

Expert Meeting: Modeling for Carbon Pricing Instruments

Annotated Agenda

April 24-25, 2013

The World Bank “J” Building (Room JB1-080)

701 18th Street, NW, Washington, DC, USA

Hosted by World Bank partners:

This event will be hosted by the following World Bank partners: Partnership for Market Readiness (PMR), Climate Policy and Finance Department (CPF), Development Economics Vice Presidency (DEC), the Energy Sector Management Assistance Programme (ESMAP), Poverty Reduction and Management Network (PREM), and World Bank Institute (WBI).

Objectives:

- Facilitate knowledge and experience sharing on modeling for carbon pricing instruments;¹
- Enable a community of practitioners that connects government experts and modelers within and across countries;
- Better understand and address the questions and needs of World Bank client countries in this area; and
- Provide inputs towards development of a World Bank work program for providing systematic support to countries on modeling of carbon pricing instruments.

Format:

The expert meeting aims to facilitate discussion among participants. Experts in policy modeling and assessment and country representatives will make short presentations for each topic on the agenda with the aim of sharing knowledge and experience. Key issues will include: (i) purpose of the analysis; (ii) framing of questions to be analyzed; (iii) selected/considered modeling approach (and why); and (iv) results, along with key caveats and considerations (as appropriate). Country representatives will be invited to share their work/plans/thinking in each of the different areas, as well as the questions on which they are seek insights through modeling, and particular challenges and considerations that need to be taken into account. Some of the presentations and discussion will focus on modeling work that informs a policy decision on carbon pricing instruments while others will focus on modeling work that informs the specific design of carbon pricing instruments once a policy decision has been made. Group discussion should shed light on the needs and gaps countries face (or expect to face or should prepare to face) when modeling carbon pricing instrument and contribute to the development of a work program.

Contact persons:

Ms. Martina Bosi (mbosi@worldbank.org) and Mr. Philippe Ambrosi (pambrosi@worldbank.org)

¹ Carbon pricing instruments are hereby understood as those policies that regulate greenhouse gas emissions through price instruments such as a tax on carbon or an emissions trading system. This is sometimes referred to as “direct” carbon pricing. Other “indirect” pricing approaches such as reform of fossil-fuel subsidies, subsidies for renewable energy, etc. are not the focus of the proposed discussion.

Day 1 (April 24)

| 1. Opening and Introduction Co-Chairs: Ms. Martina Bosi and Mr. Carter Brandon (World Bank) | |
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| 9:00 | Registration: welcome coffee and badge pick-up |
| 9:30 | <ul style="list-style-type: none"> - Welcome – Ms. Joëlle Chassard, Manager (Carbon Finance Unit, World Bank) - Introductions - Tour de Table |
| 2. Setting the Stage: Instruments and Modeling Tools | |
| This introductory session aims to build a common language among participants on carbon pricing instruments and on modeling tools. | |
| 10:00 | <ul style="list-style-type: none"> - Overview of Carbon Pricing Instruments — Mr. Ian Parry and Ms. Eliza Lis (International Monetary Fund) - Select, Design and Assess Carbon Pricing Instruments: the Landscape of Modeling Tools — Mr. Felix Matthes (Oeko Institut) - Q&A |
| 10:45 | Coffee Break |
| 3. Foundation for a Work Program on Modeling of Carbon Pricing Instruments | |
| All participants are invited to briefly describe their work and needs in the area of modeling carbon pricing instruments (discussion to be initiated by representatives from Brazil and China). The session concludes with a brief introduction of relevant activities by World Bank partners. | |
| 11:00 | <ul style="list-style-type: none"> - Perspective on Plans for Modeling Work in Brazil – Ms. Beatriz Soares da Silva (Ministry of Finance, Brazil) - Perspective on Modeling Work on Emissions Trading in China – Mr. Zhang Yaxiong (China Information Center) <p>Round Table Discussion: experiences and/or plans with modeling of carbon pricing instruments and identification of key needs and gaps — All participants</p> <p>Key questions:</p> <ol style="list-style-type: none"> 1. What are the carbon pricing instruments being considered/planned in the participating countries? 2. What is their status (e.g., consideration, planning, design, implementation)? 3. What are the questions for which modeling is expected to help provide insights? 4. Are the existing modeling tools and datasets analysis-ready and available for/in the countries? What are the needs/expected needs? |
| 12:15 | <ul style="list-style-type: none"> - Overview of World Bank Activities in Modeling and Assessment of Climate Policy (research, technical assistance and knowledge management) – (World Bank) - Q&A |
| 12:40 | Lunch – JB1-080 Lobby |

