

Multi-State Climate Registry

Stakeholder Briefing Packet #1

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Eastern Climate Registry
Supporting Regional Climate Action



Multi-State Climate Registry Contact Information

The following organizations are supporting their states in the development of a Multi-State Climate Registry. [The California Registry was established by California statute as a non-profit voluntary registry for greenhouse gas (GHG) emissions. NESCAUM, LADCO, and WRAP are regional organizations that provide scientific, technical, analytical, and policy support to air quality agencies located in their member states.]

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Multi-State Climate Registry FAQ

BACKGROUND

What is a registry?

- Registries represent a bottom-up approach to emissions accounting, where companies and organizations quantify and report their emissions from various individual sources. Reporting is based on a series of quantification standards and guided by program requirements outlining the type of data and information an entity is required to report and how that data is reported; registries also provide a system with standardized formats for tracking, storing and making information available.
- In contrast, emissions inventories provide a top-down accounting of a state's, country's, or organization's emissions based on aggregate activity data (e.g. energy consumption data). Inventories are designed to give a comprehensive view of total emissions in a state or country and reveal aggregate trends over time.
- Examples of existing U.S. emissions registries (voluntary and mandatory) include:
 - U.S. Acid Rain program and the OTC NOx Budget Program — emissions trading registries
 - U.S. Toxic Release Inventory (TRI) — emissions reporting registry
 - DOE's 1605(b) program — emissions reporting registry that supports emissions reduction projects
 - California Climate Action Registry — entity-wide emissions reporting registry that supports emissions reduction projects

Which states/regions have legislation or plans calling for the development of climate registries?

- *Eastern States*
The New England Governors/Eastern Canadian Premiers 2001 Climate Change Action Plan identified the development of a GHG registry as a key step in helping the region meet its climate reduction goals.¹ Several state climate action plans and state legislation have also identified the development of a GHG registry as an action item, including: *Massachusetts Climate Protection Plan, Maine Public Law 2001 c.3, New Hampshire Voluntary GHG Emissions Reduction Registry Regulations, and the Connecticut Act Concerning Climate Change.*² New Jersey, Connecticut, and Maine require GHG reporting from certain stationary sources.
- *Western States*
California passed legislation in 2001 creating a voluntary climate registry³, the California Climate Action Registry, which became operational in 2002.⁴ Over 85 organizations

¹ <http://www.negc.org/documents/NEG-ECP%20CCAP.PDF>

² MA Climate Protection Plan. Spring 2004. p. 23, <http://www.massclimateaction.org/pdf/MAClimateProtPlan0504.pdf>; ME Public Law 2001 c.3, H.P. 78 - L.D. 87, http://janus.state.me.us/legis/ros/lom/LOM120th/Res1-50/Res1-50-02.htm#P21_2364; NH Code of Administrative rules: Chapter Env. A-3800, <http://www.des.state.nh.us/rules/enva-3800.pdf>; CT *Public Act No. 04-252*, <http://www.cga.ct.gov/2004/act/Pa/2004PA-00252-R00SB-00595-PA.htm>

³ Senate Bill 1771, <http://198.104.131.213/docs/ABOUTUS/SB1771.pdf>

⁴ <http://www.climateregistry.org>

currently report to the California Registry on a voluntary basis. California's Global Warming Solutions Act (A.B. 32,) passed in October 2006, will make reporting mandatory for certain major sources starting on January 1, 2008.⁵ New Mexico and Arizona have called for the creation of a GHG registry as part of their Southwest Climate Change Initiative.

- *Midwestern States*

Wisconsin developed a voluntary emission reduction registry in 2002 to document voluntary reductions of greenhouse gases and other pollutants. Reporting is required from sources that emit more than 100,000 tons of carbon dioxide.⁶ Minnesota's Pollution Control Agency identified the creation of a registry as part of its Climate Action Plan recommendations.⁷

What is the purpose and scope of a multi-state greenhouse gas registry?

- In this effort, a group of about 30 states/tribes are exploring the development of a multi-state, multi-regional climate registry to standardize best practices in data reporting and management, establish a set of common protocols (based on *WRI/WBCSD's GHG Protocol Corporate Standard*), and support a common reporting system.
- The registry currently being considered would be policy-neutral, meaning it could support voluntary reporting of GHG emissions, mandatory reporting of GHG emissions, and regulatory GHG emissions reduction programs.
- State governments would then implement their own climate programs and the registry would ensure consistency and transparency between programs and establish a high level of environmental integrity in emissions accounting and reporting.
- Regardless of whether states are implementing mandatory or voluntary climate programs, there is a need for a high quality, credible GHG registry that facilitates broader participation in existing and expanding climate programs.

What would be the benefits of state/tribe collaboration?

- *Create a vehicle for politically and geographically diverse states/tribes to take action together on climate change.* Although states/tribes are at different stages in their efforts to address climate change, state regulators and policy makers would benefit from increased information sharing regarding emissions reporting and reduction programs.
- *Support the voluntary reporting of "regulatory quality" GHG data.* Even for states implementing mandatory climate programs, it remains important for companies, organizations, and governments to have access to a system that supports the voluntary reporting of entity-wide GHG emissions as such a system may:
 - Provide reporters with a platform nationally recognized for establishing the most credible and consistent GHG reporting requirements.
 - Encourage GHG tracking and reporting for companies and organizations, large and small, that do not internally monitor their emissions data.
 - Encourage companies and organizations to report that are not yet covered by mandatory state programs.
 - Provide public disclosure of carbon emissions.
 - Offer the possibility of uniformity of rules for companies with facilities in many states. Develop a reporting platform for institutions – such as universities, large

⁵ Assembly Bill 32, <http://www.assembly.ca.gov/acs/acsframeset2text.htm>

⁶ <http://www.dnr.state.wi.us/org/aw/air/registry/index.html>

⁷ <http://www.pca.state.mn.us/publications/reports/mnclimate-action-plan.pdf>

indirect emitters, and cities – which will not likely be required to report under mandatory programs.

