

Why a carbon tax is good for the hip pocket

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Introduction

A price on carbon is widely regarded as an essential element of an efficient response to climate change, yet such an approach has been described as a 'great big tax on everything' by opponents. While there is no doubt that putting a price on greenhouse gas emissions will lead to an increase in the price of energy and, to a lesser extent, the price of other products there is also no doubt that if the revenue collected from such a scheme was given back to households, rather than used to compensate polluters, then individuals and families would be financially better off.

This paper is based on the assumption that a carbon tax is a simpler and more efficient mechanism for introducing a carbon price than the proposed Carbon Pollution Reduction Scheme (CPRS). The paper presents evidence that directly contradicts the claim that a carbon tax will have a significant impact on the cost of living and, in turn, place undue pressure on Australian families.

On the contrary, the paper presents clear evidence that the introduction of a simple carbon tax of \$25 per tonne has the potential to raise \$13 billion in new revenue and improve the financial position of an average family by more than \$1,000 per year. The \$13 billion in revenue should not be seen as a cost that is taken out of the economy but as a redistribution of \$13 billion from polluters and towards other groups in society that are deemed to be most deserving of assistance.

That is, given that a carbon tax on Australia's polluters would raise around \$13 billion per year there is enormous potential to make direct payments to families, cut other taxes, invest in services, or any combination of the three. The paper is not prescriptive about how the \$13 billion raised from the biggest polluters should be spent, rather it presents a range of costed alternative options for how the proceeds of a carbon tax could be returned to Australian families, Australian businesses, or a combination of the two.

The paper estimates that the proceeds of a simple carbon tax would be sufficient to pay every adult a 'carbon dividend' of \$700 per year and for a family of four the dividend could rise to \$2,100 per year. Such payments are far greater than the likely increase in the cost of electricity and other products which is estimated by the Commonwealth Treasury to be around \$18.50 per week for an average family.

Other options for how the revenue from a carbon tax could be spent include lowering the Goods and Services Tax (GST), lowering the company tax rate, investing in renewable energy and other low carbon infrastructure or providing compensation to polluters. The purpose of providing this range of options is to highlight the fact that a carbon tax is not a 'cost' to the economy but a means of both changing behaviour and redistributing money away from polluters and towards other uses.

This paper's conclusions will come as a surprise to many. Put simply, the paper argues that a simple carbon tax levied on the biggest polluters can put money into, rather than take money from, family budgets in Australia. There are three simple explanations for this surprising conclusion.

- The Rudd Government appears to have done a poor job of explaining to households just how generous the proposed compensation for the CPRS was to be.

- Many of the upcoming increases in electricity prices, such as the NSW Government's proposal to increase electricity prices to cover a massive expansion in the electricity distribution grid, have nothing to do with the introduction of the CPRS.
- Most of the proposals outlined below provide far less compensation to big business than was proposed by the CPRS. Put simply, every billion dollars given away to the polluters is a billion dollars that can't be given back to households as compensation or invested in new infrastructure or services.

Attitudes towards a carbon price

The only economically responsible way to reduce greenhouse gas emissions is to introduce a price on pollution either through the introduction of an emissions trading scheme or a carbon tax. As the following quotations show, support for the need for a carbon price is widespread, but not unanimous, among economists and politicians.

Ross Garnaut

"As thoughtful citizens let us all recognise that it is important soon to introduce a price on carbon"

"For any large reduction in emissions, these will be extremely costly compared with the market-based alternatives that rely on a price of emissions."¹

Julia Gillard

"If elected as Prime Minister I will re-prosecute the case for a carbon price at home and abroad."²

Penny Wong

"If you are serious about tackling climate change you have to put forward policies which place a price on carbon which makes polluters pay."³

Malcolm Turnbull

"We cannot cost-effectively achieve a substantial cut in emissions without putting a price on carbon. We have to put a price on carbon. We can do it via a carbon tax if you like. The better approach is via a cap, an emissions trading scheme."⁴

Bob Brown

"We Greens will bring in a carbon price and take action on climate change."⁵

¹ M Grattan, 'Act boldly on carbon: Garnaut', *The Age*, 26 January 2010.

