

Built on Experience

How to transition from the CDM to the Sustainable Development Mechanism under the Paris Agreement

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In the run up to the Paris Conference, the supporters of market mechanisms feared that the Paris Agreement (PA) would at best feature a passing mentioning of transfers of emission units. It thus came as a real surprise that an entire article of the PA deals with market mechanisms, and the accompanying Paris Decision (PD) already specifies critical principles of these mechanisms.

Article 6 defines two kinds of market mechanisms: a centralized mechanism “to contribute to the mitigation of greenhouse gas emissions and support sustainable development” (Art. 6.4) as well as decentralized “cooperative approaches” (Art. 6.2 and 6.3). Given the cumbersome official name of the mechanism under Article 6.4, the term “Sustainable Development Mechanism” (SDM) appears to be universally accepted.

The first Conference and Meeting of the Parties to the Paris Agreement (CMA) that is likely to be held in 2018 or 2019 is to agree on modalities and procedures for the SDM. These have to be elaborated in the coming years. What role can the CDM, and in particular programmatic approaches, play in these rules (see the discussion in Michaelowa 2012)?

1. Using CDM-related institutions for the SDM

In many aspects, the SDM builds on institutions that have been developed over many years under the CDM and JI. According to Article 6.4, the SDM is supervised by a body designated through the CMA. Here, it would make a lot of sense to design that body on the basis of the lessons learned with the CDM Executive Board (CDM EB) or even to designate the CDM EB to become the SDM EB. Compared to other institutions in international climate policy, the CDM EB has performed well and has been sufficiently versatile to learn from on-the-ground experience with CDM implementation. Another advantage of this approach would be that the accumulated budget surplus of the CDM EB could be utilized for designing a future mechanism instead of financing activities that are not always of the highest priority.

Article 6.4b requires that private and public entities participating in the SDM need to be authorised by their governments. The established structure of the Designated National Authorities (DNAs) of the CDM could be used for this process. In order to prevent the current erosion of DNA capacities from continuing, an early decision on the role of the DNAs in the SDM is needed.

Paragraph 37e states that Designated Operational Entities (DOEs) are to verify and certify emission reductions under the SDM. Here, it would be important to directly grant DOE status to all DOEs accredited under the CDM. As in the case of DNAs, this could stem the loss of DOE capacities.

An adaptation tax is levied on transactions under the SDM (Art. 6.6); the procedures applied under the CDM could directly be applied.

2. Building on CDM principles in the design of the SDM

In the Paris Decision, key principles of the CDM are applied to the SDM. The SDM shall be voluntary (para 37a PD). It is to generate “real, measurable, and long-term benefits related to the mitigation of climate change” (para 37b PD). This means that CDM baseline and monitoring methodologies can generally be applied to the SDM. Given that the SDM may also credit mitigation policy instruments, the methodology standardization efforts of recent years need to be assessed for their robustness for calculating mitigation achieved by policy instruments.

Moreover, the principle of additionality is defined in Paragraph 37d. Here, the CDM’s additionality tests need to be developed further. Highly aggregated approaches to mitigation on a sectoral level or involving cross-sectoral policy instruments are challenging when it comes to additionality testing. For example, the role of co-benefits in the introduction of mitigation policies needs to be taken into account to ensure high environmental integrity of SDM credits. Rational policy makers would introduce policy instruments if the overall societal benefits exceed the costs. So even if there are positive mitigation costs, the policy could not be seen as additional if it generates co-benefits that exceed the mitigation costs. Here, the different characteristics of Nationally Determined Contributions (NDCs) play an important role – countries with weak baselines in their NDCs should not be enabled to generate more credits under the SDM than countries with stringent ones. A policy instrument that is part of the baseline in a stringent NDC would not get any credits while the same instrument that is part of the measures under the NDC would be credited.



Success story PoAs: rural electrification in Bhutan.

An explicit statement that the experience gained with the Kyoto Mechanisms shall be applied in determining SDM rules is found in Paragraph 37f. This provides an anchor to bring in experience gained in those fields that so far has not been mentioned in the Paris texts. For example, special rules for certain technologies and scales of their implementation, as well as country groups, need to be scrutinized carefully regarding their appropriateness under the SDM. Should the SDM be less stringent regarding policy instruments that mobilize micro-scale technologies? Should it accept all policy instruments in Least Developed Countries regardless of their additionality?

3. Learning from programmatic approaches

The programmes of activities (PoAs) under the CDM are the only component to have survived the market crash after 2012 to any great extent. PoAs have achieved high sustainable development co-benefits due to their appropriateness for dispersed, small-scale technologies. Therefore, credit buyers have been willing to pay substantial premiums for PoA credits. Nevertheless, PoAs have never been able to demonstrate their advantages in an environment of high credit prices.



Checks and balances: a geothermal power plant in Indonesia.