- *Establish a common infrastructure to support current and future mandatory programs.* Whether or not states are engaged in mandatory GHG programs, as states invest in any registry, they are developing the framework for a GHG emissions management system.
- *Lower costs for states.* The potential of creating a common registry will likely reduce each state's costs, as we pool resources. Especially when considering the cost of developing software for the Registry, pooling resources will reduce costs and allow for a higher quality software interface than many states could individually afford.
- *Develop linkages between policies and management systems.* Some states are interested in linking their GHG reduction programs – the registry would provide a forum for state regulators to develop linkages and perhaps create models for future programs.
- *Standardize best practices in GHG emissions reporting.* The *GHG Protocol Corporate Standard* establishes high-level standards regarding GHG accounting at the entity-level. In terms of actual GHG reporting, however, a variety of decisions will need to be made on a program level regarding how this information is captured, stored, and reported.

How would a multi-state GHG registry compare with existing climate registries?

- *Chicago Climate Exchange:* CCX is an independent, for profit, voluntary emissions and allowance trading system—the program is not subject to state mandatory and regulatory guidelines and differs from an entity-wide voluntary emissions reporting approach.
- *U.S. Department of Energy's 1605(b) program:* 1605(b) is a voluntary emissions reduction registry established to track emissions reductions based on intensity metrics to meet the Bush Administration's goal of an 18 percent decrease in U.S. GHG emissions intensity by 2012; in contrast, the states would develop a policy-neutral emissions reporting system and would track emissions on an absolute basis.
- *U.S. Environmental Protection Agency's Climate Leaders program:* Climate Leaders is public/private partnership designed to support corporate GHG management strategies and reduction targets; it does not provide a policy-neutral platform for state-sponsored policies and programs.

What is the incentive for companies and organizations to voluntarily report their emissions?

- Demonstrate environmental leadership
- Identify and manage GHG risks and opportunities
- Gain access to user-friendly web-based software program
- Document early action (voluntary emission reductions)
- Participate in policy discussions relevant to their industry and evolving GHG policy

PROCESS

What states/regions have expressed interest in participating in the development process?

- *California (through the California Climate Action Registry):* The California Registry is a voluntary greenhouse gas (GHG) registry, operating since 2001, with more than 90 members including businesses, state agencies, municipalities, educational institutions and environmental non-profits, among others. The California Registry has more than 170 million metric tons registered and certified.

- *Eastern Climate Registry*: Ten states in the eastern U.S., including Connecticut, Delaware, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, Pennsylvania, and Vermont, coordinated by NESCAUM, are in the final stages of developing a policy-neutral climate registry.
- *Lake Michigan Air Directors Consortium (LADCO)*: Eight Midwest States, including Iowa, Illinois, Indiana, Ohio, Michigan, Minnesota, Missouri, Wisconsin, coordinated by LADCO, have been exploring the development of a Midwest GHG Registry throughout the past year.
- *Western Regional Air Partnership (WRAP)*: Thirteen Western states, including Alaska, Arizona, California, Colorado, Idaho, Montana, New Mexico, North Dakota, Oregon, South Dakota, Utah, Washington, Wyoming, coordinated by WRAP, have also been exploring the development of a climate registry.

Discussions are also underway with several tribes and southeastern states to join the Registry development process.

How is the registry development process structured?

- States/tribes participating in the registry development process have designated a group of 15 high-level environmental officials to the Multi-State Climate Registry Steering Committee.
- The Steering Committee is charged with the following tasks: develop guiding principles, approve technical framework documents, outline organizational and governance structure, establish a stakeholder process, draft a Memorandum of Understanding, and brief states/tribes on the potential roles and responsibilities of the registry.
- A team of technical experts representing state agencies and organizations engaged in the Multi-State Climate Registry effort has been assembled to develop a proposed reporting framework for the Registry.
- Subcommittees have also been established to outline options for organizational and governance structure and to draft an agreement between states/tribes.

Who sits on the Multi-State Climate Registry Steering Committee?

Environmental officials from the following states and regional organizations sit on the MSCR Steering Committee on behalf of states within their regions:

- *East*: Connecticut, Massachusetts, New Hampshire, NESCAUM
- *West*: Arizona, California, New Mexico, WRAP
- *Midwest*: Illinois, Michigan, Minnesota, LADCO

How long will the Multi-State Climate Registry development process take?

- The goal is for states to reach agreement on a common registry by June 2007 and have the program operational by December 2007.

Principles of the Multi-State Climate Registry (endorsed by MSCR Steering Committee in September 2006¹)

MISSION STATEMENT

Our mission is to develop and implement a common repository for state/tribe recognized greenhouse gas (GHG) emissions records that supports GHG emissions reporting and reduction policies for its member states and tribes. It will provide an accurate, consistent, transparent, and verified set of data and a robust accounting infrastructure.

GUIDING PRINCIPLES

States and tribes are working together to develop and implement a system based on best practices which would:

- Establish a high level of environmental integrity in measuring emissions and reductions and collect consistent, complete, relevant, accurate, and transparent data.
- Develop a common GHG reporting structure based on agreed upon accounting and reporting protocols, which would:
 - Establish a common currency to ultimately support state and tribal programs and eliminate the need to for discounting reductions between programs.
 - Minimize the burden on reporting entities.
 - Provide an opportunity for entities to establish a baseline and document early action.
- Provide the infrastructure for each member to utilize in support of GHG reporting, registration, emissions allowance and reduction tracking functions.
- Encourage other states and tribes to join.
- Reflect input from environmental groups, businesses, local government, and other interested parties.

¹ The MSCR Steering Committee is made up of 15 high-ranking environmental officials representing states and regions participating in the development process.

