

# AUSTRALIA'S CARBON PRICING MECHANISM



CENTER FOR CLIMATE  
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**Australia's Clean Energy Future plan is a comprehensive set of national policies aimed at reducing greenhouse gas emissions and driving investments in clean energy. At its core is a carbon pricing mechanism starting in July 2012 and covering approximately 60 percent of Australia's emissions. The pricing mechanism begins with a fixed carbon price for the first three years, then transitions to a cap-and-trade program. Revenue generated by the carbon price will be used to ease costs for households and industry and for investment in renewable power, energy efficiency, and other low-carbon alternatives. This brief summarizes the carbon price mechanism and other key features of the Clean Energy Future plan.**

On November 8, 2011, the Australian Senate gave final approval to the government's Clean Energy Future climate change plan<sup>1</sup> outlining a series of measures to reduce greenhouse gas (GHG) emissions and drive investment in clean energy. A central element of the plan is a carbon pricing mechanism directly covering 50 percent of Australia's emissions and providing direct financial support for renewable energy, energy efficiency, reducing emissions from land-use and forestry, and other elements. The mechanism starts with a fixed price for the first three years from 2012 to 2015 (AUD 23, rising with inflation to about AUD 25 at the end of the fixed-price period). It then transitions from 2015 to 2018 to a cap-and-trade program, with a price cap and price floor. Regulations to implement the plan are being developed. Other principal elements of the plan include:

- A long-term target of reducing GHG emissions 80 percent below 2000 levels by 2050;
- Over 50 percent of revenue generated from the carbon price is returned to households, particularly low-income ones, through tax relief and greater family benefit payments;
- Revenue generated by the program, along with additional government resources, will be used to ease the impact on trade-exposed industries and workers, and boost investments in renewable power, energy efficiency and other low-carbon

alternatives;

- Implementation of the plan is expected to cost the government AUD 4.3 billion over the first four years, over and above revenue generated;
- Emissions from sectors not directly covered by the carbon price, such as certain fuels and synthetic gases, are indirectly addressed through changes to existing levies and taxes;
- Politically sensitive sectors are carved out of the mechanism: agriculture is addressed separately through an incentive-based scheme, and road transport fuels are largely exempt from the carbon price;
- Three new governance institutions are established to administer, oversee, and advise on all areas of the plan.

## CONTEXT

Climate change rose on the political agenda in Australia during 2006 and 2007,<sup>2</sup> after the country experienced sustained record-breaking heat waves and drought. In 2008, the independent Garnaut Climate Change Review, commissioned by Australian Commonwealth, state and territory governments, concluded that it was in Australia's national interest to take stronger action to reduce emissions. Although Australia accounts for only 1.5

percent of global GHG emissions, it is among the top 15 emitters and its per capita emissions are among the highest in the world (at 24.9 metric tons of CO<sub>2</sub> equivalent in 2009).<sup>3</sup> Australia's population growth rate is also higher than that of most developed countries, and is expected to continue to grow, along with GHG emissions. Resistance to addressing climate change has been based primarily on economic grounds, particularly given Australia's heavy reliance on exports of coal and other emissions-intensive resources, which are also expected to grow. Australia's economy is closely tied to that of its Asian neighbors, particularly China, which receives the largest share of its natural resource exports.<sup>4</sup> Emissions-intensive trade-exposed industries remain opposed to a carbon price unless similar costs are imposed on Australia's competitors in the coal, steel, aluminum, mining and petroleum sectors.<sup>5</sup>

The Australian government attempted to enact the Carbon Pollution Reduction Scheme (CPRS), a cap-and-trade system, in 2007 under the previous Labor Prime Minister Kevin Rudd, which failed in Parliament. The Clean Energy Future plan's successful passage through the Parliament was the result of a particular political situation. Elections in August 2010 resulted in a hung parliament; Julia Gillard's Labor Party needed the support of one Green and three Independent Members of Parliament to form a government, who set the implementation of a carbon price as a condition for joining the coalition necessary to ensuring balance-of-power in Parliament. The government thus began exploring options for implementing a carbon price, and other ways of addressing the climate change challenge.

