Overview of the Negotiations on Article 6

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Outline of presentation

• Background
  • Role of market mechanisms in the Paris Agreement
  • Risks to environmental integrity

• Main design considerations of the two market mechanisms under Art. 6
  • Cooperative Approaches (CA) under Art. 6.2
  • Mitigation and Sustainable Development Mechanism (MSDM) under Art. 6.4

• Synergies and conflicts
  • Key similarities and differences between CA and MSDM
  • Creating a level playing field between the two market mechanisms

• Update from Marrakesh and prospects for future negotiations
  • Timeline for development of rules, modalities and procedures (RMP)
  • Influence of ICAO on negotiation of Art. 6
Background

• Role of market mechanisms in the Paris Agreement
  • The Paris Agreement represents a paradigm shift in international climate policy
    – from targets and timetables under Kyoto Protocol
    – towards pledge and review of NDCs under Paris Agreement

• Art. 6 introduces provisions for using international market mechanisms to fulfil nationally determined contributions (NDCs)
  – Cooperative approaches under Art. 6.2 allow Parties to use internationally transferred mitigation outcomes (ITMOs) to achieve their NDCs
    » i.e. via international linking of emission trading schemes, crediting mechanism or government to government transfers
  – Art 6.4 establishes a new crediting mechanism under the authority and guidance of the CMA
    » Similarities with the CDM: the mechanism has a dual objective of supporting mitigation action as well as sustainable development
Background

- **Risks to environmental integrity**
  - The Paris Agreement includes several provisions that aim to ensure environmental integrity of international market mechanisms.
    - Use of international transfers does not result in higher global GHG emissions than if the NDCs had been achieved only by domestic action.
  - Four factors can influence the environmental integrity of international market mechanisms:
    - the environmental integrity of mitigation outcomes
      » i.e. ensuring additionality under a crediting mechanism
    - the ambition of NDCs
      » i.e. avoiding the transfer of hot air
    - robust accounting of international transfers
      » i.e. preventing the double counting of emission reductions
    - incentives for future mitigation action
      » i.e. market mechanisms reduce costs to enable higher ambition

Source: Schneider et al (forthcoming)
Background

- Risks to environmental integrity: Hot air
  - NDCs which are not ambitious might generate hot air
    - If a country inflates its BAU, it could transfer ITMOs that lack environmental integrity
Background

• **Article 6 and risks to environmental integrity**
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Source: Schneider et al (forthcoming)
Background

• Risks to environmental integrity: Double counting
  • If emission reductions are double counted, actual global GHG emissions are higher than the sum of what individual countries report

  • Double counting can occur in three ways
    – Double issuance
      » i.e. more than one unit is issued for the same emission reduction
    – Double claiming
      » i.e. same reductions are counted twice towards fulfilling mitigation targets (both transferring and acquiring country)
    – Double use
      » i.e. the same issued unit is used twice to achieve a mitigation target (unit may be duplicated by mistake in registries)

Source: Schneider et al (2016)
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  • The Paris Agreement includes several provisions that aim to ensure environmental integrity of international market mechanisms
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Market approaches under Article 6

• Cooperative Approaches (Art. 6.2)
  • CA enable Parties to use Internationally Transferred Mitigation Outcomes (ITMOs) towards their NDCs and requests parties to apply robust accounting

• At COP 22, Parties reacted to questions by the co-facilitators during informal consultations on:
  – Reach of the guidance
    » On guidance for what can be transferred, many suggested keeping the scope open
  – Functioning of the corresponding adjustment
    » Several parties considered the corresponding adjustment too technical an issue for discussion at SBSTA 45
  – Managing relationships between Art 6.2 and 6.4
    » It was suggested that the exchange of ITMOs should happen under Art. 6.2, while ITMOs could be generated by any mechanism, including that established by Art. 6.4

Source: IISD (2016)
Market approaches under Article 6

- **Nature and scope of ITMOs under Art. 6.2**
  - **Metric**
    - ITMOs require a measuring unit. The adjustment can only be made if there is a common understanding about the quantities of the adjustments.
      - One common metric (t CO$_2$eq)
      - Several metrics (renewable energy capacity / generation)
  - **Accounting unit**
    - The same number of units, which are added in one country need to be deducted in another country. How should these transfers be recorded?
      - Unit issued as a certificate that can be issued, cancelled and surrendered and may also be transferred many times by Parties?
      - Pure accounting unit which only exists in the GHG accounts of the involved Parties in the ITMO transfer?

