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Carbon Emission Trading

Growing concern over global warming has spurred the development of emissions trading as a market-based approach to reducing Greenhouse Gas (GHG) pollutants. As discussed in this paper, various schemes for emissions trading are being examined internationally and in Canadian jurisdictions.

Prepared by Emily Yearwood-Lee
Reference Librarian
Legislative Library of British Columbia

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Growing concern over global warming has spurred the development of emissions trading as a market-based approach to reducing Greenhouse Gas (GHG) pollutants. The idea is that trading values attached to emissions will save participants money as they meet environmental protection requirements. Various schemes for emissions trading are being examined internationally and in Canadian jurisdictions.

DEFINITIONS

The term "emissions trading" refers to "a market where, for specified pollutants, parties can buy or sell allowances or permits for emissions, or credits for reductions in emissions."[1] For example, the United States during the nineties created a trading program to regulate sulphur dioxide emissions from electric generating facilities in order to combat acid rain.[2] Emissions trading might happen in a region, country or internationally.

In a carbon market, tradable units are either allocated by a regulatory body, or produced by GHG emission reduction projects.[3] The former system often involves a "cap-and-trade" scheme, where a regulator caps participants' allowable emission levels, then issues tradable units equal to the cap. Participants who emit less GHG than allowed can sell their left-over allowances at market price.[4] The emission cap produces the environmental benefit and might be lowered over time.[5] Project-based transactions involve buyers purchasing emission credits from a project that can "demonstrate GHG emission reductions compared with what would have happened otherwise."[6]

There is also an expanding retail segment that sells emission reductions to individuals and companies wanting to voluntarily offset their "carbon emission footprints." According to the World Bank's 2007 report on carbon markets: "Reports of increased interest of banks, credit card issuers, private equity funds and others in this segment suggest that it could grow exponentially if only there were a credible, voluntary standard for such assets."[7]

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In February 2007, the B.C. government said it would work with the federal government and "its Pacific partners to develop a sensible, efficient system for registering, trading and purchasing carbon offsets and carbon credits."[8] The government's energy plan, released the same month, mentioned carbon offsets as a means for existing thermal generation power plants to achieve zero net emissions.[9] On April 24, the government announced it had joined five American states in the Western Regional Climate Action Initiative. The alliance's purpose includes developing, by 2008, "a design for a regional market-based multi-sector mechanism to achieve the regional GHG reduction goal."[10] It was later reported that British Columbians would eventually be able to buy carbon credits under a government-developed system.[11]

Several years ago, British Columbia was involved with reviewing emission trading projects as a part of the Greenhouse Gas Emission Reduction Trading (GERT) pilot. The purpose of the pilot was to learn about emission reduction trading by reviewing actual projects.[12] GERT was conceived in British Columbia in 1995, but was not officially launched until 1998 and then included the federal government, several provinces, and other organizations.[13] According to its 2002 final report, GERT participants "concluded that project-based GHG emission reduction trading is feasible."[14]

CANADA AND OTHER PROVINCES

The federal government's action plan for reducing GHGs, released in April 2007, included domestic emissions trading and offsets as a means for companies to reduce GHG output. The trading system would include an inter-firm structure "through which regulated firms may buy and sell emission credits among themselves."[15] It would also let companies invest in "verified emission reductions outside the regulated system."[16]

Ontario has been running an emissions trading program covering nitrogen oxide and sulpher dioxide since December 2001.[17] The Ontario scheme is described as a "cap, credit and trade" system.[18] In May, Ontario's premier proposed creating a national cap-and-trade system to limit GHG emissions.[19] The government has also expressed an interest in joining U.S. states in the Western Regional Climate Action Initiative, as well as the Regional Greenhouse Gas Initiative, discussed later in this brief.[20]

The Alberta government has said it will release a draft climate action plan for discussion during the summer of 2007.[21] The *Climate Change and Emissions Management Amendment Act*, passed in April, allowed for large emitters to "also invest in projects outside their operations that reduce - or offset - emissions on their behalf."[22] In May, it was reported that Alberta had rejected the idea of joining a regional market for trading carbon credits. Premier Ed Stelmach reportedly said Albertan money should stay in the province, rather than be invested in other provinces and states."[23]

CLIMATE EXCHANGES IN CANADA

The Montreal Climate Exchange, an environmental products trading market, was announced in July 2006 as a partnership between the Montreal Exchange and the Chicago Climate Exchange (CCX). The Chicago Exchange bills itself as "North America's only, and the world's first, legally-binding, multi-sectoral, rules-based and integrated greenhouse gas emission registry, reduction and trading system."[24]

In 2007, it was reported that the Toronto Stock Exchange wanted to establish a market for trading carbon credits.[25] The same year, the Canadian Climate Exchange (CCE) issued a press release calling for the market, not the government, to determine "where emissions trading takes place."[26] The CCE, an affiliate of the Winnipeg Commodity Exchange, was created in 2003 "to explore and develop market-based solutions to climate change."

INTERNATIONAL

The Kyoto Protocol included emissions trading as one of three "flexibility mechanisms" for members needing to lower their emissions. The other mechanisms were Joint Implementation and Clean Development Mechanism, which are both project-based transaction systems.

To meet Kyoto targets, countries have established national or regional emissions trading schemes, as noted by one guide to voluntary carbon markets.[27] The largest is the European Union's EU Emission Trading Scheme (EU ETS), set up in 2005. The system involves all EU member states and allows trading with all three Kyoto flexibility mechanisms.[28] During its first phase (2005-2007), it regulated CO2 emissions from operations representing about 40 percent of EU emissions.[29] Elsewhere, the Greenhouse Gas Abatement Scheme was set up in New South Wales, Australia, in 2003. It is a mandatory trading scheme designed to reduce GHG emissions associated with electricity production.

The United States does not have a federal program requiring greenhouse gas reductions; however, several states have recently developed initiatives in that area. The Regional Greenhouse Gas Initiative involves nine northeast and mid-Atlantic states working to reduce carbon dioxide emissions from power plants. The plan is that, starting in 2009, member states will implement a mandatory cap-and-trade program for carbon dioxide.[30] According to the RGGI website, "the Eastern Canadian Provinces Secretariat and the Province of New Brunswick" have been involved in the process as observers.[31]

New state legislation directed the California Air Resources Board (CARB) to develop a program to reduce emissions to 1990 levels. The *Global Warming Solutions Act* (AB32) required CARB to consider other greenhouse gas reduction regimes. It has been speculated that this instruction could "open the door for future emissions trading between California and other states."[32] As noted in a paper by the U.S. Congressional Research Service, California's governor also issued an executive order calling for a "market-based compliance program with the goal of creating a program that permits trading with the European Union, the Regional Greenhouse Gas Initiative and other jurisdictions."[33] Further, as noted earlier, California joined in the Western Regional Climate Action Initiative in February 2007.

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