A Multi-Party Climate Change Committee (MPCCC) was established in September 2010, with the purpose of proposing legislation to be considered by Parliament. In February 2011, the Committee released a brief framework document setting out the broad architecture for a carbon price mechanism; its final negotiated proposal, the Clean Energy Agreement,<sup>6</sup> was released on July 10. Prime Minister Gillard was criticized for proposing a carbon price, as prior to her election she stated her government would not implement a carbon tax – which is how opponents of the policy characterize the carbon pricing mechanism. At the same time, the government released *Securing a clean energy future - The Australian Government's climate change plan*,<sup>7</sup> which builds on but in some respects goes beyond the Committee's recommendations, and formed the basis for the Clean Energy Future legislative package.

## KEY FEATURES OF THE CARBON PRICE MECHANISM

**A fixed carbon price set at AUD 23/metric ton of CO<sub>2</sub>-equivalent<sup>8</sup> (t CO<sub>2</sub>-e) as of July 2012 for three years;** the fixed price will rise by 2.5 percent annually, the mid-point of the inflation target range and in line with inflation projections. This price will transition to a cap-and-trade system in July 2015, with annual caps set within five-year compliance periods. The government estimates the carbon price will directly cover over half of Australia's emissions. Other sources will be addressed indirectly by an equivalent carbon price through parallel fiscal measures. Through direct and indirect measures, the carbon price will cover roughly two-thirds of Australia's emissions.

There is no cap on emissions during the fixed price period; an unlimited number of permits will be issued by the government at the fixed price, and emissions-intensive trade-exposed (EITE) industries will receive a significant share of permits for free, depending on their level of emissions intensity (detailed below). For the cap-and-trade program, if Parliament cannot agree to the first set of caps to be established by May 2014, regulations allow for a default cap consistent with the target of reducing emissions five percent below 2000 levels by 2020. The cap-and-trade program would include a carbon price ceiling and floor for the first three years, until 2018.<sup>9</sup> The price ceiling will be set out in regulations by May 31, 2014, at AUD 20 above the expected international carbon price for 2015-16, and rise by 5 percent in real terms each year. The price floor is to start at AUD 15 and rise at 4 percent in real terms each year. Voluntary action, such as purchase of accredited green power and voluntary cancellation of permits by companies, will be taken into account when setting initial facility-level emission caps. Unlimited banking and limited borrowing of permits between compliance years will be allowed.

**“Liable entities,” those with compliance obligations, are limited to large emitters;** facilities that emit 25,000 metric tons of CO<sub>2</sub>-equivalent a year, and certain landfill facilities with emissions of 10,000 t CO<sub>2</sub>-e per year.<sup>10</sup> The program is expected to cover approximately 500 emitters, covering emissions from fossil-fuel combustion and industrial process emissions (electricity generation and industrial facilities), fugitive emissions (for example from coal mining or natural gas production) and waste (certain landfills). Large retailers of natural gas will be liable for emissions from gas sold in Australia, with provi-

sions for liability to be transferred to large consumers of natural gas.<sup>11</sup> Emissions from these sources have been reported since July 1, 2009, under Australia's National Greenhouse and Energy Reporting Act of 2007. Covered entities will need to surrender a permit for each metric ton of reported emissions.

**The obligation to surrender permits can be met in a variety of ways.** During the fixed-price period, entities covered by the program can purchase permits from the Government at the fixed price, surrender permits allocated to them free of charge, and/or surrender a limited amount of eligible Carbon Farming Initiative credits (detailed below). Permits purchased at the fixed price cannot be traded or banked. Freely allocated permits can be sold to other entities with compliance obligations or back to the government, but cannot be banked. Use of international offset credits is restricted. Specifically, they cannot be used during the fixed-price phase, and are limited to a maximum of 50 percent of the compliance obligation during the first five years of the cap-and-trade phase. There are also restrictions on the type of international offsets that can be used; credits generated from certain industrial gas projects are excluded.

Failure to surrender permits will result in an emissions charge. During the fixed-price period this will be 1.3 times the fixed price for permits. In the cap-and-trade period, it will be twice the average price of permits during the year in which they should have been surrendered.

