

# Assessing impacts of implementation of response measures

African region awareness creation workshop to maximize the positive and minimize the negative impacts of implementation of Climate Change response measures

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# Outline

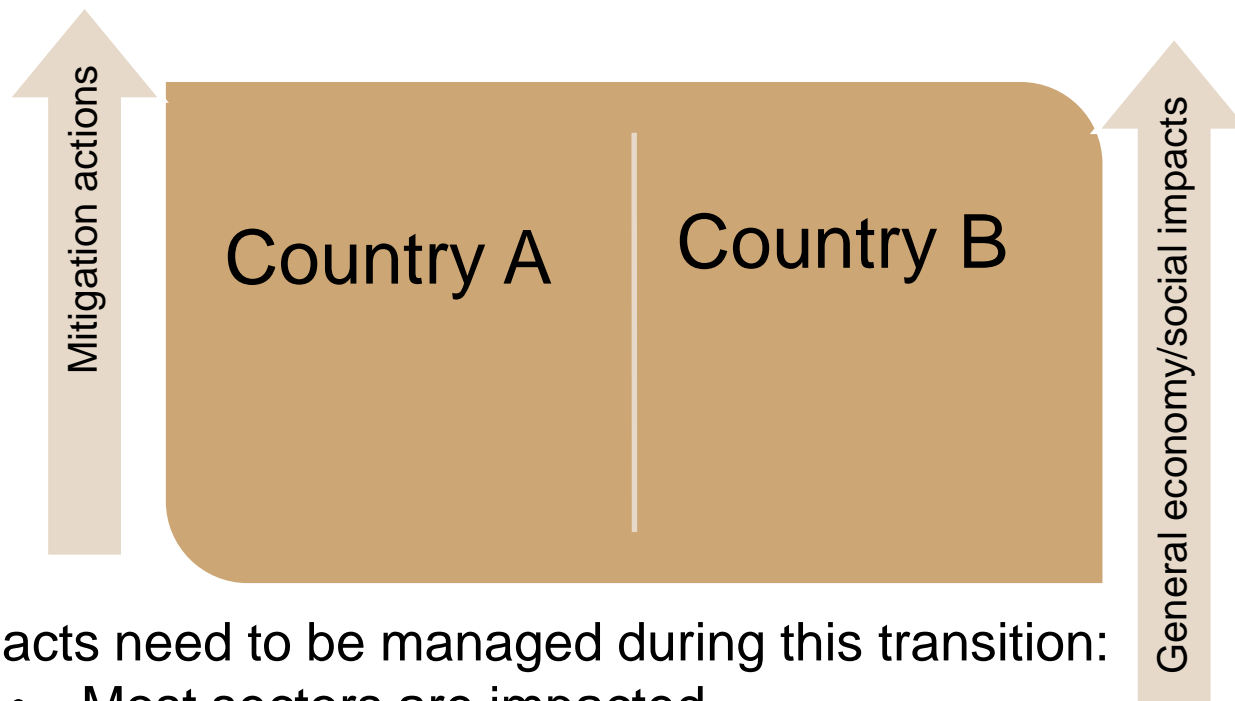
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- Assessing Impacts of RM
- *Opportunities and Challenges*
- *Reporting requirements on RM*



# Assessing Impacts of RM: The Need of the time

- In order to achieve the 2°C goal of the Paris Agreement there is the need for increased implementation of GHG mitigation abatement policies
- Hence an increased need to assess the cross-border impacts, and then to report and address these impacts.

