abatement practices.
>
> ...
>
> As there is currently no firm commitment in competitor economies with regard to the reduction of carbon dioxide emissions, it cannot be readily assumed that investors and companies factor in future action in these countries.[73]

Automotive manufacturing

4.69 The Federal Chamber of Automotive Industries and the Federation of Automotive Products Manufacturers appeared before the committee and expressed some concern about the potential impact of the carbon tax on their members.

4.70 According to these industry associations:

> The Australian automotive industry is a highly trade-exposed industry. Currently, more than 80 per cent of all vehicles sold in the Australian market are imported and up to 50 per cent of local vehicle production goes to exports. In addition, $1.1 billion in components are also sold for export annually.[74]

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70 Boulder Steel, *Submission 70*, p. 2.

71 Boulder Steel, *Submission 70*, p. 2.

72 Boulder Steel, *Submission 70*, p. 2.

73 Boulder Steel, *Submission 70*, p. 2.

74 Mr Andrew McKellar, Chief Executive, Federal Chamber of Automotive Industries, *Committee Hansard*, 17 May 2011, p. 58.

4.71 Some 50 000 Australians are employed in the automotive and vehicle manufacturing industries.[75]

4.72 The Australian car industry has 'a significant turnover of one million vehicle sales per year'.[76]

4.73 The two industry associations have undertaken research into the likely impact of a carbon tax on their respective industries. According to the economic research they commissioned:

> From that assessment we have calculated that the projected additional costs to the motor vehicle industry would be estimated to be in the order of $56 million to $84 million a year based on a carbon price of $20 to $30 per tonne. With assistance arrangements based on the emissions-intensive, trade-exposed criteria developed for the CPRS, it is estimated that the cost burden to industry would still be in the order of between $30 million and $46 million a year.[77]

4.74 The Australian automotive industry operates in an international market:

> The Australian automotive industry is a highly trade-exposed industry. Currently, more than 80 per cent of all vehicles sold in the Australian market are imported and up to 50 per cent of local vehicle production goes to exports. In addition, $1.1 billion in components are also sold for export annually.[78]

4.75 In these circumstances the potential impact on the industry could be substantial:

> Given the trade-exposed nature of the automotive industry there is little or no scope for vehicle or component producers to pass these costs on through the supply chain. Either way, the future viability of the Australian automotive industry is undermined.[79]

4.76 There are other matters that the domestic car manufacturing industry would have to grapple with:

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75 Mr Andrew McKellar, Federal Chamber of Automotive Industries, and Mr Richard Reilly, Chief Executive Officer, Federation of Automotive Products Manufacturers, *Committee Hansard*, 17 May 2011, p. 59.

76 Mr Tim Reardon, Director, Federal Chamber of Automotive Industries, *Committee Hansard*, 1 September 2011, p. 60.

77 Mr Andrew McKellar, Federal Chamber of Automotive Industries, *Committee Hansard*, 17 May 2011, p. 58.

78 Mr Andrew McKellar, Federal Chamber of Automotive Industries, *Committee Hansard*, 17 May 2011, p. 58.

79 Mr Richard Reilly, Federation of Automotive Products Manufacturers, *Committee Hansard*, 17 May 2011, p. 59.

CHAIR: If I unpack that and put it in straight language, essentially, if you are a local manufacturer servicing the domestic market, you are going to pay the tax. If you are an importer or an exporter, you do not pay the tax.

Mr Reardon: A low-volume importer, yes; that is correct. So that would be an inequity.

CHAIR: Of the locally manufactured cars, what proportion are sold to the domestic market and what proportion are exported?

Mr Reardon: It varies from year to year. Up to 50 per cent currently—I think it is about 30 per cent of local production—is exported.

CHAIR: But it is essentially distorting the market, so imports will become more competitive as a result of the carbon package and exports will become more competitive. The thing that becomes less competitive is local manufacturing for local supply.

Mr Reardon: Certainly under the carbon tax as a whole that is true. It places an additional cost burden on locally manufactured vehicles and it does not place the equivalent cost burden on imported motor vehicles. Specifically—

CHAIR: Or on exported motor vehicles.

Mr Reardon: Specifically in relation to this particular issue, yes. Imported vehicles under a CPRS model would be coming in with, on average, a lower tax rate than those manufactured locally. A CPRS model would not be our ideal. It would certainly be comparable with the carbon levy in terms of its impact.