Multi-State Climate Registry Briefing Paper (drafted by MSCR Steering Committee in November 2006¹)

Summary

The Multi-State Climate Registry (MSCR) would serve as a common repository for state/tribe recognized greenhouse gas (GHG) emissions records and would ensure consistency between GHG emissions reporting and reduction programs between member states and tribes. While the nature and scope of these programs differ, the MSCR would provide the basis for a common currency and robust data standards consistent with those used in international GHG reporting programs. Consequently, the registry would enable state and regional programs to be expanded, modified, linked and merged without undermining the basic infrastructure upon which they are built.

The MSCR would be designed as a policy-neutral reporting platform and repository for GHG emissions information to support a variety of voluntary, mandatory and regulatory state GHG programs. It would generate high quality emissions data to be quantified, collected and reported in a consistent fashion. The Registry would ensure the highest quality standards for voluntary reporting programs and fundamental data consistency and transparency among mandatory programs.

Key Drivers and Assumptions

- A group of states and tribes are jointly seeking to create a policy-neutral registry based on a high level of environmental integrity that can support state and tribe GHG reporting, registration and emissions allowance and reduction tracking functions. This registry would seek to expand its membership to include all U.S. states and tribes.
- To that end, states/tribes would need to establish an organization to manage and maintain the functions of the registry and its various uses in supporting state/tribe climate actions.
- Although our programs and policies may differ, participating states/tribes would agree to use a unified GHG reporting platform with common standards to minimize the burden on reporting entities, maximize state resources, and support best practices.
- In joining the MSCR as members, states and tribes would be expected to endorse the MSCR's voluntary reporting program and look to the Registry's accounting and reporting standards in establishing their mandatory programs.
- Only states and tribes would be qualified to become members of the MSCR. Other government, nonprofit, and private institutions would be eligible to participate as reporters to the registry (either through the voluntary reporting program or through state mandatory programs). Stakeholders would be consulted in the design and implementation of the MSCR framework and structure.

¹ The MSCR Steering Committee is made up of 15 high-ranking environmental officials representing states and regions participating in the development process.

- The duties, obligations, and authority of member states and tribes associated with participation in the MSCR would be based on the organizational structure that participating states decide to endorse.

MSCR Proposed Activities/Roles

- Develop, adopt and update GHG measurement and reporting protocols
- Support voluntary reporting, mandatory reporting, and emissions and allowance tracking
- Support baseline and reduction project reporting consistent with state/tribe regulatory programs
- Organize multi-state conferences and workshops on GHG reporting
- Manage the web application, database and software to track and report GHG emissions and allowances and reductions
- Liaison with member states
- Recruit reporters
- Generate public reports
- Provide technical support and training to reporters
- Facilitate outreach and communications
- Serve specific state needs for information collection, as required
- Support common standards with federal and international programs
- Provide high-quality education on GHG reporting to companies and organizations
- Advocate jointly for federal, foundation, and state funding to support accounting activities for state reduction programs
- Accredite and oversee verifiers

Goals of the Organization

The MSCR organizational structure needs to be able to provide the following benefits to members:

Create a common standard for tracking and measuring GHG emissions. Although states are at different stages in their efforts to address climate change, state regulators and policy makers would benefit from the standardization of emissions reporting and reduction measurement.

Lower costs for states. Creating a common registry would likely reduce each state's costs as we pool resources. Especially when considering the cost of developing software and developing and maintaining protocols for the Registry, pooling resources would reduce costs and allow for higher quality tools than many states could individually afford.

Act in time to meet state needs. For it to be successful, it is essential that the MSCR start operations in a time frame that meets state needs. Many states are now moving forward rapidly with GHG programs. If the MSCR cannot move in time to meet the needs of these states, they may develop programs on their own, increasing the challenges of coordination and harmonization. For example, the California Air Resources Board (CARB) is mandated to issue a final rule on mandatory reporting by January 1, 2008. If the MSCR cannot meet this time frame, CARB may decide to act on its own or in concert with other western states. In another example, the State of Connecticut was charged with implementing a mandatory GHG reporting program through the Registry starting in April 2006. Connecticut has already set up a state system to collect that data until they can integrate their reporting program with the MSCR's requirements and tools.

Standardize best practices in GHG emissions reporting. The World Resources Institute and World Business Council on Sustainable Development's *GHG Protocol Corporate Standard* establishes high-level standards regarding GHG accounting at the entity-level. In terms of actual GHG reporting, however, a variety of decisions will need to be made on a program level regarding how this information is captured, stored, and reported.

Develop linkages between policies and management systems. Some states are interested in linking their GHG reduction programs – the registry would provide a forum for state regulators to develop some linkages and perhaps create models for future programs.

Support the voluntary reporting of high quality GHG data.² Even for states implementing mandatory climate programs, it remains important for companies, organizations, and governments to have access to a system that supports the voluntary reporting of entity-wide GHG emissions as such a system may:

- Provide reporters with a platform nationally recognized for establishing credible and consistent GHG reporting requirements.
- Encourage GHG tracking and reporting for companies and organizations, large and small.
- Encourage companies and organizations to report that are not yet covered by mandatory state programs.
- Provide public disclosure of carbon emissions.
- Offer the possibility of uniformity of rules for companies with facilities in many states.
- Develop a reporting platform for institutions – such as universities, large indirect emitters, and cities – which will not likely be required to report under mandatory programs.

Establish a common infrastructure to support current and future mandatory reporting programs. The GHG Registry would help develop a GHG emissions management system that could support state mandated programs. It might also develop a model rule for state and tribe mandated reporting programs that could serve as an exemplar of best practices to support states/tribes in designing their mandatory GHG reporting programs.

