



Using Modeling Tools for Cost-Benefit Analysis of Carbon Pricing Instruments

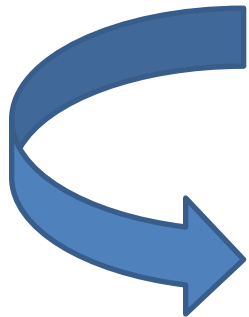
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Considerations

➤ Three phases in the development of an instrument:

- ✓ Policy initiation → acceptance of the idea;
- ✓ Decision making for itself → adoption and design of the system;
- ✓ Implementation → practical application.



Time Perspective

Why using modeling for assessing a carbon pricing instrument?

- To work on different scenarios of emissions and mitigation potentials: helps on pos-2020 debate;
- To assess the costs and understand potential impacts beforehand;
- It helps to build consensus:
 - ✓ It is important to prepare an objective basis for the domestic political debate.
 - ✓ High lack of knowledge and intrinsic level of complexity led to misconceptions that need to be tackled.

Key Questions

- Understanding of models and what they can and can't deliver:
 - ✓ Input assumptions and the structure of the model;
 - ✓ Role of uncertainties;
 - ✓ Choosing discount rates;
 - ✓ What is left out of a model can be as important as what goes in.
- Emissions trading vs. carbon tax:
 - ✓ Given chosen sectors, how different are their costs?
 - ✓ Assessing macro-economic impacts (including competitiveness);
 - ✓ Implementation cost?
 - ✓ Distributional impacts and recycling revenues;
- Cost-effectiveness of different emissions trading designs:
 - ✓ Testing sector scope and caps;
 - ✓ Discuss the role of offsets.

Main Challenges

- Improve institutional capacity: “*Economic Modeling Team*”?
- Two moments: up to 2020 and post-2020
- To solve the lack of data in order to:
 - ✓ better inform stakeholders and decision makers;
 - ✓ reduce misconceptions and speed up the decision making process.