

Lessons for Canada: Implementation of Australia's Carbon Pricing Mechanism

***Tony Beck, Beck Consulting Services¹ with an introduction by Philip Gass, project manager,
Climate Change and Energy, IISD***

Introduction

Through its Regulating Carbon Emissions in Canada initiative, the International Institute for Sustainable Development (IISD) has sought to provide insight regarding the impact of carbon pricing and regulatory schemes in Canada. While IISD's pieces have focused on Canadian policy strategies, this analysis looks at external carbon mitigation policies and offers lessons and comparison for Canadian policy-makers and industry stakeholders.

In this brief, Tony Beck, an expert on Australian carbon markets, looks at the rollout of Australia's carbon pricing scheme, and the impacts of implementation on national and subnational governments, and the private sector.

The Australian model provides an alternate model of carbon mitigation to Canada's mix of regulation and carbon pricing. While the two economies are not mirror images, the robust energy sector in Australia, its lengthy history debating carbon pricing approaches, and mix of national and subnational climate policy provide a useful parallel reference for Canada.

¹Tony Beck, PhD, has 30 years of experience in policy analysis and evaluation with a focus in the last 20 years on energy, climate change and emission trading issues. His career and involvement with climate change issues has involved both government and private sector experience and has included assessment of the impact of policy developments on a range of commercial interests, especially those linked to national and international carbon markets. Tony was instrumental in the establishment in 1998 of the Asia-Pacific Emissions Trading Forum, the entity that transitioned into the Carbon Market Institute. Prior to managing this transition, Tony held senior executive positions with the Allen Consulting Group, the Business Council of Australia and the Australian Bureau of Agricultural & Resource Economics. tbeck@beckconsulting.com.au

Australia's Clean Energy Future Carbon Price

Starting on July 1, 2012, Australia is implementing an ambitious carbon pricing scheme that aims to address the high carbon intensity of the Australian economy. Australia's *Clean Energy Future* legislative package (the "Scheme"), which includes the carbon price mechanism, has comprehensive coverage, including stationary energy, industrial processes, emissions from landfills and fugitive emissions (mainly from coal mining and natural gas extraction). The Scheme is designed to ensure Australia meets its unconditional emissions reduction target of 5 per cent below 2000 levels by 2020, which translates to 160 million tonnes of abatement (Carbon Market Institute, 2011; Australian Government, n.d.). This policy brief outlines the key elements of the Scheme and reports on implementation issues, business and political implications, and some lessons learned.

Outline of the Scheme

Key elements of the Scheme include:

- Direct application to up to 500 of Australia's largest emitters (called liable entities) who operate facilities with emissions that exceed 25,000 tonnes carbon dioxide equivalent (CO₂e) per annum. Liable entities must obtain and surrender carbon units to cover each tonne of emissions each year.
- An initial three-year fixed price period (2012–2015), where the price of carbon units issued by the federal government is fixed (starting at \$23 per tonne),² followed by a transition to a flexible-price cap-and-trade scheme.
- A subsequent flexible price period (from July 1, 2015) wherein the government will set an emissions cap that will limit the number of carbon units available to liable entities. Carbon units will be fully tradeable in the flexible price period.
- To prevent price shocks, the first three years of the flexible price period (2015–2018) will be subject to a price ceiling; thereafter, the price will be fully flexible.
- In the flexible price period and subject to limits, liable entities will be able to use certain other eligible units (such as from approved domestic and international offset projects) for compliance.
- Direct emissions from the agriculture and land sector, as well as the combustion of biofuels and biomass, are not covered. However, a legislated voluntary program known as the Carbon Farming Initiative (CFI) allows farmers and land managers to earn tradable credits from offset projects in the agricultural and waste (landfill) sectors.
- The transport sector is also not covered but certain business transport emissions (rail and shipping) will be subject to an effective carbon price applied through the fuel tax system. These companies can *opt in* to the carbon price mechanism if they want to manage their carbon price liability more directly.³

² All prices are stated in Australian currency. The Australian dollar currently has approximate parity with the U.S. dollar (September 2012).

³ The equivalent carbon price will be applied through separate legislation, which also covers non-transport use of fuels and synthetic greenhouse gases. The government intends to apply a carbon price to heavy on-road vehicles from July 2014.

