

Western Climate Initiative



Draft Design of the Regional Cap-and-Trade Program

July 23, 2008

The Western Climate Initiative (WCI) jurisdictions are recommending a design for a broad cap-and-trade program as part of a comprehensive regional effort to reduce emissions of global warming pollution to achieve the WCI 2020 regional goal. The recommended design contains costs through emission trading, allowance banking, and inclusion of an offsets component that will provide opportunities to obtain low-cost emission reductions. Further, the WCI design is intended to mitigate the economic impact on consumers, and the costs passed onto consumers, through design features such as allowance distribution and the use of offsets.

1. SCOPE¹

- 1.1. Greenhouse gases covered: Carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.
- 1.2. Emissions covered:
 - 1.2.1. Electricity generation, including emissions from electricity imported into WCI jurisdictions from non-WCI jurisdictions;
 - 1.2.2. Combustion at industrial and commercial facilities;
 - 1.2.3. Industrial process emission sources, including oil and gas process emissions;
 - 1.2.4. Residential, commercial, and industrial fuel combustion at facilities below the WCI thresholds (as described below in the Point of Regulation section, these emissions will be covered upstream). Coverage of these emissions will begin at the start of the second compliance period;
 - 1.2.5. Transportation fuel combustion from gasoline and diesel (as described below in the Point of Regulation section, these emissions will be covered upstream). Coverage of these emissions will begin at the start of the second compliance period;

¹ The scope defines the GHG emissions that are included in the cap-and-trade program, including the emissions sources and greenhouse gases that fall under the cap.

- 1.2.6. The WCI Partners recommend covering combustion from transportation, residential and commercial, and industrial fuel sources with the expectation that the individual Partner jurisdictions will:
 - Mitigate the economic impact on consumers;
 - Implement other policies that will reduce GHG emissions from the transportation sector and reduce demand for transportation fuels (such as vehicle standards, smart growth, low carbon fuel standards, transit options, etc.); and
 - Address any issues associated with the point of regulation and its implementation.
- 1.3. Carbon dioxide emissions from the combustion of biomass or biofuel are not included in the cap-and-trade program.
- 1.4. As described below under Role of Other Policies, WCI Partners acknowledge that individual jurisdictions may instead utilize comparable fiscal measures, such as British Columbia's carbon tax, to address transportation fuels and fuel use by residential and commercial sources.
- 1.5. Adequate quantification methods will be established for emissions sources prior to including them in the program.

2. POINT OF REGULATION²

- 2.1. Industrial sources (both process and combustion) with emissions above the threshold: At the point of emission.
- 2.2. Electricity: First Jurisdictional Deliverer: the generator for sources within WCI jurisdictions and the first entity over which a Partner has regulatory authority that delivers electricity generated outside the WCI into a WCI Partner jurisdiction for consumption in that Partner jurisdiction.
- 2.3. Residential, commercial, and industrial fuel combustion at facilities with emissions below the threshold: Where the fuels enter commerce in the WCI Partner jurisdictions; generally at a distributor; precise point to be determined and may vary by jurisdiction.
- 2.4. Transportation fuel combustion: Where the fuels enter commerce in the WCI Partner jurisdictions; generally at the terminal rack, final blender, or distributor; precise point to be determined and may vary by jurisdiction.
- 2.5. Cogeneration facilities: How to handle emissions associated with cogeneration facilities is still under consideration by the Partners.

² The *point of regulation* is the entity or facility with the compliance obligation, i.e., the requirement to surrender sufficient GHG allowances to cover actual emissions during the compliance period. An allowance is the tradable permit to emit one metric ton of GHG emissions. The term *entity* is generally used when the point of regulation is upstream of the point of emissions, to describe a company that has an obligation to surrender allowances to cover the carbon content of the fuel the company is moving through commerce. When the point of regulation is at the point where the emissions occur, the term *facility* is generally used. The term *source* is used to refer to emissions from either a facility or an entity.

