

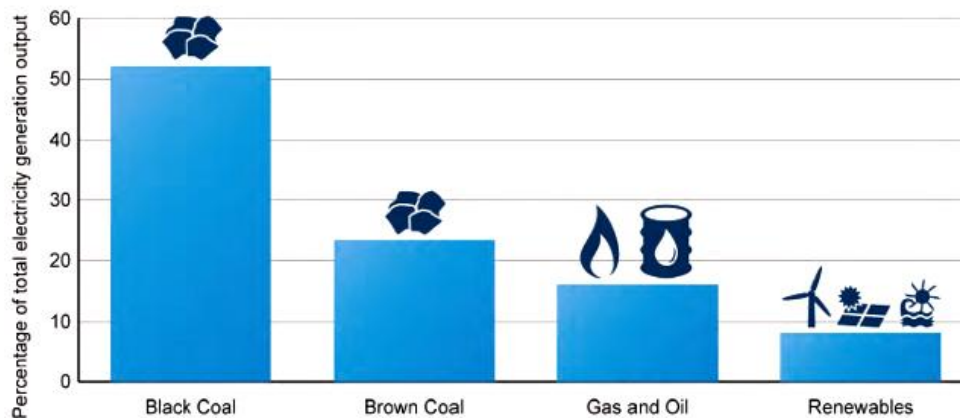
## A snapshot of the future of pricing carbon in Australia

### Pricing carbon in Australia

Four years after Prime Minister Julia Gillard's predecessor Kevin Rudd failed to gain support to put a CPRS into legislation, the Labor party is once again proposing a market-based scheme to cut carbon pollution in Australia. On 10 July 2011, the Prime Minister of the Australian Government unveiled the details of its proposed Carbon Pricing Scheme, named the "Clean Energy Future" package.

Australia emits approximately 1.5% of the world's greenhouse gas emissions primarily because Australia generates about 80% of its electricity from coal, one of the dirtiest sources of power. Australia emits as much pollution as South Korea, Britain and France, where populations there are roughly two to three times that of Australia's 22 million people. Hence, Australia being the biggest carbon emitter per person of any developed country.

### Electricity generation by fuel source (2009-10)

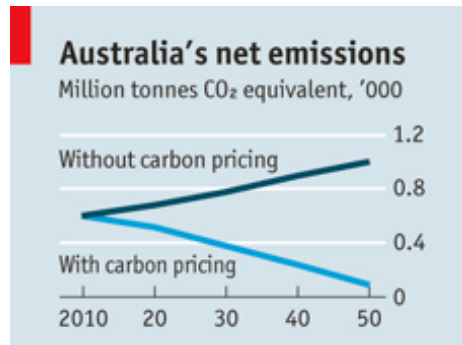


Source: Clean Energy Future ([cleanenergyfuture.gov.au/](http://cleanenergyfuture.gov.au/))

As noted by Stern in 2007, "climate change represents the greatest market failure the world has ever seen", for too long we have all been free riders and now it should be up to the market to set a price on carbon for polluters. Porter stated that "Innovation is the central issue in economic prosperity", and we are now heading towards the 6<sup>th</sup> wave of innovation where renewable technology, industrial ecology and green nanotechnology will be some of the industries dominating our markets.

## Labor & Liberal Views on the Carbon Pricing Scheme

The Australian Government and the Opposition share a target of reducing Australia's greenhouse gas emissions to at least 5% below 2000 levels in 2020. If Australia runs business as usual by 2020, our greenhouse gas emissions will increase by 23%. Therefore by reducing Australia's gas emission by 5% by 2020 requires Australia to reduce our emissions by a total of 28% by using some sort of carbon scheme to reach this goal.



Source: The Economist, 2011

Both the Government and the Opposition also support the Renewable Energy Target under which a mandated 20% of domestic electricity will be provided from renewable sources by 2020. The Australian government has also a new aim of cutting emissions by 80% of their 2000 levels by 2050 instead of 60%, the Labor party's previous figure.