Market approaches under Article 6

- Nature and scope of ITMOs under Art. 6.2
  - Relation of ITMOs to the scope of the NDC of the transferring country
Market approaches under Article 6

- Nature and scope of ITMOs under Art. 6.2
  - Advantages of limiting ITMO transfers to within NDC of transferring country include
    - Simpler for accounting purposes
      - Corresponding adjustments easier as it is not necessary to determine whether the mitigation outcome is within or outside of scope
    - Incentive to ensure environmental integrity
      - If a country overestimates mitigation outcomes and transfers them to another country, this would need to be compensated for to meet NDC
    - Encourages countries to move towards economy wide targets
      - The broader the scope of a country’s NDC the more that they can participate in cooperative approaches

- If only general international guidance is provided, limiting the scope of ITMOs may provide a higher assurance of environmental integrity
  - Mitigation outcomes outside NDC covered by Art. 6.4 with UNFCCC oversight

Market approaches under Article 6

- **Nature and scope of ITMOs under Art. 6.2**
  - *Use of ITMOs by the acquiring country*
    - Parties could define ITMOs in at least two different ways as
      » only mitigation outcomes that are both internationally transferred and used by acquiring country towards its NDC
      » mitigation outcomes that are internationally transferred and that may be used for different purposes such as voluntary cancellation
  
  - *Mechanism type*
    - The term ITMO does not imply what type of mechanism may underlie the international transfer. This could include:
      » Trading mechanisms (i.e. linking ETS schemes)
      » Crediting mechanisms
      » Other type of government to government transfers

Source: Schneider et al (2016)
Market approaches under Article 6

- Nature and scope of ITMOs under Art. 6.2
  - Fungibility of ITMOs
    - How ITMOs are defined could have impacts on their fungibility (i.e. whether they could be mutually substituted in place of one another)
      » Full fungibility would only be provided if Parties agreed that ITMOs are an international compliance unit
      » In practice it is expected that groups of countries may apply different scopes, rules and standards under Art. 6.2. Full fungibility unlikely
  - Relationship to Article 6.4
    - Depends on both the definition of ITMOs and the scope of the market mechanism under Art. 6.4
      » Emission reductions by Art. 6.4 considered as ITMOs whenever they meet ITMO definition (i.e. international transfer / used to fulfil NDC)
      » Emission reductions by Art. 6.4 always/never considered as ITMOs

Source: Schneider et al (2016)
Market approaches under Article 6

- Potential relationships of CA (Art. 6.2) and MSDM (Art. 6.4)

Separate mechanisms

Art. 6.2

- P4
- P5
- P6

Rules for adjustments

ITMO

P1
P2
P3

Art. 6.4

- A1
- A2
- A3

Certification

Tracking/registry

ITMO

P1
P2
P3

Nested mechanisms

Art. 6.2

- P4
- P5
- P6

Rules for adjustments

ITMO

P1
P2
P3

Art. 6.4

- A1
- A2
- A3

Certification

ITMO

CU

P1
P2
P3

Source: Cames et al (2016)

Source: Authors’ own compilation
Market approaches under Article 6

• Avoiding double counting under Art. 6.2
  • Art. 6.2 requires countries to apply “robust accounting to ensure, inter alia, the avoidance of double counting, consistent with guidance adopted by the CMA”
  • Paragraph 36 of decision 1/CP.21 specifies that the guidance under Art. 6.2 should ensure that double counting is avoided on the basis of
    “a corresponding adjustment by Parties for both anthropogenic emissions by sources and removals by sinks covered by the NDC”

• Different options for making corresponding adjustments include
  – Application of corresponding adjustments to inventory emissions
    » Parties with a net purchase of ITMOs subtract this amount from their inventory while sellers of ITMOs would add them to their inventory
  – Application of corresponding adjustments to NDCs
    » Parties with a net purchase of ITMOs add this amount to their NDC while sellers of ITMOs would subtract them from their NDC.