3. THRESHOLDS³ FOR COVERAGE UNDER THE CAP-AND-TRADE PROGRAM

- 3.1. Emission threshold: 25,000 metric tons of carbon dioxide equivalents (CO₂e) annually defines the facilities or entities (e.g., first jurisdictional deliverer, fuel distributor, fuel blender) that would have a regulatory compliance obligation under the cap-and-trade program. Mandatory reporting data may be used to adjust this threshold for specific industries where necessary. Additional analyses will be done to determine if adjustments to the threshold are needed to ensure sufficient coverage or to address competitiveness issues within individual sectors prior to the beginning of the program (e.g., because different Partner jurisdictions may have the same industry but with different sized sources).
- 3.2. A method will be developed to prevent first jurisdictional deliverers from avoiding coverage, such as by breaking themselves into separate power deliverers such that each delivers electricity with emissions below the threshold.

4. PROGRAM EXPANSION

- 4.1. Future Program Expansion: The WCI Partners recommend that the scope of the cap-and-trade program be capable of expanding over time (including possibly adjusting applicability thresholds over time). Prior to each compliance period, the Partners will review whether to bring new sources (and if so which ones) into the program.

5. ROLE OF OTHER POLICIES⁴

- 5.1. The role of other greenhouse gas-reducing policies is to help the WCI Partners achieve their 2020 reduction goal. Those policies will work in concert with the cap-and-trade program and may apply to any source of greenhouse gas emissions.
- 5.2. Carbon Tax and Other Fiscal Measures:
 - 5.2.1. The WCI Partners agree that individual jurisdictions may use fiscal measures that contribute to achieving overall comparable GHG emission reductions and internalize the price of carbon as expected through the regional cap-and-trade program for transportation and residential/commercial fuels.
 - 5.2.2. British Columbia currently has a carbon tax. By 2012 the Partners will determine the mechanism for integrating the cap-and-trade program with the BC carbon tax.

³ *Thresholds* are levels at which it is determined that a particular entity or facility will have a compliance obligation under the cap-and-trade program.

⁴ *Other policies* include complementary policies and alternative policies. A *complementary policy* is used in this context to mean policies other than a cap-and-trade program that aid in the goal of achieving emissions reductions for capped or uncapped sources. An *alternative policy* is a policy that is employed in lieu of a cap-and-trade program for one or more sources.

6. SETTING THE REGIONAL CAP⁵

- 6.1. The aggregate regional cap for the cap-and-trade program will:
 - 6.1.1. Equal the sum of the Partner allowance budgets (see Apportionment section below).
 - 6.1.2. Include annual caps (with 3-year compliance periods) from the beginning of the program in 2012 through 2020. The annual caps will be set in advance of the program start in 2012 so that the reductions required in each 3-year compliance period through 2020 are predictable.
 - 6.1.3. Decline over time. The regional cap trajectory for covered sectors will be a straight line from the year of initial coverage (2012 for some sources and 2015 for other sources) to 2020.
- 6.2. 2012: The initial cap will be set at the best estimate of expected actual emissions for those sources covered in the initial year of the program (i.e., 2012). The estimate of expected actual emissions in 2012 will be developed using the best available data (including any available mandatory reporting data) and by accounting for expected changes in emissions by 2012. Population growth, economic growth, voluntary and mandatory emission reductions, and other factors will be considered. The 2012 cap will also recognize actions to reduce greenhouse gas emissions before the start of the program.
- 6.3. 2015: The regional cap in 2015 will be set by adding the best estimate of expected actual emissions in 2015 from transportation fuels and residential, commercial, and industrial fuels (and any other sectors or sources that may be added to the program for the first time in 2015) to the emissions trajectory for the sources first included in the program in 2012.
- 6.4. 2020: The regional cap for 2020 will be set so that reductions achieved by the cap plus reductions from other greenhouse gas reduction policies will achieve the WCI regional 2020 goal.
- 6.5. Post-2020 caps: The Partners shall set these regional caps not less than three years in advance.
- 6.6. Once established, the regional cap for each compliance period will not be adjusted except as necessary to account for:
 - Changes in WCI membership,
 - Changes in scope or thresholds, or
 - Errors discovered in data used to determine the cap, which may become apparent, for example, after the start of mandatory reporting.
 - Any adjustments will be made prior to the beginning of the compliance period.

