

REGULATION IMPACT STATEMENT – OPTION STAGE

This is an options-stage Regulation Impact Statement (RIS) for the Government's commitment to repeal the carbon tax to reduce living costs on households and input costs for business. Consistent with the Government's best practice regulation requirements, alternatives to the election commitment are not considered in this RIS, rather it focuses on the commitment and how the commitment should be implemented.

Option: Election Commitment

The Government was elected with a commitment to abolish the carbon tax. In practice, this involves:

- the repeal of six Clean Energy Acts and consequential amendments to other legislation;
- the extinguishment of carbon tax liabilities for approximately 370 liable entities under the CPM, as well as equivalent carbon taxes on liquid fuels and synthetic greenhouse gases;
- ending mandatory audit of reported emissions for large emitters;
- ending the requirement for liable entities to report emissions;
- ending industry support schemes related to the carbon tax; and
- abolishing the Climate Change Authority.

In addition, the Government made an election commitment to require the Australian Competition and Consumer Commission to monitor and enforce reasonably expected price reductions following the abolition of the carbon tax.

- This will include changes to the *Consumer and Competition Act 2010* to prohibit surcharges attributable to the carbon tax; and
- Introduction of penalties of 2000 penalty units (\$340,000) for individuals (10,000 penalty units/\$1.7 million for corporations) that introduce or maintain price increases/surcharges attributable to the carbon tax.

See background for further detail on how the carbon tax operates.

Objectives

The objectives of Government action in this area are to remove:

- the cost of living pressures on households resulting from the carbon tax; and
- the cost pressures faced by business as a result of the carbon tax.

Broad impact

The carbon tax is directly applied to a limited range of inputs, and is paid by a relatively small number of 'liable entities'. Directly, the carbon tax increases the cost of:

- electricity and gas;
- managing landfill and wastewater;
- liquid fuels for off-road use by heavy vehicles;
- synthetic greenhouse gases.

However, the importance of many of these inputs to the Australian economy means that the incidence of the tax is felt by households and throughout the business sectors. As a result of the carbon tax, liable entities are required to either absorb the higher costs of production or pass them on to their customers (or, more likely a combination of both); to the extent that higher costs are passed through to

customers, the prices that businesses and households pay for goods and services are indirectly increased. As an example the regulated retail electricity prices in New South Wales were allowed to increase by an average of 8.9 per cent in 2012-13 as a result of the carbon tax (IPART 2012).

Problem

The problem the Government is addressing is twofold. Firstly, the carbon tax increases the cost of living for the household sector. Secondly, it increases costs for business, both in terms of higher input costs, and the costs incurred by liable entities in complying with carbon tax obligations

Household costs of living

Broadly, the impact of the carbon tax on households is through increases to consumer prices. The carbon tax has increased prices for goods and services consumed by households that are emissions-intensive in their production or supply chains.

Prior to the introduction of the carbon tax, the Commonwealth Department of the Treasury modelled the likely impact of the carbon tax on households (Department of the Treasury 2011a). It estimated that the average impact on household expenditure (based on existing expenditure patterns) across all households was likely to be around \$9.90 per week (or around \$515 per year) in 2012-13, with almost half of that impact due to increased electricity and gas prices (Table 1).

Table 1: Effects on weekly expenditure and consumer prices ^a

	Household expenditure (\$ per week)	Consumer prices (per cent)
Electricity	3.30	10
Gas	1.50	9
Food	0.80	<0.5
Overall effect	9.90	0.7

Note: a. The dollar per week impacts are the average across households, not the impact on an average household. Effects on weekly expenditure are in 2012-13 dollars.

Source: Strong growth, low pollution: modelling a carbon price, p. 137

Changes in consumer prices are likely to have affected different households in different ways. The distribution of these effects depends on the initial emission intensity of consumption by different household types and their relative ability to alter their consumption. Low income households are disproportionately affected by carbon pricing. They spend, on average, a higher proportion of their disposable income on emission-intensive goods, such as electricity and gas. For this reason, the average price impact for a single pensioner household in the lowest income quintile is estimated to be 1.0 per cent in 2012-13, while for a one-income household with no children in the highest income quintile the average price impact is estimated to be 0.6 per cent (Department of the Treasury 2011a, p. 137).

