



WWF

CLIMATE  
& ENERGY

ISSUE  
PAPER

2018

# PHASING OUT KYOTO PROTOCOL FLEXIBLE MECHANISMS AND SHIFTING TO THE SUSTAINABLE DEVELOPMENT MECHANISM

Recommendations for countries at COP24 in Katowice, Poland

## Introduction

This December at the 24th Conference of the Parties to the UN Climate Convention (COP24) in Katowice, Poland, governments are supposed to agree the Paris Rulebook which will operationalise the Paris Agreement by laying out the tools and processes. A critical part of the Paris Rulebook, being negotiated under Article 6 of the Paris Agreement, deals with how governments will transition away from Kyoto Protocol flexible mechanisms like the [Clean Development Mechanism \(CDM\)](#) and [Joint Implementation \(JI\)](#) to the Paris Agreement's Article 6.4 Mechanism also known as the "Sustainable Development Mechanism" (SDM).

This briefing analyzes and suggests options for how countries can effectively transition from the CDM and JI to the SDM, and the general timing of each step of this transition, while maximizing the global climate ambition and sustainable development benefits of this transition.

*To protect the effectiveness of the Paris Agreement and our world's chances to limit warming to 1.5°C, the countries at COP24 must take key decisions so they can swiftly prepare the groundwork for the CDM and JI's replacement, while phasing down the CDM and ultimately closing it out when the Kyoto Protocol ends in 2020.*

Some components of the CDM infrastructure including might be useful building blocks for the SDM. Countries should screen different components of the CDM infrastructure drawing on lessons, both positive and negative, from how the CDM was implemented in different countries.

Other aspects of the Kyoto Protocol flexible mechanisms should not be carried over to the SDM under any circumstance.

Most notably, due to environmental quality concerns, CDM credits (Certified Emissions Reductions or CERs) and JI credits (Emissions Reduction Units or ERUs) should not be made available for use by countries under the Paris Agreement or by airlines under the UN International Civil Aviation Organization's (ICAO) Carbon Offsetting and Reduction Scheme for International Aviation (CORSA).

However, CDM or JI mitigation activities--and the projects based on those activities--could be recertified under the SDM, if they are screened on the basis of environmental and social quality criteria.

This briefing first discusses the positive and negative experiences of the CDM. Because of the limited global nature of the Joint Implementation, the briefing does not analyse in great detail the history of the JI nor the infrastructure from it that could be transferred, be screened, or inform the development of the SDM. Second, the briefing recommends how countries in Poland at COP24 can take key decisions to close out the Kyoto Protocol flexible mechanisms and begin to set up the SDM--including its new Supervisory Body, rules, processes, and modalities. This briefing does not attempt to fully scope out how the SDM should be designed, as many of the options will need to be discussed further by country negotiators and among the new Supervisory Body that will largely govern the SDM.

## Positive and negative experiences from the CDM

Before we can build the SDM so it is fit for purpose to help deliver the Paris Agreement, we need to understand what worked in the CDM and what didn't.

## What benefits did countries take from the CDM?

Countries and their people that have hosted CDM projects over the years have benefited in many cases, even as the exact impact of those benefits is debated by scholars.

- 1. Sustainable development:** Most CDM projects over the years have cited the positive impacts of CDM projects on local economic development coming from higher employment and greater poverty alleviation, followed by pollution reduction and the promotion of renewable energy and energy access.<sup>1 2</sup> One challenge, however, is that countries defined sustainable development in different ways and have different process to assess it. Partly as a result of this patchwork of assessments, experts differ on the extent of the sustainable development impacts from the CDM. Most stakeholders agree this is one of the most important outcomes of the CDM and there is a desire to enhance this impact.<sup>3</sup>
- 2. Technology transfer:** While technology transfer is not explicitly included in the Kyoto Protocol as an objective of the CDM, it has been noted as a co-benefit. Empirical studies show that about one-third of CDM projects report technology transfer as a component of the project design.<sup>4</sup> As of 2012, technology transfer continued to remain high in almost all countries other than Brazil, India, and China where technology transfer rates have gone down considerably. This technology transfer “may have facilitated leapfrogging the establishment of extensive fossil energy infrastructures.”<sup>5</sup>
- 3. Building knowledge and institutions to fight climate change:** In general, the CDM has “...created knowledge, institutions, and infrastructure that can facilitate further action on climate change.”<sup>6</sup> Specifically, the CDM helped create a global carbon market, even as the market has its imperfections and is not sufficiently scaled to the ambitions many carbon market enthusiasts have had for it.

