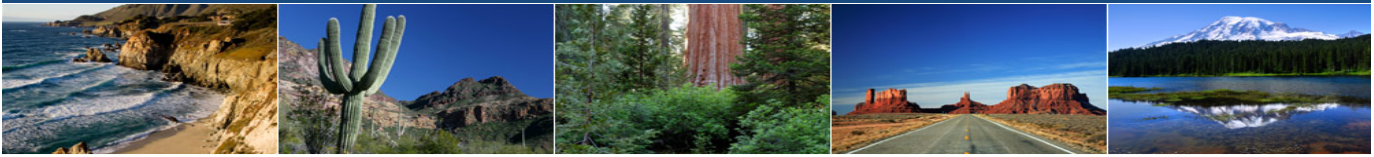


Western Climate Initiative



October 29, 2007

TO: All Interested Parties

The Western Climate Initiative (WCI) Partners are pleased to release the attached work plan of WCI activities through August 2008. As directed by our Governors and Premiers (<http://www.westernclimateinitiative.org/ewebeditpro/items/O104F12775.pdf>), this work plan describes our process for developing design recommendations for a proposed cap-and-trade program, as one element of our collaboration to identify, evaluate, and implement ways to reduce GHG emissions and to achieve related co-benefits.

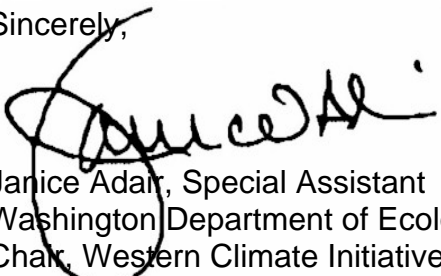
The WCI Partners encourage stakeholder and public participation, and toward that end have included a description of the proposed stakeholder process in the work plan. This process includes three workshops, planned for January, May, and July 2008, as well as regular conference calls and other activities. These activities will supplement the outreach being conducted individually by each of the states and provinces.

Included in the attached work plan is a list of program design questions and issues on which we are particularly interested in receiving input at this time. The WCI Partners request that you submit input regarding these questions and issues by November 30, 2007. Instructions for submitting comments are posted on the WCI website: www.westernclimateinitiative.org.

Throughout our work, the WCI Partners will solicit written input, including feedback on preliminary materials as they are developed. Comments and input will be posted to our website. Input is welcome at any time on issues related to the WCI.

The WCI Partners appreciate your interest and involvement in this initiative. We look forward to working with all stakeholders to achieve WCI's objectives.

Sincerely,


Janice Adair, Special Assistant
Washington Department of Ecology
Chair, Western Climate Initiative


Steve Owens, Director
Arizona Department of Environmental Quality
Co-Chair, Western Climate Initiative

Western Climate Initiative



WESTERN CLIMATE INITIATIVE

WORK PLAN
October 2007 - August 2008

October 29, 2007

Table of Contents

I.	Introduction	1
II.	Background	2
III.	Design Principles for a Regional Cap-and-Trade Program	3
IV.	Communications and Stakeholder Outreach	4
V.	Timeline and Milestones	6
VI.	Design Questions for Stakeholder Review and Comment	7
VII.	Subcommittees	10
VIII.	Subcommittee Work Plans	11
	A) Reporting Subcommittee	11
	B) Scope Subcommittee	14
	C) Electricity Subcommittee	20
	D) Allocations Subcommittee	22
	E) Offsets Subcommittee	25

I. INTRODUCTION

This document presents the plan for the Western Climate Initiative (WCI) activities through August 2008.

- Section II presents a brief summary of the WCI and its objectives.
- Section III presents the design principles adopted by the WCI Partners to guide the development of recommendations for a cap-and-trade program.
- Section IV presents the process for involving stakeholders and the public in the WCI deliberations.
- Section V presents a summary of the overall timeline and milestones for developing the program design recommendations.
- Section VI presents design questions and issues on which public input is solicited at this time. Please note that input on additional questions and issues will be solicited during the development of the program recommendations and that input is welcome at any time on issues related to the WCI.
- Section VII describes the subcommittees created by the WCI Partners.
- Section VIII presents the work plans for each of the subcommittees.

II. BACKGROUND

On February 26, 2007, Governors Gregoire (WA), Kulongoski (OR), Napolitano (AZ), Richardson (NM) and Schwarzenegger (CA) signed an agreement establishing the Western Climate Initiative (WCI). The purpose of the initiative is to collaborate in identifying, evaluating and implementing ways to reduce GHG emissions and to achieve related co-benefits.

Since February, Premier Gordon Campbell of British Columbia, Utah Governor Jon Huntsman, and Premier Gary Doer of Manitoba have all joined the Initiative as full Partners.

It is the intention of the Governors and the Premiers to expand the Partners in the initiative to include other states, tribes, and provinces who share their commitment to aggressively address climate change.

Currently the following jurisdictions are participating as official observers: the U.S. States of Alaska, Colorado, Idaho, Kansas, Nevada, and Wyoming; the Canadian Provinces of Ontario, Quebec, and Saskatchewan; and the Mexican State of Sonora.

On August 22, 2007, the WCI Partners released their regional goal to collectively reduce emissions, consistent with previously established state and provincial goals. Details on the WCI regional goal (to reduce emissions 15% below 2005 levels by 2020) can be found at www.westernclimateinitiative.org.

Each of the Partners has joined the newly formed GHG registry (The Climate Registry). The Climate Registry builds on the existing California Climate Action Registry and will begin accepting data in early 2008. More information about The Climate Registry can be found at www.theclimateregistry.org. The Climate Registry will play an important role in establishing an accurate reporting mechanism and accounting infrastructure on which to base the WCI cap-and-trade program.

Five WCI subcommittees have recently been established to work on various aspects of the regional program. The five subcommittees are: Reporting, Scope, Electricity, Allocations, and Offsets. Staff from WCI states and provinces serve on the subcommittees, and each subcommittee will obtain input from technical experts and stakeholders.

Each of the WCI Partners will separately conduct stakeholder outreach and involvement with interested parties in their jurisdictions. In addition, the Partners will collectively host periodic conference calls, provide written updates on the progress of the initiative, and conduct other communications and outreach activities.

