

State Greenhouse Gas Registry Collaborative

I. Overview

On June 4-5, 2001, representatives from environmental organizations, state environmental agencies and the Environmental Protection Agency met in San Francisco, CA to discuss the development of voluntary greenhouse gas registration programs. Prior to the meeting, several of the states including California, New Hampshire, New Jersey and Wisconsin began taking concrete action to establish GHG registries. Seven states that are considering developing registries or related initiatives also participated in the meeting.

Over the past few years, many of the meeting participants have been working to develop policies or initiatives to drive emission reductions, including everything from the direct regulation of carbon emissions to early action incentive programs to ad hoc emissions trading, as well as voluntary registries. In the northeast, NESCAUM has been working with states, corporations and environmental groups to develop a model state GHG registry and to help states in the region develop successful registries. At the national level, EPA is launching the Climate Leaders program to promote voluntary registration of, and commitments to reduce, GHG emissions. NGO's such as Climate Neutral Network, Clean Air-Cool Planet and Environmental Resources Trust have been working one-on-one with companies, universities and others to achieve substantial emission reductions. At the same time, the GHG Protocol Initiative, co-convened by WRI and the World Business Council for Sustainable Development, has been working with a large group of stakeholders to develop a protocol that all of these efforts can use to help participants identify, measure, and report GHG emissions.

Although the San Francisco meeting was directed primarily at issues related to state registries, we actively engaged parties working on related initiatives who must address many of the same concerns. A primary goal was to try to develop agreement about the purposes of GHG registries and what states, environmentalists and companies hope to achieve by creating and participating in them. We also wanted to share information and resources and develop a game plan for parties involved in these issues to work together in the coming months in order to minimize duplication of effort and create consistent, if not identical, programs.

II. Registry Objectives

The overarching goal of a state registry is to encourage the reduction of GHG emissions. However, over the course of our discussions we identified numerous other important objectives. Establishing a registry can raise awareness among corporations, municipalities, NGOs, the general public and other states regarding the importance of addressing climate change. It can also provide examples of success stories, demonstrating the potential for cost-effective and low-cost reductions and collateral benefits to the environment and the economy. Registries can help participants understand and better manage their GHG emissions, identify opportunities for emission reductions that bring economic benefit and

competitive advantage, and reduce risks associated with future carbon regulation. By documenting emissions over time, registries can also help participants ensure that they are treated fairly under future regulatory regimes. Registries can also help states and municipalities better understand the emission sources within their jurisdictions and within their direct control. For these reasons, registries can begin to develop the political will necessary to address the issue of climate change by requiring emission reductions, and can help develop tools such as measurement and verification protocols that may be necessary to implement future policies such as early action incentive programs and emission caps.

Collaborative participants recognized that a state's ability to achieve many of these objectives depends largely on the design of the registry, in particular whether the registry requires participants to report their emissions on an entity-wide basis (i.e., whole corporation reporting) or permits reporting associated with a single project or facility. Most participants acknowledged that project-based registries had a limited role in achieving the most important of these goals because they only focus on emission reductions associated with a discrete activity within the corporate boundaries. A broader entity-based approach provides a more complete representation of the overall emissions performance of the entity and helps to eliminate concerns about reporting an emissions reduction activity at one site, when the overall emissions of the reporting entity have increased. This project or activity-based approach has undermined the credibility of the Department of Energy's 1605(b) program within the environmental community and many identify it as one of the main factors why 1605(b) has failed to drive substantial – if any – emission reductions.

Nevertheless, some state representatives argued that project-level reporting was a valuable first step, and many expressed the concern that they did not have the political support to require entity-wide reporting. The environmental groups unanimously agreed that, based on the experience of DOE's 1605(b) registry¹ (upon which many of the programs currently under development are modeled), they were not interested in promoting project-level registries. Since only California and EPA's Climate Leaders programs are prepared to require entity-level reporting at this time, Collaborative participants agreed to work together to transition project-level registries into entity-wide programs, or at a minimum into two-tiered programs in which a "gold track" required entity-level reporting.

III. Collaborative Objectives

The parties agreed to work as a Collaborative to help state registries and related efforts move forward in a consistent fashion that is informed by the concerns of the environmental community. They also agreed that through the Collaborative they would work to ensure that collectively they develop a new brand of voluntary reporting program that is markedly superior to existing models and meets the maximum number of registry objectives set forth

¹ Under the 1605(b) program, electric utilities registered 120 million tons of emission "reductions" in 1998 alone, while national emissions for the industry increased by over 15% between 1990 and 1998. See Hawkins and Lashof, *Less Than Meets the Eye* (2000) available at www.nrdc.org/globalWarming/aless.asp.

above. This will entail educating a broad group of stakeholders about the shortcomings of project-based reporting and the benefits of entity-wide programs.