**Sectors indirectly impacted by the carbon price include transport fuels for domestic aviation, shipping and rail, non-transport fuels, and certain synthetic gases.**<sup>12</sup> Fuels for road transport will generally not be covered by the pricing mechanism.<sup>13</sup> Transport fuels for domestic aviation, shipping and rail will face an equivalent carbon price applied through increases in excise taxes and reductions in fuel tax credits. An effective carbon price will also be applied to off-road and non-transport use of liquid and gaseous fuels.<sup>14</sup> Though not agreed to by the Committee, the Government is intending to include heavy-duty vehicles in the scheme as of July 2014. Hydrofluorocarbons (HFCs) and sulfur hexafluoride (SF<sub>6</sub>) are not covered by the scheme, but will face an equivalent carbon price through existing synthetic GHG legislation, whereby levies applying to the manufacture

and import of synthetic GHGs will be adjusted annually to reflect the carbon price.

Revisions to the legislation following comments from major transport companies allow large fuel users such as airlines, miners and rail transporters to voluntarily opt in to the carbon-pricing system from July 1, 2013, rather than paying under the fuel tax credit or excise systems.<sup>15</sup>

## INDUSTRY ASSISTANCE

As part of special assistance to be provided to industries, Australia's Productivity Commission, the government's independent research and advisory body for analysis of economic, social and environmental policy issues, will be tasked with undertaking reviews and assessments of assistance programs for EITE industries. These will include consideration of how assistance arrangements are operating, their economic and environmental efficiency, and the impact of the Clean Energy Future plan on EITE industries. As it currently does, the Productivity Commission will continue to report on actions taken by other countries to reduce GHG emissions.<sup>16</sup>

## JOBS AND COMPETITIVENESS PROGRAM FOR EMISSIONS-INTENSIVE TRADE-EXPOSED INDUSTRIES

Over the first three years of the mechanism, an AUD 9.2 billion Jobs and Competitiveness Program will provide assistance to new and existing entities undertaking an eligible emissions-intensive trade-exposed (EITE) activity. These entities will receive free allocation of permits based on production levels. Eligibility will be determined through trade exposure (ratio of value of imports and exports to value of domestic production greater than 10 percent, and the inability to pass through costs due to international competition) and emissions intensity assessments (average emissions per AUD million of revenue or value added). Initially, 94.5 percent of permits will be allocated freely for industry activities with an intensity of at least 2000 t CO<sub>2</sub>-e/AUD million in revenue or 6000 t CO<sub>2</sub>-e/AUD million of value added. For lower levels of intensity the share is 66 percent, with the minimum threshold being 1000 t CO<sub>2</sub>-e/AUD million in revenue or 3000 t CO<sub>2</sub>-e/AUD million of value added. The level of free allocations will decrease by 1.3 percent annually. The coal mining sector is not covered under the Jobs and

Competitiveness Program; a separate support mechanism has been proposed for the limited number of coal mines expected to face significant cost pressures under the carbon price, due to their high volume of fugitive methane emissions.

### **ENERGY SECURITY FUND FOR CERTAIN COAL-FIRED ELECTRICITY GENERATORS**

Financial assistance is provided to certain coal-fired electricity generators through an Energy Security Fund. This includes payments for the closure of 2000 MW of highly-emitting coal-fired power generation capacity by 2020 (1.2 t CO<sub>2</sub>-e/megawatt hour (MWh)),<sup>17</sup> including a structural adjustment support package for the affected workforce; generators with emissions intensity above 1 tCO<sub>2</sub>-e/MWh can also receive AUD 5.5 billion in transitional assistance through free allocation of carbon permits (41.7 million annually from 2013-14 to 2016-17) and cash payments in 2011-12; generators receiving transitional assistance are required to develop and annually update Clean Energy Investment Plans. Loans to assist generators with an emissions intensity above 0.8 t CO<sub>2</sub>-e/MWh in purchasing future vintage carbon permits at advance auctions are also planned alongside the Energy Security Fund.