CHAIR: But presumably, whether it is domestically manufactured for local supply or for export or whether it is manufactured overseas for import into Australia, the emissions intensity would be pretty similar?

Mr Reardon: Ostensibly identical.

CHAIR: So it seems odd for them to have different treatment, doesn't it?

Mr Reardon: Yes.[80]

Cement industry

4.77 The Australian cement industry:

> ... employs over 1,800 people and produces over ten million tonnes of cementitious materials, with an annual turnover in excess of $2.14 billion.[81]

4.78 The Cement Industry Foundation (CIF) represents Australia's three major cement producers – Adelaide Brighton, Boral and Cement Australia. There are

80 Mr Tim Reardon, Federal Chamber of Automotive Industries, *Committee Hansard*, 1 September 2011, pp 62–63.

81 Cement Industry Federation, *Submission 33*, p. 2.

currently nine cement manufacturing plants in Australia with an annual turnover of $2 billion. In 2010, Australia produced 8.5 million tonnes of cement.[82]

4.79 Cement is important to Australia's modern economy, CIF states, because:

> ... [it] is a vital commodity for the Australian economy, not only as a critical input for Australia's building and construction industry, but increasingly in resource recovery and reuse innovation – in both cases providing significant economic and social benefits. Competitively priced supplies of cement are essential to Australia's continuing economic growth.[83]

4.80 Australian cement competes with alternate sources of the product being supplied in the Asia region, specifically south-east Asia and Japan.[84] This proximity presents challenges given the failure to secure a global agreement on reducing global greenhouse gas emissions:

> An important characteristic for the Australian cement industry is that our competitors, almost without exception, are countries in the developing world where there is an unlikely prospect of green house gas (GHG) emissions penalties being imposed.[85]

4.81 The consequences for not supporting the Australian cement industry are that:

> As the Australian cement industry has emission intensity second only to Japan in the Asia-Pacific region, and with the emissions from shipping included, delivered cement from Japan would come at a higher CO2 cost.[86]

4.82 The impact on the cement industry would be detrimental while causing emissions to increase:

> **CHAIR:** So to the extent that market share is taken away from producers in Australia and taken by producers in China and other places around the world where there is no price on carbon, the outcome will actually be an increase in global greenhouse gas emissions rather than a reduction?
>
> **Mr Leon:** Yes, that is absolutely correct.
>
> **CHAIR:** So we would be putting the cement industry under additional pressure, putting jobs at risk?
>
> **Mr Leon:** Absolutely.[87]

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82 Mr Chris Leon, Chair, Cement Industry Federation, *Committee Hansard*, 8 June 2010, p. 9.

83 Cement Industry Federation, *Submission 33*, p. 2.

84 The Grattan Institute, *Submission 26, Attachment 1*, p. 19.

85 Cement Industry Federation, *Submission 33*, p. 5.

86 Cement Industry Federation, *Submission 33*, p. 5.

87 Senator Mathias Cormann, Chair, Senate Select Committee on the Scrutiny of New Taxes and Mr Chris Leon, Cement Industry Federation, *Committee Hansard*, 8 June 2011, p. 9.

Australia's farming industry

4.83 The Australian agriculture sector is important to the nation and provides opportunities and employment for many in regional and rural Australia. According to the National Farmers Federation (NFF) 'there are 120,941 farms solely dedicated to agricultural production'.[88]

4.84 Australian farming makes a significant contribution to the national economy:

> Australian farms and their closely related sectors generate $155 billion-a-year in production - underpinning 12% of GDP.
>
> Australian agriculture has important linkages with other sectors of the economy and, therefore, contributes to these flow-on industries. Agriculture supports the jobs of 1.6 million Australians, in farming and related industries, across our cities and regions – accounting for 17.2% of the national workforce.[89]

4.85 Under current arrangements:

> The National Farmers Federation reinforces its opposition to any carbon tax proposal that places the Australian farm sector's competitive position at risk. While pleased that agriculture has been excluded from the direct impacts of the carbon tax, the NFF maintains its concern about the proposal's potential detrimental impact on the Australian economy and farmers' ability to compete on international markets.[90]

4.86 While farming will not be directly covered by the proposed carbon tax / emission trading scheme, the agriculture sector will still be affected by the new taxation arrangements:

> It is sometimes misconstrued that because agriculture's direct emissions have been excluded from the government's carbon pricing plans the sector will be unaffected. This could not be further from the truth. Up to 45 per cent of a farmer's inputs are either energy or energy dependent—all costs that will increase under the government's plans.[91]

4.87 In particular, specific sectors within the agricultural industry are likely to be affected according to the NFF:

> ... we are price takers in the market. Price increases through the supply chain inevitably come back down the supply chain on to the farmer instead

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88 National Farmers Federation website: http://www.nff.org.au/farm-facts.html (accessed 31 May 2011).