By August 2008, the Western Climate Initiative Partners will develop design recommendations for a regional cap-and-trade program to:

1. Reduce greenhouse gas emissions in each Partner jurisdiction; and
2. Help achieve the Partners' overall greenhouse gas emissions reduction goals.

III. DESIGN PRINCIPLES FOR A REGIONAL CAP AND TRADE PROGRAM

To attain the Western Climate Initiative's greenhouse gas reduction goal, the members are committed to designing a system that:

1. Is equitable, administratively simple for government and private participants, minimizes administrative costs, and has a clear compliance path;
2. Maximizes total benefits throughout the region, including reducing air pollutants, diversifying energy sources, and advancing economic, environmental, and public health objectives, while also avoiding localized or disproportionate environmental or economic impacts;
3. Requires all reductions to be real, surplus/additional, verifiable, permanent, and enforceable;
4. Stimulates investment, especially in low carbon technologies, and rewards innovations that will lead to long-term permanent greenhouse gas reductions;
5. Covers as many sources as is practical, while encouraging pollution reductions beyond the capped sources and sectors;
6. Provides appropriate recognition and incentives for early emissions reductions;
7. Assures a transparent and robust accounting system that will measure and report emissions rigorously and consistently across all sectors and throughout the region;
8. Minimizes the potential for leakage; and
9. Facilitates linkage to similarly rigorous regional and international greenhouse gas reduction markets and encourages other states, provinces, and countries to join the market.

IV. COMMUNICATIONS AND STAKEHOLDER OUTREACH

The Western Climate Initiative Partners are committed to maintaining an open and transparent process that integrates public participation and stakeholder input. Therefore, the WCI Partners will conduct a regional communications and stakeholder outreach process during the design phase to:

1. Supplement the individual state and province communication and outreach efforts.
2. Inform the public and stakeholders of the WCI Partners' deliberations, and draft and final work products.
3. Provide a mechanism for subcommittees to obtain timely input from the public and stakeholders on key design elements of the regional cap-and-trade initiative to support their deliberations and recommendations.
4. Establish opportunities for the public and stakeholders to communicate through oral and/or written comments to the WCI Partners prior to key decision points in the process, including integration of design elements from subcommittees into the final program design.
5. Maintain an ongoing dialogue between WCI Partners and stakeholders in the process.

The WCI Partners will carry out the following actions.

1. Website. The WCI Partners have established a Western Climate Initiative website at www.westernclimateinitiative.org. The website will serve as the primary vehicle for the WCI Partners to make their draft and final work products available for public review and comment. In addition, the WCI Partners intend to post the written comments received from members of the public and stakeholders on the website.
2. Listserv. The WCI Partners have established a regional Listserv to which members of the public and stakeholders may subscribe by visiting the WCI website (www.westernclimateinitiative.org). Subscribers to the regional Listserv will receive email notifications when new content is added to the website, including the availability of draft and final work products, as well as notifications of public information sessions.
3. Public Information Sessions. In addition to making draft and final work products available on the WCI website, the WCI Partners will hold public meetings by teleconference and in-person, as follows:
 - Teleconferences. The purpose of the teleconferences is to provide information to interested members of the public and stakeholders. The WCI Partners will hold periodic teleconferences to relate the subject of their ongoing deliberations on areas of focus in the initiative. In general, these teleconferences will occur shortly after the periodic meetings of the WCI Partners, though additional teleconferences will be held as necessary. Call information will be posted on the website and notifications will be sent via the Listserv. The current schedule for WCI teleconferences is as follows:
 - Thursday, October 31, 2007 at 2 pm PDT / 3 pm MDT
 - Thursday, December 6, 2007 at 2 pm PST / 3 pm MST
 - Thursday, March 6, 2008 at 2 pm PST / 3 pm MST

- Workshops. The WCI Partners will conduct public workshops at various locations in the WCI region beginning in January 2008. Workshops will be webcast.
 - At the first session (early January), the subcommittees will present the status of their deliberations, including identifying the major options that are under consideration and the pros and cons of the alternatives. Public input on the options will be solicited.
 - The second workshop will occur in May 2008. At the second session, the subcommittees will present their recommendations on key elements of the regional cap-and-trade program. Public input on the recommendations will be solicited.
 - The third workshop will occur in July 2008. At the third session, the Partners will present the preferred fully integrated plan that is being considered. Public input on the proposed plan will be solicited.
 - Interested members of the public and stakeholders will have the opportunity to provide oral comments at public information sessions. Participants will be encouraged to submit written comments to supplement oral comments. Comments that are submitted in electronic format will be posted to the WCI website.

(Note: The dates for teleconferences and in-person meetings are subject to change, and any changes will be promptly posted on the WCI website and sent out on the WCI listserv.)

- Public Input to Subcommittee Deliberations. The purpose of this activity is to provide a mechanism by which the subcommittees can solicit stakeholder and public input. As necessary, each subcommittee will prepare written requests for input that will be posted on the website and announced via the Listserv. Written input will be received, reviewed, and posted on the website.
- State and Provincial Stakeholder Processes. This section describes communication and outreach that the WCI Partners will undertake together at the regional level. These regional communications are intended to supplement and not replace individual state and provincial communications and do not supplant any public comment periods required in connection with the adoption of laws and regulations in specific Partner jurisdictions.

The WCI Partners will revisit this Communications Plan from time to time and consider appropriate revisions to the plan based on comments received by interested members of the public and stakeholders, or on their own initiative.

V. TIMELINE AND MILESTONES

October 2007	Release work plan and major design issues for review and comment <ul style="list-style-type: none">• Subcommittees identify specific issues on which input is sought
November 2007	Initial written stakeholder feedback on work plan and major design issues requested by November 30.
January 2008	Subcommittees describe major options under consideration <ul style="list-style-type: none">• Workshop to discuss options with interested stakeholders
May 2008	Subcommittee recommendations on key elements of regional cap-and-trade program <ul style="list-style-type: none">• Workshop to discuss subcommittee recommendations
July 2008	Proposed design of regional cap-and-trade program <ul style="list-style-type: none">• Workshop to discuss proposed design
August 2008	Partners release design recommendations for a regional cap-and-trade program

VI. DESIGN QUESTIONS FOR STAKEHOLDER REVIEW & COMMENT

The WCI Partners are broadly framing their discussions around the following set of design questions and seek input from stakeholders and interested members of the public to guide the development of the program.