### **SPECIAL ASSISTANCE TO STEEL AND COAL**

AUD 300 million are provided over four years to help the steel sector “transition to a clean energy future,” through a Steel Transformation Plan,<sup>18</sup> along with AUD 1.3 billion over six years of “transitional assistance” for the highest-emitting mines under a Coal Sector Jobs Package. This assistance is complemented by an AUD 70 million Coal Mining Abatement Technology Support Package over six years, providing matching grants for the implementation of carbon abatement technologies. These measures were not approved by all members of the Committee, and will not be funded by carbon price revenue but directly through the government budget. The Steel Transformation Plan Bill was passed alongside the Clean Energy Future legislative package.

### **ADDRESSING AGRICULTURE AND LAND-USE**

Farming and land-based activities are not covered under

the mechanism, but emission-reducing opportunities are offered through the Carbon Farming Initiative (CFI)<sup>19</sup>, which includes an offset program. The CFI program allows credits to be generated and sold from both Kyoto-compliant and non-Kyoto-compliant<sup>20</sup> land-use activities, and also provides incentives for research, innovation and GHG abatement action. Within the carbon pricing mechanism, only Kyoto-compliant credits generated under the CFI can be used by entities with compliance obligations (non-Kyoto-compliant credits will be purchased by the government and voluntarily by companies). Use of such credits is limited to 5 percent of the obligation during the fixed-price phase; there will be no limits on use when the program converts to cap-and-trade. These credits can also be exported, within both the fixed- and flexible-price periods. The opposition Coalition of the Liberal and National parties announced it would keep the CFI in place if it gains power at the next election, in 2013.

Legislation to underpin the CFI was passed on August 23, 2011, and enacted on September 15, 2011. The government announced the CFI as operational on December 8, 2011. Regulations put forward positive and negative lists of eligible offset activities to simplify determination of additionality,<sup>21</sup> and a process has been established allowing anyone to propose an activity for inclusion in the positive or negative list. This approach is intended to provide greater certainty for project developers and reduce transaction costs. An independent Domestic Offsets Integrity Committee will assess methodologies for use under the CFI and recommend their approval or disapproval. An interim Committee has been in place since October 2010. As of November 2011, six methodologies had been submitted for approval.

### **HOUSEHOLD ASSISTANCE**

Over 50 percent of the revenue generated from the program will be used to assist households, particularly low-income households and pensioners, through parallel tax reform involving tax cuts, a higher Family Tax Benefit (payments for parents or caregivers with dependent children or full-time dependent students), increased tax-free thresholds, and increases in pensions, family payments and allowances. The Clean Energy Future plan incorporates tax reforms recommended in an extensive review of Australia's tax system undertaken from 2008 to 2010.<sup>22</sup> A second round of tax cuts will take place in 2015-16. The



average cost-of-living impact as a result of the carbon price is expected to be AUD 9.9 per week; average assistance received will be worth AUD 10.10 per week. The tax reforms are also expected to remove 1 million people from the tax system. In addition, the plan provides or increases funding to programs that offer efficiency upgrades in low-income homes, grants for community facilities, and renewable energy development in remote communities.

## OTHER KEY FEATURES OF THE CLEAN ENERGY FUTURE PLAN

The Clean Energy Future plan emphasizes investments in renewable energy and energy efficiency through the creation of new institutions and enhanced funding:

- Establishment of a commercially-oriented **Clean Energy Finance Corporation** (CEFC) with AUD 10 billion to invest in renewable energy, low-polluting and energy-efficient technologies. The Corporation will seek commercial returns on loans or on equity stakes. Legislation establishing the CEFC will go through Parliament in 2012, and it is expected to begin operations in early 2013. This timeline also leaves the CEFC more vulnerable than the other new institutions and programs to political changes in the 2013 election;
- Creation of an **Australian Renewable Energy Agency** (ARENA) to coordinate AUD 3.2 billion in existing grant funding programs, and to adopt a holistic approach to financing renewable energy projects and programs;
- An AUD 1.2 billion **Clean Technology Program** to improve energy efficiency in manufacturing industries and support research and development (R&D), organized in three components: an AUD 800 million Clean Technology Investment Program providing grants to manufacturers; a Clean Technology Food and Foundries Investment Program, providing AUD 150 million to the food processing industry and AUD 50 million to the metal forging and foundry industries, both over six years; and an AUD 200 million Clean Technology Innovation Program providing grants to business investment in R&D over five years; and

- An AUD 40 million Energy Efficiency Information Grants program for small- and medium-sized enterprises (SMEs).

