



# Good-Bye Kyoto:

TRANSITIONING AWAY FROM OFFSETTING AFTER 2020

Carbon Market Watch Policy Brief · April 2017

2020

CDM

## **Executive Summary**

The 2015 Paris Agreement, which sets out the framework for global climate action after 2020, includes the establishment of the Sustainable Development Mechanism (SDM). The goals of the SDM are to promote higher ambition that contributes to emission reductions and sustainable development, and deliver an overall mitigation of greenhouse gas emissions.

While it shares a number of the characteristics of its predecessor, the Clean Development Mechanism (CDM) established under the Kyoto Protocol in 1996, the SDM must function in a world where all countries have climate mitigation targets. This stands in stark contrast to the design of the CDM which was established as a pure offsetting mechanism for a bifurcated world. Reductions in developing countries produced credits that could be used to 'offset' increased emissions in developed countries but still meet their climate targets. Yet, the future of the CDM, its rules, institutional set-up and projects remains unclear.

To avoid a dangerous overlap of the two mechanisms that could jeopardize the accounting of emission reductions towards the Paris Agreement's goals, it is time to phase out the CDM and learn from the experiences with the mechanism to start over new with the SDM.

This briefing explains the differences in the contexts of the Kyoto Protocol and the Paris Agreement, the differences between the CDM and the SDM, the lessons of the CDM experience for the SDM, and recommends steps to transition from the CDM to the SDM.

## **Key Recommendations**

- **Abolish carbon offsetting for the Paris Agreement**
- **Design the SDM as a tool for results based climate finance**
- **Transition project registration from the CDM to the SDM**
- **End use of CDM credits in 2023**
- **Inform a new reformed SDM supervisory body**
- **Adapt CDM infrastructure**
- **Establish a CMP CMA process to guide the transition process**

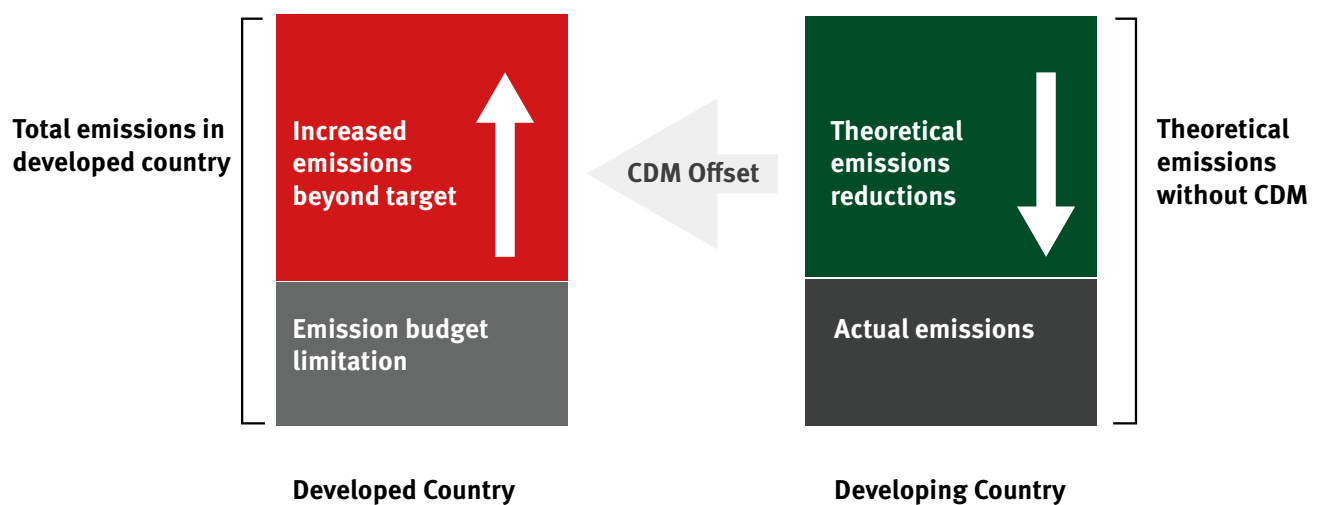
## Kyoto versus Paris climate policy frameworks

The Kyoto Protocol and the Paris Agreement are separate and independent instruments of the United Nations Framework Convention on Climate Change (UNFCCC), they are not directly related to one another and also represent different eras and contexts. The Kyoto Protocol created the CDM to serve a bifurcated world divided between developed countries with specific targets quantified in a budget for a given and limited period of time and developing countries without emission targets.