To establish working registries, state regulators and their industry and public interest partners will need to address a number of first-order issues, including defining the scope of emissions that participants will initially report, developing measurement, verification and reporting protocols for each type of emission and determining how to handle emissions and emission reductions that might be reported by (or ascribed to) more than one entity, such as emissions associated with electricity use. As reporting programs develop, stakeholders will begin to address second-order issues such as creating industry-specific output-based standards and determining the feasibility and the best methods for calculating and reporting emissions associated with such activities as employee travel, shipping, paper use and waste.

The Collaborative will help to ensure that these initiatives work jointly with one another and with EPA to prioritize and divide up this work appropriately to avoid duplication of efforts. Although we recognize the value of experimentation at the state level, we would like to ensure that these programs are at least consistent, particularly with respect to reporting procedures and measurement and verification protocols. Many corporate partners operate in multiple states and simply will not participate if registries present a tangled morass of conflicting requirements.

* * *

Several issues beyond the scope of the state registries envisioned here are worth noting. These relate to the issuance of direct financial incentives for early action or tradable emission credits.

Incentive and credit programs involve the very thorny issue of *additionality* – that is, whether or not a particular reduction is additional to what would have happened under a business-as-usual scenario – which is not relevant in the registry context. Since it is not pleasant and, many would argue, not possible to get inside the mind of a corporation to determine the motivation behind a particular investment that reduces emissions, those grappling with the question of additionality have developed a number of alternative ways of approaching it. For example, a program could evaluate performance on the basis of benchmarks that are substantially above current industry standards such as output-based emission standards for electric generators.

Credit programs must also address the issue of *double-counting*, which is not a concern for programs that register emissions only and not reductions. The registries proposed to date have taken advantage of the opportunity to drive investments in energy efficiency by end users by allowing parties to report indirect emissions, such as those associated with electricity use. By definition, all indirect emissions involve double counting, since another entity controls the direct emissions. For a credit program, this is a problem. The simplest way to address it is to credit only direct emitters, but this may result in a program that does not drive efficiency investments. By including both direct and indirect emissions, registries

can provide the basis for a variety of policy options in the future, including a cap-and-trade program for direct emitters and financial incentives for parties that reduce indirect emissions.

Although a market is already developing for GHG emission credits, validating or certifying such currency is well beyond the current work of state registries. A registry adds value by providing a uniform set of emissions information – upon which a trading or crediting scheme can build. Although private entities may use the fact of emission registration to facilitate trading, it would be impossible for states to issue or validate emission reduction credits that would have any currency under a future federal regulatory program. Most collaborative participants are interested in proposals for incentive and credit programs and plan to keep abreast of the debates regarding additionality and double-counting, but the Collaborative will not seek to resolve these issues directly.

IV. Major Design Issues²

All of the major design issues discussed at the initial meeting of the Collaborative raise the need to balance the desire to collect the most complete, accurate and useful information available in order to meet the registry's objectives, with the concern that even the appearance of overly burdensome reporting requirements will discourage participation. While collaborative participants acknowledged that high levels of participation are meaningless if the information registered is not useful, many expressed interest in addressing these issues in phases, increasing the stringency of requirements as registrants learn more about their emissions, their information-gathering capabilities and the benefits that a more rigorous registry can provide.

Those advocating broader reporting requirements want to encourage registrants to develop a comprehensive understanding of their emissions and provide them with the greatest opportunity to identify profitable and low-cost emission reduction strategies. They also argue that states can only use their best efforts to ensure fair treatment of registrants under future regulatory regimes if they have enough information to know what fair treatment should be. The emissions associated with one project, one business unit or even the corporate-wide activities in a single state, are unlikely to be sufficient to make this determination. Most proponents of more narrow reporting requirements recognize these benefits but do not believe we need to achieve all of them in the initial registry design.

Reporting Boundaries. Questions regarding reporting boundaries relate to the definition of entity, and are only relevant for registries that require entity-level reporting. The more broadly a registry defines the term entity, the more information it will require registrants to collect and report. A broad definition can help the registrant better understand and manage its emissions and provide the state with the information needed to determine fair treatment of that entity under a future regulatory regime. However, an overly broad definition can force registrants to report emissions they do not control or that are unrelated to their businesses. Three types of boundaries are at issue:

² These issues are discussed in greater detail in *Key Programmatic Issues for GHG Registry Development* available from Molly Tirpak at molly@tirpak.com.

