



# Prospects for Africa's CDM activities under the Paris Agreement

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## Policy Briefing

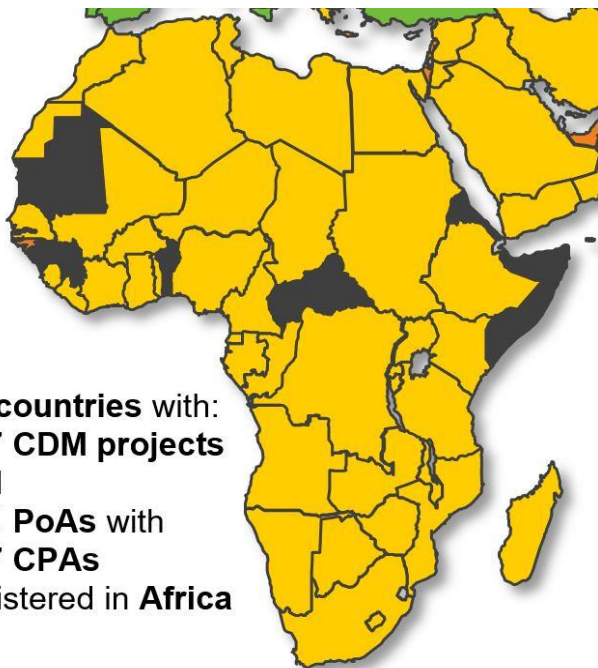


Figure 1- Number of registered CDM & PoAs in Africa (Oct. 2016).

## Key Points

- The existing CDM pipeline is liability and opportunity alike for the Paris Agreement
- Africa stands to gain from continuation and scaling-up of its PoA pipeline
- The future of CDM activities depends on their active transition to the Paris Agreement context
- COP22 should agree already on a principle that CDM activities will be able to transition into the Article 6.4 mechanism, subject to certain conditions
- A prompt start for Article 6.4, using in particular PoAs from the CDM, could help keep vital emission reduction activities alive and stem the exit of Africa's hard-won capacity
- Climate finance has an important role to play in bridging the demand gap and should leverage the existing African CDM pipeline

## Introduction

As the Paris Agreement is set to replace the Kyoto Protocol as the new and universal global agreement in driving down greenhouse gas emissions and addressing the adverse impacts of climate change, the fate of the pipeline of CDM activities is unclear. The same is true for the methodologies they use and, more generally, the standards, procedures and institutional architecture developed over the history of the CDM.

For this value built up in the CDM to have a future, it needs to be actively transitioned to the new climate regime by integrating and building on the success of the

CDM there. This is already partly anchored in the negotiations. Decision 1/CP.21 already says the new mechanism for mitigation and sustainable development in Article 6.4 of the Paris Agreement is to build on the experience gained and lessons learned with existing mechanisms. A large number of Parties see the CDM's modalities and procedures as a starting point in operationalizing the new mechanism, with appropriate changes to reflect long-sought reforms. However, the discussion on what to do with registered CDM activities is only just beginning.



African countries have consistently called for the recognition and preservation of the reforms they have made under the CDM. Now that the Paris Agreement has decided on a new UNFCCC-governed crediting mechanism, it is still not in their interest to lose what they have built up – hundreds of CDM activities, capacity and a set of operational reforms pursued through the UNFCCC and the CDM Executive Board.

The CDM did eventually result in funds flowing to the African continent and this coincided with many countries becoming more aware of the potential of the CDM to drive economic, social and environmental development. A case in point are CDM Programme of Activities (PoAs), which have been created for the long-haul with a duration of 28 years and where Africa holds a significant share.

### “The CDM pipeline is at risk of being stranded but presents an opportunity for rapid implementation of Article 6”

The current pipeline of CDM activities presents both liability and opportunity for the new generation of mechanisms under the Paris Agreement. The liability is that the credibility of the Article 6.4 mechanism is at stake. The private sector already has “burnt fingers” over the continuing low-price environment for CERs. Disregarding the investments made in the CDM may be a fatal blow for investor confidence in mechanisms governed by the UNFCCC.