## What were the main drawbacks and negative implications of the CDM?

Even as some projects provided some helpful contributions to sustainable development in a handful of countries, project development was not equally distributed around the world, some human rights abuses have transpired from CDM projects, and it has fallen woefully short as a climate change mitigation measure.

- 1. The CDM is zero sum:** The CDM is zero-sum, meaning one entity can continue to emit while another will reduce its emissions by the same amount. However, the recent warnings from the IPCC highlights that the CDM's successor, the SDM, must deliver an overall mitigation in global emissions to be fit for purpose to facilitate a rapid transition in developed countries and developing countries alike. This will mean, above all, two things: (1) That if “X” amount of emissions reductions under SDM are transferred from a host country to a buyer, then the host country must reflect in its nationally determined contribution (NDC) that its emissions have increased by the same amount; and (2) the SDM has a provision(s) that ensures overall mitigation of global emissions such as “automatic cancellation” or “discounting”.<sup>7</sup>
- 2. The CDM has increased greenhouse gas emissions:** Studies have shown that an overwhelming majority of CDM projects are highly likely to not be additional and thus are not developing valid credits. For example, Cames et al. (2016) estimates that only 2% of CDM projects are likely to have environmental integrity, and 73% of CERs have a low likelihood of representing actual emissions reductions. In the previous decade, many developed countries significantly relied on CDM credits to help them achieve their Kyoto Protocol climate targets--the overall result being an increase in global greenhouse gas emissions. In the EU alone, just under 800 million CERs were used in the EU Emissions Trading System between 2008 and 30 June 2017.<sup>8</sup> If we assume that 73% of CERs don't represent real emissions reductions, it would mean that global emissions may have increased by roughly 580 million tonnes CO<sub>2</sub> between 2008 and 30 June 2017.<sup>9</sup> Allowing CDM credits into the Paris Agreement or into the ICAO CORSIA, would severely hamper and/or undermine the credibility of these international agreements.
- 3. Some CDM projects have violated human rights:** Several CDM projects have led to human rights violations, sometimes affecting those of indigenous peoples. Forced displacement of local communities, for example, has happened in the case of the [Barro Blanco hydrodam project](#) in Panama. The CDM does

<sup>1</sup> UN Framework Convention on Climate Change. (2012). Benefits of the Clean Development Mechanism 2012. Available at: [https://cdm.unfccc.int/about/dev\\_ben/ABC\\_2012.pdf](https://cdm.unfccc.int/about/dev_ben/ABC_2012.pdf)

<sup>2</sup> The Energy Resources Institute (TERI). (2012) Assessing the Impact of the Clean Development Mechanism on Sustainable Development and Technology Transfer. New Delhi: The Energy and Resources Institute. Available at: [http://www.cdmpolicydialogue.org/research/1030\\_impact\\_sdm.pdf](http://www.cdmpolicydialogue.org/research/1030_impact_sdm.pdf)

<sup>3</sup> Ibid

<sup>4</sup> Ibid.

<sup>5</sup> Cames et al. (2016). How additional is the Clean Development Mechanism? Available at: [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)

<sup>6</sup> Ibid

<sup>7</sup> Schneider, L; C. Warnecke; T. Day; & A. Kachi. (2018). Operationalising an 'overall mitigation in global emissions' under Article 6 of the Paris Agreement. Available at: <https://newclimate.org/wp-content/uploads/2018/11/Operationalising-OMGE-in-Article6.pdf>

<sup>8</sup> European Commission. (23 November 2017). REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL: Report on the functioning of the European carbon market. COM(2017) 693 final. Available at <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52017DC0693&from=EN>