- *Legal parameters.* For non-corporate entities like municipalities, state agencies and non-governmental organizations, determining the legal parameters of the reporting entity involves making some decisions (e.g., should registries permit city agencies to report individually?), but is generally pretty straightforward. For corporations, drawing this line appropriately with a single stroke is more difficult. It doesn't make sense to require a huge conglomerate of diverse and completely unrelated businesses to report as a single entity. However, if registries permit any type of subsidiary or business unit to report as a distinct corporate entity they may lose the benefits that entity-wide reporting requirements are designed to deliver.
- *Geographical boundaries.* Should states require registrants to report state, national or international emissions information? Again, most participants recognize the value to companies and states of looking at emissions on a broad geographic basis; the question is whether the burden of requiring registrants to do so is, or appears to be, overly burdensome. Although there does not appear to be any legal impediment to states requiring the reporting of national or international information as a prerequisite to participation in a voluntary program, a number of states raised political concerns about doing so.
- *Ownership.* How should a company treat emissions from a resource that it owns jointly with one or more other parties? Both the WRI Protocol and the California registry legislation permit an entity to prorate emissions according to percentage of ownership or to ascribe emissions to the entity that operates or controls the source.

Direct and Indirect Emissions. Direct emissions are *emissions* from sources that are owned or operated by the reporting entity, e.g., emissions from company-owned vehicles, stacks, manufacturing processes, vents, etc. Indirect GHG emissions are emissions that are influenced by the activities of a reporting entity, but physically occur at sources owned or operated by someone else, e.g., imported electricity, employee travel on vehicles not owned or operated by the company, product transport in vehicles not owned or controlled by the company, emissions occurring during the use of products produced by the reporting entity. Most registries permit participants to report both direct and indirect emissions, in order to encourage investments in energy efficiency and reduce emissions associated with a broad range of activities. By definition, all indirect emissions are double counted whenever the direct emitter also reports. However, as long as registries collect this information in a transparent fashion and are simply tracking emissions and not issuing credits, this double counting does not interfere with the achievement of any of the registry goals set forth above.

Materiality. Should registries require participants to report immaterial or *de minimus* emissions? If not, what definition of *de minimus* should registries use? How will companies know whether emissions are *de minimus* if they don't measure them? Participants may find cost-effective emission reduction opportunities even among the smallest sources of

emissions, but may be overwhelmed by the prospect of being required to measure immaterial sources. One possibility is to adopt a minimum threshold (for example, not require reporting of emission sources that comprise the lesser of 5% of an entity's emissions or 1000 metric tons of carbon dioxide) and allow parties to demonstrate that emissions are *de minimus* using standard estimates rather than actual measurements. However, the use of materiality thresholds does pose difficulties from the perspective of third-party verification.

Certification. Environmental groups unanimously contend that third-party certification of emissions is essential for reliable data. Many industry partners are concerned that such a requirement would be unduly burdensome and costly. This issue turns largely on the standards for certification and/or verification. Would a registry require participants to hire a third party contractor to stack test its on-site emissions or simply review documentation filed with EIA or state regulators?

Actual/Rate Based. Most registries focus exclusively on the reporting of actual mass emissions – since this provides a measure of the total burden on the environment. Some parties support reporting of rate-based emissions in addition, in order to demonstrate improved environmental performance even if overall emissions are increasing. For example, an electric generator that invests in new, cleaner generation resources may report an increase in overall emissions, even if it is also cleaning up its older, dirtier facilities. Only if it reports emissions per kilowatt-hour as well as mass emissions can it demonstrate improved environmental performance. While some parties are concerned that such an approach strays from the goal of reducing overall emissions, others believe it is essential to driving investments in new, cleaner generation and will help set the stage for allocating emission allowances on an output basis (i.e., based on tons of emissions per kilowatt-hour rather than historical emissions) under a future cap-and-trade program.

Appendix I

Collaborative Workplan

At the close of our initial meeting, the collaborative established the following seven working groups to continue working on these issues over the next several months. We agreed to meet again in the early fall, at which time the working groups will report their progress to the full collaborative and we will develop a strategy for moving forward.