The plan also establishes three new governance institutions. The carbon pricing program will be administered by the Clean Energy Regulator, a new statutory authority to be established by April 2012, which will also oversee the CFI, and Australia's existing renewable energy target and national registry of GHG emissions. The Clean Future Energy plan will be overseen by a new independent statutory body, the Climate Change Authority, responsible for advising on emission caps, reviewing the carbon price, renewable energy target, and CFI, and generally ensuring progress towards the plan's targets. A new independent advisory body, the Energy Security Council, will be created to advise the government in case of systemic risks to energy security, including from carbon pricing. It will also offer advice on provision of loans to coal-fired power generators.

## COST IMPLICATIONS AND INVESTMENT (UN)CERTAINTY

Modeling by the Australian Treasury of the carbon price's impact has suggested it will add 0.7 percent to the Consumer Price Index in its first year – less than the 2.5 percent increase which arose when the general sales tax was introduced in 2000. The Treasury has also estimated that through 2050 gross domestic product will grow 0.1 percent a year more slowly than without the carbon price (2.6 percent vs. 2.7 percent).<sup>23</sup> Implementation of the package is expected to cost the government AUD 4.3 billion over four years above and beyond revenues generated, with most of this amount (AUD 2.9 billion) in the first year. Following the first four years, Treasurer Wayne Swan has said impacts will be broadly budget-neutral. Opposition politicians have called the mechanism complex and costly, saying it will drive up prices, threaten jobs, and do little for the environment.<sup>24</sup>

The carbon pricing mechanism aims to provide long-term certainty for business investments. Certainty is provided through a specific date for the transition to a cap-and-trade program (whereas previously a process for reviewing the transition date was envisaged), a price collar in the first three years of the flexible-price regime, and a default cap in line with reducing GHG emissions

five percent below 2000 levels by 2020. The government must also provide three years' notice of any changes to industry support measures under the Jobs and Competitiveness Program.

One significant area of uncertainty for businesses is offsets, which are generally seen as a cost-control tool. The CFI is an emerging policy, and it is unclear whether the supply of Kyoto-compliant CFI projects will be sufficient to meet demand, particularly when there are no limits to their use under the cap-and-trade program.<sup>25</sup> Qualitative restrictions on international offsets are generally in line with those in place under the European Union Emissions Trading System, though the government may decide in the future to impose further restrictions as deemed necessary to preserve the market's environmental integrity, if recommended by the Climate Change Authority. Other areas of uncertainty are the foreseen Productivity Commission reviews of assistance programs for EITE industries as well as fuel excise arrangements; it is unclear when these will take place and how they will impact businesses.<sup>26</sup>

## REACTIONS AND OUTLOOK

The Clean Energy Future plan is market-based and therefore a relatively economically efficient approach to GHG emissions reduction. The Clean Energy Future plan is also a political compromise, with which no single constituent is completely satisfied.

The plan is generally seen as a first, positive step by academics and policymakers that have argued for carbon pricing in the past, as well as by carbon market players and most environmental groups, though some see it as insufficiently ambitious.<sup>27</sup>

Business reaction to the plan has been mixed; energy- and emissions-intensive sectors such as coal, aluminum, mining, liquefied natural gas (LNG) exporters and brown-coal power generators have expressed concern about the mechanism's costs and the threat of international competitors.<sup>28</sup> On the other hand, a group of over 50 businesses across the finance, energy, technology and retail sectors have expressed support for the carbon-price policy.<sup>29</sup> Response from the electricity sector has been particularly mixed, with some operators satisfied with the compensation they will receive, others dissatisfied, and still others viewing the mechanism as presenting new opportunities for businesses.<sup>30</sup>

Labor unions have generally backed the carbon price mechanism, expressing satisfaction with the industry and household support measures.<sup>31</sup> Public opinion has been generally skeptical and unsupportive of the carbon price mechanism, primarily on economic grounds.<sup>32</sup>

