Why cap-and-trade?

Cap-and-trade is the best means of reducing the GHG emissions that cause global warming while simultaneously providing industry with incentives that will encourage alternative, renewable energy sources and technologies.

A cap-and-trade program sets a clear, mandatory, enforceable limit on GHG emissions and then allows the market to identify the most cost-effective ways to achieve the limit. The state or provincial government sets an absolute aggregate limit (or “cap”) on GHG emissions from a sector or multiple sectors. Tradable emissions “allowances,” or permits, are then distributed in an amount that equals the total emissions permitted by the cap. These allowances can be distributed by auction and/or be allocated at no cost. Partner governments will specify which entities and facilities must surrender allowances to cover their emissions.

Cap-and-trade programs turn pollution reductions into marketable assets. By giving pollution reductions a value in the market place, cap-and-trade promotes technological and process innovations that reduce pollution down to or beyond required levels. New ideas become bankable. And these new ideas don’t have to be new technologies. UPS estimated it has saved about 28 million drive miles, or about 3 million gallons of gasoline and an estimated 31,000 metric tons of carbon dioxide by eliminating left hand turns in many of its routes.

What are the elements of a cap-and-trade program?
- A mandatory emissions cap. This is the limit on the total tons of emissions that can be emitted. It provides the standard by which environmental progress is measured, and it gives the units of pollutants traded market value. If the cap didn’t result in real reductions, the pollutant would not have any market value.
- A number of allowances equal to the cap. Government can allocate the credits to emitters in a number of ways, but the total number of allowances needs to equal the cap to make the program work. Emitters can then buy and sell allowances to meet their needs, so long as they have allowances equal to their emissions when government checks compliance. In the case of a carbon dioxide cap-and-trade program, each allowance (or credit) gives the owner of the allowance the right to emit one ton of carbon in a given year.
- Accurate measurement and reporting. At the end of each compliance period (e.g., 3 years), each source must hold a number of allowances equal to its tons of emissions for that period. Measurement and reporting of the emissions must be transparent and accurate.
- Appropriate enforcement. To ensure confidence in the market so that carbon has value and innovation occurs to reduce carbon, the cap must be real. All elements of the program – ensuring emissions do not exceed the cap, that sources have sufficient allocations to cover their emissions, that reporting is accurate – must be backed up by appropriate enforcement mechanisms.

**Does cap-and-trade work?** As part of the Clean Air Act Amendments of 1990, a cap-and-trade program was designed, tested, and proven as a successful tool for controlling Acid Rain (Sulfur dioxide) air pollution. The Economist magazine called the Acid Rain cap-and-trade program “probably the greatest green success story of the past decade”. (July 6, 2002) Outcomes of the Acid Rain cap-and-trade program included:

- The expected market price for SO2 allowances was $579-$1,935 per ton of SO2; the actual market price as of January 2003 was $150 per ton.
- In the 1990s, the U.S. acid rain cap-and-trade program achieved 100% compliance in reducing sulfur dioxide emissions. In fact, power plants participating in the program reduced SO2 emission 22% - 7.3 million tons - below mandated levels.
- Before the launch of the program, cost estimates had ranged from $3-$25 billion per year. After the first two years of the program, the costs were around $0.8 billion per year. The long-term costs of the program are expected to be around $1.0-$1.4 billion per year, far below early projections.

**How is cap-and-trade different from a tax?** Cap-and-trade sets the limit for emissions and lets the market work out the costs of hitting that limit. A tax sets a price for emissions and lets the market work out how much of a reduction in emissions will happen. Both can work if designed and implemented properly, but the challenges are different. A tax provides price stability for those who will pay it, but the environmental benefit is not assured because emissions will not fall if people are willing to pay higher costs. Taxes at the rate needed to send the price signal needed to reduce carbon and spur reduction innovations are difficult to put in place and adjust over time. Cap-and-trade provides certainty of environmental performance but the costs are uncertain and will vary over time. It may be easier to put in place but more
challenging to implement.

What are the WCI cap-and-trade program elements being recommended by the WCI?