However, harnessing the mitigation potential of the CDM pipeline can also be turned into an opportunity. The existing pipeline of CDM activities, especially PoAs, is ideally placed for rapidly scaling up mitigation action.

The key question addressed in this policy brief is how the African CDM pipeline can be transitioned and find a new place in the context of the Paris Agreement.

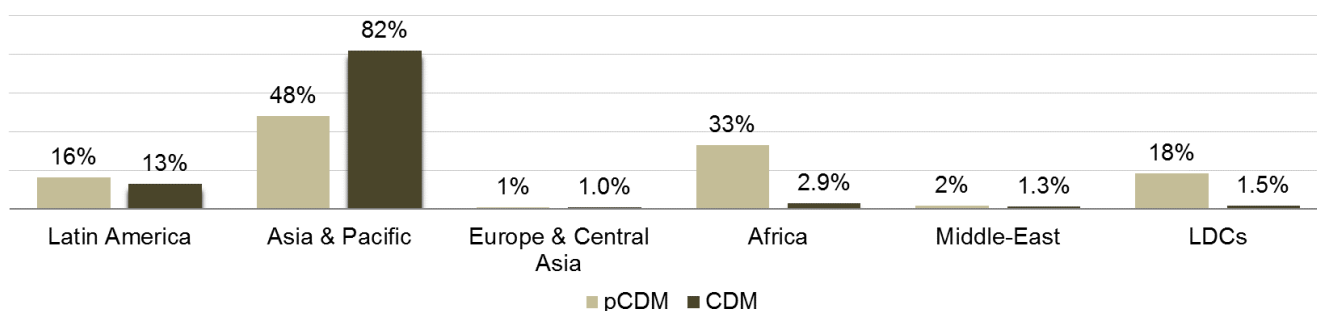
## What is at stake?

Africa’s CDM Pipeline is smaller than in other regions but has continued to grow as CDM rules have been adjusted to better recognize the circumstances of underrepresented regions like Africa. As of October 2016, there are 245 active CDM projects in Africa, of which 205 are fully registered and hosted by 31 African countries. Importantly, there are also 126 PoAs in Africa, of which 101 are fully registered. As these comprise of 327 component project activities (CPAs), there are in effect 572 CDM activities in Africa, many of which are in grave need of finance and support.

These CDM activities have potential to generate up to 402 million CERs by 2020 (132 million of which are from PoAs). With only 37.5 million issued to date (0.9 million from PoAs), and life times of up to 28 years in the case of PoAs, it is clear that the CDM is only beginning to deliver benefits to Africa.

**Safeguarding hard-won achievements.** The CDM has never been static and has always evolved in a learning-by-doing design. Africa initially barely saw any benefits from the CDM, however, the need to improve the geographical distribution of CDM activities became a key priority of reform efforts from 2006 onwards after COP 12 was held in Nairobi. The successful introduction of PoAs and simplified methodologies, in particular standardized baselines, are direct results of these efforts, which have slowly but steadily translated into improved access to the CDM by African countries.

Figure 2 - % comparison of regional distribution of pCDM and CDM



Source - UNEP DTU 2016b

### Scaling up programmatic mitigation action.

Table 1 shows that programmatic approaches have worked much better in Africa than single projects for many reasons, including size and scale of individual activities in a continent with very low historical emissions. A crucial advantage of CDM PoAs is that they provide a fully operational, UNFCCC-approved framework that allows for replicating mitigation activities over long periods of time and including micro-scale activities that promote household and community energy access. Importantly, scaling up these registered PoAs can take place with significantly lower transaction costs.

Table 1 shows several examples of African PoAs. The cumulative emission reductions for 2020 are indicative for what further potential these have after 2020. It is also evident that several PoAs have already managed to include a significant number of CPAs. They can all grow further, as the number of CPAs is not limited. Providing certainty on whether PoAs qualify for the mechanisms under the Paris Agreement would however overcome a key barrier and give a strong boost to scaling up these programmes. With over 100 of them already registered, scaling them up could happen quickly and incur very few transaction costs.