Program Scope and Timing

- A. What sectors and gases should be covered by the cap-and-trade program, and within each covered sector, what point of regulation is most appropriate?
 - 1. Electricity:
 - (a) At the generator level?
 - (b) At the retail provider level?
 - (c) A “first seller”¹ approach (covering both emissions that occur inside the jurisdiction as well as the emissions attributable to the electricity generated outside the jurisdiction)?
 - (d) A generator-retail provider hybrid approach?
 - (e) Other?
 - (f) For all of the above, which gases should be considered for the electricity sector?
 - 2. Others sectors: Referring to Table 1 in the work plan (see page 18), are the options shown properly defined? Should additional options be added? What combination of options should be considered?
- B. Should all sectors/gases be covered by the program on the same launch date, or should sectors/gases be added over time, and why?

Setting Cap Level(s), Scheduling Reductions & Distributing Allowances

- A. What factors should be considered in determining the relative role of the cap-and-trade program as compared with complementary policies in reaching regional emission reduction goals?
- B. How should the initial emissions cap(s) for the cap-and-trade program be established at the regional, state and provincial and/or sectoral levels, and what schedule of reductions should be set?
- C. What are the key objectives that WCI Partners should address through allowance distribution (e.g., cost minimization, equity, technology incentives, etc.)?
- D. How should the allowances be distributed (e.g. auction or free allocation), and should the distribution process be common to all Partners?

¹ For discussion of the first seller, retail provider, and other electricity sector scope options see http://www.climatechange.ca.gov/documents/2007-06-29_MAC_FINAL_REPORT.PDF

- E. How should recognition and incentives for early emission reductions be provided?

Offsets

- A. What roles and key objectives, if any, should an offsets mechanism play in WCI?
- B. How should a WCI offset mechanism be designed?
 1. How should greenhouse gas offsets be defined for use within the WCI cap and trade system?
 2. How should the WCI design principles that reductions be real, surplus/additional, verifiable, permanent, and enforceable be translated into practice?
 3. What approaches should be used to develop project baselines and monitoring methodologies?
 4. Should there be limits on the extent to which offsets can be used to meet compliance obligations? Should such limits change over time?
 5. What issues should be considered in determining issues such as project start dates, offset expiration, and project crediting periods?
 6. What project types and locations should be eligible, and on what basis should eligibility be determined? Should offsets from other programs be eligible (e.g. Clean Development Mechanism, Regional Greenhouse Gas Initiative)?
- C. How should the WCI administer an offset mechanism? Are there useful models and protocols to follow?

Other Flexibility and Cost-Containment Mechanisms

- A. What should the length of the compliance periods be, and why?
- B. What are the pros and cons of allowance banking?
- C. What are the pros and cons of allowance borrowing?
- D. Should the program include other cost-containment mechanisms such as a safety valve, allowance price cap, or other instruments? If so, how should these be designed?

Emissions and Allowance Data, Monitoring, Reporting and Tracking

- A. What are the best sources of data to use in establishing emission baselines?
- B. Should mandatory emissions reporting precede establishment of an emissions baseline in one or more of the sectors to be covered by the program?
- C. How should emissions, allowances, and offsets be measured, monitored, reported and/or tracked by the program?
- D. Are there additional objectives for a reporting systems beyond assessing compliance with the cap-and-trade program, and if so, what should they be?
- E. What are the best ways to assure consistency in reporting throughout the WCI? How should mandatory reporting under the WCI be best integrated with The Climate Registry?

Miscellaneous Issues

- A. How should the cap-and-trade program be designed to enhance the benefits from complementary policies in the Partner jurisdictions?
- B. How should the WCI ensure compliance with program goals? What non-compliance penalties would be appropriate for entities that are covered under the cap?
- C. Should the WCI partners establish regional organization(s) to coordinate aspects of program implementation, and if so, what aspects?
- D. Which design elements should be common, and which should be allowed to vary, across WCI partner jurisdictions?
- E. How should the program be designed to facilitate linkage with other trading systems outside the WCI region (e.g. EU Emission Trading System, Regional Greenhouse Gas Initiative)?
- F. Are there additional issues that should be considered to ensure that the cap-and-trade system conforms to the WCI principles?

VII. SUBCOMMITTEES

In order to carry out their mission, the Partners have established five subcommittees which are briefly described below. Section VIII of this work plan provides a more detailed description of the subcommittee work plans.

Reporting Subcommittee. The mission of the Reporting Subcommittee is to identify and/or develop a consistent mechanism for mandatory reporting of GHG emissions that will provide the measurement and accounting structure for the regional cap-and-trade program to be developed and implemented by the WCI. The Reporting Subcommittee is chaired by Jim Norton of the State of New Mexico.

Scope Subcommittee. The Scope Subcommittee will recommend the scope and points of regulation for the cap-and-trade program, with the exception of the electricity sector which is being assessed by the Electricity Subcommittee. The Scope Committee is chaired by Michael Gibbs of the State of California.

Electricity Subcommittee. The Electricity Subcommittee will recommend the scope and point of regulation for the electric sector. The Electricity Subcommittee is chaired by David Van't Hof of the State of Oregon.

Allocations Subcommittee. The Allocations Subcommittee will recommend options for establishing emissions allowance budgets in each Partner jurisdiction, as well as how to distribute allowances within Partner jurisdictions among covered sectors and sources within each sector. The Allocations Subcommittee is chaired by Steve Owens of the State of Arizona.

Offsets Subcommittee. The Offsets Subcommittee will make recommendations on the inclusion, design, scope and operation of the greenhouse gas offset system as an element of the cap-and-trade program. The Offsets Subcommittee is chaired by Tim Lesiuk of the Province of British Columbia.