Under the Paris Agreement by contrast, the world is no longer divided into two groups with and without commitments. All parties are expected to make and implement climate commitments called nationally determined contributions (NDCs) to help fulfil the Paris Agreement's goals to limit warming to 1.5 degrees and to decarbonize by the second half of this century. 164 countries have submitted INDCs so far. Although the Paris Agreement defines stocktaking cycles of five years, new climate commitments are expected regularly and in perpetuity until the Paris Agreement's goals are reached.

This contrast is important when looking at the Clean Development Mechanism (CDM) and the Sustainable Development Mechanism (SDM) which were established to reach the goals of the Kyoto Protocol and the Paris Agreement respectively.

### Offsetting: No Overall Reduction



### The Clean Development Mechanism

The CDM was one of the three flexibility mechanisms established under the Kyoto Protocol. Its dual mandate is to provide a cheaper option to comply with the reduction targets of developed countries under the Kyoto Protocol and assist with the sustainable development of developing countries. The logic of creating a cheaper compliance option for developed countries was based on the theory that a ton of greenhouse gasses has the same global warming effect wherever it is emitted. Correspondingly, if reducing a ton of a greenhouse gas is cheaper in one place rather than another, it is more efficient to reduce the gas at where it is cheapest. However, the CDM was designed as an offsetting mechanism which limited its goal to shifting the location of an emission reductions rather than reducing overall emissions.

### **The CDM in numbers:**

- 7,768 registered projects as of April 2017
- Over 1,814 Mt CO<sub>2</sub>e carbon credits issued to date (comparable to the 2013 emissions of France, Germany and the UK combined)
- As estimated potential supply of 4,829 Mt CO<sub>2</sub>e carbon credits from registered projects from 2013 to 2020
- About 70% of carbon credits originate from projects in China and India
- About 73% of carbon credits issued are likely to be bogus credits because they do not represent additional, measureable emission reductions

*(Sources: UNFCCC, WRI, and Öko-Intitut)*

## **The Sustainable Development Mechanism**

The Paris Agreement's Article 6 opens a new era for international carbon markets. In addition to providing a legal basis for the use of so called "cooperative approaches", it establishes the Sustainable Development Mechanism (SDM) which is understood as an heir to the Clean Development Mechanism (CDM) and Joint Implementation (JI). Similar to the CDM, its goal is to contribute to the mitigation of greenhouse gas emissions and support sustainable development.

The SDM has a number of CDM and JI features, including the CDM's share of proceeds provision for administrative costs and adaptation financing. However, the Paris Agreement's wording suggests that all countries will be able to generate and use units towards their climate pledges. Critically, the SDM adds a more specific goal to "deliver an overall mitigation in global emissions". Of fundamental importance is that the SDM must function in a world where all countries, and particularly countries potentially hosting SDM activities have climate commitments.

## **Lessons from the Clean Development Mechanism**

The CDM provided a valuable learning experience with a number of positive aspects, but also lessons to be avoided when deciding how the SDM will operate.

In theory, the CDM was an efficient way to reduce emissions by mobilizing capital and encouraging participation of developed and developing countries and the private sector to help reduce emissions. By involving the innovative capacity of the private sector, a valuable catalogue of ways to approach mitigation was continuously expanded. Perhaps most importantly, the CDM built capacity and brought technology to developing countries, provided a framework to estimate the impact of that effort, and attempt to account and price it, thereby mobilizing financial flows to reduce emissions in developing countries.

Arguably one of the largest success of the CDM is the catalogue of methodologies and associated emission reduction estimates, which can provide a quantified estimate of emission reductions for a given amount of financing. When voluntarily cancelled rather than used towards a climate target, the CDM can contribute to an overall reduction in emissions or "net mitigation", often referred to as "Results Based Finance".

While innovative at the time, the CDM also showed a number of shortcomings:

**No overall emission reductions:** The CDM was designed for countries that did not have commitments to be met under the Kyoto Protocol. Its goal was to reduce emissions in developing countries to compensate for increased emissions in developed countries leading to a net neutral outcome, not a reduction of overall emissions.