**Government leadership.** Many of Africa's PoAs are owned and operated by public institutions. This can lower the barriers for including private operators into existing programmes and help ensure their recognition in nationally determined contributions (NDCs) under the Paris Agreement and in low emission development strategies (LEDS). This involvement of public institutions addresses the need for greater national contributions to climate action and offers an important route for bringing a greater sectoral focus into the mechanisms under the Paris Agreement.

**Delivering Sustainable Development.** African PoAs demonstrate high sustainable development benefits, in particular via sustainable energy access. They indirectly contribute to high-profile development priorities such as the Sustainable Development Goals (SDGs) and Sustainable Energy for All (SE4ALL). Strengthening these linkages, in particular within the UN system (UNFCCC, Agenda 2030, SE4ALL), would harmonize efforts and contribute to reducing procedural transaction costs for African governments.

Table 1 - CDM PoAs in Africa

Host country	Title	CPAs	2012 MtCO <sub>2</sub>	2020 MtCO <sub>2</sub>
Madagascar, (many)	PoA for the Reduction of emission from non-renewable fuel from cooking	5 9	0	29 854
Uganda	Uganda Municipal Waste Compost	1 2	136	1 018
South Africa	Green Power for South Africa	1 1	0	12 333
Tunisia	Solar Water Heater Programme in Tunisia	8	15	417
South Africa	SASSA Low Pressure Solar Water Heater	7	166	3 258
South Africa	CDM Africa Wind and Solar PoA for South Africa	7	0	20 337
Burundi, Rwanda, Tanzania, Uganda	Del'Agua Public Health Program in Eastern Africa	7	0	1 593
Ghana	African Improved Cooking Stoves PoA	6	0.6	2 370
Rwanda	Improved Cook Stoves programme for Rwanda	6	10	2 221
Rwanda	Renewable Energy CDM Programme of Rwanda (RECPR)	6	0	256
Nigeria	Improved Cooking Stoves for Nigeria PoA	5	11	990
Tanzania	Tanzania Renewable Energy Programme	5	0	504
Egypt	Egypt Vehicle Scrapping and Recycling Programme	3	0,03	212
Nigeria	Distribution of fuel-efficient improved cooking stoves	3	11	1 266
Senegal	Promotion of Energy-Efficient lighting using Compact Fluorescent Light Bulbs in rural areas in Senegal	1	0	41
Kenya	KTDA Small Hydro Programme of Activities	1	0	180
South Africa	City of Cape Town Landfill Gas Extraction and Utilisation	1	0	212
South Africa	Residential Hot Water Efficiency Programme in South Africa	1	0	288
Morocco	ONE Wind Program of Activity, Morocco	1	0	4 577
Uganda	Accelerating Electrification through Grid Extension and Off-Grid Electrification in Rural Areas of Uganda	1	0	640
Ethiopia	Ethiopia – Clean Cooking Energy Program	1	0	245
Ethiopia	Ethiopia Off-Grid Renewable Energy Program	1	0	158

Source: Authors, based on UNEP DTU 2016b



## Transitioning CDM assets

This issue is beginning to draw attention within the negotiations. In the latest round of submissions under the SBSTA work to develop rules, modalities and procedures for the Article 6 mechanism<sup>1</sup>, the **African Group of Negotiators** has called for a “transition pathway” of registered PoAs to the mechanism under Article 6.4, arguing that this will harness the potential for scaling up and building trust among stakeholders.

This appears to be supported by a diverse set of countries. **Brazil**, for example, argues for continuity and a smooth transition from the CDM to the Article 6.4 mechanism, stating that this will be key to the reputation of the Convention and that failure to guarantee CDM project developers and other stakeholders recognition for their efforts will jeopardize legal certainty and prevent the CDM from contributing to early action and enhancing pre-2020 ambition.