Source: Cames et al [2016], Schneider et al [2016]
Market approaches under Article 6

- Avoiding double counting under Art. 6.2
  - Application of corresponding adjustments to reported emissions

Source: Schneider et al (2016)
Market approaches under Article 6

- Avoiding double counting under Art. 6.2
  - Application of corresponding adjustments to emission budgets

Source: Adapted from Schneider et al (2016)
Market approaches under Article 6

- Avoiding double counting under Art. 6.2
  - The term ‘adjustment’ may be somewhat misleading as it suggests that either the reported emissions or the NDC target may be replaced by different values
    - However, both values remain unchanged by the adjustment but the equation simply includes an additional parameter i.e. number of ITMOs
  
- Inventory approach may provide more reliability as determining aggregated national emissions via GHG inventories is a well-established process
  - If ITMOs are used, compliance control needs to take into account all three values to determine whether a Party achieved its target or not
    » the emissions inventory
    » net transfers of ITMOs
    » NDC

- It may be of lesser importance, which approach is finally applied – although for transparency it would be preferable for a common approach to be agreed

Source: Cames et al (2016)
Market approaches under Article 6

- Diversity of NDCs (differences in the type of NDCs)

Source: Cames et al (2016)
Market approaches under Article 6

- Diversity of NDCs (differences in time horizons of NDCs)

Source: Cames et al (2016)
Market approaches under Article 6

- Diversity of NDCs (single year targets vs trajectory targets)
  - A target trajectory represents a commitment to limit cumulative emissions over a continuous period

Advantages:
- Greater certainty over cumulative emissions
- Incentive to start GHG reductions early on

Source: Adapted from Lazarus et al (2014)
Market approaches under Article 6

- Diversity of NDCs (single year targets vs trajectory targets)
  - A single-year target represents a commitment for the target year only, with no specific ambition for the years prior to the target

Disadvantages:
- Vulnerable to climatic conditions
- Impact on cumulative emissions uncertain

Source: Adapted from Lazarus et al (2014)
Market approaches under Article 6

- Diversity of NDCs (single year targets vs trajectory targets)
  - If targets are not determined as a trajectory, it will be challenging to enable the flexibility in terms of in which year emissions reductions may be achieved.

Disadvantages:
No clear accounting requirements for units transferred in a year not covered by the target.

Source: Adapted from Lazarus et al (2014)
Market approaches under Article 6

• Diversity of NDCs
  • The diversity of NDCs can be broadly addressed in two ways

1) Ensuring the compatibility of NDCs
   – Eligibility
     » Excluding countries (i.e. that do not provide a clear target trajectory)
   – Conversion:
     » Request countries to convert their NDCs / adopt common methodologies (i.e. to convert target years into a trajectory)

2) Conversion of corresponding adjustments
   – If mitigation targets of two countries involved in CA are not expressed in the same way – corresponding adjustments converted. Challenges include
     » GWP values (i.e. from different IPCC assessment reports)
     » Non GHG mitigation targets (i.e. RES or EE targets)
     » Reference levels (i.e. BAU / emission intensity / historic base year)

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Market approaches under Article 6

- **Mitigation and Sustainable Development Mechanism (MSDM) (Art. 6.4)**
  - The MSDM enables parties to implement GHG mitigation activities whose results can be used towards fulfilling NDCs / support sustainable development.

- At COP 22, Parties reacted to questions by the co-facilitators during informal consultations on:
  - **Additionality**
    » Parties wish to enable new projects that would not have taken place without Art. 6.4, not activities that are already planned within a NDC.
  - **Governance**
    » Parties expressed strong support for centralised governance, and for enhancing and building on experience from the CDM and JI.
  - **How to use the experiences from existing mechanisms**
    » **Brazilian position**: Supports CDM +
    » **EU position**: Will not accept the replacement of the CDM with a similar mechanism simply under a different name.