**Problematic accounting:** Several CDM host countries made climate commitments in Copenhagen and Cancun, a laudable step forward in ambition. Yet, if emission reductions from such jurisdictions are counted towards national targets and sold as CDM offset credits at the same time, these reductions are counted towards multiple reduction goals. This means that the actual global emissions could be higher than the sum of what individual countries report.

**Perverse incentives:** The CDM was faced with the challenge of potentially discouraging countries from implementing climate friendly policies because this would lower the number of credits given out. To address this, the CDM rules do not take new climate friendly policies in developing countries into consideration which may result in the issuance of offset credits that do not accurately represent the climate and energy policy context of the host country.

**False assumptions:** Another challenge of the CDM was keeping up with technological progression over time. Partly because of these assumptions, a vast majority of carbon offsets are very likely not additional, measurable, or real - meaning that they would have happened anyway. New analysis<sup>1</sup> shows that about 73% of all potential CDM credits between 2013 and 2020 do not represent real emission reductions. When and if these credits are used as an offset, these credits increased overall emissions.

**Questionable sustainable development benefits:** Ambiguous rules about the contribution of a given project to sustainable development has led to vastly different results in different countries. Site visits and first hand reports from local communities in the vicinity of CDM projects have shown that many implemented CDM projects do not live up to the sustainable development benefits indicated in the official project dossiers. Some projects even had negative environmental and social consequences. Moreover the fact that the CDM follows the concept of technology neutrality has led to controversy regarding the eligibility of fossil fuel projects, such as the construction of new coal fired power plants.

## Phasing out the CDM

The CDM was established as an offsetting mechanism where emissions in developed countries that had climate targets with emission reducing projects in developing countries without targets. In contrast, the SDM must function in a world where all countries have climate mitigation targets, contribute to sustainable development, and deliver an overall mitigation of greenhouse gas emissions.

To address this crucial difference between the two mechanisms, the SDM will have to take the commitments of all countries into account, and re-evaluate the CDM's with a view to learning from the CDM experience notably its approach to additionality, and how it provides perverse incentives against further climate action. Critically, the SDM needs to be accompanied with a larger strategy to implement broader climate policies to help developing countries achieve their own targets.

The different legal frameworks of the Kyoto Protocol and the Paris Agreement lead to a number of challenges in implementing the SDM. The Kyoto Protocol's commitment periods will end in 2020. Parties now need to actively decide how to transition the protocol's instruments and its institutions, including the CDM in the Paris framework.



<sup>1</sup> Cames, M. et al (2016). How additional is the CDM? Analysis of the application of current tools and proposed alternatives. Öko-Institut. Study prepared for DG CLIMA. Available here: [https://ec.europa.eu/clima/sites/clima/files/ets/docs/clean\\_dev\\_mechanism\\_en.pdf](https://ec.europa.eu/clima/sites/clima/files/ets/docs/clean_dev_mechanism_en.pdf)

What is clear is that a potential overlap between the CDM and the SDM, as well as the use of CDM credits towards Paris commitments, poses a number of challenges. These are a perpetuation of the shortcomings of the CDM, a lack of clarity for the framework under which to register new emission reducing activities, and the risk of undermining overall emission reduction efforts through reduced comparability of commitment achievement with different instruments and double counting, among others.

In fact, the CDM's continued operation which is based on commitments and development levels in the 1990's is already an abstraction from the climate policy progression in developing countries, including several countries' Copenhagen and Cancun pledges, and all countries' NDCs under the Paris Agreement.

For this reason, the transition from the Kyoto world to the Paris world logically corresponds to a transition from the CDM to the SDM, starting with a clear political signal to phase out the CDM as an outdated Kyoto mechanism that has no role to play under the Paris Agreement. However, this phase out process should come hand in hand with a transition taking advantage of the valuable CDM experiences in order to shape the SDM.