Work on developing regulations to implement the carbon price mechanism is already underway to allow policies to take effect by July 2012, and the governance institutions created under the plan are being set up. On October 12, 2011, the Chair of the Energy Security Council was appointed, and the charter to guide the Council's work released. On the same day, two bills establishing the Australian Renewable Energy Agency were introduced into Parliament, and a panel of experts appointed to deliver recommendations for the design and establishment of the Clean Energy Finance Corporation by mid-March 2012.<sup>33</sup>

Prime Minister Julia Gillard's poll ratings have been at record lows, giving the Liberal-National coalition its first lead over Labor in nearly 40 years,<sup>34</sup> and raising the possibility that Gillard and Labor will lose the 2013 elections. Opposition leader Tony Abbott has threatened to dismantle the climate change plan if elected in 2013, and has warned businesses not to purchase forward permits, prompting reactions from power producers that such policy uncertainty will hinder investment decisions.<sup>35</sup> However, it is unclear how feasible dismantling the carbon price mechanism would be, both in practical and in political terms. Carbon permits have been defined as property rights under the Clean Energy Future legislation, and the government would need to compensate businesses for permits already purchased. If a new government comes in, the Greens would still hold balance-of-power majority in the Senate, meaning such a policy reversal could only occur under a double dissolution of both houses of Parliament, which is unlikely to be possible until after the carbon price has been in place for several years.<sup>36</sup> Some market players view any political risk as short-term, as once the mechanism is in place as of July 2012, it will be difficult to undo.<sup>37</sup> How smoothly the plan is implemented will be very important, both for public and business perception of its costs, and for whether a new government would seek to dismantle it. If payments to households and tax reforms occur smoothly, and payments are made out to industries rapidly, the policy has a greater chance of being accepted and taken in stride by the economy.

## ENDNOTES

1 A list of all the bills forming the package, and links to their full texts and explanatory memorandum, is available at <http://www.climatechange.gov.au/en/government/clean-energy-future/legislation.aspx>

2 Climate change appeared early on the Australian government's political agenda; in 1991 the Australian cabinet passed a proposal to reduce CO<sub>2</sub> emissions 20 percent by 2005. It was, however, not enabled by any legislation under the next Prime Minister, and climate change generally remained on the political back burner for the next decade. Joan Staples, "Our lost history of climate change", Australian Policy Online, 11 November 2009, <http://apo.org.au/commentary/our-lost-history-climate-change>

3 Total GHG emissions excluding land-use, land-use change and forestry. Source: [UNFCCC GHG statistics](#), and [OECD statistics](#) (2009 population).

4 Sustainable Prosperity, Carbon Pricing in Australia: Lessons for Canada, Policy Brief September 2011. Available at [www.sustainableprosperity.ca/dl622](http://www.sustainableprosperity.ca/dl622)

5 These include countries such as Mozambique, India, Russia, Brazil, Indonesia, Columbia, South Africa and Canada – countries not included in the Australian Government Productivity Commission's June 2011 report on Carbon Emission Policies in Key Economies. See Heather Ewart, "More support for the carbon tax", Australian Broadcasting Corporation, 9 June 2011, and positions from the Australian Aluminium council, Australian Coal Association, Australian Petroleum Production and Exploration Association and Australian Steel Institute, cited in Sustainable Prosperity, Carbon Pricing in Australia: Lessons for Canada, Policy Brief September 2011. Available at [www.sustainableprosperity.ca/dl622](http://www.sustainableprosperity.ca/dl622)

6 [www.climatechange.gov.au/en/government/initiatives/~~/media/publications/mpccc/mpccc\\_cleanenergy\\_agreement-pdf.pdf](http://www.climatechange.gov.au/en/government/initiatives/~~/media/publications/mpccc/mpccc_cleanenergy_agreement-pdf.pdf)

7 [www.cleanenergyfuture.gov.au/wp-content/uploads/2011/07/Consolidated-Final.pdf](http://www.cleanenergyfuture.gov.au/wp-content/uploads/2011/07/Consolidated-Final.pdf)

8 Price of Treasury modeling undertaken for the original 2007-08 Garnaut climate change review, undertaken for the development of the CPRS. The review was updated in 2011. The Garnaut review assesses the impacts of climate change on the Australian economy and recommends policy frameworks.