As the carbon tax is legislated to increase in 2013-14 and 2014-15 prior to the start of the flexible pricing period, the cost of living impact on households is expected to further increase in the short term.

Costs to business

The carbon tax has two broad impacts on business costs: the impacts associated with the imposition of the tax itself; and the additional costs the liable entities face in complying with the administrative requirements associated with the carbon tax.

Impact of the carbon tax

The carbon tax is estimated to have raised \$5.08 billion of revenue in 2012-13 (Australian Government 2013). The primary impact of the carbon tax on businesses is to increase the cost of inputs. While the carbon tax is directly applied to a relatively small number of activities and liable entities, the size and importance of these activities means that as these costs are passed on through the economy the carbon tax results in an increase in input costs for the majority of businesses. The main driver of these input cost increases is the impact of the carbon tax on energy prices – primarily electricity and gas prices.

Modelling prior to the introduction of the carbon tax suggested that retail electricity prices would be 10 per cent higher as a result of the tax after 5 years (Department of the Treasury 2011b, p. 12). As price increases such as these flow through to businesses, economic activity shifts away from relatively emissions-intensive (and hence, as a result of the carbon tax, higher cost) sectors, towards those sectors less affected by the carbon tax. Table 2 provides an indication of which sectors are likely to have been affected the most by an imposition of the carbon tax. It shows the projected changes in industry gross output (a measure of economic activity) in 2020 under the carbon tax compared with a no carbon tax scenario.

Within the services sector, the largest reductions in economic activity are in the production of electricity (particularly coal-fired electricity) and gas. In the mining sector, coal mining and gas production are the industries most affected by the carbon tax, and in the manufacturing sector cement production is particularly affected. It should be noted, however, that despite relative cost increases these sectors are projected to grow in absolute terms over the period to 2020.

Table 2: Change in gross output in 2020 as a result of the carbon tax, compared with a 'no carbon tax' scenario

Industry sector	Change in gross output (per cent) ^a
Agriculture	0.4
Mining	-0.9
Manufacturing	0.3
Construction	-0.9
Services	-0.3

Note: a. Modelled estimates include the impact of industry and household assistance measures.
Source: Strong growth, low pollution: modelling a carbon price – update , p. 8.

Carbon tax compliance costs

The annual ongoing compliance costs associated with the Clean Energy Act and associated regulations are estimated at around \$94.8 million per annum. These costs fall into two cost categories: administrative (in-house) costs and substantive (mainly verification/auditing) costs.

All liable entities face administrative costs because of monitoring, reporting, permit acquisition and surrendering obligations under the carbon tax. These costs are estimated at around \$66.6 million per annum (based on these obligations requiring one full-time-equivalent (FTE.) staff member per annum at an average cost of \$180,000 per FTE). These costs are in addition to those imposed on entities under

separate reporting obligations under the National Greenhouse and Energy Reporting Scheme.

Approximately 154 liable entities also face substantive costs because they have total emissions of more than 125,000 tonnes carbon dioxide equivalent (CO₂-e) emissions per year while 129 entities face substantive costs because of auditing requirements to receive assistance under the Jobs and Competitiveness Program (JCP). The average cost of audits for large emitters is estimated at approximately \$133,000 per entity per annum (an ongoing cost of around \$24.5 million per annum). The average cost of audits for recipients of JCP assistance is estimated at approximately \$60,000 (an ongoing cost of around \$7.7 million per annum).

These estimates do not include the additional costs businesses may incur in managing permit obligations (for example purchasing, banking or selling) when the carbon tax moves to the flexible pricing period in 2015.

Measures currently in place to address these issues

There are a number of Australian Government programs in place to address some of the cost pressures faced by households and businesses.

For consumers, these measures include increases to existing government payments to households (the 'Clean Energy Supplement'); income tax cuts, equivalent to around \$300 per annum for most households; and additional measures such as the Essential Medical Equipment Payment, and additional payments to low income households.

