

CARBON MECHANISMS REVIEW

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Assembling the Parts

Article 6 negotiations on the
home stretch?

Wanted:
Balanced Transition
The CDM and the Paris Agreement

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A Standardized Crediting Framework for the Post-2020 World

editorial

Dear Reader!

The UNFCCC negotiations on the Paris Agreement Work Programme are entering a decisive phase, although it is still open whether a 'rule book decision' will be reached at the UN climate summit in Katowice later this year.

As for the cooperative approaches, negotiators have already agreed on a stepwise approach which sees them taking basic overall decisions in Katowice and shelving technical issues for inclusion in a work programme later down the line.

This CMR thus assesses the status quo in terms of Article 6 and weighs up the crunch issues, see adjacent article (due to time constraints, not all contributors were able to cover the recent UNFCCC texts of Oct 15). We also look at the future of the CDM and evaluate options for its transition to the 'Paris world'.

Also in this issue, we present proposals to frame sustainable development contributions in the Article 6 text and review ways to operationalize the ambition raising requirement in Article 6.1.

Finally, we feature a report on a standardized crediting framework, a Senegal-based pilot which aims to support the design of simplified and decentralized approaches under Article 6.

On behalf of the editorial team, I wish you an interesting and informative read.

Christof Arens



Wuppertal Institut

Carbon Mechanisms Review (CMR) is a specialist magazine on cooperative market-based climate action. CMR covers mainly the cooperative approaches under the Paris Agreement's Article 6, but also the broader carbon pricing debate worldwide. This includes, for example, emission trading schemes worldwide and their linkages, or project-based approaches such as Japan's bilateral offsetting mechanism, and the Kyoto Protocol's flexible mechanisms CDM/JI. CMR appears quarterly in electronic form. All articles undergo an editorial review process. The editors are pleased to receive suggestions for topics or articles.

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Katowice and the 'Paris Rule Book'

The incremental way forward could turn into a mile stone event

by Thomas Forth, Advisor to BMU

At the start of the supplemental session of the Subsidiary Body (SB 48.2) in Bangkok, UNFCCC negotiators realised that working out all the technical regulation requirements of Article 6 PA would not be a realistic option. This might also be the case in Katowice for all or almost all other agenda items covered by the Paris Agreement Work Program (PAWP) contributing to the so-called Paris Rule Book. As negotiations and consultations went well in Bangkok, however, there is some confidence now that UNFCCC negotiators can achieve good results in Katowice¹.

In terms of outcome, the Bangkok session has improved the readability of the options which Parties have tabled since COP21 in Paris. At this point of the negotiations, no agreement could be reached on any of these options. This highlights just how long the road to finding compromises and establishing practical side rails for cooperative approaches and carbon markets might be. Nonetheless, the further iteration of the informal notes, sometimes rather euphemistically called “reflection notes”, should be seen as real progress. Negotiators stopped their continuous shifting of their own options to position them in the right place in the informal notes.

Instead, Parties changed their mode of negotiation and started asking questions and consulting to achieve a better understanding of the options proposed by other Parties. This might be the step that leads to compromise. In the belief that negotiations

are not a linear continuum, real progress can be expected at some point – meaning when the time comes to build bridges, and that may well come in Katowice.

How should negotiations proceed in the lead up to Katowice and the year beyond? The plan now is that COP24 should reach a very general decision, a one-pager with two annexes. Annex 1 should contain basic decisions reached at COP24 and Annex 2 could contain a work plan for 2019 covering all remaining technical deliverables. These texts are to be drafted by the Co-Chairs by mid-October and will be discussed at the Katowice summit. Whether this clear and strategic plan enables a successful outcome in Katowice, depends on three things:

- a) That the pro-active atmosphere of SB48.2 will continue
- b) Annex 1 will deliver key decisions, i.e. some compromises or a solution have been found
- c) Annex II will be a well-defined, focused work plan and not just a mangle-mangle of items

Whether the strategic concept works will depend on the agreed interim step: Co-Chairs, Co-Facilitators and Presiding Officers with support of the UNFCCC secretariat are mandated to deliver a complete draft decision text on October 15th. How this draft is received will be the litmus test for COP24. If Parties

¹ At the time of writing, the SBSTA Co-Chairs' text of Oct 15 had not been released yet. The article therefore does not take account of it.



Beyond Coal – the new Silesian Museum housed in a former coal mine and new buildings form a culture zone in the center of Katowice, which is going to host COP24 in December.

decide to work with the text, commenting and revising the wording, then we will know if the COP in Katowice might become a milestone in combating climate change.

The draft decision text has not been published at the time of writing. The following reflections on a range of critical issues arising from observations on how carbon market mechanisms are handled in UNFCCC negotiations or in other international processes might be helpful in deciding the direction that further elaborative work should take.

Critical Issues

As the case stands, references to the project-based approach of the Kyoto Protocol are dominant while up-scaled approaches are underexposed in the Bangkok text. Improved project-based approaches might make sense for certain uses in the private sector, i.e. the voluntary market or compliance regimes

such as CORSIA. However, the underlying thinking of a project-based approach will not contribute to a GHG pathway of well below 2°C or to the long-term goals of the Paris Agreement.

Project-based versus scaled-up mitigation activities

The Kyoto mechanisms CDM and JI delivered a huge number of project-based activities. This was quite successful in serving the historical demand of those Annex I countries that accepted their obligations under the Kyoto Protocol. Then, at the time this demand was almost entirely met in 2010/2011, the price collapsed. Thereafter, supply far exceeded the remaining low demand at this low-price level for quite some time and with the added consequence, which we are still facing today, that both the supply and the economic feasibility of new projects or programmatic approaches dropped, too.

With hindsight, the CDM and JI were effectively a flash in the pan. But even if we assume that the CDM had continued at its highest level during the second commitment period, this magnitude would have been insufficient to contribute to the emissions reductions needed to raise ambition in host countries. In my view, this is a direct result of the project-based approach and should be replaced by scaled-up mechanisms in general.

This does not mean that single investments and the issuance of related new CERs would be blocked. The opposite is envisioned, but crediting should follow broader parameters such as on a sectoral level and should not allow scope for cherry-picking in relation to a host country's unconditional NDC claims and needs.

To address climate change seriously with markets, those markets need side rails which apply when it comes to respecting NDCs and the activity level of international cooperation set up in the Paris Rule Book, as well as a long-lasting perspective for financial flows from private and public sources.

Unfortunately, since COP21 in Paris, the UNFCCC negotiations have not given enough attention to the question of how scaling-up activities should be handled as these affect host countries' NDC implementation strategies. Taking a more detailed look at the draft decision text, various links to the project activity cycle used under the CDM become apparent and negotiators would be advised to learn from the CDM and JI and improve the rules for the future use of Article 6.4. This may well be a serious undertaking, but it does not provide the right scale on which to address climate change. Article 6.4 would again end up in offsetting engagements for CORSIA, the voluntary market and some public purchase programmes of Parties.

This could perhaps be an acceptable outcome, but then Article 6.2 will be the choice for up-scaled mitigation activities and for any interest in achieving transformational impacts contributing to domestic strategies, e.g. the LEDS (Low Emission Development

Strategy), and ultimately to the Paris long-term goal of global carbon neutrality in the second half of the century.

Additionality, baseline and NDC provisions for carbon markets

To avoid limiting Article 6.4 to the narrowed uses laid out above, a solution is needed to enable interaction with the NDC. One option would be to integrate the NDC mitigation into the baseline setting. Given the vast experience with the CDM and the role of the EB, it is reasonable to assume that the new Article 6.4 body would act in a similar way. Another strong argument against such limitation is that both NDCs and related domestic strategies and policies may define the share between domestically-needed and transferable emission reductions by determining in a transparent manner the entry points for international carbon market partners.

Accepting the commitments and provisions of the host country as the policy component of the crediting basis, it becomes evident that eligibility of activities must be seen from two perspectives. To better understand how this works, the principle of counter-vailing influence could provide to some explanation.

- I. On the one hand, the centralized part of Article 6.4 under UNFCCC oversight needs improvements in setting baselines by using sectoral and sub-sectoral parameters as well as further elements reflecting the dynamics of the real world, such as the requirement to regularly update baseline parameters. This will have two effects: a) the additionality test becomes more precise, and b) the crediting period must be adjusted to the up-dating cycles. I would consider these elements as the core of the Article 6.4, because they form the core mechanics.
- II. On the other, the policy component falls completely under the sovereignty of the host country. It seems to me very unlikely that the centralized process, represented by the Supervisory Body, will lead to an assessment of domestic policies and

to conclusions being drawn from that assessment. Therefore, the policy component should be considered and operationalized in CO₂eq metrics separately and as a second step in determining the internationally transferable part of the achieved mitigation outcome. In principle, the issue here is very easy to solve, but consensus is still not given. In the end, the NDC is a political decision by the host country and consequently the host country decides on the shares. Of course, the host country is not entirely independent, it can only decide in line with prevailing accounting and transparency provisions and requirements. However, the policy component of Article 6.4 is clearly “country-led” and the country-led approach as such should reach its limitations in the UNFCCC oversight, which exercises control to ensure not only correctness, but also comparability and fungibility of certificates.

This could be seen as a stepwise approach. First the baseline setting and the additionality test are used to ensure that mitigations outcomes go beyond “business as usual” and then the result is checked against ex ante-decided sharing of the mitigation outcomes by the host country. This step is about saving the unconditional NDC from potential cherry-picking by the buyer side. Article 6.5 could work as the main anchor for such a strong role on the part of the host country. The question that remains, therefore, is when and how the countervailing influence comes in.

One of the key concerns of the international climate debate addresses the overall and country-specific weakness of the NDCs. On the global level, we have seen that INDCs/NDCs have been elaborated in a rush and make little change to the figures when compared with the projection in current policies. Climate Action Tracker (CAT) (<https://climateaction-tracker.org/global/temperatures/>), speaks about of global warming of between 3.2°C to 3.5°C by the end of the century, when the unconditional part of all NDCs would be implemented. In the first Special IPCC report on 1.5 °C, the global warming figures have since been confirmed in the likely range of 2.6°C

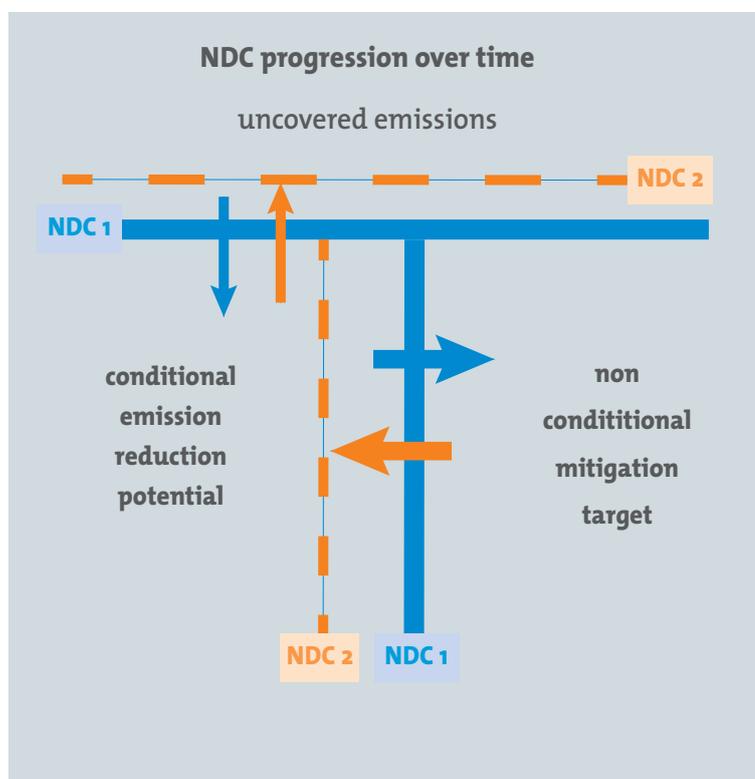


Fig. 1: Countervailing influence by identifying additional mitigation activities within conditional targets, leading to an increase of the NDC coverage finally

to 4 °C, see http://report.ipcc.ch/sr15/pdf/sr15_spm_final.pdf

Fig. 2 shows rising emissions until 2030 and the need for greater emission reductions between 2030 and 2050.