Source: IISD (2016)
Market approaches under Article 6

- Similarities of market mechanisms under the Kyoto Protocol and Paris Agreement

<table>
<thead>
<tr>
<th>CDM (Art. 12 of the Kyoto Protocol)</th>
<th>MSDM (Art. 6.4-7 &amp; Para 37-38 of the Paris Agreement)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resulting in certified emission reductions</td>
<td>Verification and certification of emission reductions</td>
</tr>
<tr>
<td>Achieving sustainable development and in contributing to the ultimate objective of the Convention</td>
<td>Contribute to the mitigation of greenhouse gas emissions and support sustainable development</td>
</tr>
<tr>
<td>Additional to any that would occur in the absence of the certified project activity</td>
<td>Additional to any that would otherwise occur</td>
</tr>
<tr>
<td>Supervised by an executive board of the CDM</td>
<td>Supervised by a body designated by the CMA</td>
</tr>
<tr>
<td>Approval of the party involved</td>
<td>Authorised by each Party involved</td>
</tr>
<tr>
<td>May involve private and/or public entities</td>
<td>Incentivise and facilitate participation ... by public and private entities authorised by a Party</td>
</tr>
<tr>
<td>May use the certified emission reductions ... to contribute to compliance</td>
<td>Be used by another Party to fulfil its NDC</td>
</tr>
<tr>
<td>Share of the proceeds from certified project activities is used to cover administrative expenses as well as to assist developing country Parties that are particularly vulnerable to the adverse effects of climate change to meet the costs of adaptation</td>
<td>Share of the proceeds from activities ... is used to cover administrative expenses as well as to assist developing country Parties that are particularly vulnerable to the adverse effects of climate change to meet the costs of adaptation</td>
</tr>
<tr>
<td>Elaborate modalities and procedures</td>
<td>Adopt rules, modalities and procedures</td>
</tr>
<tr>
<td>Voluntary participation</td>
<td>On a voluntary basis</td>
</tr>
</tbody>
</table>

Source: Cames et al (2016)
Market approaches under Article 6

• Differences between the market mechanisms under the Kyoto Protocol and Paris Agreement
  • The CDM distinguishes the roles of Annex I Parties (acquire CERs) and non-Annex I Parties (host mitigation projects)
    – This distinction is entirely dropped out of the MSDM. Developing and developed countries can take on both roles
  • The CDM is project-based (project activities). This was later enhanced by the EB to programmes, which include a number of similar projects.
    – The MSDM does not specify the scope of the mitigation activities but requests that an eligible scope of activities should be further specified
  • The CDM is essentially an offset mechanism. From a global perspective, it does not directly contribute to reduce global GHG emissions
    – The MSDM includes a provision that it shall aim at delivering an overall mitigation in global emissions.

Source: Cames et al [2016]
Market approaches under Article 6

• Design issues for the MSDM
  • Scope: In addition to project and programme-based mitigation activities, the scope of MSDM could be extended to entire sectors or even to policies
    – How could a sector or policy be clearly distinguished from another sector or policy?
      » International classification for sectors? Policies even more difficult
    – The heterogeneity in terms of potential mitigation technologies
      » Technologies applicable across many sectors
      » Incentivised by different kinds of mitigation policies
    – Data may not be available for base year emissions / BAU projections
      » Data monitoring may be required in advance of MSDM operation
    – It may be necessary to elaborate scope specific methodologies for the determination of baselines and monitoring of emission reductions
      » Build upon CDM experiences and gradually increase scope overtime

Source: Cames et al (2016)
Design issues for the MSDM

- Strengthening of the NDC: Additional challenge to MSDM implementation as the shape of the baseline may be uncertain at the start of the activity.
Market approaches under Article 6

• Design issues for the MSDM
  • Governance:
    – Supervision by a body under the guidance of the COP / CMA
      » Similar to the EB of the CDM?
      » Rules and procedures for preparing decisions and for decision making could be built on those from the CDM?
      » Agreement on the competences of the body (i.e. accreditation of independent verifiers, issuance of units, establishing a registry)
  
• How should existing CDM / JI projects be dealt with under the MSDM?
  – Extreme positions: no continuation to quasi automatic continuation
  – Continuation of certain projects / certain countries / adjustment of baselines / re-registration of projects under MSDM?
  – Type of project criteria important
    » RES projects – likely to continue even without revenue from CERs
    » N₂O avoidance from nitric acid plants depend on CERs to continue

Source: Cames et al (2016)
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Synergies and conflicts

- Differences between CA and MSDM
  - Both CA and MSDM allow for the international transfer of international carbon market units among UNFCCC Parties. However, differences include:

<table>
<thead>
<tr>
<th></th>
<th>Art. 6.2</th>
<th>Art. 6.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raising of ambition</td>
<td><strong>Neither</strong> explicitly mentioned in Art. 6.2-3 nor in the respective decision paragraph (36 of 1/CP.21)</td>
<td>Art. 6.4(d) requires that the market mechanism shall “deliver an overall mitigation in global emissions”</td>
</tr>
<tr>
<td>Bindingness: guidance versus rules, modalities and procedures</td>
<td>Parties are mandated to develop guidance for the implementation of the market mechanism</td>
<td>Parties are mandated to elaborate more comprehensive and binding rules, modalities and procedures for under Art. 6.7</td>
</tr>
<tr>
<td>Promotion of contribution to sustainable development</td>
<td>Just speaks of promotion of sustainable development</td>
<td>Speaks more strongly of a contribution to sustainable development</td>
</tr>
<tr>
<td>Governance</td>
<td>Absolutely silent on any governance</td>
<td>A body to supervise the implementation of mechanism is established</td>
</tr>
<tr>
<td>Share of Proceeds (SoP)</td>
<td>No such provision</td>
<td>Activities under the MSDM shall provide a share of proceeds to cover administrative expenses and support adaptation on particularly vulnerable countries</td>
</tr>
</tbody>
</table>

Source: Cames et al (2016)
• **Ensuring a level playing field for the mechanisms under Art. 6**
  
  • The significant differences among both market mechanisms may constitute a considerable distortion of competition
    – The provisions for the MSDM are significantly more stringent and perhaps also more cumbersome than those for CA
    – Parties may prefer CA over MSDM so that finally only one of the market mechanisms may form the basis for the international carbon market

  • If one mechanism appears to be more attractive to the Parties, this should be accepted, provided that both ensure the same level of environmental integrity
    – Yet, this can be questioned since the provisions for CA are less stringent and involve less scrutiny of environmental integrity than in the MSDM
    – To ensure a somewhat level playing field among both market mechanisms the guidance for CA should thus ensure that the CA contributes to both
      » raising the global mitigation ambition
      » sustainable development
      » and is equally stringent in terms of environmental integrity.

Source: Cames et al (2016)
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Article 6 negotiation update

• Outcomes from Marrakesh
  • Procedural conclusions for mechanisms under Art. 6
  • Submissions due 17 March 2017 in response to the discussions undertaken in the three sub-items of the Art. 6 negotiations
  • Following the submissions, the Secretariat will organise a roundtable discussion amongst the Parties at SBSTA 46
  • The issues raised will continue to be under consideration at SBSTA 46

• Reaction to progress
  • Some substantive discussion, though mainly based on contents of submission
  • No substantive negotiations due to time constraints (one week only)
  • Purely procedural conclusions, little progress because submissions may be somewhat more structured
  • No agreement on a workplan towards adoption of RMP by 2018

Source: IISD (2016)
**Timeline for the RMP**

- Marrakech made a fair deal of progress on the rules, modalities and procedures (RMP) of the Paris Agreement. Important outcomes from the CMA included
  - Setting 2018 as the deadline for concluding the operationalisation of the Paris Agreement

  » Ambitious given that the Kyoto Protocol required three years to set rules, modalities and procedures

- ‘Roadblocks’ in advancing technical discussions on the RMP include:
  - Developing countries continue to worry about developed countries’ wanting to “delay” fulfilling their obligations to the post-2020 era

  » when the previous distinction between developed and developing countries under the KP will no longer apply under the PA

  » All countries are expected to make contributions to climate action prior to 2020.

**Source:** IISD (2016)
Influence of ICAO on negotiation of Art. 6

- ICAO adopted in Oct. 2016 its resolution on a Global Market Based Measure
  - With this resolution, ICAO creates the CORSIA as a high level framework for the mechanism
    » A key element of CORSIA that has not yet been finalised is which programmes and project types will be eligible (criteria to be agreed)

Demand from CORSIA is expected to be considerable

- Aggregated demand from CORSIA (2021-35) of expected 2.7 Gt compares with 1.7 Gt issued under the CDM from 2001 to 2017
  » Demand from aviation likely be important driver of carbon markets post 2020

- Additional demand important as almost a quarter of countries stated that they do not intend to use market mechanisms to fulfil their NDCs
  » Need to ensure that support is provided to Parties open to the use of mechanisms - reflecting their level of capacity and experience

Source: Cames et al (2016)
Thank you for your attention

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