² J Gillard, Press conference, 24 June 2010.

³ AAP 'Clear path for carbon price, Wong says', *Sydney Morning Herald*, 25 July 2010 at www.smh.com.au.

⁴ M Turnbull, 'The climate challenge', Alfred Deakin Lecture Series 2010, 15 June 2010 at

<http://www.malcolmturnbull.com.au/issues/issues-environment/wheeler-centre-deakin-speech>

⁵ T Moore, 'Greens will force through carbon price: Brown', *www.Brisbanetimes.com.au*, 25 July 2010.

By contrast, the leader of the opposition Tony Abbott has said:

“We have no policies and will have no policies for a carbon tax.”⁶

Potential revenue from a carbon tax

Australia is among the most greenhouse gas emission intensive economies in the world. While this is disastrous from an environmental perspective, from the point of view of tax reform this presents an opportunity. In his recent report to the Rudd Government the Secretary of the Treasury, Ken Henry, argued that pollution should be one of the four tax bases in Australia. He argued that pollution was undertaxed and that the introduction of a carbon price would lead to an improvement in efficiency.

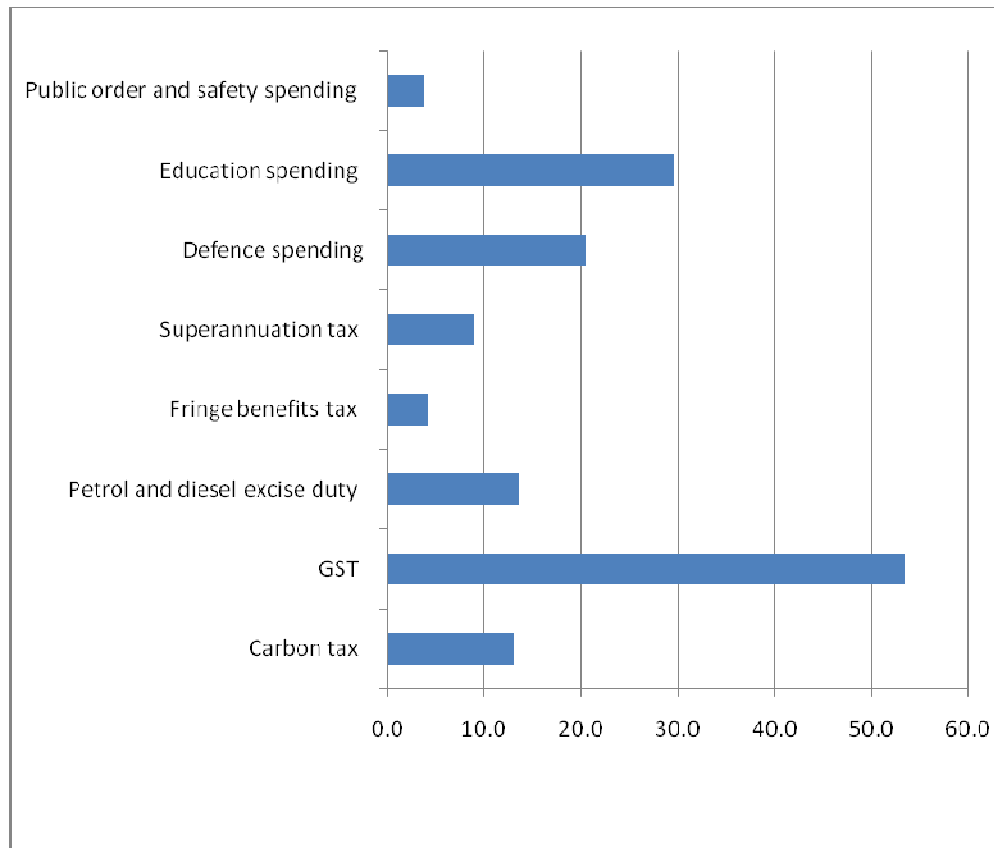
The Henry Report said:

*Market-based approaches allow the market to determine the lowest-cost means of abatement. Such approaches therefore provide the opportunity to deliver improved environmental outcomes at the lowest economic cost. They also provide strong ongoing incentives for investment in technology research, development and deployment, and in efforts to improve efficiency.*⁷

While the original design principle of the CPRS was to introduce a broad scheme to cover all forms of greenhouse gas emissions this principle did not last long in the face of industry lobbying. First the agriculture sector was excluded and then transport fuel was effectively excluded. The final iteration of the CPRS was confined primarily to electricity generation, manufacturing and industrial processes. That said, even with the narrow tax base proposed under the CPRS the government’s own estimate is that a carbon price of \$25 per tonne would raise revenue of \$13 billion in 2012-13. The following graph shows the size of the carbon tax compared with selected other revenue and spending items in the federal budget.

⁶ AAP, ‘No carbon tax in Coalition’s new climate policy: Abbott’, *Sydney Morning Herald*, 2 December 2009.

⁷ *Australia’s Future Tax System: Report to the Treasurer*, December 2009, p. 347.



Potential costs of a carbon price

The Commonwealth Treasury's estimate is that the additional cost per household of a \$25 carbon price would be \$6 a week for the direct impact on the costs of electricity, gas and other household fuel.

There are also indirect costs to consumers in the prices they pay for other commodities. The butcher has power costs that are passed on to consumers, electricity goes into smelting aluminium that goes into all aluminium products including cans of soft drink. Adding indirect effects increases the additional cost per household to \$18.50 a week for a family on average household income, an increase of 1.1 per cent on the value of all household consumption expenditures.⁸

⁸ These are The Australia Institute estimates based on ABS, *Australian National Accounts: Input-Output Tables – Electronic Publication 2005-06*, Cat No 5209.0.55.001, 18 November 2009. The input-output tables allow us to track the increased energy costs on other businesses which eventually flow into higher costs for consumer purchases. Those additional costs are compared with the average household expenditure on consumption goods as reported by the Australian Bureau of Statistics in ABS, *Household Expenditure Survey, 2003-04*, cat no 6530.0, 15 February 2006. Those expenditures in turn are updated to 2011-12 values using CPI estimates from

Lower income families, who on average spend less on energy and on general consumption, would face smaller weekly increases in their costs.

Potential benefits of a carbon tax

The impact of a carbon tax cannot be evaluated with reference only to the increase in the cost of electricity and other products. While prices will rise as a result of the introduction of such a tax so too will government revenue. The impact on families will be as much determined by what governments choose to do with the new source of revenue as by the rise in electricity prices.

The introduction of a carbon tax should not be seen as taking \$13 billion out of the economy but as a redistribution of \$13 billion from polluters and towards other groups in society that are deemed to be most deserving of assistance. One of the major problems with the CPRS is that the polluters themselves were major recipients of the proposed compensation package. By restricting the amount of compensation paid to polluters it is possible to significantly increase the potential payments to Australian households.

As already pointed out, every billion dollars given back to the polluters in the form of compensation is a billion dollars that cannot be given back to families.

How could the proceeds of a carbon tax be given back to families?

Based on a carbon price of \$25 per tonne the Commonwealth Treasury estimates that the government would collect \$13 billion per year in revenue . The following sections provide a range of costed alternatives for how the proceeds of a pollution tax could be recycled through the tax and spending system.

Table 1 provides an overview of the options that have been examined.

Table 1 Tax reform options made available through the introduction of a carbon tax

| |
|---|
| Family carbon dividend payment at just over \$40 per week for a family of four with adjustments up and down for different household sizes. |
| Reduce company tax rates by five per cent (from 30 per cent to 25 per cent in 2011-12). |
| Reduce GST rate to 7.5 per cent (from 10 per cent). |
| Reduce income tax by 8.1 per cent or on average \$1080 per taxpayer, or \$20.75 per week. |
| Increased support green initiatives , eg for renewable energy, efficiency measures, alternative energy research and development. |

ABS, *Consumer Price Index, Australia, June 2010*, cat no 6401.0, 28 June 2010 plus official inflation forecasts from the *2010-11 Budget Papers*.