About 0.7 Gt CO₂eq would be needed annually. This amount of emission reductions cannot be achieved on the basis of projects. Negotiators and Parties are challenged to answer how they will encourage broader carbon market concepts in the Paris Rule Book.

Despite all uncertainties of the projections, a growing emission gap in the minimum-maximum range of GHG emissions of about 57 – 67 Gt CO₂eq in 2030 must be expected with current policies and NDCs calculated on own domestic contributions. The IPCC speaks of 52 – 58 Gt CO₂eq with medium confidence. This illustrates the need to unlock the conditional

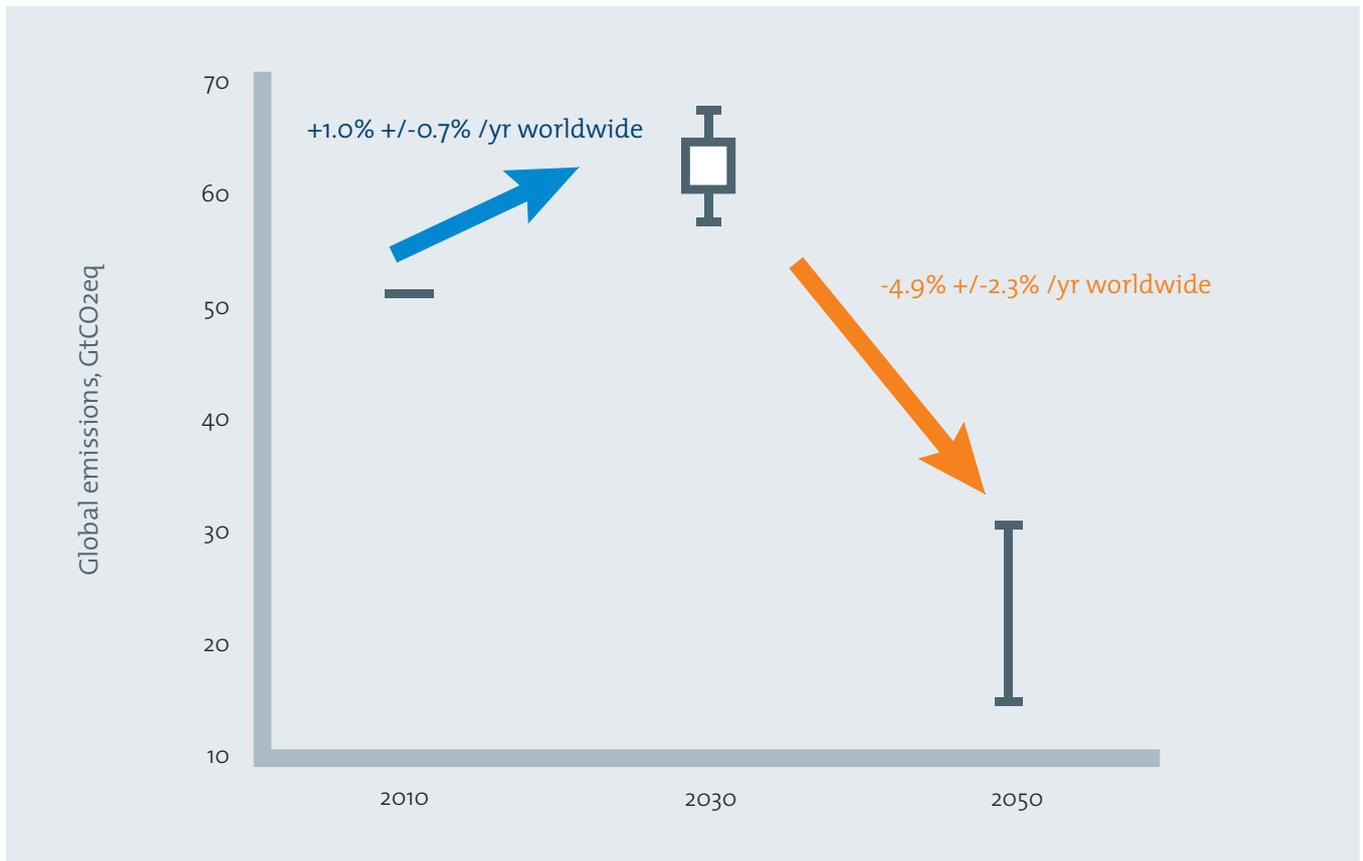


Fig. 2: Could Carbon Markets counteract growing GHG emissions up to 2030?

Global emissions and uncertainty ranges in 2010, 2030 and 2050. The 2030 range is determined based on full and sole achievement of the NDCs, while the 2050 range corresponds to the Intergovernmental Panel on Climate Change (IPCC) milestone if global warming is to be limited to 2 °C since pre-industrial times (i.e. 40%–70% emissions reductions in 2050 compared to 2010). The uncertainty range is shown for 2030 in the form of a box-and-whisker plot representing the fifth percentile, first quartile, median, third quartile and 95th percentile values. Arrows indicate the average rate of change in annual global emissions for the periods 2010–2030 and 2030–2050. Source: Benveniste et al., in: *Environmental Research Letters*, January 2018, <http://iopscience.iop.org/article/10.1088/1748-9326/aaaob9/meta>

parts of NDCs with carbon market mechanisms and carbon pricing approaches in the very near future. For this reason, carbon market regulations would fail if they took the current NDC as a reference point for the additionality check.

Fortunately, this is not necessary. Private and public practitioners could build on more advanced domestic climate policies, formulated on sectoral or programmatic level, defining at the same time the entry points for international cooperation via carbon finance. This is relevant for every host country that has developed a conditional NDC or would like to bring still-uncovered emissions under the NDC, something the Paris

Agreement allows at any time. In contrast to these country-specific scopes and definitions of activities, we need a complete set of safeguards in the rules, modalities and procedures (RMP) for Article 6.4 that delivers on market comparability and fungibility, and the assurance that transferring and trading happen outside the range of achieved emission reductions that host countries need for NDC compliance.

The question here is thus how the unconditional mitigation target could be achieved without transferring certificates and without using Article 6, which seems to be simple enough to argue for, and also by using Article 6, which brings the chal-

challenge of attribution of the achieved emission reduction to the cooperating partners. This needs not only a mitigation part of the NDC broken down into quantitative elements, as the needs for cooperative approaches are clearly to get data on the economic segment of cooperation. To define a sectoral baseline which provides information as to the activities that could be performed without international support is an important deliverable for all cooperative approaches, including Article 6.4 activities. Clarity is needed on the entry points for international partners. Cooperative approaches at this level require data and targets on the sectoral scale.

These are consequentially pre-conditions for scaled-up activities and depending on the activity concerned, they can contribute to the quantification of the domestic NDC. This will also allow the setting of an economy-wide target at a later stage to raise the ambition. Theoretically, the NDC update in 2020, but in any case the Global Stocktake, would be the first opportunity to demonstrate that Article 6 can voluntarily serve to unlock the conditional NDCs.

NDC accounting and markets: The next step

Parties are still divided over the narrative of the Article 6 mechanisms. Most speak about NDC implementation. Here, the negotiating world is not divided into developing and developed countries. Also, buying Parties speak of support in NDC implementation or supporting NDC. This wording is vague and is biased towards current NDCs, which is the opposite of the Article 6 objective contained in Article 6.1.

Going beyond the ambition of current NDCs is the requirement in the Paris Agreement to legitimize the existence of the option for renewed carbon market mechanisms. If the decision is taken in the Paris Rule Book to define Article 6 for NDC implementation, the climate value would be very low and the question of allowing the transfer of mitigation outcomes would lead to a gap for seller countries to achieve their NDCs or to double counting occurring regularly under a legal arrangement. Apparently, this is something which is not intended by Parties or negotiators, but might well be an outcome of imprecise regulations.

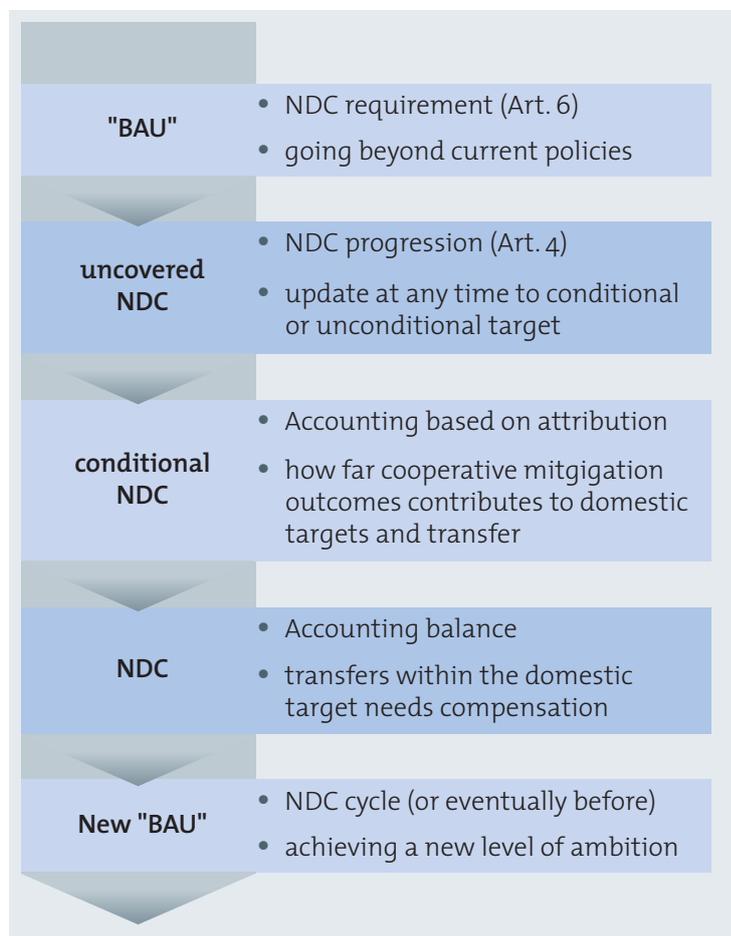


Fig. 3: "Progression over time" with Article 6

Addressing ambitions beyond the current NDC has to be operationalized and could not be handled as a matter of principle based on wishful thinking. At COP24 in Katowice, Article 6 negotiators will come to the next crossroads, where one way leads back into the Kyoto world – this time helping host countries to achieve their domestic targets – and the other way to new market mechanisms as the instrument for ambition raising in current and future NDCs. Way one is apparently a dead-end street: NDC compliance and transfer are not possible with the same mitigation outcomes, but the issue at hand is how useful Article 6 could be when cooperation is not based on the transfer of ITMOs. Way two has not been sufficiently explored in the time that has lapsed since COP21 in Paris and should therefore find a prominent place in work plan 2019 (Annex 2) and the draft negotiation text for Katowice.

A Balanced Transition

The future of the CDM in light of the Paris Agreement

by Frank Wolke, German Emissions Trading Authority

The Paris Agreement has established a market mechanism under Article 6.4 to contribute to mitigation of GHG and to support sustainable development. Although the agreement itself does not explicitly refer to the CDM, a link to lessons learnt is incorporated in the accompanying Paris Decision. The following article aims to shed light on aspects that must be considered when discussing transitional options for ongoing activities.