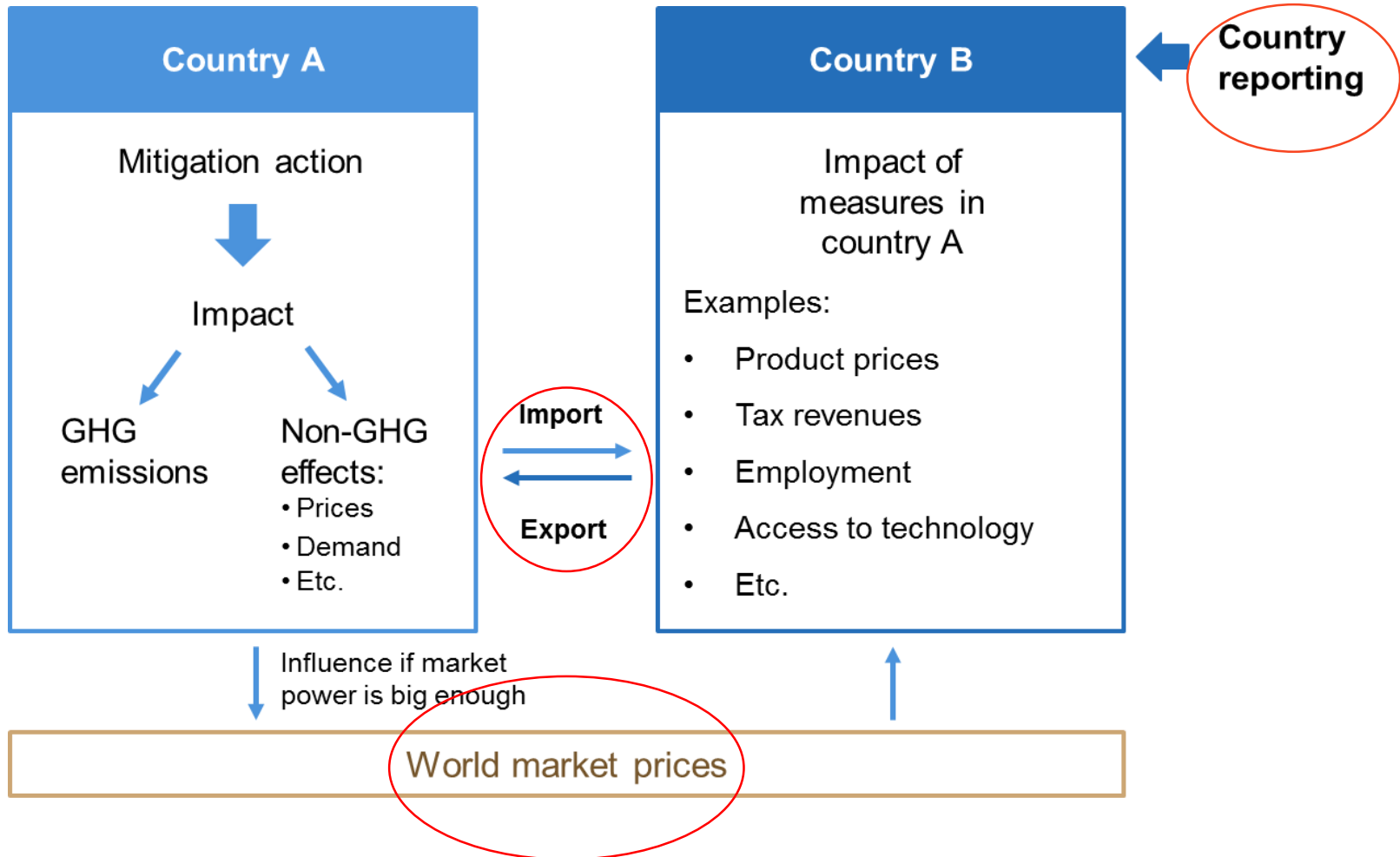


Impacts need to be managed during this transition:

- Most sectors are impacted
- Most jobs are impacted



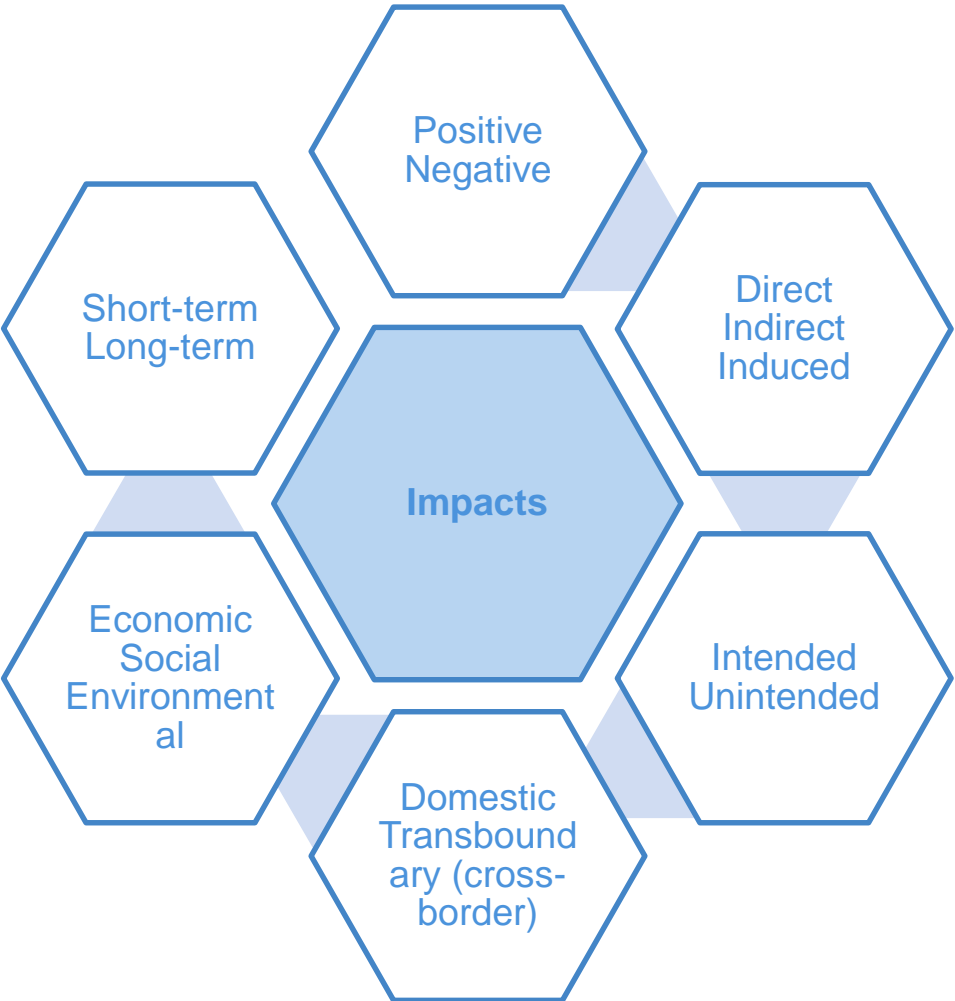
# Assessing Impacts of RM: The Need of the time



Developing country Parties are encouraged to report on impacts received from implementation of response measures by developed countries



# Types of impacts of response measures



Identify

Assess

Report

Address/manage



# Sectors impacted

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- 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

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## Selected response measures and their impacts

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| <i>Policy</i>                                       | <i>Key Impacts</i>   |
|---|--|
| Domestic carbon taxes and cap and trade schemes     | Loss of market share for foreign exports   |
| Subsidies for renewable energy technology producers | Loss of market share for foreign competitors (renewable energy technology and fossil fuels)  |
| Standards and labelling requirements                | Loss of market share for producing firms   |
| International carbon taxes and levies               | On aviation: loss of tourism revenue for airline destinations and loss of market share for air-freighted goods<br>On maritime transport: reduced trade flows |

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# Assessment of impacts of response measures

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## ✓ Approaches

- **Qualitative:** produces a description of the potential effects of policies and measures. It provides an estimate of the direction of change (positive, negative) and its relative size (small, medium, large);
- **Quantitative:** Models provide quantitative assessment results with a higher degree of accuracy; usually require a large data set and expertise and are associated with high cost;
  - CGE-based, E3ME;
- Other quantitative tools: input-output analysis, econometric analysis, cost-benefit analysis

## ✓ Timing of assessment

- **Ex-ante:** assessment undertaken before formulation and adoption of PaMs, for evidence-based decision making, and involvement of stakeholders
- **Ex-post** : undertaken after the implementation of PaMs, to check and evaluate its real impacts.

