Assessing impacts of implementation of response measures

Ad Hoc Expert Group Meeting on Implementing The Paris Agreement: Response Measures and Trade
Geneva, 3-4 October 2017
Outline

- Provisions for Response Measures and Trade under the
  - Convention,
  - Kyoto protocol
  - Paris Agreement
- Reporting requirements
- Assessing Impacts of RM
- Opportunities and Challenges
Provisions for Response Measures and Trade under the Convention

- In the implementation of their commitments under the Convention, Parties shall give full consideration to what actions are necessary to meet the specific needs and concerns of developing country Parties arising from the adverse effects of climate change and/or the impact of the implementation of response measures (article 4.8 of Convention)

- Measures taken to combat climate change, including unilateral ones, should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade” (Article 3.5 of the Convention)
Provisions for Response Measures and Trade under the Kyoto Protocol

- The Parties included in Annex I shall strive to implement policies and measures in such a way as to minimize adverse effects, including the adverse effects of climate change, effects on international trade, and social, environmental and economic impacts on other Parties (Article 2.3 of the KP).

- Each Party included in Annex I shall strive to implement the commitments mentioned in paragraph 1 above in such a way as to minimize adverse social, environmental and economic impacts on developing country Parties, particularly those identified in Article 4, paragraphs 8 and 9, of the Convention. (Article 3.14 of the KP)

- Forum established under the Convention shall serve the Paris Agreement (paragraph 33, decision 1/CP21)
Provisions for Response Measures and Trade under the Paris Agreement

- PA recognizes that Parties may be affected not only by climate change, but also by the impacts of the measures taken in response to it.
- Take into account the imperatives of a just transition of the workforce and the creation of decent work and quality jobs in accordance with nationally defined development priorities.
- Parties shall take into consideration in the implementation of this Agreement the concerns of Parties with economies most affected by the impacts of response measures, particularly developing country Parties (Article 4.15 of the PA).
- No specific mention of trade and response measures under the PA.

**HOWEVER**

- The decision that adopted the PA indicated that the Forum established under the Convention shall serve the Paris Agreement (paragraph 33, decision 1/CP21).
Reporting requirements

- Each Party included in Annex I shall provide information relating to how it is striving, under Article 3, paragraph 14, of the Kyoto Protocol, to implement its commitments mentioned in Article 3, paragraph 1, of the Kyoto Protocol in such a way as to minimize adverse social, environmental and economic impacts on developing country Parties, particularly those identified in Article 4, paragraphs 8 and 9, of the Convention. (Decision 15/CMP 1, Annex H, paragraph 23)

- Encourages non-Annex I Parties to provide information, including in their national communications and/or other reports, on their specific needs and concerns arising from the adverse effects of climate change, including any gaps they identify in the implementation of decision 5/CP.7 (Decision 1/CP10)
Assessing Impacts of RM: The Need of the time

- Increased GHG mitigation policies and actions after adoption of Paris Agreement
- An increased need to assess the cross-border impacts, and then to report and address those impacts.

Impacts need to managed during this transition:
- Most sectors are impacted
- Most jobs are impacted
Developing country Parties are encouraged to report on impacts received from implementation of response measures by developed countries.

Assessing Impacts of RM: The Link to Trade??

Country A

Mitigation action

- Impact
  - GHG emissions
  - Non-GHG effects:
    - Prices
    - Demand
    - Etc.

Influence if market power is big enough

World market prices

Country B

Impact of measures in country A

Examples:
- Product prices
- Tax revenues
- Employment
- Access to technology
- Etc.

Import

Export

Country reporting
Types of impacts of response measures

- Positive
- Negative
- Direct
- Indirect
- Induced
- Intended
- Unintended
- Domestic
- Transboundary (cross-border)

Identify
Assess
Report
Address/manage
Sectors impacted

- Conventional oil, gas and coal fuels;
- Energy-intensive trade-exposed goods (aluminium, iron and steel, cement, chemicals, and pulp and paper);
- Tourism;
- Agriculture.
## Mitigation policies and impacts

### Selected response measures and their impacts

<table>
<thead>
<tr>
<th>Policy</th>
<th>Key Impacts</th>
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<tbody>
<tr>
<td>Domestic carbon taxes and cap and trade schemes</td>
<td>Loss of market share for foreign exports</td>
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<td>Subsidies for renewable energy technology producers</td>
<td>Loss of market share for foreign competitors (renewable energy technology and fossil fuels)</td>
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<tr>
<td>Standards and labelling requirements</td>
<td>Loss of market share for producing firms</td>
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<tr>
<td>International carbon taxes and levis</td>
<td>On aviation: loss of tourism revenue for airline destinations and loss of market share for air-freighted goods On maritime transport: reduced trade flows</td>
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### Overview of Steps of Assessment of Impacts

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
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<tbody>
<tr>
<td>1</td>
<td>Identify policies and actions that may have potential impacts of response measures</td>
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<td>2</td>
<td>Identify causal relations</td>
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<td>3</td>
<td>Identify indicators of relevance</td>
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<td>4</td>
<td>Identify suitable assessment methodologies</td>
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<td>5</td>
<td>Carry out data collection and customization</td>
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<td>6</td>
<td>Define scenarios, simulation and analysis results</td>
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<td>7</td>
<td>Reporting the results</td>
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Types of Analytical tool

Qualitative Approach: simple analysis
Quantitative Approach: basic to complex

- Simple analysis
- Econometric estimation
- Systems of equations
- Input-output analysis
- Partial modelling
- General modelling
Challenges and Opportunities

Challenges

- Lack of experience in developing countries
- *Lack of case studies, specifically cross border impacts*
- Lack of methodological and analytical tools

Opportunities

- *Forum established under the Convention shall serve the Paris Agreement (paragraph 33, decision 1/CP21)*
- *Forum provides a platform to allow Parties:*
  - *to share* information, experiences, case studies, best practices and views,
  - *to facilitate assessment and analysis* of the impact of the implementation of response measures,
  - *with a view to recommending specific actions*;
Thank you!

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