One major topic of discussion since the start of negotiations after Paris is the question of transition of the CDM into the new regime and the circumstances of such a transition, if it actually occurs. The issue seems like the ‘elephant in the room’ as on the one hand, new elements of a mitigation and sustainability mechanism are discussed under Article 6 paragraph 4 while on the other, Parties directly or indirectly refer to eligibility and implementation aspects of the CDM within the new Article 6.4 framework. In this discussion it may first be useful to consider the consequences of a CDM transition to enable such offsets after 2020.

Although the current demand for CERs is very low, a huge amount of potential offsets may be available if appropriate demand were to be created under the Paris Agreement. In the absence of any eligibility restrictions (that would mean a one-to-one transition of CDM projects into the Paris regime) there would be a large pool of up to 4.7 billion CERs available to supply the market, with only less than one-fifth of them coming from projects deemed vulnerable.

At the theoretical level, the PDD’s of projects already registered would lead to an even higher potential CER supply of up to 7.7 billion units (figures rely on current project information, technical status and other implications, see Schneider et al. 2017a). These figures are based on an assumption that the current 7,800 registered projects will continue. About two-thirds of them (more than 5,000) have chosen a seven year crediting

period with the option of renewal. About 1,700 of these should already have requested renewal, but have not done so to date. They still have the opportunity to renew, however, until the end of 2019. The remainder of the more than 5,000 projects are still within their first crediting period and may choose to renew later on. In consequence, the actual number of projects for any transition as well as the CER supply from those projects are uncertain, but they could well reach a very critical mass.

A large share of such estimated supply would arise from projects that may receive alternative revenue streams (electricity sales). The marginal costs of supplying more CERs are limited to transaction costs and therefore could lead to a very low price, i.e. below €1 per unit, that would only increase significantly if demand was beyond 3.7 billion t CO₂ (Fearneough et al. 2018).

However, judging from the first round of NDCs, such demand is highly unlikely to occur. The available supply of cheap credits would probably be much higher than the rather limited demand for ITMOs. In consequence, policy makers not only have to face the ideas expressed by some countries for continuation of CDM activities and transition of CERs, but they also have to take into account the impact of a potentially large amount of cheap units after 2020 and find ways to structure the future demand of offsets. This automatically leads to discussions about restrictions in any transition approach, such as vintage rules and other eligibility criteria based on project types.

Vintage means a restriction on the eligibility of projects at the time of registration, start date or issuance date. A recent study shows that such eligibility constraints will have a significant impact in limiting the potential supply of CERs (Fearneough et al. 2018).



Source: Danish Wind Industry / Flickr / CC BY-NC 2.0

Independent: as wind and solar power become more and more competitive, they are less and less dependent on additional funding from carbon finance.

It also may also be appropriate to only promote existing projects that are deemed vulnerable. The idea behind such an approach is that projects that currently have other revenues may no longer be seen as additional. Although the fact that some projects are now independent from CER revenues does not necessarily mean that they were not additional when they began. It remains questionable whether these projects will be made eligible under the Paris regime without further limitations.

Although the assessment of vulnerability depends on several aspects according to a vulnerability study by the DEHSt (it may be appropriate to incorporate a generic requirement into the Article 6.4 rules that existing CDM projects are only deemed additional if they were discontinued in the absence of support from this mechanism, cp. Warnecke et al. 2017). Such a requirement would safeguard the targets of the Paris Agreement with regard to market mechanisms having to contribute to overall mitigation and increase ambition. Another option for Parties still would be the future use of such projects for their own contribution to achieve their NDCs.

Yet another solution may be to link eligibility of certain types of projects with the introduction of supporting policies in the host countries. Furthermore, modalities under Article 6.4 PA should also consider the risk that even new project types may become stranded and discontinue mitigation should the market collapse after 2020.

Additionality Reloaded

Additionality may also be linked not just to positive but also to negative lists. With regard to automatic additionality for renewable energy projects, for example, consideration must be given to the declining technology costs and especially to wind and solar power becoming more and more competitive. It may, therefore, be advisable to limit any automatism to countries that have no policy in place to promote renewables or that have clearly stated that they need additional international support beyond their own contribution. Also, the performance penetration approach developed under the standardised baseline framework, or a threshold for the expansion of renewables, may be defined where further expansion beyond this threshold would be deemed additional.

From projects to sectors

Another controversial issue involving the Article 6.4 mechanism that directly affects any reflections on transition of CDM activities is the general approach of this new mechanism as project-based or sectoral-based. Establishing programmatic approaches under the CDM (PoAs) was certainly a step towards more sector-oriented implementation of the CDM which culminated in the CDM Executive Board's decision to introduce specific PoA regulations last year. The main aspect and trigger of these developments was the idea to simplify the proceedings for programmatic approaches by providing specific and transparent rules. But the process of adapting project-related rules for programmatic approaches also highlights some of the teething problems faced when thrashing out the details of procedures and standards for a sectoral approach of this kind (Dransfeld et al. 2015).

The decision on whether to go for a project-based or a sectoral-based approach will also have implications to the baseline setting. In this regard, the situation under the Paris Agreement is completely different to the one under the Kyoto Protocol. In the future regime, it would become crucial to refer the baseline scenarios to the NDC targets, and that means ensuring that the emission reductions are quantified against a baseline that credibly represents the emissions that would have occurred in the absence of the crediting mechanism. In this regard, the baseline setting under the Paris Agreement might be more challenging at a project level that we know from the CDM, as the CDM baselines do not count towards national targets. In consequence, the idea of setting baselines at a sectoral level might become more visible as it can be assumed that the national mitigation plans and NDCs may reflect certain sectors, but probably no individual projects, for their target achievement and possible use of markets (Schneider et al. 2017b).

Environmental Integrity

In addition to these more technical questions on the development of implementation provisions, the challenge for any Article 6.4 activity is to achieve environmental integrity within the system. Unlike the CDM under the Kyoto Protocol, the Paris approach foresees contributions from every Party in due course. In this context, any units that would result in higher

global GHG emissions must be prevented from being transferred. Four main issues can be identified that would affect environmental integrity:

1. accounting for transfers,
2. quality of units,
3. ambition of the NDC targets of the transferring country, and
4. presence of incentives and disincentives for further mitigation action.

The discussions about introducing robust accounting are moving forward although nothing has been decided yet, and the specifics may be critical. But assuming that an accounting framework will emerge, a crediting mechanism would still pose environmental risks (be it the continuation of the CDM or an Article 6.4 mechanism), mainly with regard to the quality of units or the scope and ambition of the NDC target of the transferring country.

The lack of quality of units is critical in two cases: firstly, if the emission sources are not included within the scope of an NDC target, and secondly, if the transferring country has an NDC target less stringent than BAU. In both cases the transferring country could transfer units that lack quality without infringing its ability to achieve its NDC target (Schneider et al. 2017b). In the case of mitigation activities outside the NDC's scope, a credit worth less than a tonne of CO₂ would allow the acquiring country to increase its emissions by one tonne without an adequate reduction in the host country, thus leading to damage to the atmosphere. The same applies in the case of an NDC less stringent than BAU: the transferring country would not need to "compensate" for transferring units that lack quality because it would be able to comply with its NDC target as long as the number of transferred units is smaller than the difference between the NDC target and BAU emissions. For this reason, transferring countries may also have incentives not to enhance the ambition and scope of future NDC targets.

The aforementioned study also estimated the potential impact from a lack of quality of units on global GHG emissions. Assuming that a total of nearly 10Gt CO₂eq in 2030 is either not included in NDC targets or has no effect under the low target scenario, and more than 8Gt CO₂eq under the high target scenario, it is obvious that quality of units would be key to ensuring environmental integrity. On the one hand, the transferring coun-



Source: Bothma / UNFCCC / CDM 0079 Kuyasa energy upgrade project

From projects to sector-based approaches: a low carbon world requires more than solitary climate projects.

try would not have to compensate for the lack of quality of units, but on the other, if the units have quality, their transfer would not lead to higher global GHG emissions (except for possible disincentives for further mitigation action) and the scope and ambition of the NDC target of the transferring country would not have an impact on global GHG emissions.

To ensure quality of units within a crediting mechanism, some crucial principles must be observed (without further discussion due to limited space): conservative assumptions and calculations, real and measurable abatement, the above mentioned additionality, permanence in emissions reductions and third-party verification.

Taking into account the importance of the quality of units within any crediting system, a system of close observation is deemed necessary. In fact, this is already being broadly debated in the Article 6 negotiations – primarily since the Bangkok session (SB 48 II) and especially with regard to the establishment of a supervisory body for the Article 6.4 mechanism to safeguard environmental integrity. This is not new, because even in the CDM review process – where no final con-

sensus was reached – many Parties called for changes to the current EB structure and composition. And as in the CDM review, a broad range of ideas have found their way into the Article 6 negotiations, starting with a similar approach to the CDM structure and membership, to ideas of strengthening some regional groups like AOSIS or even opening membership to private stakeholders or NGO's, always combined with the issue of majorities and blocking minorities.

What kind of supervisory body?

This issue may become particularly relevant in respect of the UNFCCC negotiations in Katowice later this year. In view of the overall text in Article 6.4, it is foreseeable that any decision about the regulation will be more generic rather than specific and will leave a lot of room for a working programme for the coming year. By establishing a supervisory body in Katowice, the Parties would create a rather technical platform for further discussions. Looking at the practice of the CDM Executive Board, one may come to the conclusion that its membership and voting rules have secured a decision-making process that has been

more or less regionally balanced and has not supported or undermined the interests of any regional groups. Other approaches, especially with regard to non-government stakeholders, would in contrast raise nomination issues, implying more complex rules to agree on amongst Parties as to which organisations are 'entitled' to nominate such members.

If the body could start working on administrative issues on its own terms after Katowice, it could be ready for its functional work at the end of 2019. But for this to happen, the core elements for quality-based units for a crediting system under Article 6.4 would have to be agreed on by the CMA before the body could go into detail. The current negotiation text (as of 15 October 2018) differentiates between transition of activities and transition of units. In the end, both are directly linked as the numbers quoted above show a severe risk to environmental integrity – not only in respect of the issued CERs, but also with regard to unrestricted continuation of registered projects. Without robust quality provisions, the aforementioned estimated future supply of CERs from current projects together with issued CERs would probably undermine all other efforts under NDCs that are more stringent than BAU scenarios.

Conclusion

In consequence, the rules and provisions of Article 6.4 not only have to restrict the use of pre2020 CERs, they also have to carefully consider any continuation of current projects. To learn from the CDM, therefore, would mean finalising the setting of robust rules, modalities and procedures for Article 6.4 that fit the Paris world before deciding on the eligibility of running projects or issued CERs within the new scheme. The new architecture of the Paris Agreement, with its NDCs and the need to balance the supply to avoid flooding the market with cheap credits, requires a different set of rules for crediting activities to those applied under the CDM. Thus, a simple transition of CDM activities or units poses serious risks to the environmental integrity of any new market approach right from the moment the new system gets underway and does not seem feasible, therefore.

Disclaimer

The opinion expressed here is not necessarily that of the German Environment Agency or the German Emissions Trading Authority (DEHSt) at the German Environment Agency.

