MEMORANDUM

To: Regional Greenhouse Gas Initiative Agency Executives

From: Members of the Subgroup on Cost-Benefit Analysis Subgroup,

as Led by Representatives from Massachusetts

Date: January 16, 2004

Re: Update on Cost-Benefit Analysis Subgroup Activities and Next Steps

This memorandum describes the efforts of the Cost-Benefit Analysis Subgroup since October, 2003. The Subgroup was assigned a set of tasks as described in the Action Plan adopted by the agency chief executives on September 29, 2003. This memorandum provides an update on the Subgroup's progress toward completion of these tasks and proposed next steps.

The Task

The RGGI Action Plan tasked the Cost-Benefit Analysis Subgroup with designing and implementing a modeling and analysis plan to assess the economic cost and benefits of a proposed regional cap and trade program covering carbon dioxide emissions from power plants. Specifically, the subgroup will: (a) recommend an approach for modeling or analyzing the economic impact of a regional carbon cap on each state and on the region, including integration with the energy sector modeling, (b) conduct the modeling and provide sensitivity analyses to understand the relative impacts of various levels of a carbon cap implementation; and (c) report and interpret the results.

Accomplishments to Date

The Subgroup considered the critical outputs needed to evaluate economic impacts within and between states. The Subgroup recognized a particular need to account for anticipated employment change and other beneficial economic impacts with a carbon cap and a new emphasis on low CO_2 energy (such as renewable energy) on the economy. To address these needs, the Subgroup has accomplished the following:

a) The Subgroup reviewed a number of models that are available to analyze the regional impact on employment, disposable income and other economic factors and the environmental benefits and costs of a cap on

- regional carbon levels. Among the models evaluated was the REMI Policy Insight model.
- b) In addition to the use of a model such as REMI, the Subgroup recommends additional economic impact analysis of the carbon cap program on the energy efficiency and renewable energy economy in the RGGI region including specific regard to industry clusters (e.g. photovoltaics, fuel cells) already present. The Subgroup met (by phone) with economic and business researchers from the University of Massachusetts Boston who have recently performed comparable research analysis for Massachusetts, and discussed the expansion of this work to the RGGI region. The group was favorably impressed by the experience of the researchers.

Next Steps

The Subgroup will focus its future efforts on the following tasks:

- Complete the final review of the available models, looking at the IMPLAN model in particular, and make a choice of model for regional impacts analysis. Negotiate the final contract with the chosen model provider, including a license agreement. With the goal of giving all states equal access to the model, if they so desire, we are considering locating the site license at some regional entity (i.e. NESCAUM). The model will be selected and negotiations complete by February 29, 2004.
- 2. Prepare the scope of work and protocols for the modeling effort. Develop data input/output requirements in coordinate with the Modeling Subgroup and Technical Data and Analysis Subgroup. This task will be ongoing, with final inputs coming from the Modeling Subgroups modeling runs.
- 3. Establish a scope of work for energy efficiency and renewable energy sector analysis, and solicit bids from researchers to perform this work. Complete contract for scope of work by <u>February 29, 2004</u>.
- 4. Establish a work scope for environmental costs and benefits and work with the Modeling Subgroup to ensure that the electricity modeling is conducted with this in mind. To be completed March 31, 2004.