

Implications for Design and Benefit-Cost Analysis of Emission Reduction Policies

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Improving the Assessment and Valuation of
Climate Change Impacts for Policy and Regulatory Analysis

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My Task

- Title
 - Implications for Design and Benefit-Cost Analysis of Emission Reduction Policies
- Charge
 - How can improved IAMs, aid in the design and evaluation of domestic emission reduction policies such as cap-and-trade or carbon taxes, and inform negotiations of international climate agreements?

Frame of Reference

- Focus my remarks on three specific classes of policymakers
 - Legislative (domestic policy design)
 - Foreign Policy (global policy design)
 - Regulatory Agency (policy implementation)
- Emphasize policymaker's needs and how those needs might be met with information from IAM's

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 - What is the benefit-cost ratio of, for example, a \$25/ton carbon price?

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 - How much would my constituents be willing to pay to avoid these damages?

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UNFCCC, Major Economies Forum, G20

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 - How would a global carbon market affect international trade and investment?
 - How would large-scale “green growth” policies affect trade and investment?

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- There may be roles for IAM's to play in regulatory design other than RIAs, but the role will be specific to the regulation in question.

Information Likely to be of Future Value For Legislation and Foreign Policy

- Detail on the distribution and severity of damages (by geography, demography and economic sector)
- Characterization of adaptation potential to lower damages
- Estimate of damage sensitivity to the speed of climate change

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- Value of future climate damages is measured by the preferences of people living today
- People living today will themselves not enjoy the benefits of mitigation activity
- Why then would people living today be willing to pay anything to avoid climate damages?

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- WTP to prevent climate damages is the classic case of intra and intergenerational bequest value and altruism
- Estimates of these values are wholly absent from the SCC analysis. One wonders why