Obligations of Participating States

Each state/tribe would retain all rights in implementing and enforcing their GHG programs and would agree to participate in the joint MSCR approach. It is assumed that all states participating in the MSCR would agree to endorse the use of Registry protocols and the reporting platform for voluntary reporting. It is also assumed that while states and tribes would follow the reporting requirements outlined by the MSCR and would use the MSCR as a GHG emissions repository (or at least upload their emissions data to the MSCR) for their mandatory reporting data, their agencies would continue to have complete control over the specific design of these programs, particularly with respect to compliance and enforcement.

² It is important to note that companies and organizations would be invited to voluntarily report their emissions into the Multi-State Climate Registry even if emissions occur in a state that is not a registry member. Wal-Mart, for example, may choose to report their GHG emissions to every state in which they operate regardless if that state is a registry participant.

Governance

A Board of Directors would be created and made up of one representative of each participating state/tribe. To coordinate this large group (potentially including 30+ states and tribes), an Executive Committee would also be appointed for day to day decision-making. A more detailed governance structure would be developed by the Steering Committee for review, discussion and approval by the entire MSCR membership as the development of the Registry progresses.

The development of an MSCR organization to manage the Registry will be discussed in a Working Group and reviewed by the Steering Committee. The Steering Committee will evaluate options and identify the resources needed from member states/tribes and other interested parties for implementation.

Technical Elements

The MSCR Technical Team, consisting of environmental regulators from states participating in the development process, has drafted technical framework proposals to lay the groundwork for the following program elements to support entity-level accounting and reporting. Detailed protocols and guidelines will be drafted and released for public comment once an MOU has been signed in spring 2007.

Entity accounting allows a company or organization to identify its reductions in GHG emissions by making annual emissions comparisons. Under voluntary programs, an entity must identify a *base year* to identify reductions in GHG emissions over time. Entity accounting is used primarily for companies and organizations to conduct internal inventories for management purposes or to demonstrate GHG emissions reductions based on voluntary reduction targets (e.g., EPA Climate Leaders); entity accounting concepts are also required for governments to quantify emissions from regulated entities, set accurate cap levels, and calculate whether an entity has met its requirements under the cap.³

Best Practices in Emissions Reporting. The MSCR would develop a series of reporting standards to establish the building blocks for mandatory and voluntary reporting. These standards would be designed to ensure basic consistency among mandatory reporting programs, and that all data reported through voluntary programs is of high quality. These reporting standards would represent the common thread between state mandatory reporting programs and mandatory and voluntary reporting programs.

GHG Reporting and Accounting Protocols. The MSCR would adopt a harmonized set of accounting and reporting protocols based on guidelines established by the California Registry and the Eastern Climate Registry. These would be consistent with WRI/WBCSD's GHG Corporate Protocol Standard. The MSCR would continue to adopt new guidance documents as needed. Initially this reporting framework would focus on absolute emission reporting, but during a subsequent phase of implementation could be expanded to include project accounting.

Third-Party Verification. The MSCR would establish verification requirements and administer a verification program for all voluntary reporters. States/tribes that have mandatory reporting requirements may choose to use the MSCR's third-party verification system.

³ Participating states will work to develop a rigorous project accounting framework that could quantify and characterize CO₂ removals from the atmosphere, including terrestrial sequestration activities (e.g. forest or agricultural soil based activities) as well as geologic sequestration, in the registry's implementation phase.

Multi-State Climate Registry Implementation Timeline (endorsed by MSCR Steering Committee in November 2006¹)

This document provides an overview of a proposed approach for implementing the Multi-State Climate Registry (MSCR) and the steps which will be required. This overview offers proposed action steps, timing and proposed responsible parties for the achievement. Projected major MSCR milestones are indicated in italics.²

Development Phase

1. Develop Technical Framework Document Sept - Jan 2006
The Technical Team will propose a technical framework to support the MSCR's reporting needs. This framework will be based on existing high quality reporting programs and will be designed to support the MSCR's principles of consistency, accuracy, and transparency.

Duration: 4 months
Responsibility: Technical Team
2. Develop Options for Organizational Structure Oct - Dec 2006
The Options Subcommittee of the Steering Committee will develop a set of options for the organizational structure of the MSCR, including a recommended option for adoption by the Steering Committee.

Duration: 3 months
Responsibility: Options Subcommittee

Steering Committee selects option for organizational structure Dec 2006
3. Draft MOU Dec 2006 – Feb 2007
A Drafting Subcommittee of the Steering Committee will draft the text of a proposed MOU. This is intended to serve as the founding document of the MSCR and will offer a structure for the governance and structure of the organization.

Duration: 2 months
Responsibility: Drafting Subcommittee and support organizations (CCAR and NESCAUM)
4. Steering Committee Phoenix Meeting Feb 2007
At the meeting, the Drafting Subcommittee will present its draft of the MOU to the Steering Committee for consideration. The Steering Committee will also discuss financial and administrative details associated with the organization, and the Technical Team will present its draft technical framework.

¹ The MSCR Steering Committee is made up of 15 high-ranking environmental officials representing states and regions participating in the development process.

² All activities and dates are subject to change pending the availability of resources, the content of the MOU, and the guidance of the Registry Board.

5. Review and Comment on the MOU Feb - Mar 2007
The draft MOU will be revised based on the comments and concerns of participating states through a series of conference calls with agency heads, as needed.

Duration: 2 months

Responsibility: Steering Committee and support organizations (CCAR and NESCAUM)

States sign MOU. Press events will be held in all participating states, followed soon thereafter by a first meeting of the board.

Mar - Apr 2007

Implementation Phase

6. MSCR Organizational Launch Mar - May 2007
The MSCR will be incorporated and hire or contract staff to carry out implementation beyond this point. The Registry website will also be launched at this time.

7. Develop Software Proposal Feb – April 2007
The Technical Team will develop a proposal for a decision by the board on a data collection and reporting software tool capable of supporting the MSCR's programs. Several tools exist and are in use in different parts of the country. They may be used individually or in coordination to meet the needs of the MSCR. The ability of these tools to meet the Registry's needs will be analyzed and options for their deployment developed.