The lessons learned from upscaling PoAs can be very helpful for the SDM, which aims to upscale mitigation beyond single projects. Increasingly, Nationally Appropriate Mitigation Actions (NAMAs) are built around PoAs. Given the challenge of finding finance for NAMA implementation, revenues from SDM credits could play the key role in making such approaches viable.

4. SDM features beyond the CDM

Given that all countries are to submit NDCs under the Paris Agreement, it is crucial to prevent double counting of emissions achieved through the SDM reductions by the seller and the buyer country. Therefore, it is imperative that the emission reductions achieved are allocated between these two countries (Art. 6.4c and 6.5). This is more complex than it might seem. While the SDM should not have any problems in preventing double issuance, double claiming is more difficult to address, as it requires full international oversight over national emissions inventories. This is necessary to allow consistent tracking and reporting on units (see Schneider et al.

2015, and 'Ensuring Integrity' in this issue). Whether the SDM EB will be able to exercise such oversight remains doubtful, as it would require the authority to scrutinize how countries set up and manage their emissions registries.

The SDM's level of aggregation needs to be defined (para 37c PD). If it allows crediting of mitigation policy instruments or NAMAs, a number of questions arise (see Dransfeld et al. 2015a). Incentive structures need to be sufficiently attractive for emitters to achieve mitigation. The revenue from credit sales actually needs to reach those actors that make the decisions to operate mitigation technology. If it was retained by government institutions, emitters would not react unless the government provides carrots to emitters for mitigation or wields sticks against them (see Michaelowa 2012).

According to Article 6.4d, the SDM is to achieve a reduction in global emissions. The most transparent way to achieve this would be to discount the number of emission credits compared to the emission reductions achieved: alternatively, credits could be retained by the SDM EB and cancelled. The use of stringent baseline methodologies would indirectly achieve a global emission reduction. However, it is difficult to generate a level playing field across mitigation technologies and policy instruments.

The crediting period of activities under the SDM has not yet been specified. Given that governments usually change every few years, the lifetime of sectoral approaches and policy instruments is likely to be lower than that of mitigation technologies. On the other hand, a transformative policy instrument, such as fuel taxes, can have a lifetime lasting many decades.

5. Competition between the SDM and the Cooperative Approaches

Many observers assume that the "cooperative approaches" (CAs) under Article 6.2 and 6.3 allow countries to define bilateral market mechanisms generating "internationally transferred mitigation outcomes" (ITMOs) without relevant international oversight. The PA is much less specific on the CAs than on the SDM; it only mentions that CAs should satisfy environmental integrity and transparency. If CAs are not sufficiently controlled, they could generate ruinous competition for SDM

credits. This risk is exacerbated by the possibility of using ITMOs before 2020 (para 107 PD). Given that the fragmentation of carbon markets since 2009 has not really benefitted anyone (as foreseen by Michaelowa 2011), the lessons learned from this troubled period should not be overlooked. The desired reduction in transaction costs has not really been achieved and prices for emissions credits are both intransparent and vary by several orders of magnitude. Therefore, we call upon governments to ensure that CAs cannot undercut the SDM in terms of environmental integrity and international oversight.

6. Combining climate finance and the SDM

The CDM was unable to harness climate finance due to an overly rigid definition of the Global Environment Facility (GEF) regarding use of GEF funding for CDM projects. Now, blending of climate finance with market mechanism revenues is becoming generally accepted. Obviously, additionality needs to be respected but there are ample opportunities for blending, particularly when it comes to overcoming the investment barriers linked with insufficient trust that a national mitigation policy instrument will prevail in the long term. Here, the key challenge will be to create guarantee systems that enable the trust deficit to be overcome.

Furthermore, the direct use of SDM credits by climate finance institutions could prevent that these institutions “reinvent the wheel”. Initial experience with the Green Climate Fund (GCF) highlights the risk of vague and lenient mitigation assessments by climate finance institutions. This could be prevented by using the SDM, even before 2020, to generate mitigation outcomes that are credible. A fragmentation of mitigation assessment methodologies must be prevented at all costs as it would lead to a further lack of trust and jeopardize long-term mitigation ambition.

7. The future of the Paris mechanisms

In a similar way to the development of detailed modalities and procedures for the Kyoto Mechanisms in the Marrakech Accords after the Kyoto Protocol was signed, the coming years will be crucial in deciding whether the Paris Mechanisms will

play a role that is comparable to the CDM in its heyday between 2005 and 2009. As CDM rules have been substantially reformed and streamlined over the “doldrum years”, they form an excellent basis for developing the SDM rulebook. Achieving a balance between environmental integrity and transaction costs is decisive. In order to achieve a smooth transition between the Kyoto and Paris Mechanisms, it would be highly desirable to use the CDM as the core of the SDM and to translate the CDM portfolio into the SDM. A provision on early action for the SDM could play a key role in making it competitive against the CAs and generate trust among governments and market participants.

With the increasing role of climate finance mechanisms like the GCF, the linking of the Paris Mechanisms with climate finance streams will also become critical, especially until the NDCs kick in in 2020.

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