Web Design and Resources

Leader: TJ Roskelley (tjroskelley@nescaum.org)

Participants: Charlene Garland, Brian Jones, Andrea Denny, Molly Tirpak, Reid Harvey, Kelley Hickman

This group will work to create a website that will house or link to background resource materials such as state legislation and regulations establishing registries; WRI protocol materials; primary documentation for related initiatives such as Climate Neutral Network, Clean Air-Cool Planet and ERT; issue papers from the Nescaum GHG Demo Project; and general background materials including critiques of the DOE 1605(b) program.

The site will also provide a password-protected repository for working group proposals and other documentation developed by the collaborative.

Transition

Leader: Joanne Morin (jmorin@des.state.ny.us)

Participants: Rob Sliwinsky, Richard Driscoll, Brian Jones, Tim Morstad, Cynthia Cummis, Eric Mosher, Dale Bryk

Although California is the only state that has adopted a GHG registry that will record emissions on an entity-wide basis, many states have expressed an interest in transitioning from current proposals for project-based registries to an entity-based program, or at a minimum, a two-tiered program that would confer greater stature on participants that reported entity-wide emissions. This group will examine issues related to that transition and identify ways in which the collaborative can assist states and local stakeholders develop the political support and the technical capacity necessary to establish entity-based registries

Reporting – What emissions information should participants report?

Leaders: Janet Ranganathan (janetr@wri.org); Pierre du Vair (pduvair@energy.state.ca.us)
Participants: Barney Brannen, Chris Nelson, Rob Sliwinsky, Vince Camobreco, Josh Uebelherr, Brian Jones, Sandra Chen, Charlene Garland, Marla Mueller, Dale Bryk

This group will explore the issues related to (and possibly make recommendations regarding) different levels of reporting, relying primarily on the following reporting scopes set forth in the WRI protocol:

Scope I: Direct Emissions
(process, stationary combustion, mobile combustion)

Scope II: Imports and exports of electricity and steam

Scope III: Other Indirect Emissions
(product use, waste, raw materials, transportation, franchises/outsourced activities)

This group will also grapple with some of the design issues discussed above, including the appropriate geographical and legal parameters of “entities”; the level of emissions that should be considered material to an enterprise and the potential value of rate-based or other industry-specific reporting metrics.

Reporting – How should participants report information to the registry?

Leaders: TJ Roskelley (tjroskelley@nescaum.org); Cynthia Cummis (cummis.Cynthia@epa.gov)
Participants: Charlene Garland, Heather Tansey, Kathy Pendelton, Pierre du Vair, Barney Brannen, Vince Camobreco, Janet Ranganathan, Eric Mosher, Kelley Hickman

This group will try to develop consistent formats for reporting emissions information to state registries and to EPA under the Climate Leaders program. This may include recommendations for reporting templates or software programs. The group should also consider the potential to develop cross-registration programs whereby participants can register in more than one program simultaneously or with minimum duplication of effort.

Auditing

Leader: Barney Brannen (bbrannen@ert.net)
Participants: Heather Tansey, Vince Camobreco, Wendy James (?), Josh Uebelherr, Pierre du Vair, Janet Ranganathan, Kelley Hickman

This group will try to develop recommendations for auditing procedures that will ensure the integrity of emissions information reported without imposing an undue burden or expense upon registry participants.

State-specific Issues

Leader: Andrea Denny (denny.andrea@epa.gov)

July 16, 2001

Participants: TJ Roskelley, Joanne Morin, Josh Uebelherr, Allan Willinger, Tim Morstad, Karl Michael, Kathy Pendelton, Kelley Hickman

This group will work with states to identify and address legal, logistical or other concerns that regulators may have regarding the development and implementation of a state registry. The group will also discuss the relationship between state greenhouse gas inventories/action plans and state registries, including design factors and lessons learned.

Marketing & Communications:

Leader: Wendy James (wendy@climateregistry.org)

Participants: Charlene Garland, Richard Driscoll, Brian Jones, Cynthia Cummis, Dale Bryk

Although we limited the initial meeting of the collaborative to state and NGO representatives, we recognize that the success of the state registries depends entirely on the active participation of companies, municipalities and other reporting entities. In order to ensure such success, this group will develop marketing and communications strategies to encourage a broad array of industry players and others to view the registries as tools that can help them identify cost-effective and low-cost opportunities to reduce emissions, improve economic as well as environmental performance and provide long-term competitive advantages.