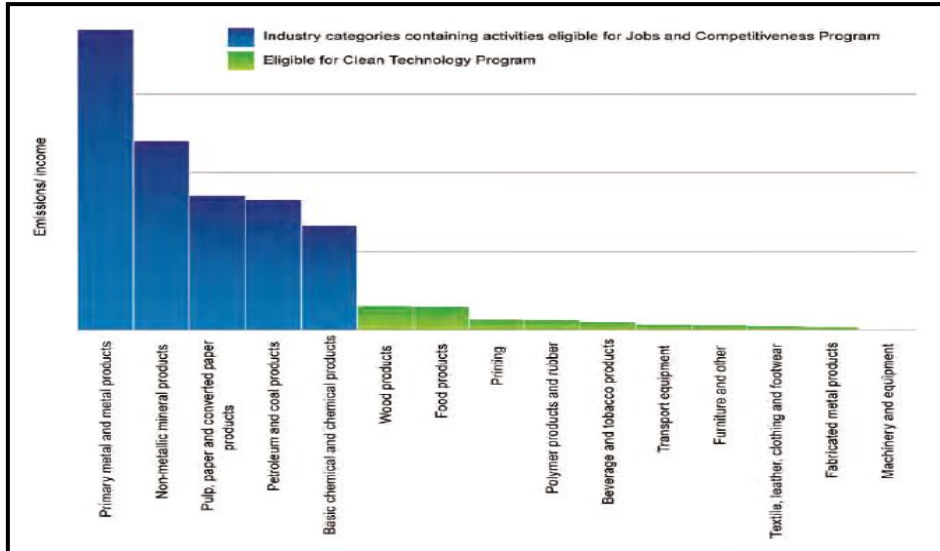
The confirmed starting date of 1 July 2012, a draft legislation is due to be released in late July, there is less than one year to develop and implement a comprehensive strategy that identifies opportunities and to reduce risks in the new business environment.

### Key details

- Carbon Price at \$23/tonne of CO<sub>2</sub> equivalents beginning 1 July 2012
- Grown at 2.5% real growth during fixed price period (until 1 July 2015)
- This carbon price only applies to facilities generating 25,000 tonnes or more of Scope 1 CO<sub>2</sub> emissions per year, approximately 500 companies in Australia
- Companies must meet their emissions obligations by purchasing and surrendering a carbon permit for every tonne of CO<sub>2</sub> equivalent produced
- Compliance period: 1 July to 30 June
- Coverage: Sectors which fall under the carbon price include
  - Electricity
  - Industrial processes
  - Domestic aviation
  - Rail
  - Shipping segments of the transport sector
  - Fugitive emissions associated with oil, gas and coal extraction
  - Emissions Intensive Trade Exposed Industry

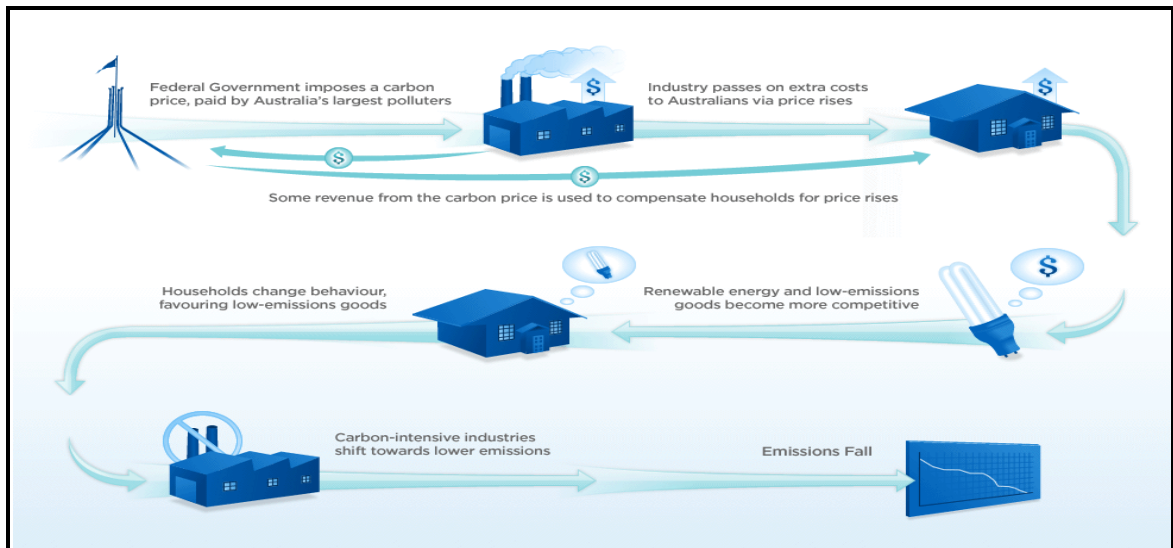
*Note: where fuel is subject to a carbon price, it will be broadly applied by reducing existing fuel credits/exemptions*