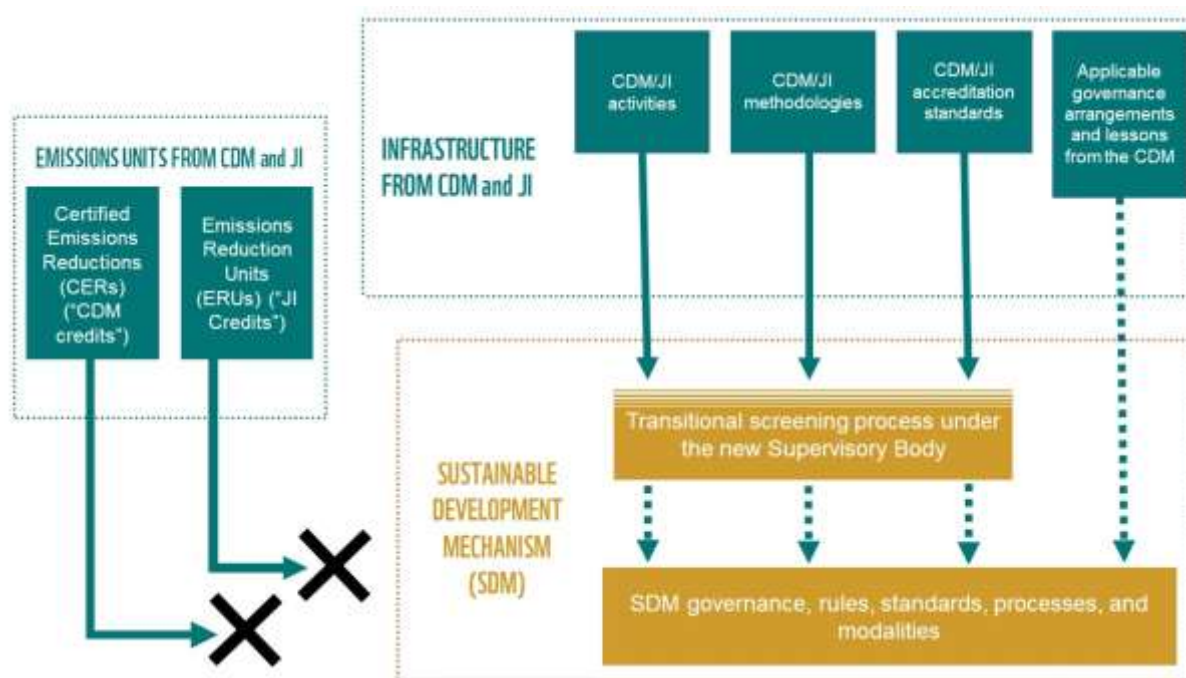
<sup>9</sup> Cames et al. 2016 estimates that, of the potential 2013-2020 CER supply, 73% are non-additional. This 73% rate has been extrapolated to CERs used in 2008-2012, which is why this briefing characterizes this 580 million tonnes as a “rough estimate.”

not have a safeguards system in place that would avoid and remedy these types of impacts, and the CDM continues to permit registration of projects with well-documented adverse effects such as large hydropower dams and coal-fired power plants, which also have negative, non-climate-related, environmental impacts for the surround environment. The new SDM must have a strong top-down safeguards system, to counter human rights infractions and protect the credibility of the SDM and broader carbon market.

4. **Inequitable and inadequate CDM benefits for developing countries:** Most developing countries have not benefited from CDM. Furthermore, CDM benefits have not been equitably distributed. The overwhelming majority of CDM credits have been issued in fewer than five countries. Consequently, the least developed and most vulnerable countries--the CDM's main intended beneficiaries--have barely profited from it at all. The SDM must have a system that prioritizes Least Developing Countries (LDCs) and Small Island Developing States (SIDS) to reap the sustainable benefits they were not afforded under the CDM.

## Recommendations to countries for decisions at COP24

At COP24, countries should make decisions that comprehensively address the phase out of the Kyoto Protocol flexible mechanisms and provides a roadmap for future technical work--notably a "transitional screening process" that would assess the validity of CDM/JI activities, methodologies, and accreditation standards. *Figure 1* lays out generally how this should ideally play out. Further discussion on each step can be found below.