References:

Dransfeld, B. and Stephan Hoch: Developing Sectoral Mechanisms in the Transition Period towards a New Climate Treaty. In: Federal Environment Agency (Ed.): Climate Change 01/2015: https://www.umweltbundesamt.de/sites/default/files/medien/378/publikationen/climate_change_01_2015_developing_sectoral_mechanisms.pdf

Fearnehough, H.; Thomas Day; Carsten Warnecke; Lambert Schneider: Discussion paper: Marginal cost of CER supply and implications of demand sources. Berlin 2018: https://www.dehst.de/SharedDocs/downloads/EN/project-mechanisms/Marginal-cost-of-CER-supply.pdf?__blob=publicationFile&v=1

Schneider, L.; Thomas Day; Stephanie La Hoz Theuer; Carsten Warnecke: Discussion paper: CDM Supply Potential. Berlin 2017a: https://www.dehst.de/SharedDocs/downloads/EN/project-mechanisms/CDM-Supply-Potential-up-to-2020.pdf?__blob=publicationFile&v=7

Schneider, L.; Jürg Füssler; Stephanie La Hoz Theuer; Anik Kohli; Jakob Graichen; Sean Healy; Derik Broekhoff: Environmental Integrity under Article 6 of the Paris Agreement. Discussion Paper. Berlin 2017b: https://www.dehst.de/SharedDocs/downloads/EN/project-mechanisms/Discussion-Paper_Environmental_integrity.pdf?__blob=publicationFile&v=2

Warnecke, C.; Thomas Day; Lambert Schneider; Martin Cames; Sean Healy; Ralph Harthan; Ritika Tewari; Niklas Höhne: Vulnerability of CDM Projects for Discontinuation of Mitigation Activities. Assessment of Project Vulnerability and Options to Support Continued Mitigation. Berlin 2017: https://www.dehst.de/SharedDocs/downloads/EN/project-mechanisms/vulnerability-of-CDM.pdf?__blob=publicationFile&v=3

Text Proposals

Promoting sustainable development through article 6 of the Paris Agreement

by Karen Holm Olsen and Fatima-Zahra Taibi, UNEP DTU Partnership, Marion Verles, Gold Standard Foundation and Sven Braden, Independent Consultant

This article is a product of the Sustainable Development Dialogue (SDD) on the implementation of Article 6 of the Paris Agreement under the UNFCCC. Building on six Policy Briefs that unpack the issues related to sustainable development, this article proposes text recommendations relevant to the work program to be decided at COP24 in Katowice.¹

Why and how sustainable development in Article 6 of the Paris agreement matters

Sustainable development (SD) features prominently in Article 6.1 as a unitary objective together with rais-

ing climate action ambition and ensuring environmental integrity. Thus, in each of the Article 6 cooperative approaches, SD is an objective to be pursued in parallel with climate action. The text in Articles 6.2 and 6.3 states that Parties can decide to enter into voluntary cooperation and transfer mitigation outcomes (ITMOs) and in doing so “Parties shall [...] promote sustainable development and ensure environmental integrity”. In Articles 6.4 to 6.7 “a mechanism to contribute to mitigation and support sustainable development” is established. Finally, Articles 6.8 and 6.9 define a “framework for non-market approaches to sustainable development”.

Despite a clear mandate to promote SD, without clear guidance and rules, there is a high risk of



Aligning the agendas: SD provisions help ensure that Article 6 activities make tangible contributions to sustainable development.

¹ Views stated are those of the authors. The SDD is currently supported by Belgium, Germany, Liechtenstein, Norway, Sweden and Switzerland and receives technical assistance from UNEP DTU Partnership and the Gold Standard Foundation, and Sven Braden, Independent Consultant.

repeating the CDM's failure to deliver tangible SD contributions (Olsen 2007, CDM Policy Dialogue 2012). Building on the experience and lessons learned from SD assessment under the Kyoto and voluntary market mechanisms, the challenge is to determine how the Article 6 SD provisions can be operationalised to incentivise a 'race to the top' as opposed to a 'race to the bottom' (Sutter and Parreño 2007).

The question of how to govern the synergies and trade-offs between climate action and SD has been a controversial issue for many years, with diverse political and stakeholder interests constituting the main barriers to promote SD benefits (Dransfeld, Wehner et al. 2017). To help overcome such barriers, the SDD has identified high-level options to operationalize the SD provisions in Article 6 based on Party submissions (for an introduction to the SDD's work see CMR 1/2018). In the latest round of submissions leading up to COP23 hosted by Fiji in Bonn 2017, the Secretariat received 22 submissions. The following summarizes Party views on SD under Article 6:

- Deciding on SD criteria/standards/priorities is a national prerogative

- SD criteria to be publicly available
- Global SDGs can serve as a framework for comparable reporting and assessment
- An international voluntary tool can be helpful to Parties
- Conformity with human rights and safeguards for no-harm-done to be confirmed
- Certification of SD impacts related to units/ITMOs traded, do-no-harm and respect for human rights
- Tools to be developed for assessment of negative impacts of climate actions
- Reporting under the transparency framework on how activities promote SD to be enabled
- International minimum requirements for SD to be applied by Parties nationally

Figure 2 illustrates the high-level options developed by the SDD and their interlinkages particularly in striking the right balance between Parties' national

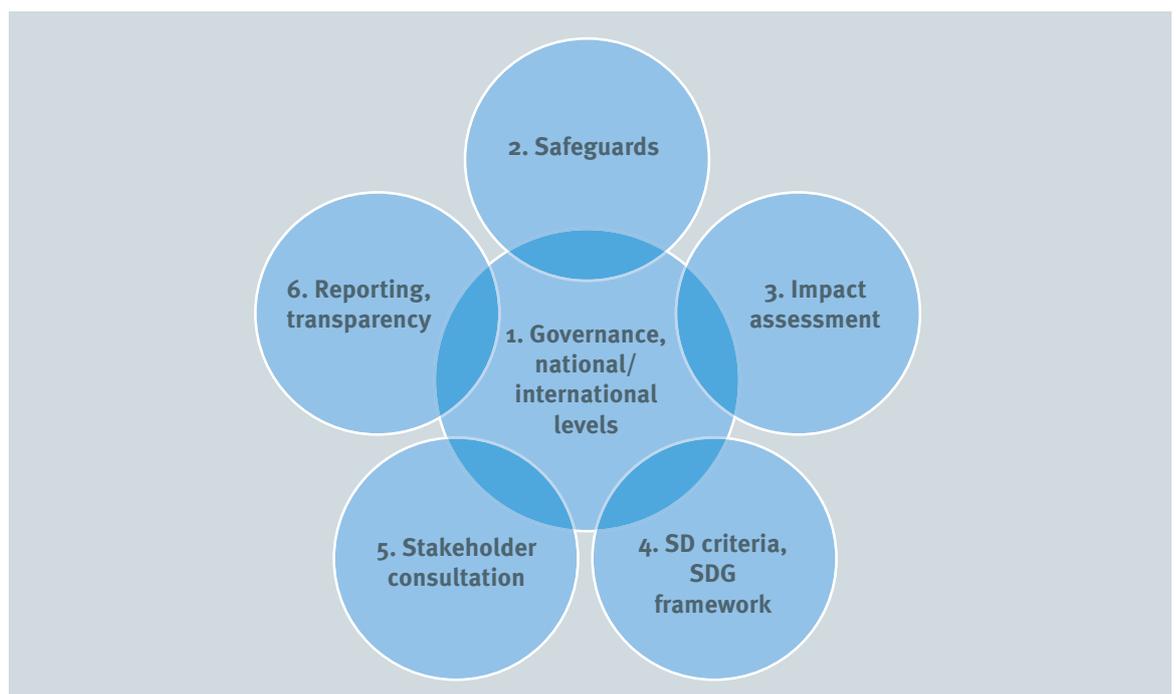


Figure 2: High-level options to operationalize Article 6 SD provisions

prerogative to decide on SD priorities at national level and the need for common provisions at international level for governance of the Article 6 approaches.

The high-level options (HLOs) and issues to operationalize the Article 6 SD provisions are unpacked in detail in six Policy Briefs published by the SDD (Verles, Braden et al. 2018) 2018, see footnote below.

In the following, we analyze the provisions in the draft texts as compiled after the meeting of the Subsidiary Body for Scientific and Technological Advice (SBSTA 48-2) in Bangkok in September 2018 (SBSTA 48-2a, 2018, SBSTA 48-2b, 2018). We summarize how they relate to the six high-level options and issues to operationalize the SD provisions in Article 6. Moreover, we make recommendations to ensure that the cooperatives approaches of Article 6 make tangible contributions to SD, respect human rights and have no negative impacts.

SDD analysis and text proposals

The draft negotiation texts of 6.2 and 6.4 do not contain standardized provisions for SD. Hence, we will analyze and provide recommendations for each of them separately. Those recommendations are based on our own SDD analysis, the various submissions from parties and the outcome of the SDD events. The draft texts contain various options with differing provisions. This makes the analysis difficult, as it is hard to foresee what Parties will agree to in Katowice.

For a clear overview of the structure of the negotiation text and easy reference to each of the elements, the SDD text proposals are provided in a separate Annex.¹

The background and rationale for the SDD text proposals are presented below following the structure of the negotiation texts. The text proposals in the Annex will be updated based on Party feedback and the SBSTA Chairs joint reflections note, Addendum 2 released 15 October 2018.

Article 6.2

Principles (II)

Option A of the principles section of the draft text contains the promotion of SD as one of its provisions. Although it is clear from the Paris Agreement text in Article 6.2 that the promotion of SD is a "shall" requirement, the draft text still contains the option for either a "shall" or a "should" provision. Agreement on a 'should' provision would constitute a watering down of the importance of SD.

Furthermore, the principles section does not contain any further provisions relating to human rights and avoidance of negative impacts. Respect of human rights is one of the requirements of the Paris Agreement, is an important element of any multilateral agreement and should be one of the principles of Article 6.2. In addition, the principle that Article 6.2 activities shall avoid negative impact and harm of the environment should also be included.

Governance (VII)

Governance and oversight options for Article 6.2 are still very divergent, but the current provisions fall short of ensuring that Article 6.2 activities promote sustainable development. Further elaboration is needed to ensure that the oversight and governance arrangements promote sustainable development at the appropriate levels of decision making. Such provisions could include that:

- The Article 6.2 oversight to provide a structured, comparable approach to assess the contributions of ITMOs to sustainable development in the host Party.
- The ex-ante review by the Article 13 technical expert review determines that a Party meets the participation responsibilities in addition to the participation requirements.
- The participating Parties have procedures for a grievance/appeal and redress mechanism, including the possibility for stakeholders to effectively appeal in the context of Article 6.2 oversight.

¹ <http://www.unepdtu.org/what-we-do/thematic-programmes/low-carbon-development/sustainable-development-dialogue-on-the-implementation-of-article-6-of-the-paris-agreement-under-the>

Participation requirements (VIII.A)

Option A of the participation requirements has extensive provisions for accounting of ITMOs but is silent on participation requirements to promote SD, even though SD is one of the objectives of the cooperative approach.

Consequently, in line with the spirit of the Paris Agreement and the Article 6 objectives, provisions would have to be added and could include that the Party:

- Has published its national criteria and/or objectives for sustainable development or communicated its intention to use SDGs. This would allow for an objective evaluation on whether and how an activity promotes SD.
- Has published its procedures for ensuring that ITMOs promote SD, do not result in environmental or societal harm and conform to its obligations on human rights.
- Has published its procedures for local stakeholder consultations. Stakeholder consultations is a main safeguard adopted by various climate instruments. It shall therefore be featured as part of the participation requirement for a host Party.
- Has procedures for a grievance/appeal and redress mechanism, including the possibility for stakeholders to effectively appeal in the context of Article 6.2 oversight. This is actually a main building block in all multilateral instruments.

Participation responsibilities (VIII.B)

The participation responsibilities of Parties, also in option A, are comprehensive in respect to avoiding negative environmental impacts, ensuring SD and respect of human rights. To ensure compliance, a "shall" requirement rather than a "should" is recommended. The responsibility to demonstrate that local stakeholder consultation has been undertaken in compliance with a certain set of minimum requirements is missing and should be added.

