Quick Facts on Article 6 - Market Mechanisms

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Content

1 What is Article 6 of the Paris Agreement?

- Article 6 of the Paris Agreement (PA) introduces several provisions for using international market mechanisms (UNFCCC 2015). Article 6.1 outlines four main purposes:
  (1) implementation of nationally determined contributions (NDCs);
  (2) allowing for higher ambition in mitigation and adaptation actions;
  (3) promoting sustainable development; and
  (4) promoting environmental integrity.
- Both the cooperative approaches (CAs) under Article 6.2 and 6.3 and the mitigation and sustainable development mechanism (MSDM) under Article 6.4 allow countries to use internationally transferred mitigation outcomes (ITMOs) to fulfil their NDCs. However, the extent to which ITMOs will be used under these market mechanism approaches is subject to continued negotiation to ensure that all of the objectives outlined in Article 6.1 of the PA are fulfilled. International guidance on implementing Article 6.2 is therefore currently being negotiated under the Subsi¬diary Body for Science and Technology Advice (SBSTA). Similarly rules, modalities and procedures for implementing Article 6.4 are simultaneously being developed also under SBSTA. According to the co-facilitator's informal work plan, recommendations for both market mechanism approaches are expected to be completed by the 49th SBSTA session in 2018.

1.1 Cooperative approaches (CAs)

- CAs are commonly understood to allow Parties to use ITMOs to contribute to the achievement of their NDC. CAs between Parties may involve the linking of their emission trading schemes, the use of international crediting mechanisms or direct bilateral transfers. To avoid the risk of double counting emission reductions, Parties engaging in CAs are expected under Article 6.2 to apply 'robust accounting'. Parties are expected to make 'corresponding adjustments' to either their GHG inventory or NDC target (yet to be determined) in order to account for the flow of ITMOs between Parties. The ability to adjust the NDC target upwards to account for the purchase of ITMOs also provides an opportunity to encourage higher levels of mitigation ambition amongst the Parties.

1.2 Mitigation and Sustainable Development (MSDM) Mechanism

- The MSDM is widely understood to be a new market mechanism under the autho¬rity and guidance of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA). The design elements of the MSDM strongly resembles those of the Clean Development Mechanism (CDM): 'the mechanism has a dual objective of supporting mitigation action as well as sustainable development, is under authority and guidance of the CMA and supervised by a UNFCCC body, involves public as well as private entities, and requires mitigation action to be additional, real, measurable, long term, as well as to be verified by designated operati¬onal entities' (Schneider et al. 2016).
- Although there are many similarities between the MSDM and the market mechanisms under the Kyoto Protocol (KP), there are a number of important differences. Cames et al. (2016) refer to the following key differences:
  (1) While the CDM distinguishes between Annex I Parties (acquire certified emissions reductions (CERs)) and non-Annex I Parties (host mitigation projects), this distinction has been dropped from the MSDM;
  (2) The CDM is project-based (later redefined by the Executive Board (EB) as programmes, which can include a number of similar projects), whereas the MSDM does not specify the scope of the mitigation activities but requests that the eligible scope be further specified;
  (3) The CDM is an offset mechanism, which, from a global perspective, does not directly contribute to reducing global GHG emissions. By contrast, the MSDM is subject to a provision stating that it shall aim to mitigate global emissions overall.

1.3 Differences between the market mechanisms under Article 6

- Table 1 provides an overview of the differences between the CA (i.e. Article 6.2-3) and the MSDM (i.e. Article 6.4). The provisions for the MSDM are significantly more stringent and perhaps more burdensome than those for CAs (Cames et al. 2016). Parties may potentially prefer CAs over the MSDM; however this will ultimately depend on the stringency of the guidance currently under development for CAs, which will need to balance the demands from 'those wishing to retain full flexibility and those advocating command and elaborated guidance and/or strong international governance' (Carbon Mechanisms Review 2017a).

Table 1: Differences between the market mechanisms

	CA	MSDM
Raising of ambition	Neither explicitly mentioned in Art. 6.2-3 nor in the respective decision paragraph (36 of 1/CP.21).	Art. 6.4(d) requires that the market mechanism shall 'deliver an overall mitigation in global emissions'.
Bindingness: guidance versus rules, modalities and procedures	Parties are mandated to develop gui¬-dance for the implementation of the market mechanism.	Parties are mandated to elaborate more comprehensive and binding rules, modalities and procedures for under Art. 6.7.
Promotion of contribution to sus-tain¬able development	Just speaks of promotion of sustainab¬le development.	Speaks more strongly of a contribu-tion to sustainable development.
Governance	Requires transparency to be included in governance. However, no further specifi-cation of governance.	A body to supervise the implementa-ti¬on of mechanism is established.
Share of proceeds	No such provision.	Activities under the MSDM shall provide a share of proceeds to cover administrative expenses and sup-port adaptation.

