



Securing SMEs in Australia's Low Carbon Future:

The Cost of the Carbon Pollution Reduction Scheme for Australia's Small and Medium Sized Businesses

Report to

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Executive Summary

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This study examines the effects on small and medium sized enterprises of the Australian Government's proposals to introduce an emissions trading scheme, known as the Carbon Pollution Reduction Scheme (CPRS).

The proposed design of the CPRS has evolved substantially from the release of the Green Paper in July 2008 to May 2009, when the Government announced the latest revisions, including a one-year delay to the commencement of the scheme. The evolution of the CPRS reflects the growing recognition of the scheme's unintended consequences, caused by the introduction of carbon pricing in Australia while no such pricing occurs in its competitors. The Government's willingness to make adjustments to the transitional assistance package has been driven by the growing understanding of the economic effects of the CPRS as the debate on Australia's climate policy framework progressed.

However, the focus of the assistance measures has remained relatively narrow, dealing with the effects of the scheme on the emission-intensive trade-exposed industries (EITE), as well as on consumers, and on the coal-fired electricity generators. Limited attention has been given to how the CPRS will affect other trade-exposed sectors within our economy, or what measures need to be taken to deal with the loss of competitiveness in those sectors.

This report seeks to fill that gap. We measure the likely effects of the proposed scheme on trade-exposed small and medium sized businesses. Our approach is based on developing a thorough understanding of the cost structures of small and medium manufacturing businesses. This study surveys a sample of firms to create representative financial models for three key sectors of Australia's economy:

- Food processing
- Plastics and chemicals manufacturing, and
- Machinery and equipment manufacturing.

The cost of all non-tradable goods and services with embedded emissions covered by the CPRS will increase once the scheme is imposed. Our modelling enables us to consider exactly how the CPRS effects will feed into the balance sheets of trade-exposed small and medium sized businesses.

Key Results

Our findings show that the CPRS will generate additional costs that would erode firm profitability at marked levels of between 4 to 7 percent on average. In some cases, we found that the impact of additional carbon costs could erode firm profitability entirely. Erosion of firm profitability at these average levels could be significant enough to change investment incentives.

The inclusion of transport fuels in the CPRS is an important part of the overall impact, adding significantly to total costs for businesses. When considering the effects of CPRS on investment and employment, we believe it is essential to see through the short-term effects of the fuel excise credit. If the Government implements a scheme that covers transport fuels, then it is reasonable to expect the full carbon costs to be eventually priced into freight. Failure to do so would be fiscally unsustainable and would not be effective climate change policy. Businesses will recognise the eventual impact of extending the CPRS to transport fuels, and will respond accordingly.

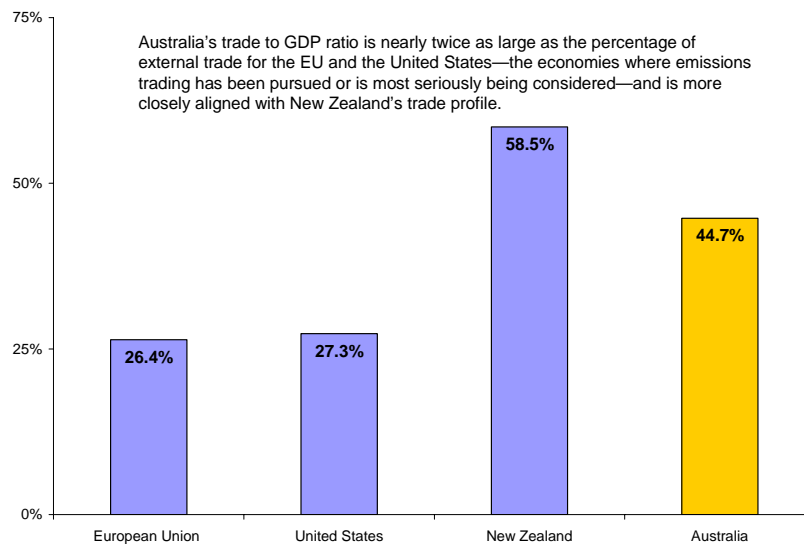
Our analysis particularly highlights the following conclusions:

- Domestic businesses are likely to be disadvantaged relative to international rivals, which have lower exposure to domestic freight costs, and a greater reliance on international freight, which will not be affected by CPRS. The additional relative freight costs paid by domestic producers will contribute to the competitiveness risk of unilateral carbon pricing
- Network effects, particularly in air transport, may cause the total economic cost of pricing transport fuels to be significantly higher. As demand for domestic air transport falls, some routes may become unviable, depriving even those willing to pay of access to the service
- The fuel assistance package distorts the market in the short-run by providing road transport with an advantage over less emissions-intensive modes, such as rail and coastal shipping
- Over time, relatively higher domestic transport and freight costs will stimulate a geographic realignment towards increased urbanisation and reduced rural and regional economic activity
- The differential impact of higher costs on various transport modes with different levels of emissions intensity will change the merit order of freight, adding further to a geographic realignment and a shift in competitiveness
- The anticipated geographic realignment may create second- and third-order effects that increase the economic impact from covering transport fuels in the CPRS. For instance, structural unemployment is likely to rise due to a draining of economic activity from more remote regions.