⁵ The *regional cap* is the overall limit on total emissions set for the emissions included in the cap-and-trade program.

7. APPORTIONMENT⁶

- 7.1. Each Partner will have an annual allowance budget within the regional cap from 2012 to 2020. The annual Partner allowance budgets for each year through 2020 will be set prior to the start of the program in 2012.
- 7.2. The Partners are working on an apportionment methodology based on Partner and regional emission reduction goals and requirements. The apportionment methodology will address factors such as production and consumption of electricity, projected population growth and economic activity, and other factors. The Partners intend to have a recommended apportionment methodology by Fall 2008.
- 7.3. For years post-2020, the Partners will set allowance budgets not less than three years in advance.
- 7.4. Once established, each Partner's allowance budget will not be adjusted except as necessary to account for:
 - Changes in WCI membership;
 - Changes in scope or thresholds;
 - Errors discovered in data used to determine the cap or the Partner budgets, which may become apparent, for example, after the start of mandatory reporting.
 - Such adjustments will take effect at a regionally coordinated and designated time, such as at the beginning of a compliance period.
- 7.5. Partners will recognize within their own jurisdictions allowances issued by other Partners so that all WCI allowances are of equivalent use and fungible throughout the WCI region, regardless of which Partner issues the allowances.
- 7.6. Determination of allowance budgets for new Partners will take into account the following parameters:
 - The WCI regional goal;
 - Allowance budgets for existing Partners;
 - The share of the new Partner's budget that is already included through the WCI's provisions covering imported electricity; and
 - The apportionment methodology that is being developed by the Partners (above).

⁶ *Allowance apportionment* describes the Partners' budget or share of GHG emission allowances. Allowance budgets must be set for each Partner jurisdiction.

8. DISTRIBUTION OF ALLOWANCES⁷

- 8.1. Distribution of Allowances by Partners: Once the allowance budget has been established for each Partner, allowances will be issued by each Partner within its own jurisdiction.
- 8.2. The WCI Partners agree that a minimum percentage of the value of each Partner's allowance budget (for example, through set-asides of allowances, through a distribution of revenues from the auctioning of allowances, or other means) may be dedicated to one or more of the following public purposes that provide benefits in each Partner jurisdiction:
- Energy efficiency and renewable energy incentives and achievement;
 - Research, development, demonstrations and deployment (RDD&D) with particular reference to carbon capture & sequestration (CCS); renewable energy generation, transmission and storage; and energy efficiency; and
 - Promoting emission reductions and sequestration in agriculture and forestry and other uncapped sources;
- 8.3. The remaining percentage of Partner allowance budgets will be distributed as each Partner sees fit. When distributing allowances Partners may consider objectives such as:
- Reducing consumer impacts, especially for low-income consumers;
 - Providing for worker transition and green jobs;
 - Providing transition assistance to industries;
 - Adaptation to climate change impacts;
 - Recognizing early actions to reduce emissions; and/or
 - Promoting economic efficiency.
- 8.4. In advance of the first compliance period, and at least one year before the beginning of each relevant compliance period thereafter, each Partner will advise the other WCI Partners how it intends to distribute or retire allowances so that Partners' plans can be made public in a coordinated fashion.
- 8.5. To address competitiveness issues between Partner jurisdictions, the WCI Partners shall consider standardizing the distribution of allowances over time, such as:
- Treating similar emissions-intensive industries operating in more than one Partner jurisdiction, but in the same market, similarly (such as aluminum, steel, cement, lime, pulp and paper, and oil refining);
 - Harmonizing allowance distribution to similar industries, such as the electricity sector, and;
 - Providing a level playing field for new emission sources.

⁷ Allowance distribution is the Partners' initial distribution of GHG emission allowances into the market.