9 However, the government may extend the price collar further if deemed necessary.

10 Those within a prescribed distance of large landfill facilities, to avoid displacement from covered to non-covered landfills.

11 If the customer is a large emitter, it can take on liability for the natural gas through quoting an obligation transfer number (OTN). This transfer is voluntary, except where the gas is used as a feedstock or where emissions of over 25,000 tCO<sub>2</sub>-e per year can be attributed to gas supplied under contract by a given supplier. For further details on the oil and gas industry under the carbon price mechanism, see Alex Cull and Jehann Mendis, "Australia: The carbon pricing mechanism: an oil and gas industry focus", Norton Rose, 27 July 2011; Ernst & Young, "Navigating the complexities of carbon pricing policy: Oil and Gas industry supplement", November 2011.

12 Perfluorocarbons (PFCs) from aluminum smelting are covered directly by the carbon price.

13 No carbon price will apply to: transport fuels used by households and light commercial vehicles; gas used for transport; ethanol, biodiesel and renewable diesel; transport fuels used as lubricants and solvents.

14 Except for agriculture, forestry and fishing industries.

15 David Fogarty, "Australia adds opt-in rule for polluters in CO<sub>2</sub> scheme", Reuters, 14 September 2011.

16 The Productivity Commission released its Carbon Emission Policies in Key Economies Research Report in June 2011. The report and appendices are available at: [www.pc.gov.au/projects/study/carbon-prices/report](http://www.pc.gov.au/projects/study/carbon-prices/report)

17 These payments will be negotiated, and it appears may come out of the government budget, Rob Burgess, “[The true cost of carbon confusion](#)”, Climate Spectator, 14 July 2011.

18 This is complemented by additional free allocation of permits under the Jobs and Competitiveness Program. The steel sector will receive a 10 percent increase in the direct emissions and electricity baselines relating to the production of certain steel products, starting in 2016-17 and guaranteed through 2017-18.

19 Information on the CFI is available at <http://www.climatechange.gov.au/cfi>; Carbon Market Institute, “[The Carbon Farming Initiative: An introduction to participation](#)”, Carbon Market Institute, 2011; Clayton Utz, “[Carbon Farming Initiative bills passed; now to get ready for them](#)”, 24 August 2011.

20 Such as improved soil carbon content, revegetation, and forest management practices (e.g. reduced logging in native forests). Carbon market units established under the Kyoto Protocol have rules regarding activities that qualify to produce those units, which are referred to as Kyoto-compliant under the CFI.

21 The likelihood that the activity would occur without the CFI in place; the emission reductions from offset credits are generally meant to be additional to any that would occur in the absence of the crediting mechanism.

22 Australia's Future Tax System Review, also known as the Henry Tax Review after the review's chairman Kenneth Ross Henry. For more information please refer to <http://taxreview.treasury.gov.au/Content/Content.aspx?doc=html/home.htm>

23 The Australian Treasury's carbon price modeling is available at [www.treasury.gov.au/carbonpricemodelling/content/default.asp](http://www.treasury.gov.au/carbonpricemodelling/content/default.asp)

24 A summary of different views is provided in these Reuters articles [www.reuters.com/article/2011/07/10/us-australia-carbon-analystview-idUSTRE7690HM20110710](http://www.reuters.com/article/2011/07/10/us-australia-carbon-analystview-idUSTRE7690HM20110710) and [www.reuters.com/article/2011/07/10/australia-carbon-idUSL3E7IA06E20110710](http://www.reuters.com/article/2011/07/10/australia-carbon-idUSL3E7IA06E20110710); see pages 41-42 of the [Clean Energy Bill 2011: Explanatory Memorandum](#) for fiscal tables.