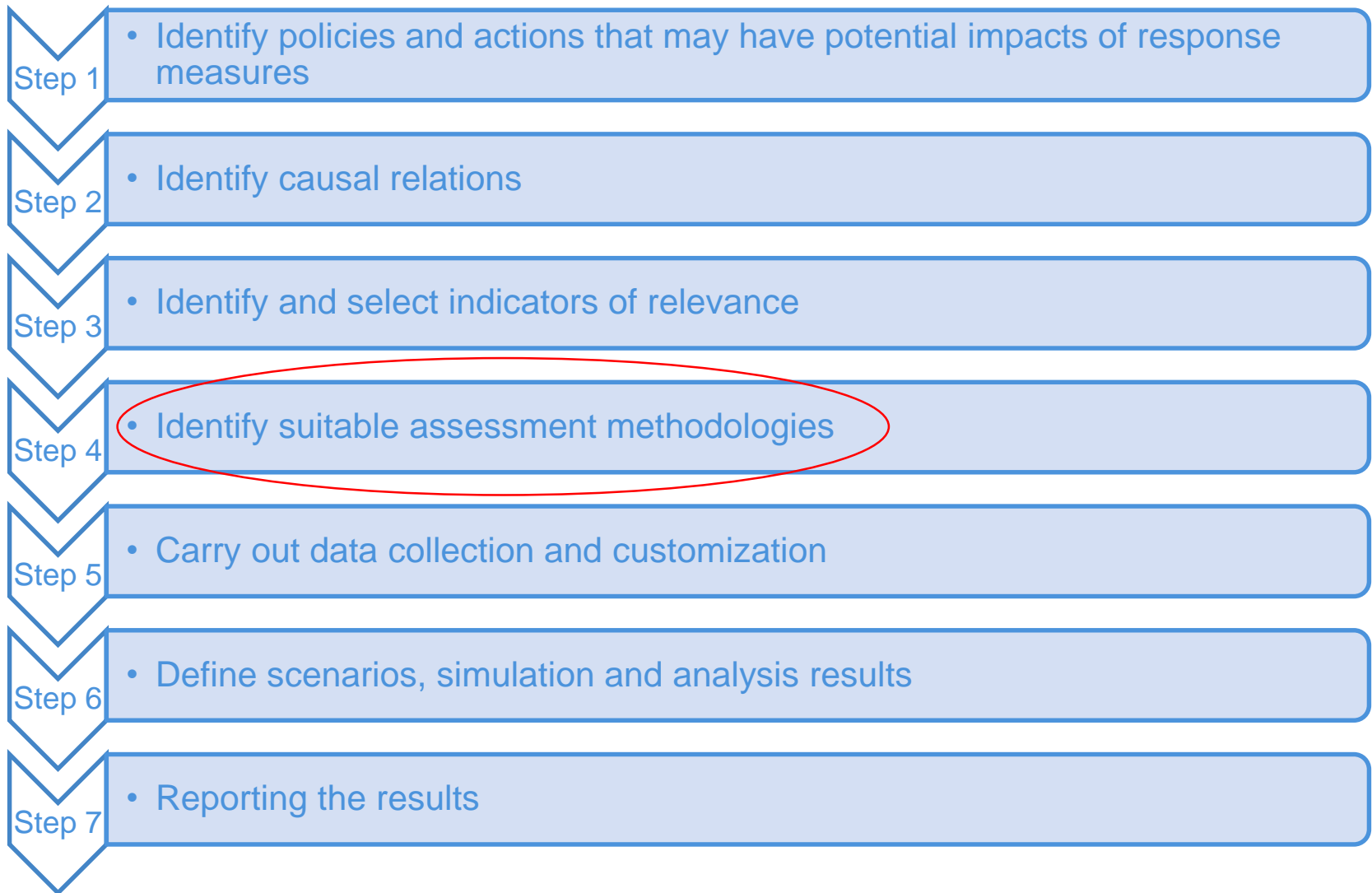
## ✓ Step-wise methodologies

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# Overview of steps of assessment of impacts