**Norway** calls for explicit guidance to provide certainty for market participants. It notes that existing activities have lifetimes well beyond 2020, especially PoAs and even more so forestry projects, and advocates keeping the CDM operational for some time, including through the true-up of the second commitment period in 2023. Then it should be considered what elements can be “imported and adapted” to operation under the Paris Agreement. Norway also seeks clarification from host Parties how emissions reductions from CDM activities post 2020 are treated vis-a-vis their NDCs.

The **Project Developers Forum** requests a transition procedure from the current CDM to the new mechanism so that CDM projects are able to transfer into the new mechanism following a streamlined procedure.

### “Two avenues of transition: regulatory recognition and the piloting of crediting mechanisms”

We see two main avenues through which the CDM pipeline of activities can transition to a place under the Paris Agreement in the period after 2020: First, through clarifying the regulatory routes through which CDM activities can be recognized under Article 6 and, second, through starting out as soon as possible on the piloting of crediting activities.

Both these avenues refer to the *activities* under the CDM and not to the CDM mechanism itself. Drawing on elements from the CDM mechanism such as its methodologies, standards and procedures in the operationalization of the new global mechanism is a separate discussion and one that is already underway in the negotiations of the rules, modalities and procedures of Article 6.4.

These two avenues are interconnected as a positive signal on the UNFCCC level will encourage funders to build on existing CDM projects when designing pilot activities for Article 6. Conversely, the lessons learned from these pilots will feed into the negotiations. These two avenues and their interrelations are further explored in the ensuing sections.

## Regulatory recognition at the UNFCCC level

There are several possible routes for CDM activities to be given recognition under Article 6. These would not be mutually exclusive.

The first possibility is to allow CDM activities to qualify for and be integrated into the Article 6.4 mechanism once it becomes operational. The challenge is how to provide sufficient certainty to project developers for them to keep operations running, or invest in new ones, while the new mechanism’s rules are still in the making.

### “COP22 should decide on the principle for transition of CDM activities to the Article 6.4 mechanism”

A first step towards giving such assurance would be an early decision in principle. This could already happen at the first Conference of the Parties meeting as the Parties to the Paris Agreement – CMA 1 - in Marrakech.

<sup>1</sup> <http://www4.unfccc.int/submissions>

Any such principle, early in the negotiations, would need to be subject to certain conditions, such as that CDM activities would only be eligible if they

- Match the scope of the new mechanism in terms of eligible activities
- Demonstrate ongoing operation
- Demonstrate ongoing additionality
- Demonstrate ongoing sustainable development benefits

If it is too early in the Article 6.4 negotiations to take even an in-principle decision, the SBSTA conclusions outlining its ongoing work should at least include the development of the conditions for recognition as an explicit task to be accomplished.

A second possibility for the recognition of CDM activities under Article 6 has already been provided for. CDM activities can be incorporated into cooperative approaches that countries develop, as recognized by Article 6.2. The use of mitigation outcomes from these activities towards achieving NDCs would need to be subject to the authorization of the participating countries, in accordance with Article 6.3, and they would also need to conform to guidance on accounting to be agreed by the CMA. These would be matters to be resolved by the participating countries, making it unlikely that this would occur on a one-off basis and more likely that it would evolve out of bilateral relationships, possibly influenced by the volume of relevant CDM activities available.

### “CDM projects could be transitioned under Article 6.2 through bottom-up cooperation”

It may also be possible, at least on a temporary basis until other mechanisms are made operational, for such CDM activities to remain in the CDM and generate emission reductions there that could nevertheless be transferred to other countries for use in fulfilling NDCs under Article 6.2. The requirements for host country authorization and accounting would still apply. However, this option may do little to assure investors of a long-term recognition under the Paris Agreement.

The transition of CDM activities also has a temporal dimension that should be distinguished from the above issue of recognition under the Paris Agreement. One option is to allow for early action through the CDM,

meaning the acceptance of pre-2020 CDM credits for use in achieving NDCs for the post-2020 period. The Kyoto Protocol allowed for this under the “prompt start” of the CDM, under which projects could generate credits already from 1 January 2000, before the start of the Kyoto Protocol’s first commitment period. JI projects on the other hand were allowed to register prior to 2008 but could only generate ERUs starting in 2008.