Appendix II: Draft Comparison of State Voluntary GHG Registries

	California	Maine	New Hampshire	New Jersey	Rhode Island	Texas	Wisconsin
Implementation Timing	January 2001, new law enacted Spring 2001, Board appointments and organization plan being developed	LD 87 brought forward by Representative Bob Daigle directs ME DEP to adopt rules for GHG registry	Adopted Chapter Env-A 3800 "Voluntary Greenhouse Gas Reductions Registry" on 2/23/01	Amended the Open Market Emission Trading Program to include GHGs	As part of its climate working group, RI DEP is considering a GHG registry	The Texas Natural Resource Conservation Commission instructed the Executive Director to establish a GHG registry by 12/1/01	The WI legislature directed the DNR to establish a multi-pollutant emissions registry-currently engaged in the rulemaking process
Voluntary	Yes- Voluntary Program administered by a non-profit managed by a stakeholder board of directors	Yes	Yes	Yes	N/A	Yes	Yes
Emissions Included	GHGs (CO ₂), CH ₄ , N ₂ O, HFCs, PFCs, SF ₆ after three years of involvement	N/A	GHGs (CO ₂ , CH ₄ , N ₂ O, HFCs, PFCs, SF ₆)	GHGs (CO ₂ , CH ₄ , N ₂ O, HFCs, PFCs, SF ₆), NOx, VOC	N/A	N/A	GHGs (CO ₂ , CH ₄ , N ₂ O, HFCs, PFCs, SF ₆) NOx, SO ₂ , VOC, PM _{2.5} , CO, Lead, Mercury
Whole Corporation Inventory Reporting	Yes	N/A	No	No	N/A	N/A	No
Project-Specific Emission Reduction Reporting	NO	N/A	Yes	Yes	N/A	N/A	Yes
Third party verification	Yes	N/A	Yes	Yes	N/A	N/A	No
Participants Must Commit to a Reduction Target	Encouraged, but not required	N/A	No	No	N/A	N/A	No

Appendix II: Draft Comparison of State Voluntary GHG Registries							
	California	Maine	New Hampshire	New Jersey	Rhode Island	Texas	Wisconsin
State Commitment to Defend Registered Reductions	Yes	N/A	Yes	N/A	N/A	N/A	Yes
Quantification Protocols	Board will adopt protocols that facilitate recognition in future regulatory regimes.	N/A	Defers to EIA 1605(b) and others as determined by the agency	Articulated by the DEP	N/A	N/A	IPCC, EPA EIIP and others
Reporting Scope	Both direct and indirect emissions reported	N/A	Both direct and indirect emission reductions	Both direct and indirect emission reductions	N/A	N/A	Both direct and indirect emission reductions
Reporting Metrics	Mass and rate-based	N/A	Mass-based	Mass-based	N/A	N/A	Mass and rate-based
Provides for Emission Trading		N/A	No	Yes but not for GHGs	N/A	N/A	No
Reporting Software	Registry will review available software, including EPA's software, to see whether it will meet registry requirements	N/A	Has developed reporting forms - Defers to EIA 1605(b)	Reporting forms - Private firm administering registry	N/A	N/A	Reporting forms
Cost of Participation	Reasonable fees	N/A	None	For NOx and VOC From \$0.20 - \$12.50 per DER (ton) Vary for GHGs From \$0.00 - \$0.03 per DER (ton)	N/A	N/A	None
Contact Information	Molly Tirpak/Pierre duVair Registry Working Group/California Energy Commission 415-641-7080/ 916-653-8685 molly@climateregistry.org / pduvair@energy.state.ca.us	Kevin McDonald ME DEP Kevin.Macdonald@state.me.us	Joanne Morin NH DES jmorin@des.state.nh.us	Allan Willinger NJ DEP awillinger@dep.state.nj.us	Joshua M. Uebelherr RI DEM (401) 222-3434 ext. 7134 juebelhe@dem.state.ri.us	Lynn Weber TNRCC lweber@tnrcc.state.tx.us	Eric Mosher WI DNR moshee@dnr.state.wi.us

Appendix III

State GHG Registry Collaborative

List of Participants

Environmental Protection Agency
Energy Foundation
Northeast States for Coordinated Air Use Management
MJ Bradley & Associates

States

California
Connecticut
Iowa
Maine
Massachusetts
New Hampshire
New Jersey
New York
Rhode Island
Texas
Vermont
Wisconsin

NGOs

Clean Air-Cool Planet
Climate Neutral Network
Environmental Defense
Environmental Resources Trust
Natural Resources Defense Council
Public Citizen
Union of Concerned Scientists
World Resources Institute