Reporting (IX)

The ex-ante reporting section of the draft text focuses on reporting of accounting elements that would ensure the environmental integrity of the Article 6.2 activities. It is, nevertheless, silent on the promotion of SD, environmental and social safeguards as well as human rights. Further elaboration of those provisions is therefore recommended. For Option A, elements of this elaboration could include reporting on the participation responsibilities. Option B and C of the draft text should include the following reporting elements:

- (a) SD objectives and/or criteria
- (b) Procedures for ensuring that Article 6.2 activities contribute to promoting SD
- (c) Local stakeholder consultations procedures
- (d) Grievance/appeals/redress mechanism procedures
- (e) Procedures for ensuring Article 6.2 activities do not result in environmental or societal harm
- (f) Procedures to ensure that Article 6.2 procedures do not adversely affect human rights

Option A of the ex-post reporting section of the draft text is comprehensive and includes critical elements necessary to ensure promotion of SD, avoidance of environmental harm and respect of human rights.

Article 6.4

Principles (II)

Option A of the principles section of the draft text contains fostering of SD as one of its provisions. Although Article 6.4 states that fostering SD is a "shall" requirement, the draft text still contains the option for either a "shall" or a "should" provision. Here again, agreement on a 'should' provision would constitute a watering down of the importance of SD.

The section contains respect of human rights as a provision. While this is commendable and a step for-

ward compared to both the CDM and the Article 6.2 text, again, the possibility of it being a "should" requirement" remains.

To promote safeguards for no-harm-done, a provision on ensuring avoidance of negative environmental and socio-economic impacts is recommended.

Governance (V, VI)

According to the draft text, the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA) has authority over Article 6.4.

Among its roles is the provision of guidance and taking decisions on a grievance and redress process. The CMA might act as the appeal body in case of grievances against the Supervisory Body or it could designate another body for this role.

These provisions are to be commended, as they would ensure accountability of the body supervising the mechanism. It is however important that the CMA agrees on rules and procedures for such a body early on to avoid the standstill that happened with the Kyoto mechanisms that rendered the creation of such a body impossible.

Participation requirements (VIII.A, IX.A)

The participation requirements section for host parties (VIII.A) is silent on SD and safeguards participation requirements. Only a few hints are implicit in the text, such as the reference to compliance with Articles 6.2 or 6.4 that has fostering/promotion of SD in its requirements. However, given how extensive other participation requirements are, it is recommended that provisions related to SD and respect of human rights are also spelled out in the draft text. Such provisions could include that the Party:

- Ensures that its procedures ensuring for Article 6.4 activities do not result in environmental harm and do not adversely affect human rights
- Has published its national criteria and/or objectives for SD or communicated its intention to use the SDGs

- Has published its procedures for stakeholders

Participation responsibilities (VIII.B, IX.B)

The participation responsibilities of Parties cited in Option A are quite comprehensive though weak. Indeed, most requirements related to SD ask only for confirmation rather than an explanation/demonstration. This has the potential to perpetuate the practices observed under the CDM, where no real assessment of activities' SD contributions took place (including negative impacts and human rights). We therefore recommend using a more affirmative language, such as substituting the terms "confirm" and "explain" with "demonstrate". In addition, provisions ensuring that potential negative impacts are avoided and, if unavoidable, mitigated, is missing, and must be included.

Role of Designated Operational Entities (XI)

The draft text provides the Designated Operational Entities (DOEs) with the roles of validation of the Article 6.4 activity, and verification and certification of the resulting emission reductions. Most requirements related to the promotion of SD fall under the oversight of the participating Parties, particularly the Host Party. This leaves a significant share of the requirements of a 6.4 activity (those not related to emission reduction) un-validated and/or unverified by an independent third party. This situation at best imposes significant burdens on Host Parties to ensure all requirements are met; at worst it would result in no assurance that SD requirements are complied with.

The same situation occurred under the CDM, where SD benefits requirements were not followed, as Parties had neither the capacity nor the willingness to do so. The stakeholder consultation had been, however, placed under the supervision of the CDM Executive Board, which led to significant improvements as a result of the close scrutiny by civil society. Under the current text proposal, the stakeholder consultation process is under the supervision of the Host



Source: Kapuszinski / WB / Flickr / CC BY-NC-ND 2.0

Topping it up: Cook stoves projects deliver a number of sustainable development benefits.

Party. Consequently, it might have the same fate as the SD benefits under the CDM.

It is vital, therefore, that DOEs are also tasked with validation and verification of requirements that are overseen by host Parties, too. This would ensure all requirements are equal and would avoid burdening Parties with lengthy assessments and reports to demonstrate compliance.

Delegating these tasks to DOEs will not constitute an infringement of the national prerogative. Requirements would be defined by the participating Parties and placed under their authority.

Eligible mitigation activities (XII)

The section containing eligibility requirements for an Article 6.4 activity are exhaustive and ensure that 6.4 activities foster SD, do not have negative impacts and do not constitute a threat to human rights. To ensure compliance, these provisions should nonetheless be a "shall" requirement rather than a "should".

Mitigation activity cycle (XIII)

The mitigation activity cycle as per the draft text is very climate centric, leaving out the SD objective. Stakeholder

consultations are omitted. Consequently, it is recommended to add an additional activity relating to stakeholder consultation and to specify that it should be undertaken at an early stage of the mitigation activity cycle to allow stakeholder views to be reflected in the activity's design.

It is also recommended that the Supervisory Body develop a set of minimum requirements in accordance with international best practices for stakeholder consultations in order to ensure that stakeholders are adequately consulted.

The requirements for validation, monitoring and verification are exclusively related to emissions reduction. As specified above in the section on DOE responsibilities, it is of utmost importance that the SD aspects of an Article 6.4 activity are adequately validated, monitored and verified in accordance with the provisions of the CMA, the Host Party and the Supervisory Body.

Other processes associated with mitigation activities (XIII.J)

The draft text provides for grievance and appeal rights, which is commendable. It also provides for stakeholders, participants and participating Parties to inform the Board about alleged violations of human rights. While these provisions are impor-

tant, it is equally important to specify that the Supervisory Body is to take action based on the information received (triggering an investigation by a third party, for example) and is to take decisions commensurate with the violations confirmed.

The possibility to inform the Supervisory Body of cases of non-compliance should also extend to the potential negative impacts observed after implementation of the mitigation activity. The subsequent investigation and decision making process should follow the same process as for the alleged violations of human rights. Those elements need adequate attention in the 2019 work plan.

Conclusion

Efforts, in the draft texts, to ensure that human rights are respected are particularly commendable. The texts also contain a number of elements ensuring the promotion of SD and the avoidance of negative impacts. Nonetheless, several important changes and additions are needed to warrant adequate implementation of the SD provisions. These include the use of 'shall' provisions for SD requirements, minimum quality requirements for stakeholder consultations and third party assessment of SD provisions.

Failing to demonstrate SD contributions in an objective way could lead to criticism, which would in turn undermine the credibility of the cooperative approaches. Accountability and review mechanisms are needed to ensure provisions related to SD are complied with and that remedies are implemented in the case of non-compliance. Similar provisions as those applicable to the emissions reduction and ITMOs environmental integrity are to be used to guarantee the promotion of SD, respect of human rights and avoidance of negative impacts.

References

- CDM Policy Dialogue (2012). *Climate Change, Carbon Markets and the CDM: A Call to Action*. Report of the High-Level Panel on the CDM Policy Dialogue. Luxembourg, UNFCCC.
- Dransfeld, B., S. Wehner, T. Bagh, P. Bürgi, I. Puhl, M. Zegg, V. Friedmann, S. Hoch, M. Honegger and A. Micahelowa (2017). *SD-Benefits in Future Market Mechanisms under the UNFCCC*. Climate Change. V. Seemann. Dessau-Rosslau, South Pole Group; Perspectives GmbH; Greenwerk GbR: 139.
- Olsen, K. H. (2007). "The clean development mechanism's contribution to sustainable development: a review of the literature." *Climatic Change* 84(1): 59-73.
- Olsen, K. H., C. Arens and F. Mersmann (2017). "Learning from CDM SD tool experience for Article 6.4 of the Paris Agreement." *Climate Policy*: 1-13.
- SBSTA 48-2, a (2018). DRAFT TEXT on SBSTA 48-2 agenda item 12 (a) Matters relating to Article 6 of the Paris Agreement: Guidance on cooperative approaches referred to in Article 6, paragraph 2, of the Paris Agreement. Version 1 of 9 September 02:00 hrs - corrected version*. UNFCCC Secretariat: 31.
- SBSTA 48-2, b (2018). DRAFT TEXT on SBSTA 48-2 agenda item 12 (b) Matters relating to Article 6 of the Paris Agreement: Rules, modalities and procedures for the mechanism established by Article 6, paragraph 4, of the Paris Agreement. Version 1 of 9 September 02:00 hrs – corrected version*, UNFCCC Secretariat: 33.
- Schade, J. and W. Obergassel (2014). "Human rights and the Clean Development Mechanism." *Cambridge Review of International Affairs* 27(4): 717-735.
- Sutter, C. and J. C. Parreño (2007). "Does the current Clean Development Mechanism (CDM) deliver its sustainable development claim? An analysis of officially registered CDM projects." *Climatic Change* 84(1): 75-90.
- TERI (2012). *Assessing the Impact of the Clean Development Mechanism on Sustainable Development and Technology Transfer*. New Delhi, The Energy and Resources Institute: 1-148.
- Verles, M., S. Braden, F.-Z. Taibi and K. H. Olsen (2018). *Sustainable Development and Governance in Context of the UNFCCC Process*, UNEP DTU Partnership Gold Standard Foundation: 10. Available at: <http://www.unepdtu.org/what-we-do/thematic-programmes/low-carbon-development/sustainable-development-dialogue-on-the-implementation-of-article-6-of-the-paris-agreement-under-the>

Enhancing Ambition

Carbon pricing as a tool to step up mitigation efforts

by Malin Ahlberg, BMU

On the 8th of October, the IPCC published its Special Report on Global Warming of 1.5°C. The vital message of the Report is that countries need to be intent on moving fast within the next two decades and transform all sectors towards zero emissions by the middle of this century. The current pledges of countries are not sufficient to meet the common goal of the Paris Agreement to stay well below 2°C and pursue efforts to limit the temperature increase to 1.5°C.

With the Talanoa Dialogue, a process was kicked off at COP 23 in Bonn last year to enable collective assessment of global progress towards the long-term goal of the Paris Agreement and to inform both preparation and implementation of NDCs. The expectation is that the Talanoa Dialogue will deliver global reflection on the adequacy of the present NDCs measured against the long-term goal of the Paris Agreement and promote enhanced global ambition. The point of reference for identifying (and defining) a rise in ambition is the current mitigation effort laid out in NDCs. In principle, countries can raise ambition beyond their existing NDCs and/or to “progress” beyond earlier NDCs.