The economic effects

The key concept which underpins our analysis is that of import price parity: that trade-exposed SMEs face prices set in the international markets, and hence will have no opportunity to pass the costs of CPRS to their customers. It is obvious that SMEs that sell internationally will not be able to increase their prices once the scheme is introduced. However, SMEs that sell tradable goods domestically will be equally constrained by the prices of imported goods. The introduction of CPRS will have no effect on the price of imported goods. The reason why import parity is an important concept is because the level of trade exposure faced by manufacturing SMEs is often not recognised in broader analysis.

Figure 0.1: Trade to GDP Ratios for European Union, United States, New Zealand and Australia



Source: World Trade Organization “2007 Country Trade Profiles”¹ and Castalia.

Australia’s manufacturing sector already faces strong incentives to be as efficient as possible. Hence, it is reasonable to expect that most profitable cost-saving measures have already been implemented. It is likely, therefore, that trade-exposed SMEs would be forced to address the effects of CPRS on their profitability by reducing the number people they employ.

This study assesses the potential employment impact associated with implementing the CPRS in its current form through a costing analysis of a sample of eleven SMEs. Using the Commonwealth Treasury’s modelling of the “Low CPRS”² and the “High CPRS”³ scenarios, we present estimates of the reduction in employment that SMEs in the sectors assessed would be forced to pursue in order to compensate for the impact of the CPRS:

- Food processing SMEs would need to reduce labour costs by 4.4 percent (Low CPRS) to 8.1 percent (High CPRS), on average
- Plastics manufacturing SMEs would need to reduce labour costs by 7.4 percent (Low CPRS) to 12.9 percent (High CPRS), on average
- Chemicals manufacturing SMEs would need to reduce labour costs by 1.8 percent (Low CPRS) to 3.2 percent (High CPRS), on average
- Machinery and equipment manufacturing SMEs would need to reduce labour costs by 1.8 percent (Low CPRS) to 3.0 percent (High CPRS), on average.

¹ World Trade Organization. “Country Trade Profiles 2007” <http://stat.wto.org/CountryProfile/WSDBCountryPFHome.aspx?Language=E> (accessed 19 May 2009)

² The “Low CPRS” scenario models the impact of the additional costs generated if the CPRS achieves the less ambitious target of a 5 percent reduction in greenhouse gas emissions by 2020.

³ The “High CPRS” scenario models the impact of the additional costs generated if the CPRS achieves the more ambitious target of a 15 to 25 percent reduction in greenhouse gas emissions by 2020.

Experience shows that wages are relatively inflexible, and firms tend to adjust by cutting employment. Similarly, experience with past episodes of economic adjustment—such as the response to the oil shocks—shows that re-employment in new sectors (such as the much touted “green industries”) takes a long time to occur.

What to do

Despite efforts by the Government to ease the transition to an economy-wide emissions trading scheme, the existing coverage of the CPRS transitional assistance package does not adequately protect the SME sector from the unintended consequences of the CPRS. Introducing the CPRS in its current form will concentrate the costs of economic adjustment on the SME sector.

This is very risky for Australia. SMEs employ approximately 64 percent of Australia’s private sector labour force and produce nearly 50 percent of Australia’s domestic output. This means that the impact of the CPRS on the SME sector is no less consequential, in aggregate, than the costs the scheme will impose on Emissions-Intensive Trade-Exposed sectors that have already successfully secured CPRS assistance.

Table 0.1: SMEs Will Not Qualify for Most Assistance in the CPRS

CPRS assistance measure	Description of assistance	Do SMEs qualify?
	Businesses that emit above 1,000 tCO ₂ e/\$1m revenue will receive 66% free permits. Businesses that emit above 2,000 tCO ₂ e/\$1m revenue will receive 95% free permits. This includes the Global Recession Buffer.	
Free allocation to EITE business	Assistance rates will decrease at 1.3 percent per year.	No
Free allocation to EITE electricity users	Emissions intensive businesses will receive one free permit per MWh of electricity use.	No
Electricity sector adjustment	Coal-fired generators with emissions above 0.86 tCO ₂ e/MWh will receive a fixed allocation of permits.	No
Climate Change Action Fund information campaign	The information campaign aims to help community organization and businesses comply with and minimize the impact of the CPRS.	No
Climate Change Action Fund investment in energy efficiency and low-emissions technologies	Non-EITE businesses are eligible for capital allowances and competitive grants for investment in energy efficiency and low-emissions technology.	Yes
Climate Change Action Fund structural adjustment	Workers and communities in regions impacted by the CPRS are eligible for assistance to ease the cost of displacement and structural adjustment.	No
Climate Change Action Fund coal sector adjustment	Funds will promote abatement activity and reduce transitional costs in the coal sector.	No

Source: Carbon Pollution Reduction Scheme Bill 2009, Explanatory Memorandum, CPRS White Paper 2009, and Castalia

Australia's higher dependence on trade than most countries, and the greater relative exposure of our most productive industries to international competition, makes the challenge of introducing a viable emissions trading scheme particularly acute. The Government should recognise that the economic effects of the scheme remain poorly understood. The politics of climate change debate have created an unfortunate duality, where governments trying to introduce emissions trading schemes deliberately understate the likely economic impacts to get the scheme past the voters, while the affected interests may often overstate the effects. We believe it would be dangerous for Australia to remain stuck in that mind-set.

It is unhelpful that the desire to minimise the unintended consequences of emissions trading is often characterised as rent seeking. While, of course, firms seeking protection are looking after their own interests, it is in the national and even global interest to avoid leakage.

The results of this study show that there is much work yet to be done on the design of the CPRS to achieve the right balance between the intended environmental benefits, and the unintended economic consequences.



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