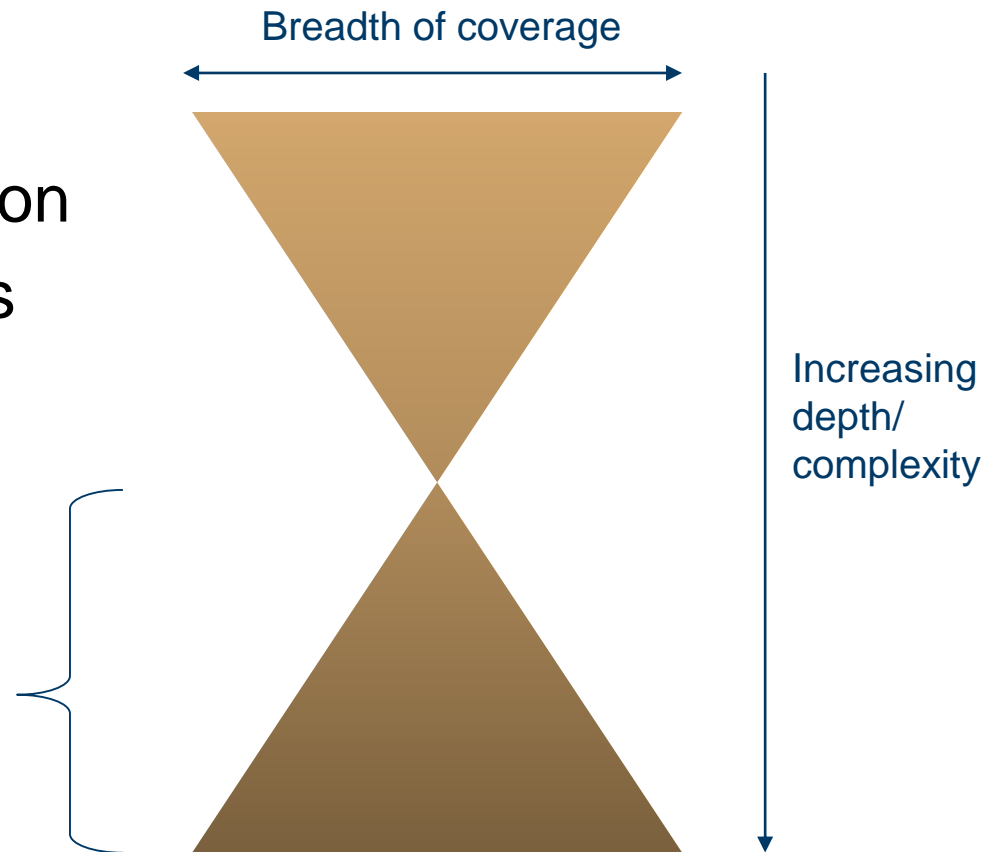


# Types of Analytical tool

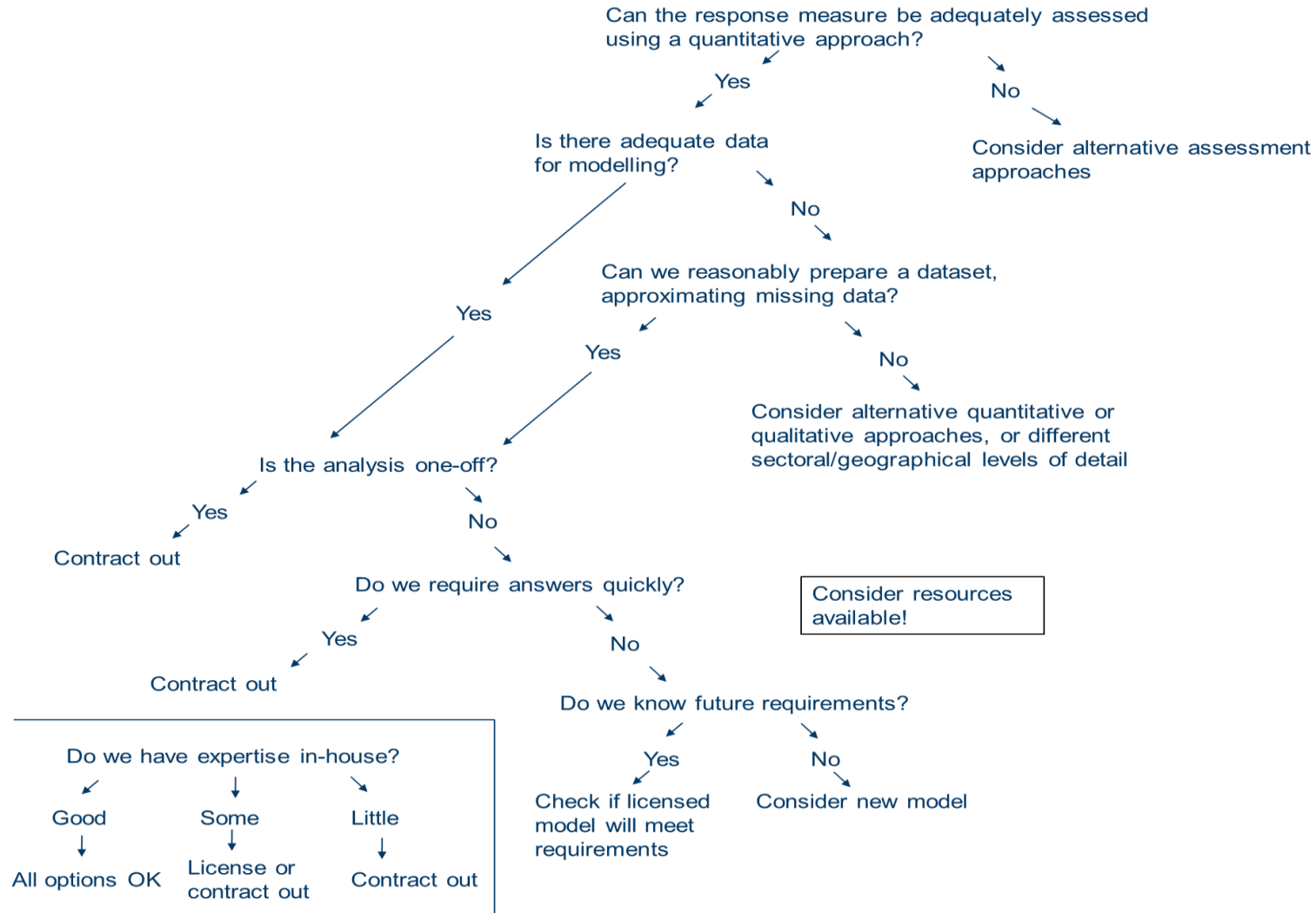
Qualitative Approach: simple analysis

Quantitative Approach: basic to complex

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



# Decision Tree for selection of assessment approach



# Challenges and Opportunities

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## Challenges

- Lack of experience in developing countries
- *Lack of case studies, specifically cross border impacts assessments*
- Lack of suitable 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;***



# Future work on response measures

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- Parties review the work programme of the improved forum in SB 49 in Katowice, December 2018
- **Mandate** - SBI and SBSTA shall recommend modalities, work programme and functions of the forum under Paris Agreement for consideration and adoption of CMA1
- Currently Parties are discussing the modalities and procedures for the implementation of the forum under the Paris Agreement:
  - Three elements, functions, modalities and work programme need to be decided and clearly defined;
  - Parties need to reach final agreement at COP 24 in Katowice.



# BR reporting guidelines: two aspects

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## Mitigation actions and their effects

- Para 8. Each Annex I Party is encouraged to provide, to the extent possible, detailed information on the assessment of the economic and social consequences of response measures.

## Finance

- Para 17. Each Annex II Party shall provide information on the financial support it has provided, committed and/or pledged for... assisting non-Annex I Parties to mitigate GHG emissions and adapt to the adverse effects of climate change and any economic and social consequences of response measures, and for capacity-building and technology transfer in the areas of mitigation and adaptation, where appropriate.