The Talanoa process is to inform the preparation of NDCs to be communicated by 2020. One crucial question this dialogue has to find an answer to is what the tangible actions are to get there. Parties and non-Party stakeholders have made more than two hundred submissions to the UNFCCC. Many submissions highlight the need to set up solid regulatory frameworks that provide clear and stable signals for private actors. In this regard, policy tools like carbon pricing instruments are often highlighted as a robust catalyst of climate action. In addition, some submissions also stress the potential of international cooperation with market mechanisms to trigger faster and more cost-efficient low-carbon development around the globe. The World Bank estimates that an international carbon

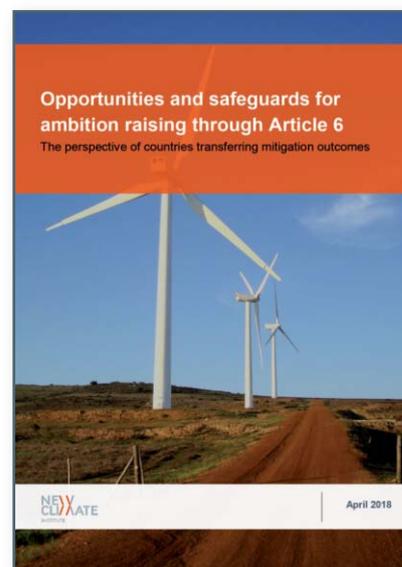
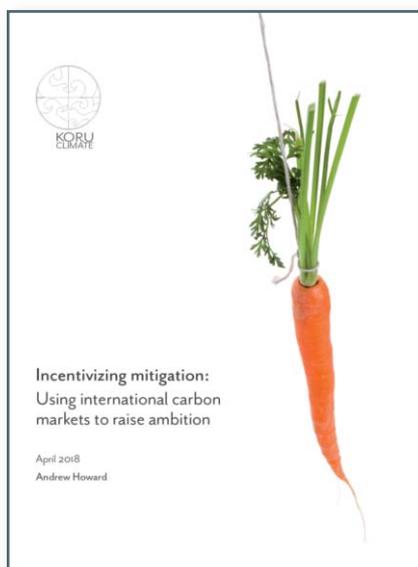
market could reduce the costs of global mitigation by one third by 2030, and by about a half by 2050 (State and Trends of Carbon Pricing, World Bank 2017).

What are the concrete opportunities countries have at hand to raise mitigation ambition through international carbon markets within the framework of the Paris Agreement? Alongside the Talanoa Dialogue process, the Federal Environment Ministry (BMU) has commissioned studies by three different think-tanks – the Wuppertal Institute, NewClimate Institute and KORU Climate – to explore ways in which countries could use Article 6 of the Paris Agreement to raise ambition and to elaborate how they can implement carbon markets to enhance mitigation outcomes, see box.

Across the three reports, this exercise led to the following key findings:

1. Broadening and strengthening carbon pricing

If the international community wants to use carbon markets effectively to raise mitigation efforts, countries need to broaden and strengthen carbon pricing around the globe. To date, countries are far from realizing the full potential of carbon pricing – both in terms of coverage and in terms of price per ton of CO₂. For instance, within the G20, less than 10% of greenhouse gases are priced and too few jurisdictions have reached a price of 30 euros for 2018, which represents a low-end estimate of carbon costs today (see Efficient Carbon Rates, OECD 2018, see https://www.oecd-ilibrary.org/taxation/effective-carbon-rates-2018_9789264305304-en). Coordination of carbon pricing schemes could play an important role in broadening and strengthening existing schemes.



Exploring ambition raising options

All papers can be downloaded at <https://www.carbon-mechanisms.de/en/2018/raising-ambition-through-cooperation/>

Through policy coordination, countries can increase economic benefits and thus are more likely to be able to increase both domestic coverage and price level. In addition, regional initiatives for coordinating carbon pricing schemes – like Carbon Pricing in the Americas and West African Alliance on Carbon Markets – may also create spillover to other countries and encourage climate policy and carbon pricing there. Countries have several options to choose from when coordinating their carbon pricing schemes, including the linking of emissions trading schemes. For instance, countries can harmonize the coverage of their respective pricing schemes, their MRV-standards and/or benchmarks as well as their reduction targets and standards for offsets. The stronger the coordination efforts, the higher the efficiency gains and thus the greater scope for higher ambition.

2. Creating demand for international credits

This approach is straightforward and not new when it comes to promoting mitigation action in developing countries. However, in comparison to the Kyoto Protocol, this approach needs to be assessed differently in light of the new conditions under the Paris Agreement. All countries have an obligation to reduce

their emissions now and international cooperation needs to enable higher ambition. Each transfer of mitigation outcomes should thus contribute to countries' ability to raise ambition and to make progress within their NDC cycles. It should be ensured, therefore, that use of international credits leads to more than a zero sum game as was the case under the Kyoto Protocol. If this safeguard is implemented, international cooperation can become a powerful tool to promote more mitigation action (see also 3. *Expanding mitigation efforts* below). Against this backdrop there are several ways to increase demand:

- **Raising domestic effort:** A precondition for allowing international credits into a mandatory carbon pricing system should be that the system is in line with the long-term goal of the country. Otherwise, there is a risk that the system is diminished and cannot set the right incentive to reduce emissions. In the worst case, this could even create lock-in of high-emission infrastructure in the respective country. Thus, the system needs to have at least an efficient carbon rate before allowing international credits into the system. This precondition would ensure that the demanding country guarantee to deliver on the Paris goals in the sector covered by the carbon price while stimulating climate actions abroad.

Furthermore, a country could also decide to purchase international credits for voluntary cancellation in order to go beyond its current NDC without including the credits in the carbon pricing scheme.

- **Facilitating the voluntary market:** The demand for the voluntary market is mostly driven by the private sector striving for climate neutrality by offsetting its carbon footprint, most often due to a commitment to corporate social responsibility (CSR). The volume of emissions reductions on the voluntary market has remained small in comparison with the compliance market. As such, emission reductions in this market segment go beyond unconditional reductions foreseen in NDCs. Therefore, the voluntary market has the potential to help host countries increase their ambition. However, with the Paris Agreement, the voluntary market also faces the challenge of avoiding double counting as the emission reductions cannot be used both for CSR and in fulfilling unconditional parts of the NDC. Double use of emission reductions would undermine the environmental integrity of both systems. The Gold Standard Foundation has recognized this challenge and has developed an assessment tool to avoid double counting. In addition, voluntary market stakeholders have started to discuss development of a new claim for the emissions reduction units. These units could be defined and recognized as a contribution to the goals of the Paris Agreement and not used for offsetting of carbon footprints, see ICROA White Paper “Scaling Voluntary Action within the Framework of the Paris Agreement”, February 2017, see https://www.icroa.org/resources/Documents/ICROA_WhitePaper_Final.pdf
- **Sectoral schemes like CORSIA:** The international aviation sector is currently not covered by the Paris Agreement. In October 2016, the International Civil Aviation Organization (ICAO) agreed on a market-based approach, the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), which goes into effect as of 2021. CORSIA is an integral component of the ICAO package of measures to reduce the climate impact from international aviation and requires airline operators to offset the growth of emissions after 2020 by purchasing emission units generated by emission reductions in other sectors. ICAO and its member states are currently discussing the details of the carbon

pricing scheme. With regard to the environmental integrity and the effectiveness of the scheme, it is critical that robust eligibility criteria be defined for offsets in order to avoid double counting within the scheme itself and ensure that no double use of emission reductions occurs within the international climate regime. If these conditions are met, CORSIA can become a source for additional financial support for countries to increase ambition outside the unconditional part of their NDC and thus increase the ambition of the NDC.

3. Expanding mitigation efforts through international cooperation

Article 6 is embedded in the architecture of the Paris Agreement and it is crucial that international transfer of mitigation outcomes is based on robust accounting which avoids any kind of double counting, ensures environmental integrity and promotes sustainable development. If the Paris rulebook provides such a robust framework, Article 6 activities can be used by supplier countries for GHG units to strategically improve the current NDC and pave the way for progress within the next NDC cycle. What is most important here, is that the climate activities are more than a zero-sum game, trigger transformation in the host country and lead in the short or medium term to higher ambition of NDCs. The following two findings are thus important:

- **Create overall mitigation of global emissions:** Overall mitigation is often described as going beyond offsetting since not the entire volume of emission reductions is used to offset emissions elsewhere. The mechanism defined in Article 6.4 requires delivery of overall mitigation. However, this could also be applied in the context of other cooperative approaches, as this is an option that can be used to increase ambition. A host country has several options available for use in implementing “overall mitigation” – for example, defining an ambitious benchmark, applying shorter crediting periods and discounting the reduction estimates by a set percentage. Such cancellation of a portion of acquired emission reductions may create more market demand and may support the host country



Source: NRE / Flickr / CC BY-NC-ND 2.0

Expanding mitigation efforts: international cooperation can be a vehicle for raised ambition.

in strengthening emission reduction targets in the respective sector.

■ **Expand the scope of future NDC:**

Countries with NDCs where the unconditional part is limited to specific sectors could broaden the scope of their mitigation action by bringing new mitigation areas within the scope of the unconditional part the NDC. This could be done by implementing the action with market means and limiting the transfer of mitigation outcome (for instance) to one NDC cycle. With the “Nitric Acid Climate Action Group (NACAG)” initiative, the German government has already adopted this kind of international cooperation approach. The NACAG makes financial support for the installation and operation of abatement technologies in this sector available subject to the condition that the partner country takes full responsibility for the mitigation activity after 2020, see CMR 03/2016. This approach could be used as a blueprint for Article 6.2 activities by purchasing emission reduction units during the implementation phase of the activity while ensuring the long-term operation of the emissions reduction activity by the host country. The emission reductions generated after the period in which units have been transferred can be accounted towards the host country’s mitigation effort.

Conclusion

Carbon pricing can become a strong and effective tool to help countries strengthen their current NDCs and to prepare for higher ambition in the next NDC cycle. Countries should thus aim to play out the full potential of carbon pricing instruments. If all of the conditions described above are implemented – broaden and strengthen carbon pricing schemes, increase demand of international emission reduction units and expand mitigation effort in host country through international cooperation – then carbon pricing and markets can be a strong driver in speeding up implementation of ambitious climate actions. This could be a way forward how the international community can achieve timely delivery on the Paris Agreement’s temperature goal. Political platforms like the Carbon Market Platform can provide scope for countries and regions to work more closely together, align their carbon pricing policies and increase their efficiency, thus enabling higher ambition. Furthermore, capacity building programs for NDC implementation should take the potential of carbon pricing into account and support countries in developing strategies both to improve their domestic carbon pricing instruments in respect of their long-term mitigation goal, use international cooperation to facilitate NDC implementation in the current period and enable progress to be made in the subsequent NDC cycle.

Operationalizing Article 6

A Standardized Crediting Framework for the Post-2020 World

by Madeleine Diouf, Senegalese CDM DNA, Direction de l'Environnement et des Etablissements Classés (DEEC)

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The adoption of the Paris Agreement in December 2015 raised hopes for carbon market continuity beyond 2020. The key strategic question now, however, is how will the Clean Development Mechanism (CDM) programs continue to generate compliance credits and will they do so at all? If they do, what is the best way to transition to the Paris framework and adapt the new market mechanisms effectively?

The government of Senegal with support of the World Bank's Carbon Initiative for Development (Ci-Dev) seeks to answer these questions using its own, self-managed Standardized Crediting Framework (SCF)—a new approach to crediting emission reductions which goes beyond the CDM Programme of Activities (PoA) model, has lower transaction costs, and encourages private sector engagement. Compared to existing crediting under the CDM, the SCF allows for more comprehensive geographic coverage, flexibility, and simplified approaches to project cycle, baselines, and monitoring. By addressing the barriers faced by the CDM programs in these areas, the SCF could benefit energy access on a much larger scale.

Collaboration between the government of Senegal and Ci-Dev started in 2016 when Ci-Dev signed an emission reduction purchase agreement (ERPA) with Senegal's Rural Electrification Agency (ASER). Ci-Dev is a fund of the World Bank that mobilizes private finances for clean energy access in low-income countries.