## **Key recommendations**

The transition process from the CDM to the SDM should build on the lessons from the experience with the Kyoto Protocol and design the SDM as a new mechanism under the Paris Agreement. While moving beyond of some of the problematic elements of the CDM and the JI, notably the concept of carbon offsetting, it is also important that valuable experience and capacity is maintained. The recommendations below suggest practical steps in this transition process:

### **Abolish carbon offsetting for the Paris Agreement**

The scale of the task of reaching the Paris Agreements 1.5-degree target and decarbonisation objectives call for a massive increase in ambition and for all countries and sectors to rapidly reduce emissions. Offsetting does not reduce emissions, but rather displaces them, allowing for increased emissions elsewhere, a perpetuation of high emitting economic practices and fossil fuel lock in. The assumptions used to estimate reductions for the CDM have been shown to be problematic for the vast majority of projects and have thereby led to an overall increased emissions. Parties should therefore transition away from offsetting as we move from the Kyoto to the Paris worlds.

### **Design the SDM as a tool for results based climate finance**

Arguably one of the largest success of the CDM is the catalogue of methodologies to reduce emissions, and their accompanying basis to estimate emission reductions for a given amount of finance. With further criteria to re-evaluate additionality - also a core-requirement for effective climate finance - this function of the CDM should be adapted for the SDM to provide financial support vulnerable projects that require finance to continue reducing emissions. However, the achieved emission reductions should not be used as carbon offsets, but serve as a quantification of the impact of climate finance efforts. Beyond providing finance for vulnerable CDM projects, the SDM should continue to be used as an innovative tool for results based finance to mobilize the public and private sectors to reduce emission in countries that are otherwise not able to do so.

## **Transition project registration from the CDM to the SDM**

The purpose of the CDM was to provide carbon credits for countries to help meet their Kyoto targets. There is overwhelming consensus that there will be no new commitment period after the Kyoto Protocol's second commitment period expires in 2020 and demand for carbon offsets to fulfil pre-2020 pledges is extremely limited<sup>2</sup>. Official figures show that there is a large oversupply of already registered CDM credits to fulfil those pledges. For this reason, CDM project registration should be stopped as of COP 24 in Poland in 2018 by a decision of the Kyoto parties (CMP). From 2018, new projects should seek registration under the Paris "rule book", notably the modalities and procedures for the SDM

## **Set a cut-off date for the use of CDM credits**

The CDM was developed to reach pledges under the Kyoto Protocol, not the Paris Agreement. The use of CDM credits should therefore be restricted to the Kyoto time horizon, with a decision to stop credit issuance and usage by the end of the true-up period in 2023, when Parties need to report on how they have met their emission reduction commitments up to 2020. .

## **Inform a new reformed SDM supervisory body**

Parties to the Paris Agreement are to designate the body to oversee the new SDM. This body should not be a copy of the CDM Executive Board, but rather be a new, different reformed body that is regionally representative and follows a more technical, less political agenda including civil society representatives. Although the CDM Executive Board was established for the purposes of the Kyoto Protocol linked to its limited commitment periods, it has a wealth of experience and knowledge that should inform the establishment of the new body. More practically, the CDM Executive Board should be dissolved and its accumulated revenues generated by the CDM should serve to establish the new SDM supervisory body.

## **Adapt CDM infrastructure**

The CDM built a great deal of valuable capacity in developing countries, but also manifested several problems relating to the overall function and shortcomings. Various structures and procedures of the CDM could be adapted and reformed for use under the SDM. Such structures could include the Designated National Authorities (DNAs), Designated Operational Entities (DOEs), panels and working groups. DNAs should play a new role in integrating support from the SDM into broader climate and sustainable development policy of the host country. DOE's could apply for approval under the SDM, but should be held liable for their assessments. Civil society should have an expanded role on panels and working groups.

## **Establish a CMP CMA process to guide the transition process**

The reform process for the CDM was originally to be finalized by December 2013 but has not yet been concluded. Even with an end to the CDM, the considerations and discussions in the CDM reform process should feed into a new process examining the transition and what elements should be transferred to the new SDM.

<sup>2</sup> The United States never ratified the Kyoto Protocol and does not participate in commitment periods. Canada withdrew from the protocol and several other major developed economies declined to participate in the second commitment period. Europe, having reached its 2020 targets in 2014, will already overachieve its targets domestically and will not need any foreign credits.

# SDM



This project action has received funding from the European Commission through a LIFE grant. The content of this section reflects only the author's view. The Commission is not responsible for any use that may be made of the information it contains.

**Aki Kachi** - International Policy Director  
[aki.kachi@carbonmarketwath.org](mailto:aki.kachi@carbonmarketwath.org)