The diagram below sourced from the Clean Energy Future provides a snapshot of Industries eligible for programs within the Clean Energy Future plan:



Source: Clean Energy Future ([cleanenergyfuture.gov.au/](http://cleanenergyfuture.gov.au/))

The diagram below sourced from the ABC provides a snapshot of how the carbon pricing will affect the market and consumers:



Source: [abc.net.au/news/specials/climate-change/pricing-explained](http://abc.net.au/news/specials/climate-change/pricing-explained)

<b>Key components of the Government's plan for a Clean Energy Future</b>		
Household Assistance	Income tax cuts, increased family payments and pension rises	\$14.9 billion over the forward estimates (the forward estimates are the period from 2011-12 to 2014-15)
Support for jobs	Jobs and Competitiveness Program	\$9.2 billion over the forward estimates
	Clean Technology Program	\$1.2 billion over 7 years from 2011/2012
	Coal Sector Jobs Package	\$1.3 billion over 6 years from 2011/2012
Support for energy markets	Energy Security Fund	\$5.5 billion over 6 years from 2011/2012
Clean energy	Clean Energy Finance Corporation	\$10.0 billion over 5 years from 2013/2014
	Australian Renewable Energy Agency	\$3.2 billion over 9 years from 2011/2012
Energy Efficiency	Low Carbon Communities	\$330 million over 6 years from 2010/2011
	Small business support	\$240 million over the forward estimates
Land sector	Biodiversity Fund and other land-based measures	\$1.0 billion over the forward estimates

Source: Clean Energy Future ([cleanenergyfuture.gov.au/](http://cleanenergyfuture.gov.au/))

## Who is affected?

Approximately 500 companies that emit at least 25,000 tonnes of Scope 1 CO<sub>2</sub> equivalent per year will be directly affected by the carbon tax. Facilities that produce less than 25,000 tonnes of Scope 1 CO<sub>2</sub> equivalent per year are exempted from the tax. Small businesses are not included in the carbon tax scheme, due to low size of emissions.

Australian households will face a 0.7% rise in the cost of living under the tax, according to Treasury modelling. Fuel for ordinary motorists will be exempt, therefore petrol prices for ordinary motorists will not be affected, but road transport above 4.5 tonnes will begin paying the tax from 2014-2015

Airfares within Australia will likely rise due to domestic aviation fuel excise will be increased by an amount equivalent to the carbon price. There will be no effect on international aviation prices.

## Industry Compensation

High emitting activities to receive 94.5% free permits initially; moderate emitting activities to receive 66% initially. Free permits reduce at the rate of 1.3% per year. Liquefied Natural Gas (LNG) will be given supplementary assistance to ensure an effective assistance rate of 50%.

## Household Compensation

The government will spend half the tax's revenue compensating house-holds for higher electricity and other living costs that polluters pass on. Another 40% of revenue will help industries to lower their costs by switching to cleaner forms of energy, if they face competition from untaxed foreign competitors.

Low income households and pensioners expected to cover increases in the price of goods and services as a result of a carbon price. Compensation will be in the form of tax cuts and direct welfare assistance.

90% of households will receive assistance and 70% of households to be "fully compensated" under the scheme. Household compensation will be permanent and increase with cost of living over time.

## Compliance vs. Voluntary Carbon Markets

The existence of an Australian carbon pricing scheme does not automatically translate to Australian businesses operating as carbon neutral. The Australian carbon market can be broadly defined under two quite distinct markets; compliance (those with an obligation to cancel permits for every ton of CO<sub>2</sub>-e under the Clean Energy Future Program) and voluntary (those with no obligation, but rather measuring, managing and mitigating emissions using carbon offsets for offsetting unavoidable emissions, likely applying the voluntary standards such as the National Carbon Offset Standard 2009).

There is no doubt that the introduction of the Clean Energy Futures program will translate into an increase in the use of domestic (& international) permits or credits (during the flexible price period Australian corporations emitting more than 25kt CO<sub>2</sub>-e will be required to meet at least 50% of their compliance obligations through the use of domestic permits or credits) to cancel or 'offset' emissions, which will reduce emissions intensity across high order emissions sources.

This is likely to result in Australian corporations being able to achieve voluntary carbon neutrality with a reduced direct requirement to purchase and retire carbon offsets due to less emissions intensive emissions factors for various activities commonly included in carbon footprinting.