- Limit the emissions from all major sources of global warming pollutants;
- Include all electricity-related emissions under the cap, including those associated with electricity imported from outside the WCI Partner jurisdictions:
- Ensure that all regulated entities use a consistent reporting methodology; and
- Mitigate economic impacts on consumers and regulated entities by allowing flexibility in how and when the reductions are made (e.g. banking of allowances and the limited use of offsets).

How was the WCI cap-and-trade program design developed? The Design for the WCI Regional Program released on July 27, 2010, is the culmination of two years of work by seven U.S. states and four Canadian provinces in collaboration with stakeholders, advisors and experts. This document provides a roadmap to inform the WCI Partner jurisdictions as they implement the cap-and-trade program in their jurisdictions, and builds off the Design Recommendations for the WCI Regional Cap-and-Trade Program released on September 23, 2008.

What is the timing of implementing the WCI cap-and-trade program? Between now and the planned program start date of January 2013, the WCI Partner jurisdictions will address remaining program design issues and take the steps necessary to make regional trading operational, including reporting greenhouse gas emissions in 2011 for emissions that occur in 2010. The first phase of the cap-and-trade program will begin on January 1, 2013, with a two-year compliance period. The second phase of the program will begin in 2015, when the program will be expanded to include transportation fuels and residential, commercial and industrial fuels not otherwise covered in the first phase.

What emissions sources are subject to the cap under the WCI agreement? The WCI cap-and-trade program covers the largest sources of emissions from each state and province, including electricity, industry, transportation, and residential and commercial fuel use.

How will emissions allowances be distributed under the WCI agreement? Each WCI Partner jurisdiction will have an emission allowance budget under the cap-and-trade program that is consistent with its jurisdiction-specific emissions goal for 2020. Each Partner has the flexibility to decide how best to allocate its allowance budget within its jurisdiction.

For instance, a Partner could “give” allowances to the emitters operating within its jurisdiction, “auction” the allowances to willing buyers, or provide for some combination of the two. The WCI design calls for a minimum auction level of 10% at the start of the program, increasing to at least 25% by 2020. Each jurisdiction may auction a higher percentage if it so chooses. In
addition, the WCI Partners have agreed to use a portion of the allowance value for purposes with region-wide benefits, such as energy efficiency and low-carbon technology development.

The WCI has established the Cap Setting and Allowance Distribution Committee to recommend methodologies for establishing the regional WCI GHG emissions cap and each WCI Partner jurisdiction’s allowance budgets.

**How will compliance be determined under the WCI agreement?** The bedrock of a cap-and-trade system is a rigorous emissions reporting requirement. The regulated sources are required to ensure the data are accurate and complete. Each WCI Partner will require third party validation of reported emissions from entities and facilities that will be included under the cap.

The WCI agreement is consistent with previous well-designed cap-and-trade programs that have had compliance rates of over 99 percent. At the end of each compliance period, facilities and entities with emissions are required to submit the same number of emission allowances to the government as the emissions they had during that compliance period. If the facility or entity does not have sufficient emissions allowances to cover its emissions, a “penalty” of three allowances will be assessed for each one they are short.

The WCI has established the Reporting Committee to develop recommendations on a greenhouse gas emissions reporting system that will support the WCI cap-and-trade program, and the Markets Committee to develop recommendations on common elements needed to guide the proper development and operation of a robust and transparent allowance and offset credit trading market, including compliance, verification and enforcement.

**What are offsets and how are they handled under the WCI program?** Offsets are reductions in greenhouse gas emissions from outside the capped sectors, such as forestry and agriculture. Offset credits may be used, provided they meet rigorous criteria to ensure that emission reductions are real, verifiable, surplus/additional, permanent and enforceable. Offset credits may be traded. The WCI program limits the use of offsets for compliance purposes to ensure that a majority of the required emissions reductions is achieved in the sources covered by the cap-and-trade program.

The WCI has established the Offset Committee to make recommendations on the design and operation of the WCI offset system. The Markets Committee will also develop recommendations on common elements needed to guide the proper development and operation of a robust and transparent offset credit trading market.
What is the WCI regional emissions reduction goal?

Working with the emissions inventory and projection for each of the partner jurisdictions, the WCI determined that a 15 percent reduction from 2005 levels by 2020 was consistent with all of the partners’ individual goals. With each partner reaching its own goal, the region is assured of achieving this level of reduction.