Partnership for Market Readiness (PMR) Technical Workshop on
Post-2020 Mitigation Scenarios and Carbon Pricing Modelling

Hosted by the Brazilian Ministry of Finance
Brasilia, Brazil – February 1-3, 2016
Windsor Brasilia Hotel – Salão Americas 2

As countries continue developing mid- and long-term emission pathways and refining their nationally determined contributions (NDCs) to achieve their mitigation ambitions, the need for them to analyze their proposed climate action plans in a broader economic development framework remains essential. Indeed, the ability to conduct underlying modeling and analytical work is critical to help them identify the scale, scope and pace of alternative emission pathways and their associated costs. Such work will also be fundamental in order to put together a suitable package of policies and measures, including carbon pricing instruments, in view of implementing their NDCs. There are various methodological approaches and tools that can support this process, as exemplified by diverse and growing practical experience on the subject around the world.

Against this backdrop, the Partnership for Market Readiness’ (PMR) Policy Analysis Work Program supports countries to advance their work to assess the implications of current or envisaged mitigation objectives and to develop a package of effective and cost-efficient instruments to achieve them. As such, the Program also brings together policy makers and technical practitioners directly involved in this effort in their respective countries, to facilitate and foster the exchange of experience and knowledge and to discuss good practices on the establishment of mitigation scenarios and carbon pricing modelling.

The Technical Workshop on Post-2020 Mitigation Scenarios and Carbon Pricing Modelling, organized by the PMR in collaboration with the Ministry of Finance of Brazil, will bring together policy makers and technical practitioners from PMR countries and international experts from research organizations and academia, to:

- Share insights and lessons learned throughout the technical assessment work underlying countries’ low emissions development strategies and, in particular, NDC decision-making process;
- Discuss common analytical challenges and gaps related to the design and operationalization of possible NDC implementation strategies, particularly with regards to the technical analysis of mitigation options and enabling policy instruments;
- Take stock of key issues and challenges facing expert modelers and policy makers when conducting carbon pricing modeling in support of an instrument design and assessment;
- Inform further work and identify key areas of support under the PMR Policy Analysis Work Program, including by establishing a PMR Modeling Expert Group and defining its work plan.
## Agenda overview

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<tr>
<td>08:30-9:00</td>
<td><strong>Introductory session</strong> &lt;br&gt;• Opening and welcome remarks &lt;br&gt;• Agenda and objectives of the workshop</td>
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<td>09:00-10:30</td>
<td><strong>Session 1 - Setting the stage: NDCs – Stepping stones towards a low-carbon future</strong> &lt;br&gt;Expert presentations:  &lt;br&gt;• Post-Paris update on NDC implementation challenges  &lt;br&gt;• From NDCs to deep decarbonization  &lt;br&gt;• Establishing Post-2020 emissions pathways: PMR Checklist  &lt;br&gt;• Q&amp;A and plenary discussion</td>
<td><strong>Introductory session</strong>  &lt;br&gt;• Recap of day 1  &lt;br&gt;• Presentation of day 2 objectives</td>
<td><strong>Introductory session</strong>  &lt;br&gt;• Recap of day 2  &lt;br&gt;• Presentation of day 3 objectives</td>
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<td><strong>Coffee break</strong></td>
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<td>11:00-12:30</td>
<td><strong>Session 2 – Analysis of mitigation options, enabling policy instruments and establishment of alternative mitigation pathways</strong> &lt;br&gt;• Overview presentation on analytical approaches and tools  &lt;br&gt;• PMR country case studies:  &lt;br&gt;  - Peru  &lt;br&gt;  - Costa Rica  &lt;br&gt;• Q&amp;A and plenary discussion</td>
<td><strong>Session 5 – Bringing it all together: Building policy packages to achieve long-term mitigation pathways</strong> &lt;br&gt;• Overview presentation on combined analysis of technical and policy options  &lt;br&gt;• PMR country case study: Brazil  &lt;br&gt;• Q&amp;A and plenary discussion</td>
<td><strong>Session 9 – Panel discussions on modeling domestic carbon tax and ETS</strong> &lt;br&gt;• Panel discussion A: Key modeling issues and challenges facing domestic ETS design and implementation  &lt;br&gt;• Q&amp;A</td>
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<td><strong>Lunch</strong></td>
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| 14:00-15:30 | Session 2 (Cont’d) – Analysis of mitigation options, enabling policy instruments and establishment of alternative mitigation pathways  
  - PMR country case studies:  
    - Kazakhstan  
    - Vietnam (World Bank/ESMAP study)  
  - NDC implementation framework  
  - Q&A and plenary discussion | Session 6 – Building policy packages  
  - Break-out group exercise  
  - Report back and plenary discussion | Session 9 (cont’d)  
  - Panel discussion B: Key modeling issues and challenges facing carbon tax design and implementation  
  - Q&A  
  - Plenary discussion: Views from PMR countries on carbon pricing modeling experience |
| 16:00-17:30 | Session 3 – NDC implementation challenges and perceived knowledge gaps  
  - Break-out group discussion  
  - Report back and plenary discussion | Session 7 – A closer look at carbon pricing policies  
  - Carbon pricing policies: Overview and instrument options  
  - Framework for evaluating carbon pricing policies  
  - Q&A | Session 10 – Building a modeling work program together  
  - Break-out group exercise  
  - Report back and plenary discussion  
  - Initial proposal for PMR’s modeling work program and way forward  
  - Open discussion and reflection on the issues covered in the break-out session |
| 17:30-18:00 | Coffee break | | Closing session  
  - Wrap-up and closing remarks |
| 18:00-20:00 | Cocktail reception in Salão Europa 1 (level p) | | |