Implementation

Under the initial three-year fixed price period, which started on July 1, 2012, the starting unit price will be \$23 per tonne, rising 2.5 per cent each year. Most units required by liable entities will be sourced directly from the government or from entities allocated free permits; up to 5 per cent may also be sourced from the CFI.

When the Scheme enters the flexible price period in 2015, the price will be set by the market under a cap-and-trade arrangement. The cap will set the overall limit on emissions from all sources covered by the Scheme but not on individual sectors, entities or facilities. Units may be obtained from a wider range of sources than under the initial fixed price period. These include government auctions, the CFI, eligible international units (subject to certain restrictions), free allocations and trading.

Responsibility for administering the Scheme rests with a new entity, the Clean Energy Regulator, which will deal with both the climate legislation and clean energy policy.⁴ The regulator is part of the federal Climate Change portfolio and administers the carbon pricing mechanism, the National Greenhouse and Energy Reporting Scheme (NGERS), the CFI and the Renewable Energy Target. In undertaking its administrative task, the Clean Energy Regulator will work closely with a number of stakeholders, including Australian government departments and agencies, industry bodies, liable entities and the community.

The national cap will be adjusted over time to meet the 2020 and subsequent targets. A mechanism will set the cap five years in advance to provide a degree of certainty for business. To provide advice to the government on the conduct of the Scheme, the government has established the Climate Change Authority, an independent body with expertise in science, economics, climate change mitigation, emissions trading, investment and business. The Climate Change Authority will provide recommendations on emissions caps and trajectories and will undertake periodic reviews of the carbon pricing mechanism and the CFI (Department of Climate Change and Energy Efficiency, 2010).

With respect to the CFI, depending on the nature of the credits generated, they can be sold into either the compliance or voluntary carbon markets. Credits that are recognized for Australia's obligations under the Kyoto Protocol can be sold to domestic liable entities. This includes credits earned from activities such as reforestation, savannah fire management and reductions in emissions from livestock and fertilizer use (Department of Climate Change and Energy Efficiency, 2012).

Compensation

Associated with the carbon pricing mechanism is a comprehensive array of business and community assistance measures to reduce its direct cost impact. Those assisted include emission-intensive trade-exposed industries, coal-fired electricity generators, the steel industry and households.

Industry Assistance

A focus of industry assistance is on "trade-exposed" companies that compete with offshore companies that are not subject to a similar carbon-pricing regime. The main vehicle for this assistance is the Jobs and Competitiveness Program. Subject to a trade-exposure test, the assistance takes the form of the free allocation of units at a rate depending on the degree of emission intensity: 94.5 per cent of the allocative baseline for highly emission-intensive activities and 66 per

⁴ For more information, see: www.cleanenergyregulator.gov.au

cent for moderately intensive activities. These initial rates will be reduced by a “carbon productivity contribution” of 1.3 per cent per year, which will provide an ongoing incentive to reduce emissions (Department of Climate Change and Energy Efficiency, 2011). The program is estimated to provide assistance worth \$8.6 billion over the first three years of the carbon pricing mechanism.

Other streams of industry assistance include funding for the:

- Clean Energy Finance Corporation, which will invest in the commercialization and deployment of renewable energy, energy efficiency and low-emission technologies.
- Australian Renewable Energy Agency, which will support research and development, demonstration and commercialization of renewable energy technologies through competitive grants.
- Clean Technology Program, which will include matching grants for investment in clean technology innovation, including in agriculture and manufacturing.

Household Assistance

The Clean Energy Household Assistance Package is designed to provide financial assistance to households to cover expected increases in the cost of living as a result of the Scheme. Under this package, from May 2012 lump sum advances were paid to people receiving social security payments and this will be followed by permanent increases in social security payments. In addition, a tripling of the general income-tax-free threshold to \$18,200 per annum will result in income tax cuts from July 2012 for all taxpayers earning under \$80,000 (Department of Families, Housing, Community Services and Indigenous Affairs, 2012).

Consumer protection has also been ramped up to ensure that unjustified price rises are not blamed on the carbon price. The Australian Competition & Consumer Commission has established a Carbon Claims Hotline and has prosecution powers to deal with false price claims (Department of Treasury, 2011).