Source: Adapted from Cames et al. (2016)

2 Why should we use Article 6?

2.1 Buying perspective

The use of Article 6 should benefit buyers of ITMOs in the following possible ways:

- Facilitating the achievement of mitigation targets set towards the Paris Agreement, by providing flexibility to reduce emissions in a cost-effective manner;
- Enabling countries to adopt more ambitious international mitigation targets, due to the cost reductions achieved through international market mechanisms;
- Provide flexibility in achieving targets;
- Allowing the verification of mitigation outcomes from climate finance, i.e. by purchasing and cancelling carbon market units as part of results-based climate finance programmes;
- Provide a product (i.e. ITMO) of a good quality to facilitate voluntary contributions by goverments or private entities, which may for example enable countries to achieve climate neutrality in a quantifiable way.

2.2 Selling perspective

The use of Article 6 should benefit sellers of ITMOs in the following possible ways:

- Enabling countries to use revenue from international market mechanisms to finance emission reductions, which are likely to occur sooner than without the financial incentives from carbon markets;
- Facilitating capacity building, technology transfer and diffusion, and awareness raising that may lead to increased mitigation action in the future;

- Enabling voluntary offsetting of emissions (that undergo robust accounting) by governments, the private sector, individuals, or non-governmental organisations;
- The rigorous MRV protocols expected to be developed under Article 6 approaches, and by following the rules and guidelines agreed multilaterally, will better position seller countries to pitch their mitigation actions for results-based climate finance. Co-benefits include generating business and investment opportunities, creating new job opportunities and strengthening regional economies;
- Improving accounting as data, information and methods used by the market mechanisms can be used to update inventory and improve overall GHG accounting;
- Mobilising private sector finance and innovation potential.

2.3 Environmental perspective

The use of Article 6 should benefit the environment in the following possible ways:

- Article 6.1 of the Paris Agreement refers to the market mechanisms enabling 'higher ambition' in mitigation actions (UNFCCC 2015);
- Article 6.2 strongly outlines the need to avoid the 'double counting' of emission reductions (UNFCCC 2015);
- Article 6.4 specifically mentions that the market mechanism is to 'deliver an overall mitigation in global emissions' (UNFCCC 2015);
- Net emission reductions from market mechanisms under Article 6 could be achieved in various ways that are currently under negotiation:
    - For example, the transfer of an ITMO generated outside of the scope of the selling Party's NDC would result in 'direct' emission reductions rather than simply offsetting the increasing emissions of the buying Party (i.e. as in the CDM);
    - ITMOs could also be discounted to contribute to overall emission reductions.
- Article 6 instruments may enable more mitigation through both earlier actual mitigation action on the ground and through the speeding up of the ambition raising process for NDCs. However only if implemented correctly (i.e. without perverse incentives);
- Article 6 instruments may further the quality of emission reduction units used under the PA by enabling robust, stringent and consistent MRV practices in different carbon pricing instruments acknowledged under it (assuming Parties negotiate strict rules and guidance).

3 What are the contributions and potential risks of Article 6?

3.1 Implementation of NDCs

3.1.1 Contributions

- The market mechanisms under Article 6 aim to reduce the cost of mitigating climate change, thereby facilitating the achievement of mitigation targets.
    - Article 6.2 refers to the 'use of ITMOs towards NDCs' (UNFCCC 2015); and
    - Articles 6.4(c) and 6.5 refer to the use of emission reductions resulting from the Article 6.4 mechanism towards NDCs (UNFCCC 2015).

3.1.2 Risks

- The extent to which market mechanisms will be used to fulfil NDCs is currently uncertain. Based on an analysis by IETA (2017), 92 out of the 190 INDCs submitted intend to use the international market mechanisms under Article 6.
    - Although the number is quite high, most are aspirant sellers in the carbon market and are mostly low-income countries who have limited experience with existing market mechanisms.
- The largest global emitters do not currently intend to use international markets to fulfil their INDCs, which means that at present, there is no significant prospective demand for an international market mechanism.

    - However, this does not completely exclude the possibility that more countries may decide to use market mechanisms either during the update process from INDCs to NDCs by 2019 or to fulfil subsequent, more ambitious NDCs.
- Of those who may use international market mechanisms, most do not specify what mechanism(s) they intend to use.