Duration: 3 months

Responsibility: Technical Team

8. Present Draft Framework to Stakeholders for Comment Apr – June 2007
The board will review and then release the draft technical framework document for public comment by stakeholders. Comments will be integrated into a final draft for adoption by the board.

Duration: 3 months

Responsibility: MSCR Technical Team

9. Assemble Emission Quantification Methods Apr – Aug 2007
The staff of the MSCR will assemble source specific approved emissions quantification methods consistent with the technical framework proposal. Developing or adopting quantification methods will be a locus of ongoing work for the MSCR, however methods must be assembled for most common sources, before the Registry launches. While there are many sources on which to draw, assembling detailed quantification guidance in a tiered structure will require significant effort.

Duration: 4 months

Responsibility: MSCR staff

10. Draft General Reporting Protocol June – Nov 2007
The staff of the Registry will develop a central reporting protocol, which is the step by step manual for reporters to the Registry.

Duration: 6 months
Responsibility: MSCR staff

11. Draft Verification Protocol July – Sep 2007
The verification protocol will instruct third party verifiers on how to assess the conformance of a reporter's emission report to the Registry's central reporting protocol and the accuracy of emission data. While this document could also be based on the California Registry's Certification Protocol, adaptation will be required.

Duration: 3 months
Responsibility: MSCR staff

MSCR board approves protocols Sept 2007

12. Customize Software Solution Aug – Dec 2007
Based on the software proposal developed during the design phase, the MSCR staff will manage the customization of the software option or options selected by the Steering Committee. This process will involve instantiating quantification methods and potentially new features of the MSCR's reporting and verification protocols.

Duration: 5 months
Responsibility: MSCR staff

13. Develop Administrative Procedures and Policies Apr – Nov 2007
The MSCR develop the administrative procedures necessary to support the reporting program. These include everything from developing a schedule of fees, to reporting and verification deadlines to procedures for qualification, training and oversight of verifiers to the revision process for protocols, among many others.

Duration: ongoing throughout implementation
Responsibility: MSCR staff

MSCR begins accepting data Dec 2007

Summary of Proposed Technical Frameworks (drafted by MSCR Technical Team and reviewed by Steering Committee in November 2006¹⁴)

Nature of Ongoing Technical Work

- The Multi-State Climate Registry will serve to create consistency between existing state greenhouse gas (GHG) reporting programs and accommodate new programs as they come on line. While the nature and scope of these programs will differ, the Multi-State Climate Registry will provide the basis for a common currency and robust data standards consistent with those used in international GHG reporting programs.
- A team of technical experts representing state agencies and organizations engaged in the Multi-State Climate Registry effort has been assembled to develop a proposed reporting framework for the Registry.
- The framework will articulate a series of reporting standards to establish the building blocks between state mandatory reporting programs and voluntary reporting programs. These standards are designed to ensure fundamental consistency between data collected for different types of climate programs.
- The proposed framework will also lay out the basic structure of a voluntary, entity wide reporting program that will be one of the key components of the Multi-State Climate Registry. This voluntary structure will include a requirement for third party verification of reported data.
- The proposed framework will be based on the existing reporting requirements of the California Registry and the Eastern Climate Registry.

Proposed Reporting Standards

- The goal of the Multi-State Climate Registry is to ensure that emissions data are generated and collected in a consistent manner, regardless of its intended use. This consistency is instrumental to creating the common currency that can eventually underpin coordinated policy. To this end, the same basic standards that apply to state mandatory reporting programs should apply to voluntary reporting programs. These program elements include:
 - Accounting and reporting principles
 - Source categories
 - Emissions quantification
 - Responsibility to report
 - Verification standards
- The Multi-State Climate Registry's standards for state mandatory programs will be structured so as not to infringe on a state's authority to design, implement, or enforce its own programs.

¹⁴ The MSCR Steering Committee is made up of 15 high-ranking environmental officials representing states and regions participating in the development process. The Technical Team, consisting of environmental regulators from participating states, has drafted technical framework proposals to lay the groundwork for establishing best practices in emissions reporting, GHG accounting and reporting protocols, and third-party verification standards.

Status

- The proposed technical framework is expected to in part, form the basis for an initial agreement between participating states to proceed with the development of the Multi-State Climate Registry.
- Once an agreement in principle to proceed with the development of a Multi-State Climate Registry is reached among the states, the Steering Committee will adopt a timeline and work plan for the detailed development of the Registry's reporting requirements and procedures.
- This development process will incorporate an inclusive stakeholder process.

1) Summary of Proposed Framework for State-Mandated Reporting Programs

Purpose and Objectives

- Collect emissions data and information, at the facility and unit level, that can ultimately support state/tribe mandatory reporting programs (e.g., CA, CT, NJ, ME, etc.) and emissions trading programs (both consumption and production based approaches).
- Develop best practices for facility emissions data and reporting through the MSCR to support state/tribe mandatory reporting programs and voluntary reporting programs.
- Ensure consistency between state/tribe reporting programs so a "ton is a ton" throughout the system.

Technical Points of Agreement

Accounting and Reporting Principles: Reporting would be based on five GHG protocol principles: relevance, completeness, consistency, transparency, accuracy.

Defining the Reporting Entity: State/tribe would determine scope of facility and entity definitions in their reporting requirements (e.g., state/tribe may decide to include all activities and operations connected to that site such as mobile sources and pipelines).

Responsibility to Report: Facility reporting in the MSCR could be conducted by the "owner" or "operator" of that facility, or in a manner consistent with existing state/tribe air quality regulations.

Applicability: At a minimum, the registry would support reporting of all six Kyoto gases at the facility level (CO₂, CH₄, N₂O, HFC, PFC, and SF₆). All GHGs would be reported distinctly into the system and only converted into CO₂ equivalents for reporting purposes.