Organisations should consider market differentiation, brand association and even staff retention benefits when considering carbon neutrality. Early movers may find it cheaper in the future to maintain market leadership in best practice carbon management.

## Carbon Farming Initiative (CFI)

The government will introduce a number of initiatives to incentivise farmers and land managers to undertake activities to reduce carbon pollution. This initiative will allow landowners to earn carbon offsets which can be traded to other businesses, creating new earning potential for the sector. For businesses that choose to purchase carbon offsets within Australia instead of internationally will be given the choice to do so when the Carbon Farming Initiatives comes into place.

The government will be investing a further \$201 million over the first six years, for research into new methods of storing carbon and reducing pollution on the land, including;

- Funding of \$20 million to convert research into practical methodologies recognised under the Carbon Farming Initiative.
- Grants of up to \$99 million for landholders to take action on the ground, including testing new ways to increase soil carbon and reduce pollution.

## BalanceCarbon's tips for businesses to get ready

To minimise the exposure on businesses when considering a carbon price a number of critical actions need to be considered when moving towards an integrated approach to energy and carbon management and reductions. This will ultimately lead to positive outcomes, which aren't just good for the environment, but society and your financial bottom line.

- An internal group should be established with a clear charter to establish goals and strategies to minimise the impact of a low carbon economy and to capitalise on a broad range of opportunities.
- Identify your direct obligations; measure your business or organisations carbon footprint; this is the first step to managing and mitigating your energy use and carbon emissions into the future. Once your energy usage and GHG emissions are measured, your business has the ability to identify opportunities to reduce emissions, establish a reduction goal and engage with your internal teams and value chain.
- Arrange for an energy audit applying AS3598:2000 to identify cost/benefits, payback periods and IRR's
- Develop a corporate abatement cost curve; Evaluate supply chain influences and consider the impact of carbon from upstream suppliers and downstream customers; Establish a carbon and energy strategic reduction plan; Identify any grant schemes that you may be eligible to apply for to receive funding.

## C3Online™

BalanceCarbon® recently launched a new online carbon accounting tool, [C3Online™ \(Cutting Corporate Carbon\)](#). C3Online™ allows businesses, organisations, projects, products and events to track energy and greenhouse gas emissions performance and undertake abatement cost scenario modelling. This tool essentially assists users to:

- Establish and monitor GHG emissions (carbon) and energy usage profiles in accordance with Australian and international standards;
- Identify, monitor and report carbon intensity across single or multiple facilities and operations (both Australian and international operations);
- Monitor and report resource inputs and outputs across single or multiple facilities including water usage, waste generation, electricity, fuel, gas, business travel, paper usage and synthetic gases;
- Identify and report carbon risks (financial, compliance);
- Evaluate various emissions abatement scenarios and costs;
- Prepare for National Greenhouse & Energy Reporting Act reporting;
- Prepare for carbon neutrality; and
- Confidently promote a commitment to carbon management and monitoring for the purposes of demonstrated corporate social responsibility amongst customers, shareholders and other key stakeholders and interest groups
- Benchmark against other businesses/organisations within the same industry

## Summary of what BalanceCarbon® thinks

The overall plan of pricing carbon is a positive step to reducing Australia's level of carbon and greenhouse gas emissions. The plan will encourage more development and investment into renewable and clean technologies within Australia but fails to limit emissions from coal exporters. Roughly \$10 billion will be invested over five years in wind, solar and other renewable sources.

Although many Australians are not supporting the proposed carbon pricing in fear of unemployment in the mining and steel industry, Peabody Energy, an American coal company, and Arcelor Mittal, a steelmaker, launched a \$4.7 billion takeover bid for Macarthur Coal, a big Australian miner that sells coal to steel mills in Asia, Europe and Brazil. The minister for climate change, Greg Combet has also recently announced that 19 new coal mines are due to open in Australia which will encourage more employment in this sector, but what the carbon pricing will encourage will be implementing technologies to capture methane in coal mining.

In conclusion, it is essential for all businesses and organisations to develop a means to measure and manage their direct energy usage, waste generation and broader resource inputs and outputs in order to minimise the direct and in-direct effects of a carbon price across the Australian economy. In reviewing the risks, businesses should not overlook the broad and significant opportunities in relation to voluntary carbon management and its effects in corporate and brand image, product and service differentiation, staff retention and reduction in operational costs.

Please [contact us](#) for further information