| 4. Building Scenarios to Assess Carbon Pricing Instruments | |
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| This session shall encourage an exchange of views, experiences and plans on considerations and challenges countries face in developing reference cases and carbon pricing scenarios | |
| 14:00 | <ul style="list-style-type: none"> - Model Inter-comparison to Understand Models Differences and Shortcomings and Handling of Uncertainties in Long-term Scenarios — Mr. Allen Fawcett (Energy Modeling Forum) - Mexico’s National Baseline: A Comparison Exercise in Collaboration with Denmark – Mr. Sixten Holm (Danish Energy Agency), Mr. Iván Islas Cortés (Instituto Nacional de Ecología y Cambio Climático, Mexico) - Low Emissions Development Studies in Poland and Macedonia — Ms. Erika Jorgensen (World Bank) <p>Round Table discussion — All participants</p> <p>Key Questions:</p> <ol style="list-style-type: none"> 1. What are the key elements (e.g., variables, assumptions, approach, consultations) for building a reference case scenario that is credible among the stakeholders? 2. What are the key challenges for models to capture drivers of economic growth and emissions trajectories (as well as changes in trajectories)? How to manage data gaps? 3. How do we go about the uncertainties associated with a range of forward-looking input parameters in the models? |
| 15:30 | Coffee Break |
| 5. Assessing Macro-economic and Sector-wide Impacts | |
| This session will focus on experiences and plans with computable general equilibrium models and other macro-economic models and sectoral models to assess impacts on, for example, growth and investment, fiscal revenues, competitiveness, employment, and emissions. | |
| 15:45 | <ul style="list-style-type: none"> - Insights and experience on analyses of proposed Federal climate bills in the USA — Mr. Allen Fawcett (US Environmental Protection Agency) - Insights and experience on analysis of EU-ETS – Mr. Tom van Ierland (European Commission, DG Climate Action) - Perspective from Thailand – Mr. Chaiwat Muncharoen (Thailand Greenhouse Gas Management Organisation) <p>Round Table discussion — All participants</p> <p>Key Questions:</p> <ol style="list-style-type: none"> 1. How applicable are these modeling tools to the questions/issues arising in countries? What are the limitations and what has to be done to customize the tools? 2. What models, if any, have already been used in countries to inform other policy decisions (e.g., macro/sector impacts of policies) that may also be applicable in context of carbon pricing instruments? 3. How to compare, interpret and reconcile results from different models? |
| 17:15 | Coffee break |

6. Introduction to the Platform for Climate Smart Planning

The Platform for Climate Smart Planning ('Platform') aims to facilitate access to well-established climate smart planning tools, approaches and data developed worldwide and provide guidance on their use to support developing countries with plans for low emissions climate resilient growth. The Platform will include elements of crowd-sourcing from an active, participatory community for faster exchange, learning, and innovation. As the Platform matures, it will allow for the expansion of datasets (including their updating), for the integration of tools and data, for the enhancement of existing tools and the development of new ones. The team will present the prototype of the Platform that was just unveiled earlier in April and answer questions on how this initiative could address the needs of different countries.

17:30

- **Mr. Philippe Ambrosi and Ms. Ana Bucher (World Bank)**
- Q & A

18:30

End of Day 1 – Cocktail Reception - MC Private Dining Room ABC

Day 2 (April 25)

| 7. Assessing Impacts on Industry | |
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| <p>This session will focus on experiences, challenges and plans with modeling impacts on sectors/industries, including competitiveness and related leakage issues, as well as compensation measures.</p> | |
| 9:00 | <ul style="list-style-type: none"> - Insights from Modeling on Sectors of the US Economy – Mr. Martin Ross (Duke University) - Insights from the EU-ETS – Mr. Felix Mathes (Oeko Institute) and Tom van Ierland (European Commission, DG Climate Action) - Perspective from Chile – Mr. Luis Gonzáles (Ministry of Finance, Chile) <p>Round Table discussion — All participants</p> <p>Key Questions:</p> <ol style="list-style-type: none"> 1. What are the issues and emerging evidence on the impacts of carbon pricing instruments on industry? 2. What are the designs/measures to address them? 3. What are the approaches, tools and data required for this analysis? |
| 10:30 | Coffee break |
| 8. Assessing Impacts on Households | |
| <p>This session will focus on experiences, challenges and plans with modeling distributional impacts on households via income and compensation measures.</p> | |
| 10:45 | <ul style="list-style-type: none"> - Analysis of Distributional Consequences in US of Carbon Pricing Instruments – Ms. Terry Dinan (US Congressional Budget Office) - Perspective from South Africa on Compensation/Revenue Recycling Measures Mr. Peter Janoska (National Treasury, South Africa) - Insights from Modeling of Impact of RGGI on Households – Mr. William Space (Regional Greenhouse Gas Initiative) <p>Round Table discussion — All participants</p> <p>Key Questions:</p> <ol style="list-style-type: none"> 1. What are the issues and emerging evidence on the impacts of carbon pricing instruments on households? 2. What are the designs/measures to address them? 3. What are the approaches, tools and data required for this analysis? |
| 12:15 | Lunch - MC Private Dining Room ABC |

| 9. From Modeling Outputs to Inputs into Policy Discussions | |
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| <p>This session will allow where participants to discuss and share experiences and plans on how to integrate and communicate insights from modeling and technical analysis into respective domestic policy debates on low emissions development strategies, the potential role of carbon pricing instruments, and their design.</p> | |
| 13:30 | <ul style="list-style-type: none"> - OECD modeling and contributions to policy discussions, Mr. Bertrand Magne (OECD) <p>Round Table discussion — All participants</p> <p>Key Questions:</p> <ol style="list-style-type: none"> 1. What are the issues, considerations, experiences with the results of modeling and technical exercises in informing policy debates/decisions? 2. Are there emerging lessons learned? |
| 14:45 | Coffee break |
| 10. Building a Work Program Together | |
| <p>Participants are invited to identify (i) needs; (ii) areas of possible cooperation, including to improve learning and sharing among countries; and (iii) ideas for next steps, as relevant.</p> | |
| 15:00 | <p>Round Table discussion — All participants</p> <p>Key Questions:</p> <ol style="list-style-type: none"> 1. What are the key questions the work program should aim to help answer? 2. What are the key elements (as well as themes) of the work program? 3. How do we build capacity sustainably and help maintain/update such tools for future use (as policies and questions evolve)? 4. How do we ensure synergies and complementarity with other relevant initiatives? |
| 16:30 | Wrap-up and closing remarks (World Bank) |
| 16:45 | End of expert meeting |