3.2 Raising of ambition

3.2.1 Contributions

- Article 6.1 refers to allowing for higher ambition in mitigation and adaptation actions; this could be inter¬preted as the overarching purpose of Article 6, applicable to both the CA and the MSDM (Cames et al. 2016).
- Given that the PA requires Parties to update their NDCs every five years after taking into account the outcome of the Global Stocktake, it is expected that the market mechanisms under Article 6 should facilitate 'higher ambition' from the Parties.
- 'Allowing for higher ambition' could however have different meanings, such as
    - encouraging more ambitious subsequent NDCs (i.e. with abatement costs reduced via trading);
    - providing net emission reductions (i.e. possibly via the discounting of ITMOs); or
    - providing finance for adaptation actions that go beyond the adaptation measures pledged in Parties' NDCs.
- Parties should therefore clarify how they interpret 'allowing for higher ambition' in the forthcoming negotiations.

3.2.2 Risks

- The reliance upon ITMOs to fulfil NDCs may delay domestic efforts for abatement by the buying country undermining long-term efforts to decarbonise their economies.
    - It may be necessary for limits to be put in place for the contribution of ITMOs towards the achievement of NDCs to prevent the 'lock in' of high carbon investments in the buying country. For example, Sweden's 2040 target includes an 85 % domestic effort and a 15 % effort through the use of international market mechanisms (New Scientist 2017).
- The design of the market mechanisms under Article 6 needs to prevent the creation of perverse incentives that deter countries from raising the ambition of their NDCs.
    - For example, a country may limit the scope of its NDC to ensure that it can generate more ITMOs that can be traded on the international market. The design of the market mechanisms will therefore have to provide incentives to encourage countries to increase the ambition and scope of their NDCs.
- The provisions against double counting (i.e. Article 6.5 and paragraph 36 of the decision text referring to corresponding adjustments) suggest that the transferring country would most likely not be able to use these mitigation outcomes to fulfil their own NDC pledges (conditional or non-conditional) (Spalding-Fecher et al. 2017).
    - If it is not possible for the transferring country to use at least part of the mitigation outcome towards their conditional target, then the ambition raising incentive of Article 6 is slightly weakened in this context from the selling perspective. This needs to be further clarified in the negotiations.

3.3 Promoting sustainable development

3.3.1 Contributions

- Achieving sustainable development (i.e. delivering economic, environmental and social benefits) is often a further purpose of international market mechanisms.
    - For the MSDM under Article 6.4, sustainable development is one of the primary purposes;
    - CAs under Article 6.2 also encourages the promotion of sustainable development as one of the requirements for Parties when transferring ITMOs;
    - Moreover, Article 6.1 mentions the promotion of sustainable development.

- Under Article 6, many countries have argued that the assessment of sustainable development should remain a prerogative of countries.
- Nevertheless, there is growing support amongst stakeholders that Parties should be required to report (i.e. sustainable development checklists) on how the use of international mechanisms promotes sustainable development.

3.3.2 Risks

- The dual objective of low cost emission reductions and promoting sustainable development under the CDM were often conflicting with one another.
  - For example, the most cost effective emission reduction project (i.e. HFC-23 projects) often provided limited benefits with regards to sustainable development. While there was a financial incentive for project developers to realise low cost mitigation potential, similar financial incentives for the promotion of sustainable development were simply not as strong. Albeit the development of the 'Gold Standard' provided sellers with the option to support projects associated with wider social benefits.
- The extent to which this issue reoccurs under the Article 6 market mechanisms will depend upon the stringency of the guidance set under the CAs (Article 6.2) and the modalities and rules applied under the MSDM (Article 6.4).
- How sustainable development is ultimately defined, and especially, implemented under Article 6 will also be very important. The mitigation and sustainable development components of the market mechanisms under Article 6 need to be better balanced than was previously the case under the CDM.