ASER's rural electrification program uses a concession-based model where private companies compete for and win the right to sell, install, and maintain new electricity connections to rural households in one or more of 10 regional 'concessions' over a period of 25 years. To facilitate electricity access for poor rural households, ASER has decided to use the carbon revenues to overcome financial access barriers. For this purpose, the project uses an innovative voucher scheme: each voucher can be redeemed by the household to the private concessionaire in their territory for the service level and connection technology that best fits their needs. The concessionaire then installs the new connection and redeems the voucher with ASER for compensation. This subsidy is ultimately paid for by Ci-Dev for the generated emission reductions.

Ci-Dev uses the CDM as the methodological framework to quantify, verify, and certify the emission reductions. However, given that the CDM may not be relevant after 2020 as the Paris Agreement replaces the Kyoto framework, there is a need to explore other types of crediting mechanisms to channel climate finance to client countries. To address this and to support transition between Kyoto and Paris market environments, Ci-Dev has commissioned the development of an SCF for energy access programs.

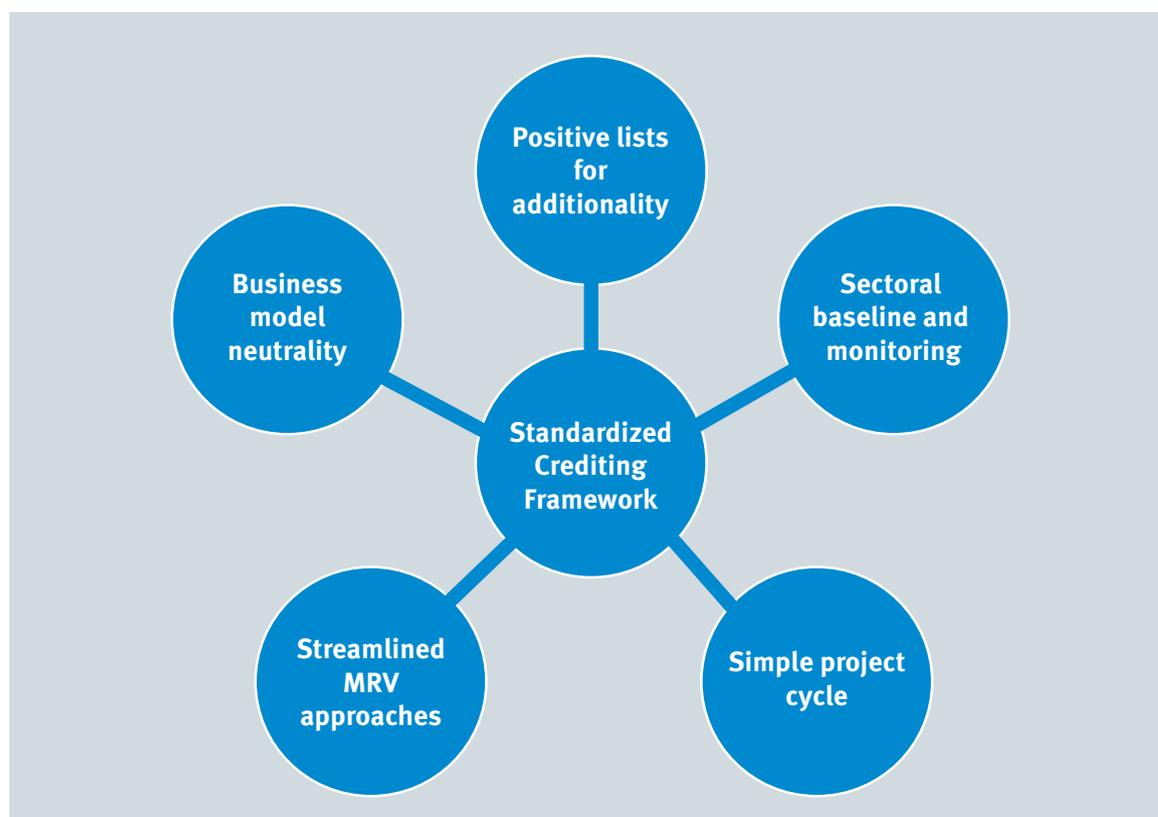


Figure 1: Key elements of the SCF

SCF in theory

The concept of an SCF is developed to address challenges faced by the CDM programs in the current crediting system, especially challenges faced by the energy access programs in Africa. These include:

- (a) Capacity of CMEs—through simplification of reporting requirements and standardizing most of the monitoring parameters at the national level
- (b) Interaction with domestic policies—by focusing on technologies with clear automatic additionality
- (c) Data needs and the related transaction costs for monitoring—reduced by using more standardized approaches, simplifications to the MRV system, and simplifying the project cycle.

The SCF approach would support greater private sector engagement by providing simplified, predictable approaches to crediting for energy access projects.

Standardized emission reductions

A central idea of the SCF is standardization of the emission reductions from each unit (i.e., solar lantern or solar home system) or household in an energy access program. This simplified approach to emission reductions would, in principle, be based on the number of households receiving access, average consumption of energy services, and the difference between the baseline and program emission factors, although the detailed calculations would vary by technology (Figure 2). Program proponents would only be required to measure the number of households receiving access under their interventions. For the other parameters, national or international default factors could be made available. This would

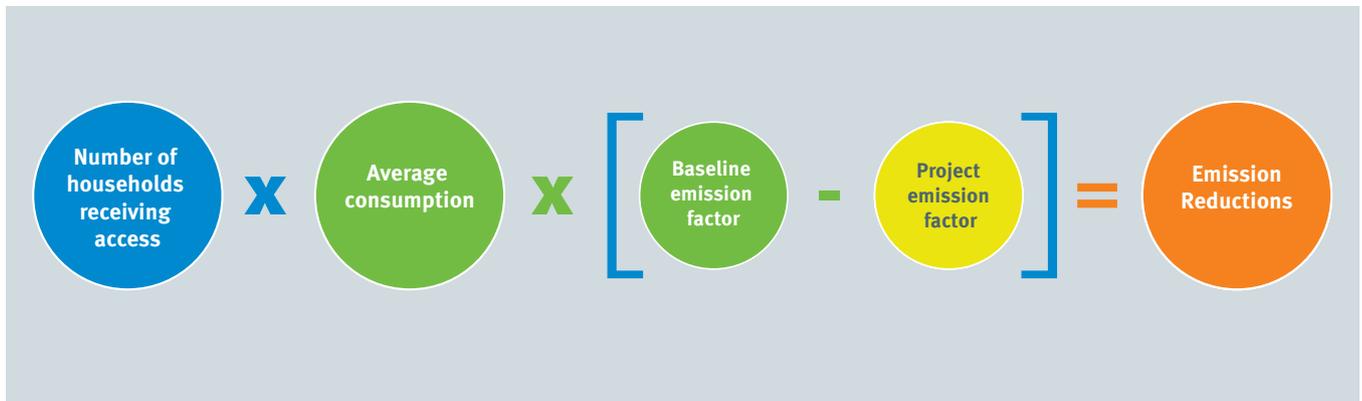


Figure 2: Standardized emission reductions for an SCF program

provide flexibility for private sector participants, while potentially significantly reducing transaction costs. If the parameters other than the number of households were based on these default factors, the total emission reductions could be calculated each year based solely on the number of households or devices within the program. This would echo the current approach for solar LED lamps under the CDM, where emission reductions are based only on the number of operational units in place and an international default emission reduction factor per unit.

Simplified project cycle

The SCF would build on earlier proposals for streamlining the project cycle by eliminating the validation step, and instead combining verification of the project design, its compliance, and performance into a single ex-post third party audit.¹ Initially, the programs would be “listed” based on information in a simplified ‘listing’ template that would clearly state the requirements for its eligibility. Once listed, the program would initiate a monitoring program to collect data annually to determine emission reductions, which would in turn be verified by a third-party auditor before credits were issued.

Under the SCF project cycle (Figure 3), with simple, clear, and transparent instructions, project proponents have little risk, in contrast to CDM, that an

activity would not be accepted under the SCF as long as it is implemented according to the SCF guidelines.

Positive lists for additionality

Almost all the technologies included in the energy access programs reviewed for the pilot fall under the “positive lists” in the current CDM rules. These technologies are considered automatically additional due to their unit size or their energy source. This implies that the total size of the activity is relevant for assessing additionality because the microscale guidelines are limited to project activities that reduce emissions by less than 20 ktCO₂ per year. However, this may not be the case for all technologies and sizes, and hence requires alternative approaches for assessing the additionality. Sector specific standardized baselines and the embedded additionality demonstration could create a foundation for more transformational procedural reforms while still maintaining the environmental integrity of SCF. These could include, for example, considerations of linkage to country NDCs, having a comparison between baseline emissions and the business-as-usual and policy impacts. Such additional requirements may increase the complexity (and subjectivity) of the SCF application in a country and sector. However, they may be necessary to ensure the environmental integrity of the program.

¹ https://www.ci-dev.org/sites/cidev/files/documents/CDM_Reform_2012.pdf

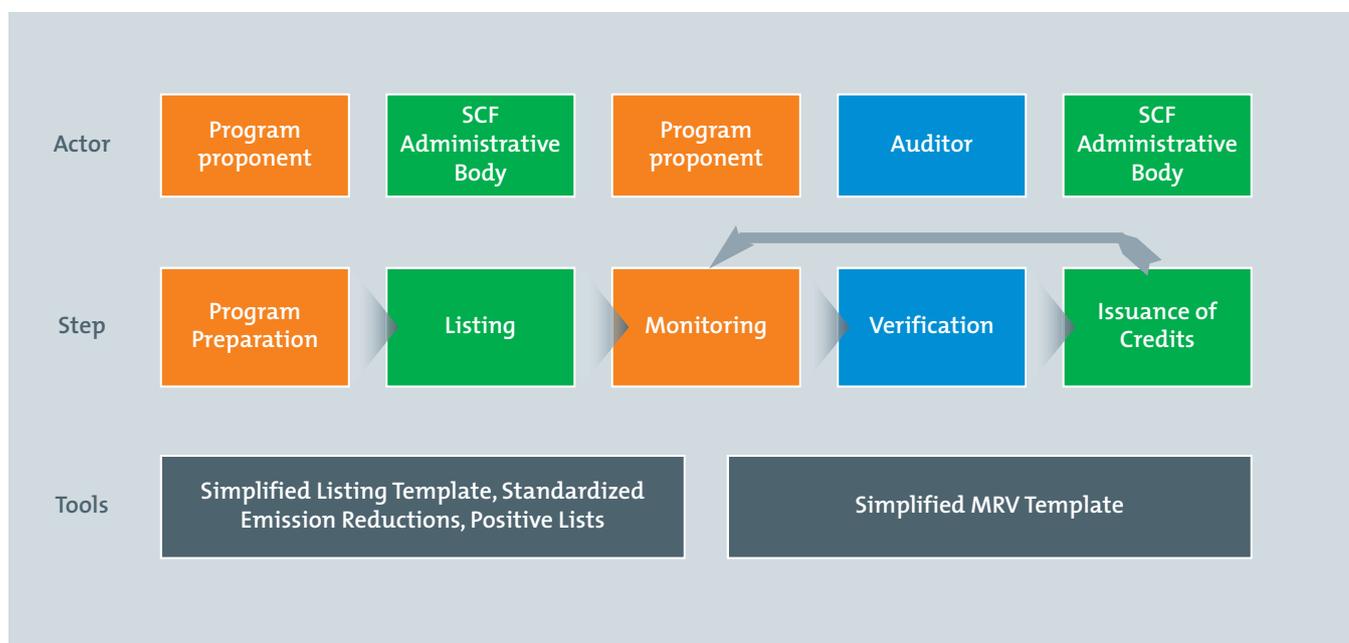


Figure 3: Project cycle—actors, steps, and tools under the SCF

Streamlined MRV approaches

The SCF would incorporate streamlined monitoring, reporting, and verification (MRV) approaches, such as a reduced need for site visits, use of local experts for auditing, faster timelines for checking documentation, tiered accuracy requirements, and calibration requirements appropriate to the country in question. Simplification of documentation would lend itself to greater digitization of forms, building on the current work in this direction under the CDM and other crediting systems.