Scope of Emissions Reported: The MSCR would support mandatory programs that require the reporting of all emissions source categories: (1) stationary combustion, (2) mobile combustion, (3) fugitive emissions, and (4) process emissions. While state authorities would determine which sources are subject to their mandatory programs, emissions information would be organized along common lines.

Level of reporting: Reporting at the facility level would be required; unit level data would be encouraged but not required.

De minimis threshold: The state/tribe authority responsible for implementing GHG reporting programs at the facility level would be charged with determining whether a de minimis emissions reporting threshold could be applied at the facility level as part of any mandatory reporting program.

Quantification Guidelines: Tiered quantification guidelines would be adopted/developed by the MSCR (similar to EU ETS system) to reflect increasing levels of accuracy; there would be a two-tiered structure representing a preferred and default approach. The choice of tiers available to the reporting facility (or entity) under state/tribe mandatory programs would be pursuant to the state/tribe regulations. The process of including states/tribes in developing and refining calculation methodologies and associated protocols would be further defined once the Steering Committee has determined an appropriate organizational structure for the Registry. The process of developing quantification tiers or sub-tiers would be iterative as states continue to develop their mandatory programs.

Emissions Estimation and Reporting: The state/tribe authority would obtain emissions and operating information on reporting facilities, including documentation of data acquisition and data handling activities, as pursuant to state/tribe regulations (such as Title V license agreements).

Frequency of Reporting: At a minimum, reporting would occur on a calendar year basis from January 1st to December 31st. The state/tribe authority may choose to require reporting on a more frequent basis, if necessary.

Verification: For states/tribes using the Registry to support mandatory reporting programs, third party verification would be identified as a preferred approach for compliance and quality assessment. The MSCR would develop third-party verification requirements (designed to support both voluntary and mandatory programs). States/Tribes might decide not to use this approach for mandatory reporting, in which case they would use any state/tribe endorsed verification or auditing system (considered “tier two”). The state/tribe approach could be considered less desirable because those programs have traditionally relied on state/tribe auditing and QA/QC systems that are not as rigorous as third-party verification standards.¹⁵ The type of verification employed would be tracked in the MSCR’s data collection system.

¹⁵ The MSCR could also help clarify what an ideal state verification system might look like. This could be integrated into a model rule that the MSCR develops for states to follow in crafting their mandatory reporting systems.

2) Summary of Proposed Framework for MSCR Voluntary Reporting Program

Purpose and Objectives

- Develop a voluntary reporting program based on best practice entity-level GHG accounting, particularly the WRI/WBCSD GHG Protocol Corporate Standard (revised edition), as well as the voluntary reporting guidelines for the California Climate Action Registry (CCAR) and the Eastern Climate Registry (ECR).
- Provide companies, organizations, and governments with a platform nationally recognized for establishing the most credible and consistent GHG reporting requirements.
- Capture emissions data and information for sources not covered under existing state/tribe mandatory and regulatory programs.¹⁶

Technical Points of Agreement

Accounting and Reporting Principles:

- Reporting would be based on five GHG protocol principles: relevance, completeness, consistency, transparency, accuracy.

Geographical Boundaries:

- National level reporting would be required for all sources located in the US or its territories, broken down by state and tribe.
- International level reporting would be optional.

Organizational Boundaries:

- For companies with shared ownership of facilities or units, the MSCR would require that reporting is done according to the control approach – following either financial control, operational control, or both. Once an approach is chosen, it should be used consistently going forward. It has not yet been decided whether a company would also be required to report its entity level emissions following the equity share approach.

Defining the Reporting Entity:

- Reporters would be required to report entity-wide emissions (i.e., total entity emissions from all subsidiaries and facilities within the chosen geographical boundaries). Parent companies or organizations that participate in the MSCR would be required to report on behalf of their subsidiaries and group operations (i.e. emissions reports should be aggregated at the highest level within the MSCR's membership, in a single report). Subsidiaries whose parent companies do not participate in the MSCR could report to the MSCR; however they would also be required to submit a corporate organizational chart that makes clear any relationship to parent companies.
- Reporters would be required to report facility-level emissions.
- Reporters would also be encouraged to report emissions data at the unit level for stationary combustion units if data are available.

¹⁶ In its initial development the MSCR would focus on entity level reporting. However, during subsequent stages of implementation it could also develop standard requirements for reporting emissions reductions projects.

Gases Covered:

- All six Kyoto gases (CO₂, CH₄, N₂O, HFC, PFC, and SF₆) would be required to be reported by the participant. Some flexibility may be given to reporters for a brief period of time in reporting gases other than CO₂.
- Quantification and reporting of carbon sinks/removals would be addressed in a comprehensive fashion (both from a project and an entity perspective) during implementation of the MSCR.

Operational Boundaries: Scope of Emissions and Sources:

- The MSCR would require entities to collect and report Scope 1 and 2 emissions data.
- Data for direct CO₂ emissions from biogenic sources would be required to be reported separately from direct (scope 1) emissions.
- Reporting Scope 3 emissions data would be optional.

Frequency of Reporting:

- Entity reporters would be required to report emissions annually on a calendar year basis.

Establishing and Updating Base Year:

- The MSCR would require that companies establish a base year for which verifiable emissions data are available and specify their reasons for selecting that particular year. Reporting entities would select a single base year rather than calculating a base year based on a multi-year average.
- Base year emissions would be required to be adjusted for structural changes when there is significant impact on the consistency of the organization's total emissions. A structural change involves the transfer of ownership or control of emissions-generating activities or operations from one company or organization to another. Structural changes include mergers, acquisitions, divestments, etc.
- In addition, companies would be required to recalculate base year emissions for any of the following cases: 1) changes in calculation methodology or improvements in the accuracy of emission factors or activity data, or 2) discovery of significant errors or a number of cumulative errors that are collectively significant.
- The MSCR would require companies to apply the significance threshold that triggers base year emissions recalculation in a consistent manner. It is anticipated that a quantitative significance threshold would be established during the Registry's implementation phase.