## 15/CMP.1: Minimization of adverse impacts in accordance with Article 3, paragraph 14

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- Para 23. Each Party included in Annex I shall provide information relating to **how it is striving** , under Article 3, paragraph 14, to implement its commitments ... in such a way as **to minimize adverse** social, environmental and economic impacts on developing country Parties...
- Para. 24 bis. Parties included in Annex I without quantified emission limitation and reduction commitments for the second commitment period shall continue to provide information relating to how they are striving, under Article 3, paragraph 14, of the Kyoto Protocol, to implement their commitments... in such a way as to minimize adverse social, environmental and economic impacts on developing country Parties...  
(new para from 3/CMP.11 – **Reporting for KP Parties in CP2**)



## 15/CMP.1: Minimization of adverse impacts in accordance with Article 3, paragraph 14

- Para 24. Annex II Parties and other Annex I Parties that are in a position to do so shall incorporate information on how they give priority... to the following actions....:
  - (a) ... Phasing out of market imperfections, fiscal incentives, tax and duty exemptions and subsidies in all sectors, taking into account the need for energy price reforms to reflect market prices and externalities
  - (b) Removing subsidies of ... environmentally unsound and unsafe technologies
  - (c) ... Technological development of non-energy uses of fossil fuels and supporting developing country Parties...
  - (d) ...Development... and wider use of ... advanced fossil-fuel technologies and CCS; and facilitating the participation of the LDCs and other non-Annex I Parties
  - (e) Strengthening the capacity ...in efficiency in fossil fuels use ...
  - (f) Assisting developing country Parties dependent on the export of fossil fuels in diversifying their economies.