In general, the Subcommittees will carry out the following tasks:

- *Information Gathering and Learning.* Each Subcommittee will take primary responsibility for gathering information and learning about the Subcommittee's areas of focus.
- *Identify Policy Questions.* The Subcommittees will collectively identify the relevant policy questions that should be assessed in order to develop design recommendations for the cap-and-trade program.
- *Evaluate Policy Options.* Each Subcommittee will evaluate potential approaches for within the Subcommittee's area of focus. The Subcommittees will present these potential options together with an explanation of the benefits and challenges associated with each approach.
- *Propose Policy Decisions.* The Subcommittees will make policy recommendations within their focus areas for consideration by the Partners.

Based on the work of the subcommittees, the Partners will develop a proposal containing all key elements of a regional cap-and-trade program for review and comment prior to reaching final agreement on the recommendations for program design.

VIII. SUBCOMMITTEE WORK PLANS

A) Reporting Subcommittee

i. Mission

The mission of the Reporting Subcommittee is to identify and/or develop a consistent mechanism for mandatory reporting of GHG emissions that will provide the measurement and accounting structure for the regional cap-and-trade program to be developed and implemented by the WCI. This reporting mechanism will be consistent with the protocols of The Climate Registry (TCR) and utilize TCR to the maximum extent possible. It will also echo or align with existing or emerging reporting systems within partner jurisdictions to the greatest degree possible. It is anticipated that this reporting mechanism will form the basis of regulations to be adopted or updated by all partner jurisdictions with respect to the reporting of GHG emissions.

In developing this mechanism, the subcommittee will likely need to design a reporting system that balances multiple objectives, consistent with the design principles laid out in Section II, and reflects key decisions of other subcommittees.

The subcommittee may consider a phased-in approach for reporting that mirrors any phase-in that may be employed for including sectors and sources under the cap or as part of an offset provision, so that the reporting system may encompass additional sectors, sources, or GHGs over time.

ii. Tasks

Task 1: Identify the roles, objectives and principles that will guide design of the reporting mechanism.

The subcommittee will need to consider the full range of potential roles and objectives for reporting within the WCI program. While the primary objective is to provide the measurement and accounting system for emissions that will allow partner jurisdictions to assess the compliance of sectors and sources under the cap within their regions, there are other possible roles for a reporting system that should be considered. These include gathering data that could be used to assess early reductions, preparing sectors and sources that are not initially covered by the program for eventual inclusion, informing decisions about expansion of the program or the allocation of allowances, monitoring offset project performance, etc. Early decisions from other subcommittees will be critical to identifying additional objectives.

The subcommittee will also need to identify what principles will be employed in balancing multiple objectives. In addition to the overall design principles in Section II above, the subcommittee will need to consider factors such as the availability of credible quantification approaches for any given sector or source, the reporting burden associated with including a given sector or source, tradeoffs between the cost and rigor associated with employing a given quantification approach, etc.

Task 2: Identify and assess existing reporting systems that can inform development of a WCI reporting mechanism.

A number of credible reporting systems exist, both within the WCI region and outside, that can be drawn upon in developing a uniform WCI reporting mechanism. The subcommittee will identify and assess these systems, comparing them on the basis of a range of key design decisions. This process will both inform how the key objectives identified in task 1 can be met and identify those sources and sectors for which reliable quantification and reporting exists, and those for which the subcommittee would need to develop such guidance. The analysis will focus at a minimum on existing and emerging systems within the WCI region, but may also examine reporting systems in other regions and nations. One key output of this task will be a comparison matrix that summarizes the key features of existing reporting systems.

Task 3: Ensure that the WCI reporting mechanism aligns with existing and emerging mandatory GHG reporting rules and The Climate Registry.

Of particular importance will be identifying how the WCI reporting mechanism can be aligned with existing reporting systems and ongoing rulemaking processes in the WCI region. The strategy developed in this task will also identify options for how updates to the WCI reporting mechanism (if a phase-in is employed) are expected to be rolled out and incorporated by partner jurisdictions.

Task 4: Frame key elements of a WCI mandatory GHG reporting mechanism and identify options for sectors and sources that could be included.

This task will center on developing an outline for a reporting mechanism that includes a range of options as to key reporting parameters. These options will be based on existing reporting programs assessed in Task 2 and objectives identified in Task 1. The outline will also include a list of proposed sources and sectors for which reliable and practicable quantification guidance exists and which should be included in the reporting mechanism, based on input from other subcommittees.

Task 5: Consider whether a model rule should be developed, and if so, what it should include and what its development schedule should be.

Based on input from other subcommittees and feedback from stakeholders on the outline, the subcommittee will consider the development of a model rule that includes at a minimum, all sources and sectors to be included in the initial phase of a WCI cap. Any such model rule will utilize TCR to the greatest extent possible and will align with existing and emerging reporting programs to the greatest degree possible. It may also include reporting provisions developed by the Offset Subcommittee around offset projects and other sectors and sources that are identified for eventual inclusion in the WCI program, to the extent that reliable methodologies are identified. Any draft model rule developed will be refined based on stakeholder feedback, as appropriate.

Task 6: Identify expected updates to the WCI reporting mechanism.

Based on input from the Scope Subcommittee and any concrete plans for expansion of the WRI program, the Reporting Subcommittee will develop a plan for updating its reporting mechanism over time. This will involve identifying and prioritizing additional sectors/sources for inclusion in the mechanism, as well as a process for developing reliable reporting methodologies where none exist. The subcommittee will also work to develop a schedule for the development of these updates.

iii. Coordination with Other Subcommittees

Reporting of GHG emissions and reductions will ultimately form the basis for evaluating progress toward meeting WCI goals and compliance for covered sources. Key input from the Scope Subcommittee and the Electricity Subcommittee will be necessary to achieve this goal. The reporting rule could also be designed to collect data for the purposes of monitoring offset projects or informing other aspects of the WCI program, such as offset baselines, expansion of the cap, allocation of allowances etc. Accordingly, the Reporting Subcommittee will have to coordinate closely with the other subcommittees and require their input, almost immediately.

