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The Carbon Pricing Mechanism under the Gillard Government

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CARBON PRICING MECHANISM

It has been 10 years since Julia Gillard become Prime Minister of Australia. One of her Government's major achievements was the introduction of the Carbon Pricing Mechanism. It was in place from July 2012 until it was repealed by the Abbott Government in June 2014. This brief looks back and asks four questions:

- Did the carbon price reduce emissions?
- Would emissions be lower today if the carbon price was not repealed?
- Did removing the carbon price reduce electricity prices?
- How effective at reducing emissions have other complementary measures that were introduced or expanded by the Labor Government been?

Did the carbon price reduce emissions?

The official Australian Government Department of Environment figures certainly show that it did. Emissions fell substantially when the carbon price was in place from 2012 to 2014. After the price was removed, national greenhouse gas emissions increased for many years. In more recent times the increase has reversed, and emissions have begun to fall – but they are still well above the levels when the carbon price was in place.

Figure 1 below shows Australia's annual (sum of the last four quarters) emissions excluding Land Use, Land Use Change and Forestry (LULUCF).¹ The red part of the line

¹ It is standard practise to exclude LULUCF from data sets. LULUCF emissions are of course highly variable for non-anthropogenic reasons (bushfires being a prime example). Internationally and historically the Australian Government will publish research that either excludes, holds static or only partially covers LULUCF emissions.

is when the carbon price was in place. The yellow part of the line shows the period of the Coalition Government's Direct Action Plan which includes an Emissions Reduction Fund (now called the Climate Solutions Fund) and a Safeguards Mechanism.



Figure 1 – Australia's annual emissions excluding LULUCF

Source: Department of Industry, Science, Energy and Resources (2020) *Quarterly Updates of Australia's National Greenhouse Gas Inventory, December2019*, available at <<u>https://publications.industry.gov.au/publications/climate-change/climate-change/climate-science-data/greenhouse-gas-measurement/publications.html#quarterly</u>>

Since 2007, when both Labor and Coalition Parties proposed market-based climate policies, the most successful period for reducing emissions was when the carbon price was in place.

Would emissions be lower today if the carbon price wasn't repealed?

The carbon price was an Emissions Trading Scheme (ETS) with a two-year fixed price period. It had a target of a 5% reduction on 2000 levels by 2020. Since it is now 2020, we can compare actual emissions to what would have happened if the ETS has been left in place. This is because an ETS fixes the quantity of emissions. Figure 2 shows that emissions in 2020 would be 25 million tonnes CO₂-e lower in 2020 if the ETS was in force and total emissions from 2015 to 2020 would have been 72 million tonnes lower.



Figure 2 – Actual emissions versus emissions under ETS

Source: Department of Industry, Science, Energy and Resources (2019) *Australia's emissions projections 2019*, available at https://publications/emissions-projections-2019, available at https://publications.industry.gov.au/publications/climate-change/climate-change/publications/emissions-projections-2019.html

The red line shows actual emissions after the removal of the carbon price. The orange line shows what emissions would have been under the ETS.

Did removing the carbon price reduce electricity prices?

The most common argument given for the removal of the carbon price was that it would lower electricity prices.² While electricity prices did fall slightly after the price was removed in 2014, two years later they were higher than when the carbon price was in place. A year after that they were 14% higher than when the carbon price was in place.

Figure 3 shows electricity prices from the Consumer Price Index (CPI) with the red part of the line when the carbon price was in place. The dotted green line is the price of electricity just before the carbon price was removed.

² ABC Fact Check (2015) *Fact Check: Have electricity prices dropped \$550 since the carbon tax was abolished*? Accessed 3 August 2020 <u>https://www.abc.net.au/news/2015-08-17/joe-hockey-550-electricity-prices-carbon-tax-fact-check/6668552</u>





Source: ABS (2020) 6401.0 Consumer Price Index, Australia, available at https://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/6401.0March%202020?OpenDocument

The removal of the carbon price created uncertainty which lead to volatility in investment in electricity generation. On closer inspection, the carbon price specifically impacted the wholesale component of electricity prices, shown in Figure 4.



Figure 4 – Monthly average spot prices in the National Electricity Market

The removal of the carbon price created great uncertainty about the future profitability of different types of generators amongst owners of and potential investors

Source: AEMO data, accessed through NEM-Review

in power stations. Sudden closures of unprofitable coal power stations and delay and withdrawal of investment in replacement renewable generation caused remarkably high and volatile wholesale electricity prices. From 2016 to 2019 the wholesale component of retail prices was much higher than it would have been in a stable long term policy environment in which a cost on carbon was a known component of the wholesale price, to the detriment of all electricity consumers.

Figure 4 clearly shows that wholesale prices were much lower during the carbon price period than they were between 2016 and 2019. If there were a price on emissions today, wholesale prices would also be lower and more stable than they were during that four year period. It is safe to say that the turmoil created by the repeal of the carbon price and subsequent failure to establish a sound policy basis for the transition of the electricity industry to a low carbon future has imposed major costs on both electricity consumers and the environment.

How effective at reducing emissions have other complementary measures that were introduced or expanded by the Labor Government been?

Around the same time as the carbon price was introduced, a number of other complementary measures were also introduced or expanded. These were the Renewable Energy Target (RET), the Clean Energy Finance Corporation (CEFC) and the Australian Renewable Energy Agency (ARENA).

Between 2013 and 2016, the Coalition Government attempted to abolish these three key renewable energy policies, but because of sufficient opposition in the Senate it was unsuccessful. Saving the RET and CEFC has resulted in emissions reductions of at least 334 million tonnes CO₂e. This is more emissions reduction than the government's central climate policy, the Emissions Reduction Fund, is likely to deliver over its six years of operation (92 million tonnes of abatement purchased from 2014 to 2020).³

Projects made viable through ARENA funding will also reduce emissions, but as ARENA supports early stage technologies it is not possible to confidently predict the future performance of those projects in reducing emissions.

³ Browne B, Campbell R & Cass D (2019) *Saved by the bench*, The Australia Institute, 3 January, available at <https://www.tai.org.au/content/saved-bench>