- 8.6. A Partner will allocate or retire all the allowances in their allowance budgets by the end of the applicable compliance period. A Partner will not hold allowances beyond the end of the compliance period.
- 8.7. The issue of establishing a minimum percentage of allowances subject to auction by each Partner is still under discussion by the Partners. The Partners expect to make a recommendation on this issue by Fall, 2008.
- 8.8. To the extent Partners decide to auction allowances, Partners will undertake auctions through a coordinated regional auction process by which each Partner will auction allowances throughout the WCI region and receive the proceeds of the auction.
- 8.9. Credits for Early Reductions: Each Partner has discretion to give credit for early actions, but any credit for early action will come from within the cap and will come out of the individual Partner's allowance budget. Early action credits will not be added to or be on top of the amount of allowances in each Partner's allowance budget.
- 8.10. Banking: Purchasers and covered entities or facilities will be allowed to bank allowances without limitation, except to the extent that restrictions on the number of allowances any one party may hold are necessary to prevent market manipulation.
- 8.11. Borrowing: Borrowing of allowances from future compliance periods will not be allowed.
- 8.12. Compliance Periods: Each compliance period will be three years long.

9. OFFSETS,⁸ AND ALLOWANCES FROM OTHER SYSTEMS

- 9.1. The WCI Partners will include a rigorous offsets system. The primary role of the offsets system is to reduce the compliance costs for the cap-and-trade program, while ensuring the environmental integrity of the cap.
- 9.2. The WCI Partners will establish a limit on the use of offsets approved/certified by WCI Partners, and/or offsets or allowances from other government-approved GHG emission trading systems. This limit will be expressed as a percentage limit on each covered entity's or facility's compliance obligation that can be satisfied during each compliance period using offsets or allowances from other government-approved GHG emission trading systems. The WCI Partners are considering a limit not greater than ten (10) percent of an individual entity's or facility's compliance obligation (i.e., the number of allowances a covered entity or facility is required to surrender to cover its emissions). The specific limit will be evaluated based on further analysis and consideration of both the cost reduction objective and the desire to ensure a meaningful fraction of emissions reductions occur at WCI covered sources.

⁸ *Offsets* are emission reduction projects undertaken to address emissions not included in a cap-and-trade program. An offset mechanism enables covered entities to offset their own emissions by purchasing emission reduction credits generated through projects that address emissions not covered by the cap.

- 9.3. The WCI Partners have identified the following list of project types as a priority for investigation and development to participate in the offset system. Making these project types a priority means the Partners are interested in understanding if they are suitable for the offset system, if they will meet the criteria for environmental integrity, and if adequate protocols /methodologies for their quantification and monitoring can be adapted or developed. Priority does not mean these project types are guaranteed to be in an offset system. Project types that reduce emissions that would eventually be covered by the cap-and-trade system would only be eligible until that coverage begins. Project types that reduce emissions covered by the cap-and-trade system would not be eligible to create offsets because the result would be a double counting of the emission reduction. The list is in alphabetical order and does not directly or indirectly represent a ranking or order of preference:
- Agriculture (soil sequestration and manure management);
 - Forestry (afforestation/reforestation, forest management, forest preservation/conservation, forest products); and
 - Waste management (landfill gas and wastewater management).
- 9.4. Starting in 2009, the WCI Partners will coordinate to review, develop, and approve, as appropriate, protocols for the project types that meet the necessary criteria for inclusion. The WCI Partners will use offset protocols that are standardized to the extent possible, and make use of (or adapt if needed), existing protocols as appropriate. The WCI Partners will also initiate the establishment of a process during 2009 to coordinate the review and approval of other project types and protocols proposed by project developers.
- 9.5. WCI Partners may approve and certify offset projects located throughout Canada, the United States, and Mexico, where such projects would be subject to comparably rigorous oversight, validation, verification and enforcement as those located within the WCI jurisdictions.
- 9.6. WCI design protocols will meet rigorous criteria to preserve the environmental integrity of the overall cap-and-trade program.
- 9.7. In the case of offset credits from the Clean Development Mechanism (CDM) and Joint Implementation (JI), the WCI Partners may establish added criteria to ensure similar rigor to WCI approved/certified offset projects or other requirements appropriate to enable use of these offset credits in the cap-and-trade program.
- 9.8. WCI Partners may allow individual regulated entities or facilities to use tradable units (allowances) from other government-regulated GHG emission trading systems that the WCI Partners recognize as meeting similarly rigorous criteria for environmental integrity for compliance purposes. These allowances would be subject to the overall limit described above.
- 9.9. The WCI Partners are considering a method that restricts the use of offsets from projects located outside WCI jurisdictions for compliance purposes in the WCI cap-and-trade regulatory program.
- 9.9.1. The use of offsets as a regulatory instrument in the WCI cap-and-trade program will substitute for allowances issued by WCI partner states and provinces for compliance within the cap-and-trade