Areas for coordination include:

- **Scope:** The Scope Subcommittee will need to provide guidance on gases and sectors covered (including thresholds) and points of regulation, and coordinate with the Reporting Subcommittee on developing a schedule for including sectors/sources where credible quantification methodologies are not readily available.
- **Offsets:** Offset reporting rules and eligibility requirements will need to be propagated to WCI partners, perhaps as a component of the reporting mechanism; reporting in some sectors might also be included in an initial model rule in order to inform baseline development for future offset development.
- **Allocations:** The emissions reporting mechanism, as well as future transaction processing systems, will need to be closely aligned to ensure reconciliation of emissions and allowances in determining compliance of covered sources.
- **Electricity:** The Electricity Subcommittee will need to provide direction to the Reporting Subcommittee on the nature and details of an approach for capturing emissions from this sector both within the WCI region and outside.

B) Scope Subcommittee

i. Mission

The mission of the Scope Subcommittee is to recommend the scope of a proposed cap and trade program. The scope must be defined so that the following are clear:

- The sectors that fall under the cap.
- The emissions sources that fall under the cap.
- The greenhouses gases that fall under the cap.
- The point(s) of regulation where the cap would be enforced.

From the scope definition, any entity or facility must be able to tell whether it has a compliance obligation under the cap, and which of its emissions are subject to the obligation.

To make this recommendation, the subcommittee must balance multiple objectives, consistent with the design principles presented above.

The subcommittee acknowledges that phasing over time may be considered, so that the program scope can encompass additional sectors, sources, or GHGs over time.

The subcommittee will examine all sectors, sources, and GHGs with the exception of the electric sector (which is being addressed in a separate subcommittee). “Sector” refers to all elements of the economy, including residential, commercial, industrial, transportation, forestry, waste management, agriculture, and others. Sources refer to the activities that create emissions, including fuel combustion, process emissions, and fugitive emissions. GHGs refer to the full set of Kyoto gases, including carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆).

ii. Tasks

Task 0: Emissions Inventory Dataset

The purpose of this task is to develop an emissions inventory dataset that the subcommittee can use in its assessment of the implications of including/excluding sectors, sources, and GHGs from the proposed scope. To support the Scope Subcommittee’s deliberations, the subcommittee directs that the data include the following:

- **Geography**: The data are required for the WCI partner and observer states and provinces. To put the region into context, the other states and provinces in the west should be included. If possible, the states and provinces in the Western Electric Coordinating Council would be appropriate to cover, in part to be consistent with the Electricity Subcommittee work.² As a reference, the national totals for the United States, Canada, and Mexico would also be valuable.
- **Time Period**: The data should be summarized for a range of years, such as 1990-2020.
- **Sectors**: The data should divide the emissions into major sectors that can be considered as options for coverage.
- **GHGs**: The data should summarize each of the six Kyoto GHGs.

² The WECC includes: British Columbia; Alberta; Washington; Oregon; California; Idaho; Utah; Nevada; Arizona; New Mexico; Colorado; Wyoming; Montana; and Baja California.

The level of detail and the categories included will be driven by the available data. The data, including both emissions totals and estimates of the number of entities with potential compliance obligations, will facilitate the Scope Subcommittee's initial deliberation regarding the implications of alternative scope definitions.

Additional detail may be needed to focus on specific alternatives. For example, we may want to collect additional detailed data on emissions from industrial natural gas consumption to set a size or emissions cut off for inclusion in the scope.

Task 1: Initial Options for Consideration

The purpose of this task is to define a short list of major options that will be considered. While there is a very broad range of possibilities, several realities narrow the field, including (*inter alia*):

- The significance of sectors/sources in the overall inventory (regionally, and within individual states/provinces);
- The inability to measure/monitor emissions adequately to support inclusion in a cap and trade program (e.g., some fugitive emissions and certain process emissions);
- The existence of reasonable points of regulation capable of addressing the sector/sources;
- The existence or expectation of other regulatory approaches for the source/sector.

There are multiple resources available to use for this task, including the Market Advisory Committee (MAC) Report from California,³ U.S. EPA Guidance on the design of cap and trade programs,⁴ the Nicholas Institute report on reporting thresholds for greenhouse gas emission regulation,⁵ and many academic and related reports.

The output from this task will be a set of three to five major options that will be evaluated more thoroughly. Table 1 provides an initial list of options for program elements that can be used to initiate the Scope Subcommittee's discussions. This list was developed based on a review of background material regarding the design of cap-and-trade types of programs for greenhouse gases. The list includes most, if not all, of the major program elements that have been discussed in recent years.

Each of the options in Table 1 defines a set of sources and GHGs that may be considered for coverage. Some of the elements can be combined into a program that covers multiple elements, while others are mutually exclusive and cannot be combined. In all cases, the consideration of options for covering the electric sector is deferred to the Electricity Subcommittee.

³ *Recommendations for Designing a Greenhouse Gas Cap-and-Trade System for California*, Recommendations of the Market Advisory Committee to the Air Resources Board, available at: <http://www.climatechange.ca.gov/documents/index.html>.

⁴ *Tools of the Trade: A Guide To Designing and Operating a Cap and Trade Program For Pollution Control*, U.S. Environmental Protection Agency, available at: <http://www.epa.gov/airmarkets/resource/cap-trade-resource.html>.

⁵ *Size Thresholds for Greenhouse Gas Regulation: Who Would be Affected by a 10,000-ton CO2 Emissions Rule?*, the Nicholas Institute for Environmental Policy Solutions, Duke University, available at: <http://www.nicholas.duke.edu/institute/knowledge-energy.html>.

Table 1 represents a starting point for discussion. Additional options may be defined and considered as part of the subcommittee deliberations, and through public input and comment.

Task 2: Description of Each Major Option

The purpose of this task is to prepare detailed descriptions that flesh out each of the major options being considered. The descriptions would include:

- General description of the option, including the sectors, sources, and GHGs covered, and the point(s) of regulation.
- Estimate of the portion of the total emission inventory included, with estimates for each state and the region as a whole.
- Estimate of the number of entities expected to have compliance obligations, by state and for the region as a whole. If possible these data should be estimated by sector.
- Assessment of the potential interactions with other regulatory initiatives or programs, including other initiatives reducing GHG emissions.
- Administrative complexity and burden.

The output from this task will be a detailed description of each major option, which will be released for public review and comment.

Task 3: Option Evaluation

The purpose of this task is to evaluate each of the major options using the detailed descriptions. The program design principles will be the starting point for the evaluation criteria to use. Additional criteria may be identified by the subcommittee and may come from public input and comment. Prior to evaluating the options, the subcommittee will produce a public review draft of the evaluation criteria for review and comment.