3.4 Ensuring environmental integrity

3.4.1 Contributions

- In the context of international transfers under Article 6, environmental integrity could mean that the international transfer of ITMOs should not result in higher global emissions than if the NDCs had been achieved only through domestic action. Schneider et al. (2017) argues that the environmental integrity of Article 6 depends upon:
  (1) the ambition of the NDCs (i.e. a country with an ambitious economy wide NDC target has an incentive to make sure that ITMOs have sufficient quality otherwise it would have to compensate for the transfer with either further emission reductions or the further purchasing of international units);
  (2) incentives for future mitigation action (i.e. market mechanisms may encourage countries to adopt more ambitious targets due to the lower cost of mitigation, however could also create disincentives to pursue mitigation action in the future if this would lower potential revenue from selling credits);
  (3) integrity of mitigation outcomes (i.e. the market mechanism makes sure that the issuance or transfer of one unit, defined as 1 t CO_2eq, leads directly to an emission reduction of at least 1 t CO_2eq in the transferring country, compared to a counterfactual scenario whereby the mechanism did not exist); and
  (4) robust accounting (i.e. global GHG emissions could increase as a result of an international transfer if emission reductions are double counted).
- The market mechanisms under Article 6 both aim to ensure the environmental integrity of the PA. For example,
  - Article 6.2 requires Parties to 'ensure environmental integrity and transparency' where engaging in CAs;
  - Article 6.4 also has a number of provisions that aim to safeguard environmental integrity. These include requiring that mitigation benefits be real, measurable and long term; that additionality is ensured; and that emission reductions be verified and certified by designated operational entities (UNFCCC 2015).

3.4.2 Risks

- Will both the international guidance under Article 6.2 and the provisions under Article 6.4 actually address issues of environmental integrity (i.e. additionality, double counting, avoiding hot air etc.) and do so in a consistent manner?

- Schneider et al (2017) show in aggregate levels, that current NDC targets represent a decrease compared to projected worldwide BAU emissions in 2030; yet up to 68 % of the mitigation ambition contained in NDCs that are more stringent than BAU could be undermined if all the hot air from NDCs that are less stringent than BAU were to be transferred. Furthermore roughly 12 to 14 % of global emissions in 2030 are not covered by NDC targets. Depending on the scenario, it is estimated that between 8 and 10 Gt CO_2eq in 2030 are either not included in NDC targets or represent hot air (Schneider et al. 2017).
- In order to avoid the transfer of hot air undermining the environmental integrity of the PA, Schneider et al. (2017) refers to some of the options currently under discussion:
  (1) Establishing principles for international guidelines for NDCs;
  (2) Ensuring transparency through setting up international reporting and review processes;
  (3) Setting eligibility criteria for the participation of countries in the transfer of ITMOs (i.e. based on the ambition and scope of NDC targets);
  (4) Setting limits on international transfers (i.e. based on a supplementary principle).

3.5 Involvement of the private sector

3.5.1 Contributions

- The private sector has been one of the major drivers of market mechanisms in the past. In many countries, the CDM and Joint Implementation (JI) have played a crucial role for engaging the private sector in the mitigation debate, convincing the actors that mitigation action can bring not only atmospheric but also financial benefits.
- The search function of a market approach is very important, enabling knowledge of the private sector to be utilised regarding technologies available and under development, their potential to reduce emissions and the resulting investment opportunities.
- Private actors are expecting the continuation of market mechanisms and it is therefore a task of policy makers to fulfil these expectations. The potential use of credits generated by Article 6.4 under climate finance could also be a new way of engaging the private sector.

3.5.2 Risks

- A lack of oversight of the private sector could lead to projects not guaranteeing real emissions reductions if the requirements for transparency and robust accounting are not clearly defined and correctly implemented.
- Without sufficient demand for international credits, the price signal may not be strong enough to finance the mitigation abatement necessary in order to decarbonise economies within the timeframe requested by the IPCC.
- The confidence of the private sector in the market may be completely undermined if CDM investments are destroyed with a 'stroke of a pen' regardless of their merits (Carbon Mechanisms Review 2017b). It may be necessary to therefore transition some CDM activities into the MSDM under Article 6.4; however this is subject to ongoing negotiation.

4 Conclusion

- This briefing paper has deliberately taken a step back to focus on a fundamental question regarding market mechanisms – namely what are the justifications for the continuation of market instruments post 2020? We have highlighted a range of potential benefits from the perspective of the buyer (i.e. lower compliance costs) and seller (i.e. capacity building / technology transfer) of ITMOs as well as the potential upside for the environment (i.e. net reductions in global emissions). However, these benefits can only be fully realised if the design of future market mechanisms under Article 6 avoid the risks that could ultimately undermine the environmental integrity of the PA. This will require learning from past mistakes and ensuring that safeguards are put in place to limit the transfer of potential hot air. If the market is harnessed correctly (i.e. perverse incentives are avoided), the market mechanisms under Article 6 could successfully work in tandem with the global stocktake to increase ambition levels amongst the Parties in future years.

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