**Figure 1:** Visualising the transition from Kyoto Protocol flexible mechanisms to the Sustainable Development Mechanism

## Transitioning CDM and JI activities

Some CDM and JI projects/project activities/programmes of activities might be valid for transfer to the SDM.

To be registered as an Article 6.4 activity, CDM and JI activities must meet all the conditions adopted by the Supervisory Body and/or the CMA which should include an environmental integrity screening process. This should be done as soon as the SDM's new Supervisory Body is stood up. If CDM and JI activities are screened and pass as being additional, having realistic baselines, having systems to address the risk of reversals, and for not causing a material increase in emissions elsewhere, they could become SDM activities. An "equity screen" could also be used to ensure that the benefits of the SDM are more evenly spread across countries than they were under the CDM. The relevant host Party must also authorize any registrations of new SDM activities.

## No use of CDM credits (CERs) & JI credits (ERUs) towards climate mitigation efforts after 2020

How CERs and ERUs can be used after 2020 is perhaps the most critical part of transitioning Kyoto Protocol flexible mechanisms.

Certified Emissions Reductions and ERUs must not be used in the country in which they were generated towards meeting that country's NDC after 2020. Similarly, after 2020, CDM and JI credits cannot be transferred to another country or to non-state actors for use towards meeting an NDC or other mitigation purpose, including the ICAO CORSIA.

## Process to transfer CDM and JI methodologies and accreditation standards

Most questions on transitioning from the Kyoto Protocol mechanisms to Article 6 of the Paris Agreement should be addressed, as recommended above, at COP24. Analysis of methodologies and accreditation standards is more technical in nature, however, and therefore can be done in a work plan conducted by countries under the UNFCCC. This analysis can be part of the same process we recommend be set up to screen CDM and JI activities under the Supervisory Body.

## Setting up the SDM's governance

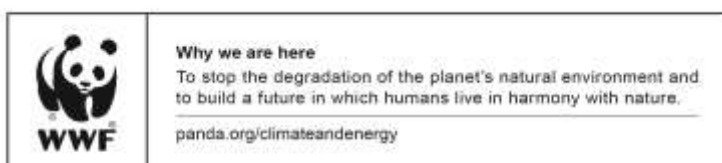
Countries at COP24 also must make some major decisions on the structure, governance, and rules of the SDM. This includes decisions like:

- Who can be members of the Supervisory Body of the SDM.
- What the rules of procedure are for the supervisory body.
- How mitigation activities are determined and approved.
- How grievances are addressed.
- How human rights will be ensured.
- The procedures to ensure the mechanism delivers an "overall mitigation in global emissions" (i.e. supplemental emissions reductions) as required by the Paris Agreement.
- Determining the level and timing of the share of proceeds that would fund the mechanism's administration and allocate funding for climate adaptation.
- Confirming that share of proceeds would go to support the Adaptation Fund, which was identified at COP22 as an institution that would serve the Paris Agreement.
- How to avoid double counting with NDCs and other mitigation purposes including the ICAO CORSIA.

As already mentioned above, briefing does not attempt to fully scope out how the SDM should be designed, as many of the options will need to be discussed further by country negotiators and among the new Supervisory Body that will largely govern the SDM.

## Conclusion

At COP24, countries must choose to move away from the CDM and the JI and develop the right tools that fit the ambition of the Paris Agreement. The SDM will have some role to play in this process, but a heavy reliance on the SDM may not be advisable in many countries that could just as easily administer other policies like emissions trading systems, carbon taxes, emissions standards, and renewable portfolio standards. In addition, developed countries urgently and massively need to scale up the delivery of international climate finance in line with their earlier commitments. Transitioning from the Kyoto Protocol mechanisms to the SDM is an additional step countries need to take at COP24 to give us a shot at meeting the Paris Agreement's 1.5°C temperature target.



For further information contact:

**Brad Schallert**

Deputy Director, International Climate Cooperation  
WWF-US

[Brad.Schallert@WWFUS.ORG](mailto:Brad.Schallert@WWFUS.ORG)