This evaluation will consider whether there is flexibility for states/provinces to vary in their implementation of the option. This evaluation will identify those aspects for which flexibility is possible, and those aspects for which identical implementation is necessary.

The output of this task will be a summary evaluation of the pros and cons of each of the major options, which will be released for public review and comment.

Task 4: Option Recommendation

The purpose of this task is to develop a consensus recommendation from the Scope Subcommittee. The draft of the recommendation will be presented for public review and input, including the factors that were important in making the decision.

iii. Coordination with Other Subcommittees

There are several key points where the Scope Subcommittee will need to coordinate with the other subcommittees:

- The Scope Subcommittee's assessment of which sources can be measured/monitored adequately for purposes of inclusion in a cap and trade program should be consistent with the Reporting Subcommittee's findings on which sources can report emissions.
- Prior to making a recommendation, we will review the Scope Subcommittee's major options with the Electricity Subcommittee to identify any inconsistencies or conflicts.
- The Offsets and Allocations Subcommittees require an understanding of the major options under consideration by this subcommittee.

Table 1: Initial Program Design Elements for Public Comment and Discussion

Elements	Sectors¹	Sources	GHGs	Comments
A. Large stationary combustion sources regulated at the point of emission.	All large stationary sources, including oil refining and other industrial facilities.	Fossil fuel combustion in stationary equipment only.	CO ₂ only. Could be expanded to other combustion related GHGs (N ₂ O and CH ₄).	This is a downstream option, similar to traditional pollution control programs. Typically an emissions threshold is used to exclude small sources.
B. Liquid fuels (i.e., transportation fuels) regulated upstream where they enter into commerce (i.e., upstream at the “terminal rack” or the point of refining or import of refined products).	This can be focused on transport sectors, including fossil fuels used in some or all of: on-road vehicles; off-road vehicles; air; marine, rail.	Liquid fossil fuel combustion.	Addresses CO ₂ emissions. (Indirectly affects N ₂ O and CH ₄ emissions from fuel combustion.)	Upstream approach to capture the transport sector. Note: some liquid fuels are used both in transport and stationary sources. Note also: gaseous fuels and electricity also used in transport.
C. Residential and commercial natural gas combustion regulated at the local distribution company (LDC).	Residential and commercial customers of LDCs.	Natural gas combustion only.	CO ₂ only. (Indirectly affects N ₂ O and CH ₄ emissions from natural gas combustion.)	This is a midstream option for covering residential and commercial combustion sites that are too small to be considered large stationary combustion sources.
D. Industrial process and waste management emissions regulated at the point of emission.	Specifically defined industrial processes, such as oil refining, cement production, aluminum smelting, adipic acid production, nitric acid production, lime production, natural gas transmission and distribution, wastewater treatment, landfill operations; others.	Specific industrial processes.	GHG relevant to each industrial and waste management process.	Downstream option to cover process emissions that can be measured or computed reliably. Wide variety of facility types.
E. Fossil fuel industry regulated at the “facility” level, such as a production field, pipeline, coal mine, or other.	Oil and gas exploration, production, gathering, and processing. Coal mining.	Fugitive and vented emissions. May include emissions from flaring if not covered elsewhere.	CO ₂ , CH ₄	Includes exploration activities, oil and gas production wells, gathering pipelines, gas processing plants and related facilities (such as dehydrators), coal mine ventilation, coal processing.

Elements	Sectors ¹	Sources	GHGs	Comments
F. Fossil carbon content of fuels regulated at the appropriate upstream or midstream choke point for the fuel.	All sectors that use fuels with fossil carbon.	Fossil fuel combustion.	CO ₂ only. (Indirectly affects N ₂ O and CH ₄ emissions from fossil fuel combustion.)	“Choke point” option, primarily considered upstream, to cover all fossil carbon emissions.
G. Passenger cars and light duty trucks regulated at the manufacturer sales level.	Transportation sector, covering passenger cars and light duty trucks.	All GHGs from the use of the relevant vehicles, including fuel combustion and refrigerant fugitive emissions.	CO ₂ , CH ₄ ; N ₂ O, HFCs	Tradable emission caps associated with the vehicles sold by the manufacturer. May be incompatible with the vehicle emissions intensity standards adopted by CA and others. Requires estimates of vehicle emissions when sold.
H. Large transportation fleets regulated at the fleet management level.	Transportation.	Fossil fuel combustion from fleet vehicles (could be defined as on-road only).	CO ₂ only. Could be expanded to other combustion related GHGs (N ₂ O and CH ₄).	This is a focused downstream transport sector option, treating “fleets” like large stationary sources.
I. Agriculture emissions regulated at the producer or “farm” level.	All agricultural sectors.	Livestock, soils (does not include fuel combustion emissions)	CO ₂ ; CH ₄ ; N ₂ O	Most emissions are diffuse and not conducive to measurement and quantification at the farm level.
J. Forestry and land use change emissions regulated at the land owner level.	Forested lands owned privately and publicly (could be segmented by ownership).	Change in carbon stock on the land.	CO ₂	Requires protocols to measure changes in carbon stock relative to baseline conditions over time.
K. Production of high GWP gases regulated at the point of production.	Chemical manufacturing, particularly HCFC-22 production.	Fugitive process emissions.	High GWP gases	Small number of production facilities nationally and internationally.
1. Under all options, the Electricity Subcommittee is assessing how best to cover the electric sector.				