Business Implications and Response

Detailed economic modelling by the federal Treasury indicates that projected national investment, incomes and employment rates will continue to grow strongly at the same time as the price of carbon is driving structural change in the economy towards less emission-intensive industries (Department of Treasury, 2011).

The initial carbon price of \$23 per tonne was found to cause a small one-off increase in the consumer price index of around 0.7 per cent. Electricity and gas price increases will be the most significant components of this impact with increases of 10 and 9 per cent respectively.

In terms of impact on business, the domestic price increases reflect the fact that energy and other input prices for non-trade-exposed sectors will rise and will generally be passed on to domestic consumers. The impact on trade-exposed industries, however, should be largely moderated by the allocation of free units and other elements of the compensation package. Despite this comprehensive (some would argue excessive⁵) compensation to business, much of the focus of business and political opposition to the carbon price remains on its supposed impact on the competitiveness of the Australian economy (Hooke, 2012).

⁵ See Grattan Institute (2011)

On the other hand, there is also business support for the Scheme. Immediately following the start of the Scheme, about 300 companies contributed to a national advertisement proclaiming their support and stating that it is an important piece of economic and environmental reform. A middle ground accepts the merits of a carbon market but questions aspects of the current Scheme, in particular the high starting price of \$23, which is now substantially higher than the de facto international European Union Emissions Trading System (EU ETS) price, which has collapsed over the last year to around \$10 with little sign of short term recovery.⁶

Relationship with other Policies

The introduction of such a comprehensive national program as the Clean Energy Future package understandably has a significant impact on other related policies, particularly those implemented by state governments who have often taken the lead on climate policy in the past.

The most significant policy affected is the Greenhouse Gas Abatement Scheme (GGAS), a longstanding mandatory baseline and credit-trading scheme implemented by New South Wales (NSW).⁷ This scheme, one of the world's first mandatory trading schemes, commenced in 2003 and established annual state-wide greenhouse emissions reduction targets and required electricity retailers and certain other parties who buy or sell electricity in the state to meet mandatory emission intensity benchmarks. Project-based activities could be used to offset emissions and meet obligations.

The NSW government closed GGAS on July 1, 2012, citing the need to avoid duplication with the federal carbon pricing mechanism. This closure had been planned for some time and was always anticipated in the event that a market mechanism was implemented at the federal level. However, due to double-counting concerns, federal regulations preclude the use of unused GGAS credits to meet compliance in the new federal Scheme. These concerns are disputed by some companies that stand to lose much of the value of their surplus GGAS credits (Carbon + Environment Daily, 2012).

Notwithstanding the political uncertainty about the future of the national carbon pricing mechanism (see below), other state governments have also been actively winding back their greenhouse gas management regimes. In Victoria, following an independent review, the state government is abolishing its previously bipartisan state emissions reduction target (a 20 per cent reduction by 2020). In Queensland, the state government has announced its intention to cut climate programs that will save it over \$660 million over three years and the Western Australian government seems likely to relax greenhouse gas conditions on major resource projects now that the carbon price is in place.

Whether state-based schemes will ramp up again if a change of government at the federal level limits future federal climate action is a moot point. All four of the major state governments mentioned above now have conservative governments, which could suggest that this may be unlikely.

⁶ The Scheme was initially implemented with an interim floor price of \$15 planned for the first three years of the flexible price phase. Following business representations, this has now been dropped (see Lessons Learned below).

⁷ For more information about the GGAS, see: www.greenhousegas.nsw.gov.au

Political Uncertainty

Climate policy is contentious in Australia. Despite supporting a carbon-trading scheme when previously in government, the (conservative) Liberal-National federal opposition is opposing the carbon price mechanism and is promising to repeal it if they win the next federal election. The current federal Labor government has a minority in both houses and relies on the support of a small number of Greens and independents. Even if the government runs its full term to late 2013, a change of government is possible given current evenly balanced polls.

However, how a new Liberal-National government would fulfil its promise to repeal the carbon tax is yet to be explained and is adding to business uncertainty. The carbon price mechanism is now fully legislated and compensation payments and tax cuts are already being paid to businesses and households drawing on the revenue from the carbon price. Cutting back these benefits and unwinding contracts and investments predicated on the carbon price will be difficult. Also, a new government is unlikely, at least initially, to have a majority in the Senate. Without a majority, it would be difficult for a new government to quickly repeal the carbon price mechanism.