Setting Performance Metrics:

- For some sectors, the Registry might develop and require reporting of sector-specific performance metrics that best capture the benefits and impacts of the sector and are relevant to the decision making needs of users.

De Minimis Emissions Reporting:

- An entity would be allowed to exclude particular sources of emissions if the total quantities excluded represent less than or equal to 3 percent of the entity's total

emissions. The entity would be required to transparently document any exclusion, providing a list of *de minimis* sources and estimated emissions from each source to the verifier. A list of excluded sources would be made publicly available in the entity's emissions report. All emission sources accounted for in an entity's base year report would continue to be reported in future reporting periods and may not be treated as *de minimis* in future years. Reporters would be strongly encouraged to report 100 percent of emissions whenever possible.

Reporting of CO₂ Removals

- There is significant state/tribe interest in developing a rigorous accounting framework that could also quantify and characterize CO₂ removals from the atmosphere. These removals, or sinks, might include terrestrial sequestration activities (e.g. forest or agricultural soil based activities) as well as geologic sequestration. The Multi-State Climate Registry would develop a comprehensive framework for accounting and reporting for sink activities, from both a project and entity approach, as soon as reasonably feasible during implementation.

Emissions Quantification

- The voluntary reporting program of the MSCR would rely on the same two tier system of quantification that will constitute the Registry's minimum standards for mandatory programs. Voluntary reporters could choose to use either tier 1 or tier 2 quantification methods, but would need to be transparent in their choice. Emission data submitted in compliance with a state regulatory program that endorses the MSCR would automatically be approved for submission as part of a voluntary report to the Registry.

Public Reports

- Emissions data would be accessible to the public through annual reports posted on the MSCR website. Public reports would include the entity's emissions data disaggregated on the following basis:
 - Geography (both national and state, territory and tribal area levels)
 - Scope (direct, indirect, and other indirect emissions) with CO₂ emissions from biogenic sources reported separately
 - Direct emissions by source type (stationary, mobile, process, and fugitive)
 - Gas (each of reported GHGs)
- Emissions reports would also be required to include the following information:
 - Consolidation approach employed
 - Base year and description of any structural changes
 - Quantification methodologies employed
 - List of de minimus sources
 - Verification status

3) Summary of Proposed Verification Framework

Purpose and Objectives

- Establish a systematic, independent and documented process for the evaluation of GHG emissions reports to ensure integrity of the data collected by the MSCR
- Ensure that the MSCR's verification system is designed to support voluntary entity wide emissions reporting as well as state mandatory and regulatory programs (recognizing that states/tribes would be free to establish their own requirements vis-à-vis compliance with their regulatory programs).
- Develop administrative procedures and detailed guidance at a later date, and rely on already established verification systems.
- Provide confidence to users that emissions reports represent a faithful, true and fair account of emissions—free of material misstatements and conforming to the MSCR's accounting and reporting rules or other requirements that individual state programs might impose.

Technical Points of Agreement

Principles:

- Accuracy, consistency, transparency, completeness, relevance
- Independence (objectivity and free from conflicts of interest)
- Consistency with ISO 14064-3
- Care in exercising professional judgment

Level of Assurance:

- Reasonable assurance, because it is the highest plausible standard of verification, and is used in systems such as the EU ETS and the California Registry would form the basis for the MSCR.

Materiality

- Initial materiality thresholds would not exceed 5% applied at entity and facility level.

Scope and Frequency:

- Scope (gases, boundaries, emissions time increment, etc.) would be dictated by MSCR reporting rules.
- Annual verification, unless specifically exempted.

Approach:

- A risk-based approach that involves assessment of both information systems/controls and GHG data.

Accreditation:

- Verifiers would be required to demonstrate experience, industry knowledge, capacity to maintain independence, and completion of specified training.

Administration:

- The MSCR or an independent body would assess conflicts of interest, oversee verifiers, and issue final certification of emissions results.

APPENDIX

Multi-State Climate Registry Proposed Reporting Framework Comparison of Proposed Reporting Requirements (drafted by MSCR Technical Team and reviewed by Steering Committee in November 2006¹⁷)

| Topic | Mandatory Reporting | Voluntary Reporting |
|----------------------------|--|---|
| Participation | <ul style="list-style-type: none"> • States have control over compliance and enforcement • States would work to incorporate the Registry's minimum reporting standards in their state mandatory reporting programs | <ul style="list-style-type: none"> • States would endorse the Registry's voluntary entity wide reporting program and would encourage entity's in their state to voluntarily report their emissions to the Registry |
| Basic Data Elements | <ul style="list-style-type: none"> • All data would be collected and stored on <i>facility basis</i> • State would determine <i>facility</i> definition; may include mobile, fugitives, etc., in definition • Unit (process) level emissions would be supported, but not required • State would determine level of consolidation for entity level reporting (by facility, entity within state, full corporate, etc.) • Reporting of indirect emissions (Scope 2, 3 for purchased electricity, etc.) would be supported, but not required • State would have option to not report activity data to registry | <ul style="list-style-type: none"> • All data would be collected and stored on <i>facility basis</i> • Would be required to report entity wide emissions, beginning at facility-level, with unit level emissions encouraged • Would be required to report entity emissions broken down by facility, nation, state, etc. • International reporting would be accepted only if <i>all</i> global operations reported • Indirect emissions reporting (Scope 2) would be required; Scope 3 optional |
| Reporting Frequency | <ul style="list-style-type: none"> • Annual reporting, from January 1 to December 31 • First year of reporting not specified (2004, 2005, etc.) | <ul style="list-style-type: none"> • Same |
| De minimis | <ul style="list-style-type: none"> • Determined by state | <ul style="list-style-type: none"> • Less than or equal to 3% of total |
| Reporting Scope | <ul style="list-style-type: none"> • Scope 1: Direct combustion GHG except biogenic • Scope 2: Indirect GHG from purchased electricity, heating, | <ul style="list-style-type: none"> • Scope definitions same for both • Entities would be required to report Scope 1 and Scope 2 emissions. Scope 3 optional |