PMR Technical Workshop  
Post-2020 Mitigation Scenarios & Carbon Pricing Modelling
## Detailed agenda

### Day 1 – Monday, February 1

#### Opening and welcome remarks
- Mr. Manoel Pires, Secretary of Economic Policy, Ministry of Finance, Brazil
- Mr. Carlos Klink, Deputy Minister, Ministry of Environment, Brazil – To be confirmed
- Mr. Martin Raiser, Country Director for Brazil, World Bank Group
- Mr. Venkata Putti, Program Manager, Climate and Carbon Finance Unit, World Bank Group

**Agenda and objectives of the workshop**
- Mr. Adrien de Bassompierre, Program Coordinator, PMR Secretariat

#### Session 1 – Setting the stage: Nationally Determined Contributions – stepping stones towards a low-carbon future

**Moderator:** Mr. Venkata Putti, World Bank Group

- **Post-Paris update on NDCs and implementation challenges** (Ms. Ritika Tewari, New Climate Institute)
- **From NDCs to deep decarbonization** (Mr. Thomas Spencer, Institute for Sustainable Development and International Relations – IDDRI)
- **Establishing post-2020 emissions pathways: PMR checklist** (Mr. Thomas Kansy, Vivid Economics)
- Q&A

#### Session 2 – Analysis of mitigation options, enabling policy instruments and establishment of alternative mitigation pathways

**Moderator:** Mr. Marcos Castro, PMR Secretariat

- **Analytical approaches and tools** (Mr. Thomas Kansy, Vivid Economics)
- **Peru case study** (Ms. Veronica Villiena, Ministry of Environment)
- **Costa Rica case study** (Mr. Felipe de León, MINAE)
- Q&A

#### Session 2 (Cont’d) – Analysis of mitigation options, enabling policy instruments and establishment of alternative mitigation pathways

- **Moderator:** Mr. Marcos Castro, PMR Secretariat
- **Kazakhstan case study** (Mr. Yerbol Akhmetbekov, Nazarbayev University)
- **Vietnam World Bank/ESMAP study** (Mr. Suphachol Suphachalasai, PMR Secretariat)
- **NDC implementation framework** (Ms. Emelia Holdaway, Ricardo AEA)
- Q&A

#### Lunch break

#### Session 3 – NDC implementation challenges and perceived knowledge gaps

- **Break-out group discussion**
- **Plenary discussion**

#### COCKTAIL RECEPTION IN SALÃO EUROPA 1 (Level P)
# Day 2 – Tuesday, February 2

## Introductory session: Recap of day 1 and presentation of objectives for day 2

**Session 4 – How can issues of policy interaction be explored?**

**Moderator:** Mr. Pierre Guigon, PMR Secretariat

- **Policy mapping tools and analytical approaches** *(Mr. Felix Matthes, Oeko-Institut)*
- **Focus on the energy sector: PMR/ESMAP study on interactions between carbon pricing and energy policies** *(Mr. Christophe de Gouvello, Energy Global Practice, World Bank Group)*
  - Q&A

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<td>14:00-15:30</td>
<td><strong>Session 6</strong> – Building policy packages</td>
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**Moderator:** Ms. Maja Murišić, PMR Secretariat

- **Carbon pricing policies: Overview and instrument options** *(Mr. Thomas Kansy, Vivid Economics)*
- **Framework for evaluating carbon pricing policies** *(Mr. Grzegorz Peszko, Climate Policy Unit, World Bank Group)*
  - Q&A
# Day 3 – Wednesday, February 3

## Introductory session: Recap of day 2 and presentation of objectives for day 3

### Session 8 – Modeling carbon pricing instruments

- **The state of knowledge and landscape of carbon pricing modeling tools (Mr. Francesco Bosello, Euro-Mediterranean Center on Climate Change (CMCC))**
- **Insights on global carbon pricing and trading modeling**
  - Mr. Duncan Gray, Department of Energy and Climate Change, United Kingdom
  - Mr. Francesco Bosello, Euro-Mediterranean Center on Climate Change (CMCC)
- Q&A

## Session 9 – Panel discussions on modeling domestic carbon tax and ETS

### Panel discussion A: Key modeling issues and challenges facing domestic ETS design and implementation

**Moderator:** Mr. Michael Toman, World Bank Group

- **European Commission** (Mr. Miles Perry, DG Climate Action)
- **Republic of Korea** (Ms. Hyungna Oh, Kyung Hee University)
- **Kazakhstan** (Mr. Yerbol Akhmetbekov, Nazarbayev University)
- **Regional Greenhouse Gas Initiative** (Mr. William Space, Department of Environment, State of Massachusetts – via Webex)
- Q&A

### Panel discussion B: Key modeling issues and challenges facing domestic carbon tax design and implementation

**Moderator:** Mr. Michael Toman, World Bank Group

- **British Columbia** (Ms. Anne Foy, Ministry of Finance – via Webex)
- **Chile** (Mr. Francisco Pinto, Ministry of Environment)
- **United Kingdom** (Ms. Emelia Holdaway, Ricardo AEA)
- Q&A
- **Plenary discussion:** Views from PMR countries on carbon pricing modeling experience

## Session 10 – Building a modeling work program together

### Break-out group exercise to elaborate on country-specific and cross-country modeling questions/issues to be included in the PMR’s modeling work stream

- **Plenary discussion**
- **Initial proposal for PMR’s modeling work program and way forward**
- Q&A

### Closing session

- Mr. Aloisio Pereira de Melo, Ministry of Finance, Brazil
- Mr. Venkata Putti, Program Manager, World Bank Group
- Mr. Adrien de Bassompierre, Program Coordinator, PMR Secretariat