For businesses, these measures include the JCP to support emissions intensive, trade exposed industries; the Energy Security Fund to maintain secure energy supplies through supporting electricity generators that are strongly affected by a carbon price; and targeted grants to provide transitional assistance to specific industries.

Conclusion

Consistent with the Government's best practice regulation requirements, alternatives to the election commitment do not need to be considered in this options-stage Regulation Impact Statement, rather it should focus on the commitment and how the commitment should be implemented.

Within the commitment to abolish the carbon tax, there are a number of parameters that need to be determined. The most important among these is the date at which emitters' liabilities under the carbon are extinguished. It is proposed that no new carbon tax liabilities be incurred after 30 June 2014. Removing liabilities from 30 June 2014, rather than a date part-way through the 2013-14 financial year, will simplify the transition for business. This is because it avoids the need to change compliance systems and renegotiate contracts that involve carbon price pass-through in the middle of a financial year, and it will also allow liquid fuel users to better manage their inventories during the transition period to reduce the risk of a shortage.

Background

The carbon tax puts a price on Australia's carbon pollution, and applies directly to Australia's biggest carbon emitters (called liable entities). In addition, a number of businesses pay 'effective carbon prices' on liquid fuels and on synthetic greenhouse gases.

Under the mechanism, liable entities must pay a tax on the carbon emissions they produce each year. As at July 2013, there were approximately 370 liable entities, covering approximately 60 per cent of Australia's carbon emissions. The carbon tax covers a range of large business and industrial facilities, and includes emissions from electricity generation, natural gas supply, stationary energy, landfills, wastewater, industrial processes and fugitive emissions.

How does it work?

Liable entities must report annually on their emissions or potential emissions under the *National Greenhouse and Energy Reporting Act 2007* (NGER Act).

Under current arrangements, liable entities must surrender one carbon unit for every tonne of carbon dioxide equivalent (CO₂-e) that they have produced in that year.

There are two stages to the carbon tax:

- Fixed price – The price of carbon units – effectively the carbon tax – is fixed for the first three years. In 2012–13 it was \$23 a tonne of carbon pollution, in 2013–14 it is \$24.15 a tonne and in 2014–15 it will be \$25.40 a tonne. Liable entities can purchase units up to their emissions levels. Purchased units cannot be traded or banked.
- Flexible price – From 1 July 2015 the price will be set by the market. Most units will be auctioned by the Clean Energy Regulator – auctions are scheduled to take place before June 2014, in the lead up to the flexible price. The number of units the Government issues each year will be limited by a pollution cap set by regulations.

If a liable entity does not surrender any or enough units, it must pay a 'unit shortfall charge':

- from 2012 to 2015, this charge is set at 130 per cent of the fixed price for the relevant fixed price year
- from 2015 onwards, once the carbon tax moves to the flexible price period, the unit shortfall charge will be up to 200 per cent of the benchmark average auction price for the relevant period.

The shortfall charge creates an incentive to surrender units under the mechanism rather than pay the higher shortfall charge. The carbon tax arrangements include systems for assessing liability for emissions, meeting liability for emissions through payment and surrender processes for eligible emissions units, and relinquishing units (in certain circumstances units are returned to the Commonwealth without them being surrendered).

What are 'liable entities'?

Entities are liable if they operate facilities that exceed the threshold for covered direct emissions, or if they supply or use natural gas. The types of direct emissions covered by the carbon tax include:

- carbon dioxide (CO₂)
- methane (CH₄)
- nitrous oxide (N₂O), or
- perfluorocarbons specified in the NGER Regulations and that are attributable to aluminium production,

but do not include:

- agricultural emissions;
- fugitive emissions from decommissioned underground mines;
- emissions from legacy waste or closed landfill facilities;
- emissions of certain synthetic greenhouse gases;
- emissions from biomass, biofuels or biogas; or
- emissions from the combustion of fuels subject to duties under the *Excise Tariff Act 1921* or the *Customs Tariff Act 1995*.