¹⁷ The MSCR Steering Committee is made up of 15 high-ranking environmental officials representing states and regions participating in the development process. The Technical Team, consisting of environmental regulators from participating states, has drafted technical framework proposals to lay the groundwork for establishing best practices in emissions reporting, GHG accounting and reporting protocols, and third-party verification standards.

| Topic | Mandatory Reporting | Voluntary Reporting |
|---------------------------------|--|--|
| Reporting Scope (cont.) | <p>cooling, steam</p> <ul style="list-style-type: none"> • Scope 3: Other indirect emissions such as purchased materials, transport not owned by entity, outsourced activities • direct CO₂ emissions from biologically sequestered carbon (biomass) would be reported separately from direct (Scope 1) • Scope 1 emissions would be required. Scope 2, 3, and biomass supported, but not required by multi-state registry | <ul style="list-style-type: none"> • direct CO₂ emissions from biologically sequestered carbon (biomass) would be required to be reported separately from direct (Scope 1) |
| Source Categories | <ul style="list-style-type: none"> • Source Categories: Stationary combustion, mobile combustion, fugitive emissions, process emissions • Reporting in all categories would not be required, based on <i>facility</i> definition • States may require mobile or fugitive source emissions to be associated with facilities, or may lump all mobile or fugitive sources as a pseudo-facility | <ul style="list-style-type: none"> • Same categories • Scope 1 & 2 reporting in all categories would be required |
| Gases Reported | <ul style="list-style-type: none"> • System can store CO₂, CH₄, N₂O, HFC, PFC, and SF₆. Stored by facility, source category (unit), and CO₂ equivalents. • Only CO₂ reporting would be required under mandatory reporting, states can require more if desired • Capability to include non-Kyoto GHGs to be considered | <ul style="list-style-type: none"> • All six Kyoto gases would be, but some temporary flexibility provided for delay in reporting non-CO₂ gases • Capability to include non-Kyoto GHGs to be considered |
| Emissions Quantification | <ul style="list-style-type: none"> • Two tier approach: Tier 1 (preferred) Tier 2 (default) with state flexibility to include other methods or limit options (e.g., Tier 1 only for a source) • Tier 1 method (preferred) based on direct measurements or high quality emission factors and or site specific activity information • Tier 2 method (default) based on less robust data and methods | <ul style="list-style-type: none"> • May use either Tier 1 or Tier 2 estimates, must clearly indicate methods • Emission data submitted to a state regulatory program that endorses the registry would automatically be approved for voluntary submittal to the registry |
| Responsibility to Report | <ul style="list-style-type: none"> • State chooses responsible parties for reporting; could include owner, operator, permit holder, etc | <ul style="list-style-type: none"> • Owner or operator based on choice between two control approaches (financial vs. operational control) |

| Topic | Mandatory Reporting | Voluntary Reporting |
|--|--|--|
| Organizational Boundaries | <ul style="list-style-type: none"> Responsibility to report and boundaries to be defined in mandatory state <i>facility</i> definition | <ul style="list-style-type: none"> Would be required to report consolidated entity-wide emissions, by facility; unit emissions encouraged Entity-wide reporting based on financial or operational control Not yet decided if emissions also should be reported on equity share basis |
| Verification | <ul style="list-style-type: none"> Recommended: 3rd party verification, but allows options. Data may be flagged as Tier 1 (3rd party) or Tier 2 (state endorsed) for verification Data are tagged to show verification status and method | <ul style="list-style-type: none"> Third party verification would be required |
| Data Collection | <ul style="list-style-type: none"> Data submitted to registry data stored in unified system Capability provided for state identifiers and confidentiality codes Facility data ID must be reported (FIPS, county, facility codes) Reporting of activity data collected by states is optional Allows upload of state mandatory data through batch .xml transfers Data to include facility ID, facility emissions and biomass combusted, tiers and methods, GHGs, emissions estimation plan if not registry protocol, exclusions, verification status | <ul style="list-style-type: none"> Data stored in unified system Data to include facility ID, facility emissions and biomass combusted, tiers and methods, GHGs, emissions estimation plan if not registry protocol, exclusions, verification status |
| Base Year Emissions and Updates | <ul style="list-style-type: none"> No guidance provided (states to determine) | <ul style="list-style-type: none"> Single base year would be required Base year requires verifiable data and reasons for selecting year Must be updated for changes in methods, significant errors, organization structural changes Not adjusted based on certain types of acquisition, outsourcing, or organic growth or decline MSCR would set quantitative significance threshold for triggering updates |
| | | |

| Topic | Mandatory Reporting | Voluntary Reporting |
|---------------------------------|--|--|
| Performance Metrics | <ul style="list-style-type: none"> • Not applicable | <ul style="list-style-type: none"> • MSCR would develop sector-specific metrics to evaluate entity performance relative to a unit of business activity, input, or output • Reporting of sector specific metrics may be required as additional detail is developed |
| Public Emissions Reports | <ul style="list-style-type: none"> • Emission reports would be accessible to the public through the MSCR and will include: facility/entity identification, emission totals and biomass combusted, calculation tiers and estimation methods, all reported GHGs, de minimis exclusions, and verification status | <ul style="list-style-type: none"> • Would include emission totals and biomass combusted disaggregated by: geography (state, national, etc.), scope (direct, indirect, etc.), source type (stationary, mobile, etc.), gas (CO₂, CH₄, N₂O, etc.), consolidation approach used, base year data, list of de minimis sources, calculation methodologies, and verification status |