The opposition's alternative climate policy framework (The Coalition, 2010) refers to "direct action" with an emphasis on soil carbon as a major element of the strategy to achieve an abatement target comparable with that of the government "without the need for a great big new tax." The driver for the "direct action" would be a taxpayer-funded Emissions Reduction Fund that would provide incentives for soil carbon sequestration, other emissions abatement, renewable energy and energy-efficiency programs. Although only a framework at this stage, the policy appears to imply that some form of baseline and credit scheme would also be deployed, supported by the Emission Reduction Fund. It states: "Businesses that reduce their emissions below their individual baseline ('historical average') will be able to offer this CO₂ abatement for sale to the government. ...Businesses that undertake activity with an emissions level above their 'business as usual' levels will incur a financial penalty" (The Coalition, 2010).

Lessons Learned

Although it is very early in the life of Australia's carbon price Scheme, there are already some useful lessons to be learned, particularly relating to implementation processes and the approach to compensation.

The implementation of a comprehensive carbon price and trading scheme requires detailed information on the emissions profiles of a wide range of entities to resolve such issues as liability thresholds, free permit allocations and compensation payments. Establishing these key parameters would not have been possible in Australia without the well-established NGERs, which was introduced in 2007. Corporations that meet the NGERs threshold must report their annual greenhouse gas emissions, energy production and consumption, and other information specified under the NGERs legislation. The NGERs is administered by the Clean Energy Regulator and has proven an effective foundation on which to base the carbon price mechanism.

More problematic has been the issue of the fixed price in the introductory phase of the Scheme. The initial fixed price phase that will run until June 2015 is designed to provide price certainty during the establishment phase before the Scheme moves to the flexible price phase. The initial fixed price of \$23 per tonne was chosen to match expectations of the European-based "international price," but the subsequent collapse in the European price and the strengthening of the Australian dollar has led to a significant difference between the fixed Australian price and this international price.

This discrepancy was also apparent in relation to the floor price of \$15 that was originally to apply in the first three years of the flexible price phase from July 2015.

Industry lobbying has targeted these differences as an unreasonable impost on Australian industry, while market advocates have claimed that the fixed and floor prices were impediments to fostering linkages with other national and regional schemes such as the EU ETS. The government had little room to move on the initial fixed price, as it effectively finances the committed compensation payments to the community and business. But it has decided to abolish the planned floor price. In announcing this change, the government has nevertheless maintained its view that European prices will recover, and has highlighted the potential benefits of linkages with the EU ETS. On the other hand, the renewable energy sector is concerned that if the European price does not recover, a significant drop in the Australian price after the fixed price phase will discourage necessary investment.

This experience would suggest that it is risky to lock in fixed or floor prices under volatile international market conditions. Early exposure to international market prices may avoid a difficult transition later in the scheme.

The volatile market also has implications for the compensation arrangements. Payments to some emission-intensive power stations, for example, which are designed to ensure critical generating capacity is maintained, are also based on carbon price projections that are now well out of line with international prices. Unless prices recover, some power stations may be overcompensated for the carbon price impact. The extent of this effect is uncertain but at least one analysis estimates that emissions-intensive brown coal power stations in Victoria may actually be better off under the carbon price mechanism. With hindsight, a compensation scheme more directly linked to market prices may have been preferable.

Conclusion

Reviews of climate policy in Australia under successive governments have recommended a domestic emissions trading scheme as the most cost-effective way of achieving meaningful emissions reductions. The Clean Energy Future legislative package, with its comprehensive carbon price mechanism, sets Australia on this path and at the frontier of global carbon market developments. However, uncertainty remains over the sustainability of its pricing regime and its durability if there is a change of government.

