



States Move Forward to Control CO₂ Emissions

Perceiving a lack of action at the federal level on controlling carbon dioxide (CO₂) emissions, states in the Northeast and mid-Atlantic regions of the United States are trying to establish a national precedent in air regulatory policy

as they work toward implementing a regional cap on CO₂ emissions from the power sector. West Coast states also are evaluating such a process.

In the eastern United States, the Regional Greenhouse Gas Initiative (RGGI) is a cooperative effort by nine states to design a regional cap-and-trade program that would limit the amount of CO₂ emissions from power plants in the region. While not currently included in the design, other sectors and sources may be added to the program in the future. Two other states are observing the process, as are representatives from the Eastern Canadian Provinces and the Province of New Brunswick.

Since RGGI represents a voluntary consortium of states, the goal is to develop a model rule that individual states can adopt. The model rule will define such things as CO₂ limits (budgets), allowance allocation methodologies, and compliance and trading rules. Interaction with other CO₂ trading regimes—such as the one under development on the West Coast, as well as with Kyoto signatories such as Canada and the European Union (EU)—also is being considered in the design of the program. The model rule as currently envisioned will apply to power plants 25 megawatts and greater.

ICF Consulting is providing the analytical support for RGGI to determine the impacts of imposing CO₂ limits on the power sector in the region. Working closely with the

RGGI Staff Working Group (SWG) to define key input parameters to the analysis, ICF Consulting is using its Integrated Planning Model (IPM®) to evaluate the impact of alternative CO₂ cap levels on the operation of the regional electric sector and its interaction with neighboring regions. IPM®, a dynamic linear programming model with detailed representation of all electric generating facilities, is used to examine generation, emissions, demand, fuel use, transmission, and other power grid issues.

States Participating in RGGI



Connecticut
Delaware
Maine
Massachusetts
New Hampshire
New Jersey
New York
Rhode Island
Vermont

States Observing RGGI

Pennsylvania
Maryland

The RGGI SWG has held a number of stakeholder meetings in which results of the modeling, as well as other key issues that feed into the design of the model rule, have been presented and debated. These results include the establishment of a reference forecast of emissions (i.e., what emissions would be without a CO₂ policy in place) and the evaluation of different potential CO₂ cap levels in light of the reference emissions forecast. Final inputs into the modeling analysis are decided upon by the SWG.

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The cost of the policy—most easily defined by the CO₂ allowance prices resulting from the reductions required and the impact on electricity prices—will be a direct result of how high the initial reference forecast is and how many million tons of CO₂ reductions are required to meet specific policy requirements. Other key issues that play into the cost of a CO₂ emissions reduction policy are gas prices; regional electricity demand; the role of non-emitting generation, including nuclear and renewable power; and the level of imports from neighboring regions. Issues regarding emissions “leakage”—the increase in emissions outside the region due to increased regional imports—and measures to mitigate it also are being discussed.

In addition, the SWG is debating how allowances are to be allocated under the CO₂ cap, and their impact on individual states and on the value of generation assets; how policies can be implemented by other states; and how regional programs will interact with other CO₂ policies, both in the United States and internationally. The SWG presented the key elements of the model rule to

agency heads of the nine participating states at the end of April 2005 and intends to have a draft model rule developed over the summer.

By implementing a CO₂ cap at the regional level, the RGGI states hope to act as a vanguard that accelerates the adoption of similar measures in other regions of the country and ultimately nationwide. California, potentially in concert with Oregon and Washington, is evaluating the RGGI process as each state considers its regional programs within the context of the West Coast Governors’ Global Warming Initiative. As individual companies develop their initiatives to reduce CO₂ emissions, whether through internally generated corporate policy or in response to shareholder resolutions, they must be aware of how policies like RGGI will impact the way they do business.

For more information on the RGGI process, please visit www.rggi.org and ICF Consulting’s Web site at www.icfconsulting.com/climatechange.