Each of the options outlined below could be combined with each other. For example, it would be possible to reduce both company taxes and make direct payments to households.

Family carbon dividend payment

This option would pay to each household a carbon dividend equal to \$700 **per year** per person or, for families, \$1,400 for two person families and another \$350 for each additional family member. Hence

- A single parent with one child would receive \$1400 or approximately \$27 per week
- A family of four, two adults and two children, would receive \$2100 per annum or just over \$40 per week.⁹

The impact on electricity and other prices of a \$25 carbon tax is estimated to be only \$18.50 per week (\$962 per year) for an average family of four which means that a \$2,100 carbon dividend would mean they were more than \$1,100 better off **each year**. If they were able to reduce their energy use then they would be even better off each year.

It is also important to note that lower income families, not surprisingly, spend less on electricity and other products than average families. This means that while their annual carbon dividend payment would be the same as others their net benefit would actually be greater.

Rather than disadvantaging low income earners, by providing direct compensation payments based on family size the introduction of a carbon tax would provide a significant financial boost to 'hard working families'.

One way of delivering the carbon dividend would be allowing households to opt to receive their dividend to offset their bills from their electricity or gas supplier. For most people that would mean a cash refund from their electricity or gas supplier.

Reduce company tax

This option applies the whole \$13 billion towards cuts in company tax rates. With the present projections in the budget papers total company tax collections will be \$75.6 billion in 2011-12 at the present company tax rate of 30 per cent. \$13 billion would fund a reduction to 25 per cent.¹⁰

⁹ The calculations were based on the latest census data which were updated by an assumed two per cent per annum population increase. Census figures give the number of both family and non-family households by number of residents. Those figures were used to calculate the numbers in the text and should give a moderately conservative estimate.

¹⁰ The government plans to reduce the company tax rate to 29 per cent in 2012-13 for small business and for all business in 2013-14. That would take the company tax rate down to 24.2 per cent in later years.

Reduce GST rate

The Goods and Services Tax now applies to most consumption goods with the major exceptions of food, rent and financial services.¹¹ In 2011-12 the GST will raise \$51.3 billion. If the whole \$13 billion of carbon receipts were applied to reducing the GST it would reduce the rate from 10 per cent to 7.5 per cent.

Because low income earners tend to consume a higher proportion of their income the result would be to benefit lower income earners proportionately more than higher income earners.

Increased support for green initiatives

There is a strong opinion that much of any carbon tax should be applied towards low carbon initiatives. There are a host of projects that could be undertaken here. Some people are optimistic that the carbon price itself is sufficient to induce a change in behaviour towards a low carbon economy. Against that we know the demand for energy is very demand inelastic, which means that people's demand is not very responsive to higher prices. As such there is a case for supplementing market mechanisms with other initiatives such as subsidies for low carbon forms of generation.

Subsidies for polluters

This item is included because it is inevitable that some participants in the debate will want to use some of the revenue to shield some parts of the economy from the impact of the carbon price. However, such initiatives will reduce the amount that is available to compensate individuals.

If individuals or households look like they will be made worse off under any proposed carbon tax, it is less likely there will be a consensus on a carbon price. The aim of a carbon price should not be to make individuals or households worse off. The aim is instead to alter the relative attraction of carbon intensive goods and services so that people will be relatively more attracted to the low carbon alternatives.

Conclusion

Introducing a carbon tax is both economically efficient and, if the compensation package is well designed, highly equitable. In addition to the complexity of the CPRS and its timid emission reduction targets a major problem with that proposal was that so much money was being offered to compensate polluters that it was not possible to design sufficiently generous compensation packages for households. The data and proposals provided above show clearly that it is possible to introduce a carbon tax, drive down emissions and improve the financial position of Australian families. While it is obviously not possible to do so if governments simultaneously seek to provide generous compensation to the polluters themselves, it is entirely possible as long as elected governments are willing to ensure that it is the polluters who really do pay.

¹¹ Financial services are instead input taxed, that is businesses supplying financial services cannot get credit for the GST paid on their purchases.