Efficient governance arrangements

The SCF is implemented through governance and institutional arrangements independent from the UNFCCC process. This could be achieved through an institutional arrangement that builds on the existing structures and avoids, to the extent possible, the creation of new institutions. This approach would help reduce the administrative and financial burden on the national government, at the same time securing

transparency and predictability of the decision making. The identified institutions (Figure 4) are required to perform oversight, executive, and administrative functions for the proper implementation and operation of the SCF.

SCF in practice

The first SCF pilot was launched in Senegal in April 2017 as a part of the national electrification program led by ASER. Previously, to support rural electrification, ASER started exploring the CDM as an option and drafted a PoA-DD and submitted it with a proposed new small-scale CDM methodology for rural electricity (which eventually became AMS I.L and AMS III.BB). The program preparation phase lasted from September 2011 until September 2016 with significant time investment by many parties along with consulting costs.

Under the SCF, on the other hand, the program template² was standardized and simplified into a

² For all SCF templates and guidelines developed for the Senegal pilot, please refer to <http://comnacc.org/standardized-crediting-framework-for-energy-access-program-protocol-senegal-pilot/>

Table 1: Comparison of SCF process with CDM process

CDM	SCF	Benefits of SCF
Comprehensive project description, application of baseline, and monitoring methodology	Checklist approach	Reduced consulting input required
PDD prepared by external consultant with inputs from project participant and Ci-Dev	No narrative part; minimal drafting effort	Reduced time spent by project participant on drafting the PoA-DD
	Data collection much less time consuming, but this was partly because of data collected for CDM PoA	
Total duration	Total duration	Reduced process time
68.7 months	2.9 months	~ 66 months of overall duration

“Listing Document.” The listing document contains a checklist to be filled out by the project proponent with clearly defined eligibility criteria for technologies. Table 1 illustrates the differences in program preparation and duration.

Validation

The validation process under the CDM started in September 2016 and the DOE submitted a Request for Registration for the program in October 2017, marking the end of the validation phase. The SCF does not include the validation process as a separate step in its project cycle, therefore it does not require any resources.

Registration/Listing

The SCF uses a simplified listing process where the SCF administrator checks the completeness of the listing document, registers the activity in its database, and provides a notification to the project proponent. ASER submitted their program documentation on October 1, 2017, and received a letter confirming the listing on November 3, 2017. Table 2 shows



Source: The World Bank Group

Table 2: Registration/listing activities and duration

CDM	SCF	Benefits of SCF
Validation report submitted by DOE to CDM Executive Board with request for registration	Completeness check by the SCF administrator	Significant time and cost savings, as well as savings in process time
Completeness check by secretariat	Entry into the SCF database and notification to the project proponent	No direct costs involved in listing for the SCF (i.e., no registration fees), although this could change after the pilot
Approval by the Executive Board (EB)		
Total duration	Total duration	Reduced process time
7.1 months	1.1 months	~ 6 months



Source: The World Bank Group

the activities and duration of the registration/listing phase.

One important difference between the SCF and the CDM is the starting date for the crediting period. For the CDM, the crediting period for each CPA within a PoA occurs only after the PoA has been registered and the CPA has been included. The registration date for the CDM PoAs is the date when their complete request for registration was submitted. The SCF, on the other hand, allows the crediting period to start up to one year prior to the registration date, so the time required for program development and listing does not reduce the potential emission reductions attributed to the program. Combined with the elimination of the validation step, which can take one to two years for the CDM, an SCF program might have a crediting period starting two to three years earlier than under the CDM.

Monitoring

Now that the ASER CDM PoA is registered, CDM monitoring activities have just begun. Monitoring for the SCF pilot began in October 2017, even though historical data from October 2016 (i.e., the start of the pro-



Source: The World Bank Group

gram and crediting period) will also be collected. While under the SCF some data collection is similar to the CDM, cost savings are expected due to simplified monitoring requirements.

Nevertheless, both the SCF and the CDM will require the development and maintenance of a database of all consumers connected under the program. This information flow from rural electrification concessionaires to ASER is more robust in some concessions than in others, so more investment will be needed in monitoring systems.

Verification

For the verification process under the CDM, a new DOE verifies the monitoring report, conducts an

on-site assessment, and prepares the verification report. While the time required for verification under the CDM is quite project specific, the average time across all CDM projects from the end of the monitoring period to issuance of CERs is typically 6–8 months.

The verification phase for the SCF is likely to be less costly and less time consuming due to simplified monitoring. The clear verification guidance and template may also lower the fees charged by auditors. In the long run, further cost saving potential could be unlocked through the accreditation and training of local auditors.



Certification and Issuance

The final step of the project cycle for both the CDM and the SCF is certification and issuance. Under the CDM, the DOE submits the verification report with a request for issuance to the CDM EB. The process includes a completeness check and assessment by the secretariat, approval by the Executive Board, and a potential review of the issuance if requested by a party or three members of the Board.

For the SCF, the administrator checks the completeness of the documentation and verification assessment from the verifier before the governing body certifies the emission reductions. The SCF pilot, however, does not issue tradable units at the piloting stage because it is still a simulation of a crediting standard.

Governance arrangements

The pilot is supervised by a governing board led by the Directorate of Environment and Classified Establishments (DEEC) of the Ministry of Environment and Sustainable Development (MEDD). It also includes the Directorate of Electricity (DE) of the Ministry of Petroleum and Energies (MPE), and the Directorate General for Finances (DGF) of the Ministry of Economy, Finance and Planning (MEFP). A Technical Committee drawing from the Thematic Group on Mitigation (GTA) of the National Climate Change Committee (COMNACC) supports the Board, as does the administrator in DEEC's Climate Change Division (Figure 4).

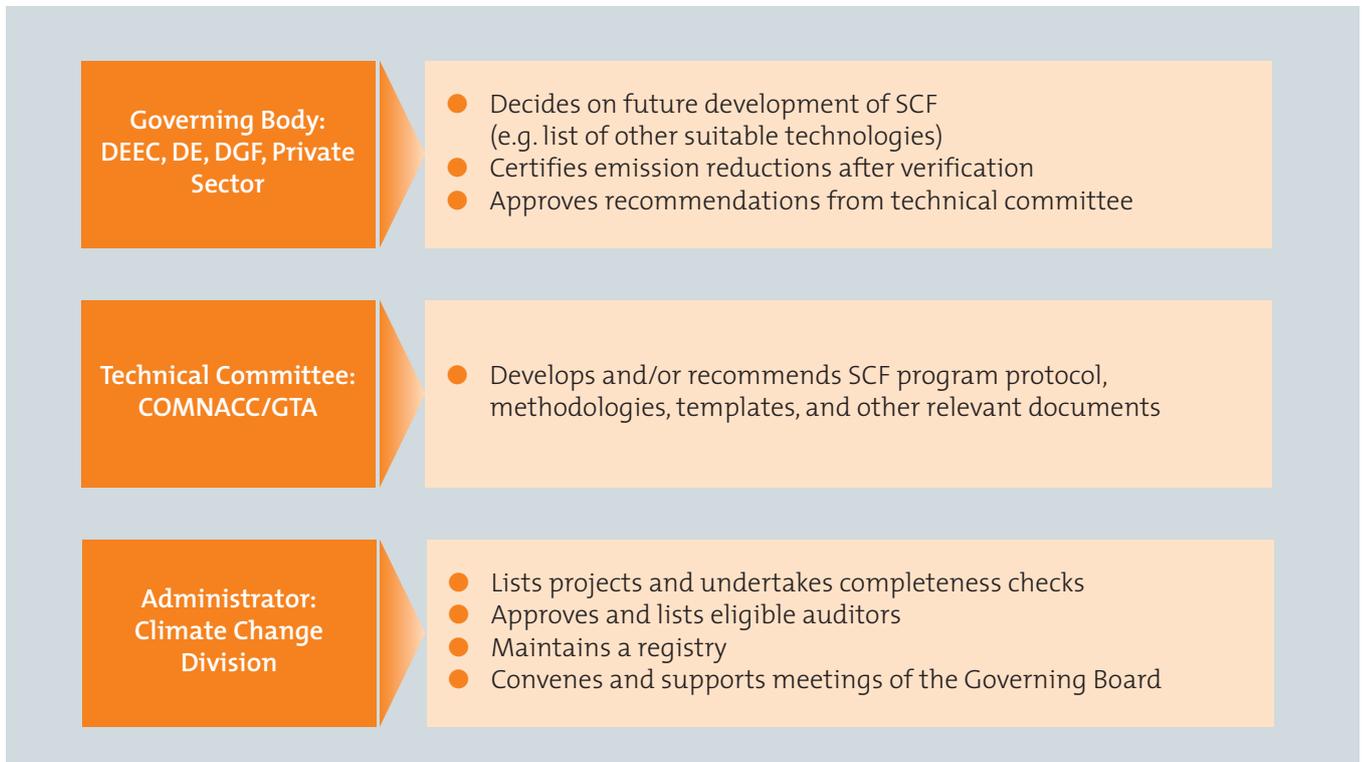


Figure 4: Roles of the key governance structures

Outlook

While the SCF builds on the CDM and many of its innovations, it is expected to become a framework under which activities could be developed under Article 6 of the Paris Agreement. With its country-owned and managed governance structure that facilitates alignment of different policies and institutions, the SCF can help build the relevant operational reforms into the new mechanisms.

Article 6.4 may be a natural place in which to embed the SCF in the architecture of the Paris Agreement. However, the SCF could also become a cooperative approach under Article 6.2. Integrating the SCF into the evolving regulatory framework is an issue to be addressed in the UNFCCC negotiation process.

By demonstrating real benefits and gaining support among stakeholders, arrangements under the SCF would most likely support the design of simplified and decentralized approaches under Article 6.



Source: The World Bank Group



Source: The World Bank Group



Source: The World Bank Group

As a next step in piloting the SCF, Senegal has commissioned an analytical study. This study will explore how the SCF can support implementation of the country's NDCs, how to determine baselines considering conditional and unconditional targets, and how to avoid double counting. The findings of the study will help update the framework and its requirements for operation in a post-2020 environment.

Conclusion

The Standardized Crediting Framework is important for several reasons, as it is one of the potential solutions that Ci-Dev is testing in the African context. First, the framework proposes a systematic approach to counting carbon credits. Second, making things simple and standardized will help improve transparency of the carbon market and reduce transaction costs. Finally, country-owned and managed frameworks like the SCF would help with capacity building in host country institutions, improve coordination

among domestic institutions, and help align climate change policy goals with sector policy goals.

The findings of the Senegal pilot will be particularly relevant for the post-2020 technical discussions on design of the elements for the new mechanisms; finding ways to avoid double counting; monitoring, reporting and verification (MRV); and governance arrangements to administer such design initiatives. The lessons learned from this pilot project will also help to better understand possible interactions between climate finance and the results-based financing model and their possible application in supporting the energy access agenda in low-income countries.

CARBON MECHANISMS REVIEW



A new Path to Policy Crediting?

New JIKO study explores potential for policy-based cooperation under Article 6. The paper is available at

www.carbon-mechanisms.de/en/policy_crediting

REDD+ and CORSIA

New research paper evaluates environmental risks if forest offset credits were to be used towards NDCs and CORSIA. Download at

www.carbon-mechanisms.de/en/redd

Glossary

All Carbon Market terms and abbreviations are explained in detail in the glossary on the JIKO website. You can view the glossary here:

www.carbon-mechanisms.de/en/service/glossary/