89 National Farmers Federation website: http://www.nff.org.au/farm-facts.html (accessed 31 May 2011).

90 Mr Matthew Linnegar, Chief Executive Officer, National Farmers Federation, *Committee Hansard*, 17 May 2011, p. 1.

91 Mr Matthew Linnegar, National Farmers Federation, *Committee Hansard*, 17 May 2011, p. 1.

> of going the other way on to the consumer, and from that perspective we are quite concerned, particularly for industries such as the red meat industry with meat processing and dairy. We export a lot of dried milk powder. That drying process is quite energy intensive. We also feel quite exposed in other things like sugar milling, grain milling and so on.[92]

4.88 According to the NFF, the agriculture sector is not only trade exposed but it is also a global market characterised by intervention that already undermines the clarity of price signals to producers and consumers:

> Not only do farmers export approximately two-thirds of everything they produce; they also do so in the most distorted sector of all international merchandise trade.[93]

4.89 Following the release of the carbon tax on 10 July 2011, the NFF moved to affirm its opposition to the proposed tax:

> ... the NFF and our members remain opposed to the carbon tax.[94]

4.90 The impact on the farming sector will be felt, even though it is exempt from the carbon tax:

> ... independent research by the Australian Farm Institute over recent months has highlighted that additional costs from electricity and other indirect energy related sources will remain embedded in the carbon tax for all Australian farmers.
>
> ...
>
> This research shows that even with fuel excluded, the average Australian farmer will still incur an additional $1,500 a year in costs under a carbon price of $23 per tonne, eroding their net farm income by 2.4 percent.[95]

4.91 These additional costs will hurt farmers operating in the globalised world of farming:

> These costs will erode the competitiveness of the agricultural industry in the domestic and international markets on which we depend.[96]

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92 Mr Charles McElhone, Chief Executive Officer, National Farmers Federation, *Committee Hansard*, 17 May 2011, p. 2.

93 Mr Matthew Linnegar, National Farmers Federation, *Committee Hansard*, 17 May 2011, p. 1.

94 Media Release, National Farmers Federation, *Carbon concessions: but still a cost for Australian farmers*, http://www.nff.org.au/read/2135/carbon-concessions-still-cost-for-australian.html (accessed 12 July 2011).

95 Media Release, National Farmers Federation, *Carbon concessions: but still a cost for Australian farmers*, http://www.nff.org.au/read/2135/carbon-concessions-still-cost-for-australian.html (accessed 12 July 2011).

96 Media Release, National Farmers Federation, *Carbon concessions: but still a cost for Australian farmers*, http://www.nff.org.au/read/2135/carbon-concessions-still-cost-for-australian.html (accessed 12 July 2011).

Sub-sectors in the agriculture sector: dairy

4.92 The Australian Dairy Industry Council (ADIC) made representations as a trade exposed part of the economy.

4.93 From the perspective of the ADIC:

> Dairy farming and dairy processing are two segments of the one integrated – trade-exposed-value chain.
>
> ...
>
> As a result, the majority of costs imposed on to the dairy industry processing sector are expected to be passed back onto farming families and regional communities. The estimated impact of this cost pass back to farm families could be between $5,000 and $10,000 per year (subject to the prices set for carbon).[97]

4.94 The ADIC stated in its second Submission, lodged with the committee after details of the carbon tax had been released, that the analysis in its earlier submission was accurate.[98]

4.95 The Australian dairy industry's major trade competitors are New Zealand, the European Union, the United States and Latin America.[99] The position overseas is that:

> ... the EU has explicitly acknowledged the risk of 'carbon leakage' for dried milk products by providing free permits for EU processors in this sector within its ETS. This provision represents a real risk for Australian export competitiveness if our firms are subject to different carbon tax arrangements.[100]

4.96 The position of the ADIC is clear:

> The current *Clean Energy Future Plan* incorporates anomalies that will adversely affect dairy's profitability and competitiveness, not just internationally but also relative to some other agricultural sectors. We believe change to mitigate these anomalies is essential to ensure that the passage of the *Clean Energy Bill* and associated legislation does not encourage unnecessarily shifts in dairy production to other parts of the world (carbon leakage) or reductions in dairy production within Australia.[101]

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97 Australian Dairy Industry Council Inc, *Submissions 49* and *94*, p. 2.

