CAP & TRADE

FACT SHEET

BRITISH COLUMBIA GLOBAL WARMING SOLUTIONS SERIES • MARCH 2008

Sustainable Energy Solutions

Tackling 40% of British Columbia's Global Warming Emissions

British Columbia is developing a "cap and trade" system that could ensure that large industry and aviation reduce the pollution that causes global warming.

If designed well, the system could spur companies to develop innovative ways to reduce global warming emissions, while allowing them to stay competitive.

The potential to reduce emissions using a cap and trade system is huge. Large industry and aviation produce approximately 40% of British Columbia's emissions – and these are just two of the sectors that could be covered by cap and trade.

However, if the emissions cap is weak or the trading system contains loopholes, British Columbia would miss a major opportunity to reduce its global warming emissions.

The Western Climate Initiative

British Columbia, Manitoba and seven U.S. states (including California, Oregon and Washington) have partnered through the Western Climate Initiative (WCI) to find global warming solutions.

The WCI partners are currently designing a cap and trade system. Negotiations about how the system will work are at a critical stage, and there is a brief window of opportunity for input from the public and policymakers.

Cap and Trade Basics

The principle behind a cap and trade system is simple. Governments determine which sources will be covered by the system, and set a limit (the cap) on the total amount of pollution allowed from those sources. The government then creates and distributes "pollution permits" equal to that amount.

Each company included in the system needs to obtain enough permits to cover its emissions for the year. They can either obtain permits from the government or from companies with a surplus.

Companies that are able to reduce their emissions cheaply can benefit financially by selling permits. Companies that find it more expensive to reduce pollution will need to buy more permits. In this way, the cap ensures that total pollution goes down, and companies are motivated to find better ways to reduce pollution.

Cap and trade systems have already been used successfully to reduce pollution in the United States and in the European Union (see "Cap and Trade Around the World" on page 4).

A strong cap and trade system has enormous potential to help reduce British Columbia's global warming emissions.

PHOTO: GARY FIEGEHEN

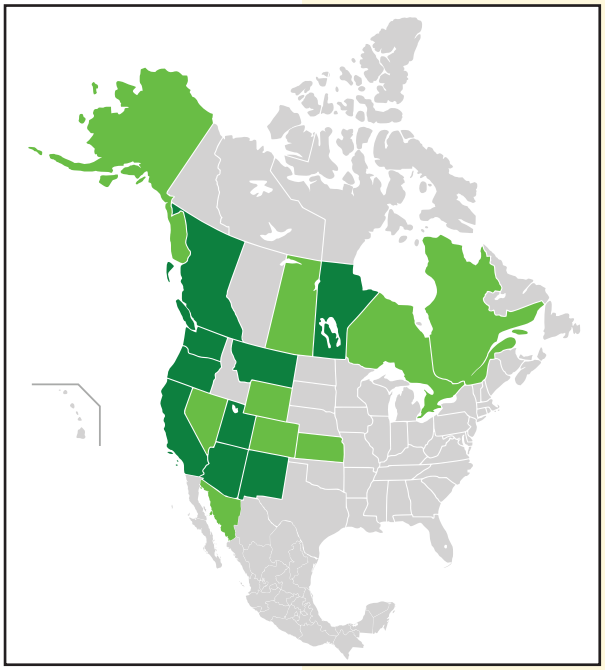

Figure 1: British Columbia is a partner in the Western Climate Initiative (WCI), which is designing a cap and trade system. WCI partners (dark green) account for emissions from 64 million people and WCI observers (light green) account for emissions from an additional 37 million people.

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RECOMMENDATIONS

Four Keys to an Effective Cap and Trade System

To create a robust and effective cap and trade system, British Columbia and the Western Climate Initiative (WCI) need to follow four simple principles:

1. SET STRONG CAPS

The cap should be at least 33% below 2007 levels by 2020. Annual caps should set an appropriate course towards this target.

This represents a "fair share" approach, where the polluters covered by the cap must achieve cuts at least in line with the targets British Columbia has put into law.

If a weaker cap is set, other parts of the provincial economy will have to reduce emissions even more. In this case, the government will need to explain who will make up for the shortfall – and how.

There should also be provisions to make the cap stronger if needed. For example, scientific evidence may indicate that we need to accelerate efforts against global warming, or economic analysis may show that cap and trade is more effective than other policies.

2. INCLUDE THE RIGHT SECTORS

Cap and trade should, at a minimum, include large industry and aviation.

Large industry and aviation are ideal candidates for cap and trade because:

- Pollution from these industries is not adequately addressed by existing policies.
- They will benefit from a regional approach to reducing emissions because they compete with businesses in neighboring jurisdictions (like the west coast states).
- Their emissions can be accurately measured with a minimum of effort, facilitating permit calculation and trading.

Other sources of pollution (for example, buildings and vehicles) could also be covered by a cap and trade system. However, if strengthened over time, British Columbia's carbon tax can produce the same results. Whichever policy is used, British Columbia must ensure that no sources of pollution slip through the cracks. Cruise ships and freighters, in particular, must be covered by either the carbon tax or cap and trade system.