program. Limitations on the use of offsets from projects located outside the WCI jurisdictions would reflect the goal of the regulatory program to achieve reductions in greenhouse gas emissions within the WCI jurisdictions. Such restrictions would also ensure that WCI jurisdictions are able to inspect offset projects and enforce any laws relevant to project operations and the use of offsets for compliance. Collateral benefits associated with some offsets projects, such as health, social and environmental benefits would also accrue within WCI partner states and provinces.

- 9.9.2. WCI Partners do not intend to regulate or restrict the existing voluntary market in offsets, to restrict the sale of offsets from projects located within the WCI states and provinces, or to place restrictions on ownership of offsets projects located within WCI partner states and provinces.

10. REPORTING

- 10.1. Mandatory measurement and monitoring for all six GHGs will commence in January 2010 for all entities and facilities subject to reporting. Reporting of 2010 emissions will begin in early 2011.
- 10.2. The entities and facilities subject to reporting are those with annual emissions equal to or greater than 10,000 metric tons of CO₂e. However, in some limited instances the threshold may be based on other parameters, such as throughput or capacity, as long as these thresholds represent the equivalent of, or are lower than, the 10,000-metric-ton threshold.
- 10.3. Partners may require third-party verification or may carry out government audit programs. (Partners are still discussing whether verification by third parties accredited under a common framework should be required for all reports submitted by entities or facilities covered by the cap.)
- 10.4. As each Partner collects additional emissions data from entities and facilities required to report, data will be made available to all Partners for review and consideration for inclusion in the cap-and-trade program.
- 10.5. Nothing in the WCI program design would limit any Partner's discretion to require reporting earlier, at lower thresholds, or for entities and facilities not covered by the cap-and-trade program.

11. START DATE FOR CAP-AND-TRADE

- 11.1. The cap-and-trade program will launch January 1, 2012.

12. COMPLIANCE AND ENFORCEMENT

- 12.1. Each jurisdiction will retain and/or enhance its regulatory and enforcement authority and responsibilities to enforce compliance with the cap-and-trade program within its own Partner jurisdiction.
- 12.2. Each covered entity or facility will demonstrate compliance with the cap-and-trade program by surrendering sufficient allowances after the end of each compliance period.
- 12.3. If by the deadline for demonstrating compliance a covered entity or facility does not have sufficient allowances to cover its emissions for the previous compliance period, it shall be required to surrender three allowances for every metric ton not covered by an allowance at the deadline. This does not preclude other penalties allowed under individual state or provincial laws.
- 12.4. The WCI Partners recognize that during the first compliance period, both they and the entities and facilities covered by the cap-and-trade program will likely encounter issues that arise in the implementation of a new program. Consequently, the Partners are committed to providing appropriate technical and other compliance assistance to the program participants.
- 12.5. The WCI Partners will ensure accounting systems are in place to prevent using allowances, tradable units, and offsets more than once for compliance.

13. REGIONAL ORGANIZATION AND NEW PARTNERS

- 13.1. To reduce administrative costs and improve program transparency and consistency, a regional administrative organization will be created to:
 - Coordinate the regional auction of allowances;
 - Track emissions;
 - Monitor and report on market activity, including any potential market manipulation;
 - Serve as a forum for Partners to update one another on program progress;
 - Coordinate review and adoption of protocols for offsets;
 - Coordinate review and adoption of updated reporting protocols;
 - Coordinate review and issuing of offset credits; and
 - Provide criteria and means to accredit service providers to deliver validation and verification services.
- 13.2. New Partners will come into the cap-and-trade program at a regionally coordinated and designated time, such as the beginning of the relevant compliance period.
- 13.3. A new Partner must have adopted an economy-wide greenhouse gas reduction goal for 2020 that reflects a level of effort that is consistent with that of the WCI Partners.