## 15/CMP.1: Minimization of adverse impacts in accordance with Article 3, paragraph 14

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- Para 36. Each Party included in Annex I shall also provide information not reported elsewhere under these guidelines on how it strives to implement PaMs... 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, especially developing country Parties...



## Compilation requirements and Status of Reporting

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- Information shall be compiled annually (Para. 26, Decision 15/CMP.1)
- Information referred to in 15/CMP.1 shall be considered by the facilitative branch of the compliance committee (*Para. 4, Decision 31/CMP.1*)
- Since 2010, eight compilation reports are published on the UNFCCC website  
[http://unfccc.int/national\\_reports/annex\\_i\\_ghg\\_inventories/items/6559.php#3594?rec=j&priref=600005964#beg](http://unfccc.int/national_reports/annex_i_ghg_inventories/items/6559.php#3594?rec=j&priref=600005964#beg)
- In 2016, 36 Annex I Parties (including 26 EU member States) provided information on Art. 3, para. 14 of the KP in their National Inventory Reports (NIR) [Compiled report for 2016](#)



# Qualitative assessment of reporting on response measure

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## In NIR:

- 28 Parties (with most of the 26 EU member States reported jointly in EU's NIR) provided information on assessment of social, environmental and economic impacts of their climate actions;
- Others reported on how they minimize the adverse effects of their climate policy and measures;
- Some EU member States and Japan provided information on how they support actions related to economic diversification in developing countries.



# Qualitative assessment of reporting on response measure

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- In BR3:
  - Several Parties (e.g. Belgium, EU, France, Greece, New Zealand and Norway) provided information on the assessment of the economic and social consequences of response measures;
  - Some Parties reported ways in which they minimize the adverse effects of the implementation of policies and measures (PaMs), which is related to, but distinct from, the assessment of the economic and social consequences;



## Qualitative assessment of reporting on response measure

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- Norway detailed its Oil for Development (OfD) initiative which aims at responding to requests for assistance from developing countries, in their efforts to manage petroleum resources in a way that generates economic growth and promotes the welfare of the whole population in an environmentally sound way. It also reported on some initiatives to foster technology development and transfer, as well as capacity building efforts in developing countries, to increase access to renewable energy, and to reduce dependence of fossil fuels.
- Some countries further identify the reduction in demand for fossil fuels in developing countries as an opportunity available for those exporting countries to look for new markets.
- Parties have also introduced topics like international trade, economic diversification, just transition of labour in context of addressing impacts of response measures in their Biennial reports.



## Key information in the reports

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- Support provided for actions related to economic diversification (*EU member States and Japan*)
- ways to minimize the adverse effects of the implementation of PaMs;
- procedures for the assessment of the impacts of proposed legislation or other policy initiatives (*EU, Greece, New Zealand and Norway included*)
- Some Parties noted that PaMs may have both positive as well as negative economic and social effects.



# Key Questions for Future of RM Reporting

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Is current reporting requirements sufficient for RM reporting under the Convention (e.g. Art. 8), KP and potentially PA?

What else can be done?

- *Improve reporting*
- *Improve assessment*



How can the reporting be enhanced so as to be beneficial to all Parties

Who should be reporting and at what level of details?



# How can reporting on RM be improved?

- Concrete reporting guidance for all Parties
- Concrete guidance on how to **identify, assess** and **report on** impacts of implementation of response measures by Parties
- Developing countries Parties to report on
  - the **actual impacts** arising from the implementation of response measures, and
  - on the measures taken to reduce vulnerability or adapt to impacts arising from the implementation of response measures
- Support from developed to developing country Parties for such reporting???





Thank you !

*<http://unfccc.int/4908.php>*