Reference List

- Australian Government. (n.d.). Carbon price. *Clean Energy Future*. Retrieved from www.cleanenergyfuture.gov.au/clean-energy-future/carbon-price/
- Carbon + Environment Daily. (2012, April 27). Property rights under threat: AGL criticises carbon credit rules. Retrieved from www.cedaily.com.au/nl06_news_selected.php?act=2&stream=1&selkey=47910&hlc=2&hlw=Property+rights+under+threat%3A&s_keyword=Property+rights+under+threat%3A&s_searchfrom_date=631112400&s_searchto_date=1348520548&s_pagesize=8&s_word_match=2&s_articles=1&stream=1
- Carbon Market Institute. (2011, November). *Australia's Clean Energy Legislative Package: A guide for business*. Retrieved from www.carbonmarketinstitute.org/publications/australias-clean-energy-legislative-package-a-guid
- Department of Climate Change and Energy Efficiency. (2010). Climate Change Authority. Australian Government. Retrieved from www.climatechange.gov.au/government/initiatives/climate-change-authority.aspx
- Department of Climate Change and Energy Efficiency. (2011). *Assessment of activities for the purposes of the Jobs and Competitiveness Program: Guidance Paper*, Australian Government. Retrieved from www.climatechange.gov.au/en/government/initiatives/jobs-competitiveness-program/~/_media/government/initiatives/EITE-Jobs-and-Competitiveness-Program-guidance-document-20110921-PDF.pdf
- Department of Climate Change and Energy Efficiency. (2012). The Carbon Farming Initiative handbook. Australian Government. Retrieved from www.climatechange.gov.au/government/initiatives/carbon-farming-initiative/~/_media/government/initiatives/cfi/handbook/CFI-Handbook-20120403-PDF.pdf
- Department of Families, Housing, Community Services and Indigenous Affairs. (2012, August). The Household Assistance Package. Retrieved from www.fahcsia.gov.au/household-assistance-package
- Department of Treasury. (2011, September 21). *Strong growth, low pollution: Modelling a carbon price*. Australian Government. Retrieved from <http://carbonpricemodelling.treasury.gov.au/carbonpricemodelling/content/default.asp>
- Grattan Institute. (2011, August 30). *New protectionism under carbon pricing*. Retrieved from <http://grattan.edu.au/publications/reports/post/new-protectionism-under-carbon-pricing>
- Hooke, M. (2012, July 1). The carbon and mining taxes. Minerals Council of Australia. Retrieved from www.minerals.org.au/news/the_carbon_and_mining_taxes
- The Coalition. (2010). The Coalition's Direct Action Plan. Retrieved from www.greghunt.com.au/Portals/0/PDF/TheCoalitionsDirectActionPlanPolicy2010.pdf

Published by the International Institute for Sustainable Development.

International Institute for Sustainable Development

Head Office

161 Portage Avenue East, 6th Floor, Winnipeg, Manitoba, Canada R3B 0Y4

Tel: +1 (204) 958-7700 | Fax: +1 (204) 958-7710 | Web site: www.iisd.org

About IISD

The International Institute for Sustainable Development (IISD) contributes to sustainable development by advancing policy recommendations on international trade and investment, economic policy, climate change and energy, and management of natural and social capital, as well as the enabling role of communication technologies in these areas. We report on international negotiations and disseminate knowledge gained through collaborative projects, resulting in more rigorous research, capacity building in developing countries, better networks spanning the North and the South, and better global connections among researchers, practitioners, citizens and policy-makers.

IISD's vision is better living for all—sustainably; its mission is to champion innovation, enabling societies to live sustainably. IISD is registered as a charitable organization in Canada and has 501(c)(3) status in the United States. IISD receives core operating support from the Government of Canada, provided through the Canadian International Development Agency (CIDA), the International Development Research Centre (IDRC), and from the Province of Manitoba. The Institute receives project funding from numerous governments inside and outside Canada, United Nations agencies, foundations and the private sector.

IISD Climate Insights

IISD's *Climate Insights* is an expert advice program provided by the IISD Climate Change and Energy Team. Delivered on a subscription basis, the program caters to public and private sector clients looking for on-demand advice related to regulatory analysis, mitigation and adaptation action, and policy development. *Climate Insights* offers insider access to developing analytics from IISD as well as monthly updates on emerging issues in climate change and energy. Subscribers also help to fund innovation, as subscription fees are re-invested directly into IISD research and publications.

IISD Climate Change and Energy is a leading and trusted authority on climate issues with a reputation for honesty and unbiased policy solutions. IISD's capacity is drawn from its global network of staff and associates from government, industry and academia, ensuring our knowledge base matches the needs of our clients.