98 Australian Dairy Industry Council Inc, *Submission 94*, p. 2.

99 Australian Dairy Industry Council Inc, *Submission 49*, p. 2.

100 Australian Dairy Industry Council Inc, *Submission 49*, p. 3.

101 Australian Dairy Industry Council Inc, *Submission 94*, p. 5.

The need for a global agreement – the need for a level playing filed

4.97 Submissions and evidence provided by witnesses to the committee referred to the absence of a global agreement to reduce carbon emissions as exposing important sectors of the Australian economy to a loss of competitiveness, investment and jobs. The clear message was that carbon leakage was a real threat.

4.98 The new Secretary to the Treasury agreed when giving evidence before the committee:

> As was made clear in the context of the Carbon Pollution Reduction Scheme, it does not serve anyone's interests if you make decisions that essentially export emissions offshore. So in designing the previous scheme, and this has been made clear in the Multi-Party Climate Change Committee's set of principles, government will need to be conscious of impacts on both competitiveness and environmental effectiveness.[102]

4.99 The committee considers that the government has failed to meet that test set by the Treasury Secretary shortly after taking on his new role earlier this year. The carbon tax, as put forward by the government, will reduce Australia's international trade competitiveness, making overseas emitters not facing a carbon tax more competitive, helping them take market share away from even the most environmentally efficient equivalent businesses in Australia, and, shifting emissions overseas, is not effective action on climate change but an irresponsible act of economic self-harm.

Committee comment

4.100 Australia's past and future prosperity relies on the important role of emissions intensive trade exposed industries, yet it is these industries which stand to be severely damaged by the introduction of a carbon tax.

4.101 The nation's prosperity is based on a resource endowment that is highly carbon-intensive. Moreover, and importantly, much of that carbon-intensity is not amenable to simple or obvious technological solutions – for instance, there is little that can be done to reduce fugitive emissions in mining. In these circumstances acting without global agreement poses significant risks to the economy.

4.102 The government’s plan imposes an impost on the competitiveness of all Australian businesses, without the same impost being imposed on our competitors. This will shift economic activity from Australia to countries without a carbon tax or an emissions trading scheme. The evidence provided to and gathered by this committee confirms this. As the Productivity Commission recently reported 'no country currently imposes an economy-wide tax on greenhouse gas emissions or has in place an economy-wide ETS'.

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102 Dr Martin Parkinson, Secretary, Department of the Treasury, *Committee Hansard*, 24 March 2011, p. 3.

4.103 To reduce emissions in Australia in a way that just shifts them overseas into areas where there will be no carbon tax and where emissions will be higher for the same economic output is pointless.

4.104 The carbon tax will have a substantial impact on Australia, given that our economy is based around access to relatively cheap fossil fuels. Many Australian jobs are based in industries that are carbon-intensive because our inexpensive access to hydrocarbons is an advantage Australia has in international markets.

4.105 Some of the hardest hit industries and towns from the carbon tax will be the electricity and mining industry in the La Trobe Valley, the automotive industry in Geelong and Adelaide and the steel industry in Whyalla, the Illawarra and the Hunter Valley.

4.106 In addition, these communities are often at the frontline of the so-called 'two-speed' or ' patchwork' economy. After becoming more internationally competitive and resourceful from the opening up of the Australian economy, they are seeing hard won markets disappear due to a higher dollar and higher input costs, partly exacerbated by the mining boom. Imposing a carbon tax on top of these pressures threatens to kindle an already smouldering situation.

4.107 Accordingly, the carbon tax has the potential to undermine the hard-fought acceptance of the economic reforms that have broadly benefited the Australian economy over the past 30 years. Such a reaction can already be seen in the calls for renewed industry assistance to the steel and manufacturing industries. Large scale renewal of the industry assistance would be a retrograde step.

4.108 Nonetheless, imposing a carbon tax now gives renewed potency to those who would seek to reimpose such protections.

4.109 The committee considers that the evidence is clear – there is no environmental gain to be experienced through the introduction of a carbon tax in the absence of global agreement on climate change. Not only is there no environmental gain but the imposition of such a tax in the absence of global agreement and a level playing field is economic recklessness – it will damage Australia's international competitiveness and drive industry and investment offshore.