C) Electricity Subcommittee

i. Mission

The mission of the WCI Electricity Subcommittee is to recommend a point of regulation, a market-based compliance mechanism design, and an accounting structure to incorporate the electricity sector into a proposed cap-and-trade program.

ii. Tasks

The Electricity Subcommittee proposes to take on the following tasks:

1. Recommend whether and how an electricity sector market mechanism should include greenhouse gases beyond CO₂.
2. Gather and share information for each partner jurisdiction on (a) historical and projected future sales and emissions from the electricity sector within the partner jurisdiction, (b) historical and projected future electricity imports into the partner jurisdiction, and (c) available data concerning the emissions and ownership attributes of the imported electricity.
3. Establish criteria, evaluate, and propose cap-and-trade compliance option(s), including the point of regulation and compliance structure (e.g., first-seller, hybrid load/source, load based, etc.). Options would focus on structures that maximize coverage of emissions attributable to electricity consumed in the partner jurisdictions, facilitate end-use energy efficiency, and meet other criteria determined by the group.
4. Based on the compliance structures evaluated, develop a consistent regional inventory methodology for CO₂ emissions from the generation of electricity that does not lead to double counting of emissions (e.g. overlapping claims) and provides a robust baseline for a cap-and-trade system.
5. Propose detailed design elements specific to an electricity sector cap-and-trade structure, including those design elements that should be consistent across states and provinces.

iii. Emissions Scope

Electricity sector emissions are tentatively defined as the greenhouse gas emissions from all generating plants that serve WCI Partners, including generation outside the borders of the WCI Partners that serve end users in WCI states and provinces.

iv. Coordination with Other Subcommittees

This committee will work closely with the Scope Sub-Committee, but as a starting point for the work of this committee we will assume the Scope Sub-Committee will not recommend upstream regulation at the point of entry of fossil fuels into the WCI region. However, this possibility is recognized. For example, the WCI Partners might choose to regulate upstream CO₂ and methane emissions from facilities that provide fuel for generating plants (e.g., coal mines and liquefied natural gas import facilities).

Close coordination with the Allocation Sub-Committee will also be needed. An electric cap-and-trade design proposal, the potential allocation of free allowances and the potential distribution of revenues from allowance auctions could affect the distribution of benefits and costs among the WCI Partners if such a system were implemented. Also, allocation decisions could affect the program's ability to accomplish end-use energy efficiency, a key element in reducing greenhouse gas emissions from the electric sector.

Finally, the accounting structures and methodologies evaluated (proposed), as well as cap-and-trade designs, will have numerous implications for the Reporting Committee.

D) Allocations Subcommittee

i. Mission

The mission of the WCI Allocation Subcommittee is:

1. To recommend a methodology for determining the number of allowances to be apportioned, either individually to each WCI partner and thereby establishing each Partner's overall emissions allowance budget for the WCI program, or regionally for the WCI region overall; and
2. To determine whether to recommend that the Partners establish a common method for distributing the budgeted emissions allowances (a) among covered sectors; and (b) within each sector to covered entities. If a common allowance distribution method is recommended, the Subcommittee will recommend a distribution method or methods for consideration by the WCI Partners.

ii. Tasks

To accomplish its mission, the Subcommittee proposes to take on the following tasks:

1. Identify the Subcommittee's preliminary information needs.
2. Before deliberating on potential options for establishing the budgeted allowances (for either the WCI region overall or each individual Partner), and recommending whether and how to distribute allowances within covered sectors and entities, the Subcommittee will develop recommended design principles to guide the Subcommittee in its deliberations.
3. Determine whether an allowance budget should be established for each WCI Partner individually or whether a regional allowance budget should be set for the WCI region overall with allowances allocated to sectors within the region.
4. Develop and recommend a methodology for determining the amount of overall allowances to be apportioned either regionally or to each WCI Partner's allowance budget.
5. Determine whether and what to recommend concerning how individual allowance budgets should be divided among individual sectors within the WCI region or each Partner jurisdiction (i.e. establish specific allowance budgets for each sector within each the WCI region overall or each Partner jurisdiction).
6. Determine whether and what to recommend concerning how allowances are distributed, either by each Partner through its allowance budget(s) or regionally by sector within the WCI region overall, including:
 - Examine existing approaches and evaluate, at a minimum, the following options: distribution by:
 - free allocation;
 - auction; and
 - a hybrid of free allocation and auction.

- If a free allocation methodology is recommended in whole or in part:
 - Recommend the parties to whom the allowances will be allocated (i.e., emitters only, consumers, product generators/producers, and/or governmental entities);
 - Recommend a formula for calculating the allowances to be allocated to each covered entity, considering:
 - The factors on which the allocation of allowances should be based (i.e., emissions, fuel or other input, product output and/or some other benchmark); and
 - The baseline for the allocations (i.e., based on a single year emissions, an average of multiple years' emissions, or the maximum emissions over a period of years) and whether the baseline should be updated periodically.
 - If an auction is recommended, in whole or in part:
 - Recommend the percentage of allowances to be auctioned;
 - Recommend criteria/parameters for uses of the funds generated by the auctions; and
 - Recommend such other auction design parameters as the Subcommittee deems appropriate, for example a reserve price, specific timing of auctions and/or eligibility for participation in the auctions, etc.
7. Determine whether the method used for allocating allowances (i.e. free, auction or hybrid) should be the same for all sectors or may/should vary by sector.
 8. Determine whether the amount of allowances allocated to each sector and/or WCI Partner should decline, and if so, at what rate and pace.
 9. Determine whether and what to recommend concerning how appropriate recognition and incentives for early emissions reductions can/should be considered in distributing allowances.
 10. Determine whether banking of allowances should be permitted, and if so, the criteria and condition for banking, including:
 - The length of time for which allowances may be banked; and
 - The amount of allowances that may be banked;
 11. Determine whether borrowing of allowances should be permitted, and if so, the criteria and condition for borrowing, including:
 - The length of time for which allowances may be borrowed;
 - The amount of allowances that may be borrowed; and
 - The rate of repayment of borrowed allowances (i.e., 2 for 1)

iii. Working Process

General Approach

- Subcommittee members and technical staff will develop one or more working documents to frame and evaluate various options for apportioning Partner allowance budgets and allocating emissions among covered sectors and entities within Partner jurisdictions.
- A plan for soliciting input from stakeholders will be developed in connection with the pending discussion on stakeholder involvement by the committee as a whole.
- The subcommittee will forward one or more straw proposals and will include an evaluation of the preferred and other options for the WCI Partners to consider.

iv. Gathering Information Gathering and Support Resources

- Data. Regarding apportionment to each state, and after conferral with the Scope Subcommittee, the baseline emissions for all Partners from the proposed sectors to be developed with the data group. A series of allocation algorithms will allow members to look at the allocations in various ways.
- Expertise. The group will generate a list of useful experts to offer presentations on a bi-weekly basis (as needed). Include discussions with people with expertise in other emissions trading systems: for example, the U.S. EPA Acid Rain Program, the Northeast NOx Emissions Trading Program, the Irish program, the UK Emissions Trading Scheme and also their auction experience, RGGI, the EU/ETS.
- Consultants. The subcommittee will identify projects and consultants that it may need to perform its missions and develop a proposed subcommittee budget that identifies the potential costs for this assistance.

v. Coordination with Other Subcommittees

- The Allocations Subcommittee will need to work closely with the Scope Subcommittee, to settle on the sectors among which reduction targets will be set based on which sectors are included in the program.
- The Allocations Subcommittee will also need to work jointly with the Electricity Subcommittee.