The threshold for covered scope 1 emissions is 25 000 tonnes CO₂-e per year. Information collected through national greenhouse and energy reporting provides the basis for assessing liability under the tax arrangements.

The carbon tax covers approximately 60 per cent of Australia's carbon emissions including from electricity generation, natural gas supply, stationary energy, landfills, wastewater, industrial processes and fugitive emissions; Table 3 displays the proportion of emissions by industry according to reported interim emissions numbers for 2012-13. It should be noted that these are interim numbers and do not represent the full year's emissions data, and that due to the effect of the industry support programs described later in this RIS, do not fully reflect the relative impact of the carbon tax on the various industries.

Table 3: Reported emissions by industry^a

	Proportion of emissions ^b (per cent)
Electricity Gas, Water and Waste Services	63.9
- Electricity generation	63.1
- Gas and water supply ^b	0.7
Manufacturing	16.7
- Basic non-ferrous metal manufacturing	5.1
- Basic ferrous metal manufacturing	3.3
- Cement, lime, plaster and concrete product manufacturing	2.5
- Petroleum and coal product manufacturing	1.8
- Fertiliser and pesticide manufacturing	1.2
- Other manufacturing ^c	2.7
Mining	14.7
- Coal mining	7.6
- Oil and gas extraction	6.5
- Metal ore mining	0.7
Natural Gas Supply embodied emissions^d	4.8

Notes: **a.** Emissions are the Interim Emissions Numbers reported in June 2013. An Interim Emissions Number is: for a direct emitter 75 per cent of the provisional emissions numbers relating to the relevant facilities for the 2011-12 financial year, or an estimate of 75 per cent of the person's provisional emissions number relating to the relevant facilities for 2012-13; for a natural gas supplier that person's provisional emissions number in relation to the supply of natural gas/fuel for the nine months to 31 March 2013. Emissions from waste to landfill are not included in estimates as waste deposited prior to 2012-13 is not liable. Numbers may not add due to rounding. **b.** Includes emissions from water supply, waste and drainage services and gas supply (both through a pipeline or mains system). **c.** Includes 14 ANZSIC subdivisions including emissions associated with agricultural manufacturing processes (e.g. dairy, meat and grain product manufacturing). **d.** Includes embodied emissions from natural gas supply. Excludes emissions from natural gas supplied to large gas consuming facilities, which are included in the totals for each industry sector above.

Source: Clean Energy Regulator, unpublished.

Equivalent carbon taxes

In addition to the carbon price on liable entities, a number of businesses pay an 'equivalent carbon price' on liquid fuels and on synthetic greenhouse gases.

- Some businesses effectively pay no excise on the fuel they use off-road, as their excise is offset under the fuel tax credits scheme. As such, the incidence of the fuel tax falls primarily on non-business consumers of products with a transport cost component and light commercial vehicles. By reducing existing fuel tax credits by an amount equal to the carbon tax, the Government imposes an effective carbon tax on businesses' liquid and gaseous fuel emissions through the existing fuel tax regime.
- Synthetic greenhouse gases are industrial chemicals used mainly as refrigerant gases in air conditioning and refrigeration equipment, but also for other purposes. Importers of synthetic greenhouse gases, including in manufactured products, are required to pay an equivalent carbon tax based on the carbon tax and the global warming potential of each gas relative to carbon dioxide. There are no Australian manufacturers of these gases.

References

Australian Government 2013, *Portfolio Budget Statements 2013-14 – Industry, Innovation, Climate Change, Science, Research and Tertiary Education Portfolio*.

Department of the Treasury 2011a, *Strong growth, low pollution: modelling a carbon price*

(http://carbonpricemodelling.treasury.gov.au/carbonpricemodelling/content/report/downloads/Modelling_Report_Consolidated_update.pdf).

Department of the Treasury 2011b, *Strong growth, low pollution: modelling a carbon price – update*,

(http://carbonpricemodelling.treasury.gov.au/carbonpricemodelling/content/update/downloads/Modelling_update.pdf).

IPART (Independent Pricing and Regulatory Tribunal), 2012, *Final Report – Changes in regulated electricity retail prices from 1 July 2012*.