25 Norton Rose, “[Carbon pricing mechanism snap shot: key features, certainty and flexibility](#)”, 10 July 2011.

26 Ibid. Regulations for the Jobs and Competitiveness Program are to be established by March 2012.

27 Sophie Vorath, “[Carbon price: Commentators' view](#)”, Climate Spectator, 11 July 2011; David Fogarth, “[Analysis: Australia CO2 plan puts carbon pricing back on track](#)”, Reuters, 11 July 2011; KPMG, *Australia's Climate Change Plan: How it will work and the implications for business*, Issues & Insights - Business and Industry issue, 11 July 2011; Reuters, “[Analysts' view: Australia passes carbon reduction laws](#)”, Reuters, 8 November 2011.

28 Sid Maher, “[Carbon tax a dead weight, BHP chief tells British briefing](#)”, The Australian, 26 August 2011; Discussion with multinational extractive industry corporation operating in Australia. Views as compiled in Sustainable Prosperity, Carbon Pricing in Australia: Lessons for Canada, Policy Brief September 2011, Table 3, page 12. Available at [www.sustainableprosperity.ca/dl622](http://www.sustainableprosperity.ca/dl622)

29 “[Big Business Backs Climate Price](#)”, ABC News, 6 July 2011; “[Australian Business Rally Behind a Price on Carbon](#)”, The Climate Group, 6 July 2011; Businesses for a Clean Economy signatories: <http://www.b4ce.com.au/home/signatories/businesses>; these include large companies such as General Electric, IKEA, Alstom, Fujitsu, The Body Shop, Johnson Controls, and Pacific Hydro.

30 Paul Murray, “[WA gets a raw deal on carbon](#)”, The West Australian, 31 August 2011; Annabel Hepworth, “[Carbon tax holds up power deals: Rio](#)”, The Australian, 13 September 2011. AAP, “[ETS may reduce costs, says business panel](#)”, 9 News, 8 November 2011.



31 ACTU media release, 13 July 2011: [Unions to campaign to help Australian workers sort carbon price fact from fiction](#). AAP, [“Carbon price wins key union support”](#), 18 July 2011 in the Herald Sun.

32 Discussion with Australian government official; see [editorials](#) from The Australian's Editor-at-large Paul Kelly; Henry Ergas, [“Labor plants poison pills in carbon tax”](#), The Australian, 16 September 2011. In a poll conducted at the end of August 2011 presenting a list of policies, the “carbon tax” was one of two policies not favored by the public, with 53 percent of respondents not supportive of it - Rob Burgess, [“Fixated on carbon and carnal pleasures”](#), Business Spectator, 30 August 2011.

33 Deputy Prime Minister and Treasurer media release, [“Michael Vertigan to Chair Energy Security Council”](#), Joint Media Release No. 122, 12 October 2011. AAP, [“Agency to achieve renewable energy target”](#), The Age, 12 October 2011. [“Clean Energy Finance Corporation: Experts Appointed”](#), 12 October 2011.

34 Latest Newspoll conducted September 2-4 for the Australian [www.theaustralian.com.au/national-affairs/polling](http://www.theaustralian.com.au/national-affairs/polling)

35 Point Carbon, “Carbon Market Australia-New Zealand”, Volume 4 Issue 11, 28 October 2011. Available at [point-carbon.com/news](http://point-carbon.com/news).

36 Paul Kelly, [“Carbon tax will define our politics”](#), The Australian, 17 September 2011; AAP, [“Don't buy carbon permits, Abbott says”](#), Sydney Morning Herald, 14 October 2011; Stephanie Peatling, [“‘Pledge in blood’ could cost Abbot almost \\$1b”](#), Brisbane Times, 16 October 2011. If the Senate and House twice fail to agree on a piece of legislation, conditions stipulated under Section 57 of the Australian Constitution allow the Governor-General to dissolve the House and the entire Senate and issue writs for an election in which every seat in the Parliament is contested.

37 Point Carbon, “Carbon Market Australia-New Zealand”, Volume 4 Issue 11, 28 October 2011. Permits for the post-2015 flexible price period are likely to be auctioned starting in late 2012 or early 2013.



The Center for Climate and Energy Solutions (C2ES) is an independent nonprofit organization working to promote practical, effective policies and actions to address the twin challenges of energy and climate change.