E) Offsets Subcommittee

i. Mission

The mission of the WCI Offsets Subcommittee is to make recommendations on whether to include a greenhouse gas offset mechanism as an element of the Western Climate Initiative cap and trade system, and, if so, on the design, scope and operation of such a mechanism.

ii. Tasks

Task 1: Role and objectives of a WCI offset mechanism

This task involves the development of clear definitions of an offset, the role of a WCI offset mechanism, and the objectives that will guide its design in the overall WCI cap-and-trade system.

The subcommittee will examine a number of potential roles an offset mechanism could play in the WCI including economic, environmental and social aspects of a cap and trade system that may influence or be influenced by an associated offset mechanism. Potential roles may include:

- Encouraging emission reductions and other benefits across the economy
- Distributing economic and environmental benefits of emission reductions across the economy
- Enabling the Partners to achieve more aggressive reduction targets than would otherwise be technologically or economically possible at capped entities alone
- Containing overall costs and competitiveness concerns for emitters and WCI partners
- Maintaining or enhancing the environmental integrity of the regional cap and trade system.

The subcommittee will also review and determine design objectives that should guide the development of a potential WCI offset mechanism and may include:

- Spurring innovation outside the regulated sectors
- Providing incentive for partnership in the WCI
- Enhancing market liquidity
- Minimizing administrative complexity, fees and transaction costs (managing barriers to entry)
- Providing environmental and social co-benefits
- Ensuring transparency
- Avoiding unintended outcomes, including negative interaction with current and future government policies

As part of this task, the subcommittee will also outline broad options that could frame the overall role and contribution of offsets to meeting compliance obligations and containing overall costs, including whether and what types of quantitative limits might be considered.

Task 2: Core design elements of a WCI offset mechanism

This task involves the development of specific technical criteria and/or requirements for projects that may be eligible in the WCI offset mechanism, and to translate into practice the WCI design principle that reductions be real, surplus/additional, verifiable, permanent, and enforceable.

The subcommittee will review potential design elements and optional aspects of those design elements including:

- Components to ensure reductions are real
- Ways to show projects or actions satisfy the principles of being surplus to other requirements and additional/incremental
- Methods to measure quantify and report emission reductions (baseline and monitoring methodologies)
- How to establish the boundary of a project and ways to account for leakage or increases in emissions outside the boundary
- How long carbon must be stored, biologically or geologically, to be considered permanent, and what tools and procedures should be used to address the loss of stored carbon from offset projects
- Ways to simplify accounting and use comparable accounting approaches across project types
- Ways to provide adequate assurance that project activities and emissions reductions or removals are taking place as claimed (validation and verification)

The subcommittee has anticipated some of the basic design criteria that will need to be reviewed and will seek input on additional design criteria as required and considered.

Task 3: Offset eligibility and fungibility

This task involves the development of any specific criteria and/or requirements that will determine the offset project types and locations, and, if relevant, other existing tradable emission commodities from other regional or international programs that would be eligible within the overall system.

The subcommittee will review a) offset project types and locations (WCI region, North America, global) and b) existing tradable emissions commodities with respect to the robustness of quantification and verification protocols, environmental integrity (permanence, leakage, incrementality/additionality), potential interaction with existing and future policies and regulations, and ability to contribute to WCI goals and principles. As part of this review, the subcommittee will examine the eligibility decisions taken in other mandatory compliance jurisdictions and their rationale. The subcommittee will also review options for eligible project start dates, and the crediting periods over which the project developers can expect to benefit from offset revenues.

Decision options may include one or more of the following:

- Determination of offset type (or commodity) eligibility subject to the availability of sufficiently robust quantification and verification protocols.
- Specification of the process by which the adequacy of protocols is determined, i.e. by the WCI itself or by other programs or standards (see also Task 4).

- Preferences and/or restrictions on eligible project and commodity types and/or locations, based on goals, principles and design elements (as developed in the Tasks 1 and 2), in addition to the robustness of protocols. (The subcommittee may also consider the possibility of rewarding or discounting specific project types or locations)
- Determination of eligible project starting date, i.e. the earliest date at which the implementation of a project activity could begin (or have begun) in order to qualify.
- Establishment of offset crediting periods, specifying the time period over which project emission reductions would be verified and/or certified, and, if relevant, offset credit expiration dates

Task 4: Offset program structure and authority

This task involves the development of operational guidelines and recommended program structure and authority to oversee and manage an offset mechanism, if and as appropriate depending on the recommendations developed above regarding the extent to which the WCI should administer its own offset program or to otherwise develop specific (e.g. minimum) criteria.

The subcommittee may consider, among other issues:

- Procedures for project validation and verification, approval of validators/verifiers, and whether appropriate and sufficient protocols are currently available.
- The process for registering and/or certifying offsets, issuing credits and maintaining transaction records
- How initial and ongoing operational questions, such as adequacy of project documentation, certification or accreditation of operational entities would be addressed and decided, including which activities should be left to third parties or other institutions.
- The institutional requirements related to the above tasks, and how that influences the path forward

iii. Coordination with other subcommittees

The Offsets Subcommittee will:

- Coordinate with the Reporting Subcommittee in the development of validation, verification and reporting requirements for the offset mechanism;
- Reflect the recommendations of the Scope Subcommittee in the definition of offset mechanism boundaries and in determining eligible project types;
- Ensure the recommendations of the Scope, Allocation and Electricity Subcommittees do not lead to double counting, gaming or perverse incentives when implemented in coordination with the offset mechanism (or vice-versa).