### “The CDM provides a wealth of experience that allows a prompt start of the Article 6 mechanisms”

There are both risks and benefits to early action. Benefits relate to incentivizing action earlier and thereby getting onto a low emissions development path earlier. For CDM activities, it could provide a vital lifeline or support for keeping the investments alive and the activities operational. Risks relate to credits for early action undermining the stringency of future targets through increasing the amount of offsetting that is possible<sup>2</sup>. It is difficult to know whether the early crediting of CDM projects would spur the development of low carbon practices in developing countries more than it would relax efforts on the buying countries’ side.

Whether there should be a prompt start for the Article 6 mechanisms, and whether the CDM can play a role, is ultimately a political decision. If the concern is with CDM activities with higher potential for scaling up, one option could be to allow a prompt start only via PoAs.

### The role of climate finance and piloting

The rapid entry into force of the Paris Agreement is a surprising achievement and promises to accelerate practical climate action. Now this momentum needs to be harnessed for developing the policy instruments needed to deliver the objectives of the Paris Agreement, including mechanisms under Article 6.

However there remains the problem of limited demand for credits, both prior to 2020 and perhaps for the initial period thereafter. The longer term prospects for demand remain good, as more ambitious NDCs emerge, countries begin to generate more domestic demand, and the new carbon offsetting system under

<sup>2</sup> Ahonen, Hanna-Mari and Schneider, Lambert (2015): Crediting early action: options, opportunities and risks, January 2015.



the International Civil Aviation Organization becomes operational.

In the short term, however, climate finance and funding for early piloting of Article 6 have a pivotal role to play in securing the future of CDM activities and capacities, and in ensuring that these remain available for the Article 6 mechanisms to build on.

First, climate finance from a variety of sources, including from bilateral donors, development banks and the Green Climate Fund, can bridge the demand gap for CERs and ensure mitigation activities commenced through the CDM are kept running and indeed scaled up. It can also make sure that institutional capacities built up in developing countries remain in place.

Secondly, it is important to use what demand there is optimally for the long-term development of mechanisms. There is still demand for credits in the context of gaining experience with new approaches to crediting, including the incorporation of results-based climate finance. Initial concepts for piloting scaled-up crediting activities are already being designed, for example through the World Bank Transformative Carbon Asset Facility and bilateral initiatives, such as the Swiss Climate Cent Foundation and others initiated by Norway and Sweden.

From an African perspective, it is important that the Article 6 pilots designed today also target elements that are quintessential to African participation in market mechanisms. One very important priority is to provide a transition platform and related eligibility criteria for PoAs, as well as key operational reforms to ensure their continued operation beyond the Kyoto Protocol. One initiative promoting this is the Standardized Crediting Framework developed by the Carbon Initiative for Development (Ci-Dev) of the World Bank. Piloting of this concept will not only support individual PoAs, such as those from the Ci-Dev pipeline, but also deliver vital lessons for the class of small-scale sustainable energy access programmes as a whole.

There are many questions relating to the co-existence of market mechanisms, results-based climate finance and NDCs that pilot activities can help answer. Pilots can be instrumental in providing practical solutions to complex questions, with the existing CDM pipeline providing an excellent learning ground. Results-based climate finance (RBCF) could be blended with private sector investment to run crediting activities, while ensuring proper attribution of emission reductions to the different sources of finance. Receiving credits for emissions offsetting is the incentive for the private

sector to join. Credits for RBCF are simply a way of reliably measuring emission reductions – although one that it desperately needs – and these would count towards finance targets and not lead to any offsetting.

Moreover, building on existing efforts and seeking innovative solutions can contribute to investor confidence and enable the delivery of mitigation results more rapidly. These kinds of solutions may have the power to meet multiple needs.

Connecting results-based climate finance to market-oriented crediting mechanisms holds much potential. The climate finance component can benefit from the strong measurement, reporting and verification infrastructure while also providing much needed capital that can be configured to reduce risks associated with the investments and attract in private sector finance.

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