An effective cap and trade system should apply to large industry and aviation – sources that account for approximately 40% of British Columbia's global warming emissions. PHOTO: DEVY MASSELINK | DREAMSTIME.COM

3. AUCTION OFF PERMITS

All of the pollution permits should be put up for auction.

When governments distribute permits to companies, they can choose to auction them or to give them away for free. Auctioning has many advantages:

- Auctioning is a simple, market-based system, consistent with the "polluter pays" principle.
- Companies that have already taken steps to reduce emissions benefit because they need to buy fewer permits than their competitors.
- Auctions provide a source of revenue for the province. The revenue can be used to fund other projects that reduce emissions, and to help vulnerable companies, workers and citizens.
- Consumers are protected from unfair price increases. In Europe, some companies that received permits for free raised prices anyway – a "windfall" profit for doing nothing.

If there are barriers to 100% auctioning of permits when the system is first implemented, governments and companies need to work to eliminate these as soon as possible.

4. MAINTAIN THE INTEGRITY OF THE SYSTEM

Limited use of offsets that are proven to reduce emissions should be allowed. Price caps that weaken the system should not be used.

Cap and trade systems can include measures, such as offsets and price caps, to limit the costs that companies are required to pay.

Offsets allow companies to buy pollution reductions from outside the cap and trade system. Examples of offset projects could include energy efficiency retrofits for low-income households, solar power installations in remote communities, and forest restoration.

A well designed cap and trade system should only allow the use of offsets under certain conditions to ensure that they don't weaken the system. Examples of offset projects could include energy efficiency retrofits for low-income households and solar power installations in remote communities.

PHOTO: COURTESY OF DOE/NREL

Offsets can be an effective part of cap and trade, but only under certain conditions:

- Offset projects need to meet strict "additionality" requirements. This means that the projects would not have happened without the funding from the offset purchase.
- Use of offsets should be limited so that permit prices stay high enough to ensure that companies still focus on reducing their pollution.
- Forest offsets should only be included if their unique challenges, including impermanent storage of carbon and impacts on biodiversity, are addressed.

A **price cap** is a guarantee that permit costs to companies will not exceed a certain amount. British Columbia's cap and trade system should not include a price cap, unless the price is high enough to avoid undermining incentives for companies to reduce their pollution.

Cap and Trade Success Story

In the 1990s, the United States implemented one of the first cap and trade systems in order to address acid rain pollution. The acceptance and quick implementation of the system – after nearly a decade of stalemates between government and companies over regulation of acid rain pollution – was the first sign of success. More importantly, the system exceeded pollution reduction goals. Power plants participating in the system reduced pollution by 7.3 million tons below the mandated levels. In addition, costs for polluters have been much lower than expected.[1]

1 Ellerman, A. Denny, David Harrison and Paul L. Joskow. 2003. *Emissions Trading: Experience, Lessons, and Considerations for Greenhouse Gases.* MIT/CEEPR and Washington, D.C.: Pew Center for Global Climate Change.

Want More Information?

For more information on cap and trade and our recommendations, download our full report from:

http://bc.pembina.org/climate-change

This is part of a series of fact sheets exploring global warming solutions for British Columbia. The series is intended to facilitate informed discussion on climate-related choices facing British Columbians today. Check our website for new additions to the series:

http://bc.pembina.org/climate-change

This fact sheet was prepared by Matt Horne of the Pembina Institute with Matt Price of Environmental Defence. We welcome your questions and feedback on this fact sheet and the recommendations. Please respond to: Matt Horne matth@pembina.org

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Cap and Trade Around the World

The Western Climate Initiative (WCI) can draw from experiences around the globe to design its cap and trade system. The United States significantly reduced acid rain pollution using a cap and trade system (see "Cap and Trade Success Story"). The European Union already has a cap and trade system for global warming emissions. The system, which covers 27 countries, is in its second phase, with changes such as auctioned permits and inclusion of air travel emissions. In Canada, federal and Alberta global warming regulations include a permit trading system. However, neither of these polices sets an absolute cap on emissions, and they both contain major loopholes that allow polluters to avoid making significant reductions in emissions.

A strong cap and trade system has the potential to drive innovation, technology and efficiency improvements that reduce pollution and save companies money. For example, oil and gas companies can reduce emissions through activities such as identifying and repairing leaks in their systems. PHOTO: DOLORES BASWICK

Take Action

The WCI partner governments, including British Columbia, are working together to design a cap and trade system by August 2008. Draft recommendations for the system are now available at the WCI website. Final recommendations will be released for review and comment in mid-July. The public can send comments on the recommendations to both the WCI and the British Columbia government. Citizens are urged to contact them and provide input.

Submit comments to the WCI here:

http://www.westernclimateinitiative.org/

Submit comments to the British Columbia government's Climate Action Secretariat here:

http://www.climateactionsecretariat.gov.bc.ca/

RECOMMENDATIONS

1. The cap should be at least 33% below 2007 pollution levels by 2020.
2. The system should include large industry and aviation (at a minimum).
3. All of the pollution permits should be put up for auction.
4. Limited use of offsets that are proven to reduce emissions should be allowed. Price caps that weaken the system should not be used.

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