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Scaled-up Crediting under Article 6.4

Will there be policy crediting under the Paris Agreement?

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Summary

Article 6 of the Paris Agreement could allow the global community to open a new chapter of market-based cooperation by going beyond the project-based approach known from the Kyoto Protocol, allowing for policy-based and sectoral crediting to take place under the Article 6.4 mechanism. The question is what will be needed to make such up-scaled approaches possible.

This paper aims to answer this question by identifying commonalities and differences between the requirements of stand-alone activities known from the pre-Paris era and future up-scaled activities by looking at the different steps of a prototypical activity cycle. The authors find that, while the activity cycle of stand-alone and up-scaled crediting activities must not differ significantly, up-scaled crediting will require specific tools and methodologies to be developed. Furthermore, each of the up-scaled crediting approaches will be confronted with specific challenges: Under policy-based crediting, demonstration of additionality and policy causality can be expected to be particularly challenging. Under sectoral crediting, by contrast, a key challenge will be to define a robust baseline.

The development of solutions tailored to the needs of scaled-up crediting will require innovative thinking and can be expected to take significant amounts of time. Given the urgent need to implement immediate climate action, the authors suggest that up-scaled crediting should be phased into Article 6.4 while developing its Rules, Modalities and Procedures (RMPs).

This approach is supported by the findings of the analysis of the current draft RMPs which show that these are sufficiently generic to allow

for being applied to mitigation activities of different scales with only limited need for aligning them with the requirements of up-scaled crediting:

- Some areas entail the potential to exclude policy-based or sectoral crediting from the Article 6.4 mechanism: The draft RMPs, for instance, include a governance structure that would allow host Parties to register Art. 6.4 activities. This may raise concerns about conflicts of interest if the host Party government is directly involved in the activity. The text further contains language on additionality that requires reductions to go beyond any mitigation required by law, regulation, or legally-binding mandate. This provision would not be compatible with policy-based crediting that will by itself be based on a law, regulation, or legally-binding mandate, making it impossible by nature to exceed them.
- Other sections of the RMPs, by contrast, are too generic to directly affect the compatibility of the mechanism with up-scaled crediting. This, for instance, includes the composition and accreditation criteria of Designated Operational Entities (DOEs) that are to evaluate Art. 6.4 activities.

Building on these observations, policy makers willing to foster up-scaled crediting under Article 6.4 could proceed in three steps:

First, those sections that were found to be incompatible with up-scaled crediting should be prioritized and be aligned with the requirements from policy-based and sectoral crediting. Given that the registration of Art. 6.4 activities by host Parties may raise conflicts of interest if governments or public entities are directly involved in these activities, the mandate should

be limited to stand-alone activities that have been proposed by private and sub-national entities. Similarly, definitions of additionality must be specified to ensure that they do not exclude policy crediting.

Second, those sections of the RMPs that currently lack detail should be made more explicit by including specific language on up-scaled crediting. This, for instance, relates to the definitions section of the RMPs, where sectoral and policy crediting could explicitly be mentioned as possible Art. 6.4 activities.

Third, attention should be paid to the specific requirements of up-scaled crediting when further designing the mechanism and its institutions, including during its operation. When establishing the accreditation criteria for DOEs, for instance, the capacities needed for the assessment of sectoral dynamics and policy evaluation should be taken into consideration. Similarly, when deciding on the exact composition of the Article 6.4 Supervisory Body, sectoral expertise should be one criterion guiding the selection of members.

This approach should result in a common governance framework applicable to up-scaled crediting as well as stand-alone activities that takes the peculiarities of the different activity types into account while allowing methodologies and tools needed for up-scaled crediting to evolve dynamically during the operation of the mechanism. Under such an approach, up-scaled crediting activities could further benefit from the experiences made by the first Article 6.4 stand-alone activities: When dealing with the new framework conditions of the Paris Agreement, the implementation of stand-alone activities will also require the development of innovative solutions, which might inform up-scaled crediting.

In addition, the implementation of up-scaled approaches under Article 6.4 could be supported through a number of ways. One possibility is the top-down development of methodologies

for policy-based or sectoral crediting. Providing capacity support to host countries in identifying their potential for up-scaled crediting would be another avenue in fostering the emergence of scaled-up crediting under Article 6.4.

1 Introduction

Since the registration of the first project under the Clean Development Mechanism in 2004, the global community has gained valuable experience with the project- and programme-based mitigation activities under the Kyoto Protocol. With the Paris Agreement and its Article 6.4 mechanism scheduled to become operational by the beginning of 2020, there is now the possibility to open a new chapter of market-based cooperation and to allow what has been excluded under the CDM: policy-based and sectoral crediting. Many expect that such mitigation activities will not only supersede existing interventions in terms of scale but that they will also be in a better position to drive entire sectors or even economies towards low-carbon sustainable development.

Only months before the implementation of the Paris Agreement kicks-off in 2020, rules on how to operationalize market-based cooperation under the new regime are still in limbo. Parties have failed to agree on an Article 6 rulebook that would also specify the functioning of the 'mechanism to contribute to the mitigation of greenhouse gas emissions and support sustainable development' established under Article 6.4. It is therefore yet unclear how mitigation activities under Article 6.4 will look like and if there will be room for up-scaled crediting under the new mechanism.

The objective of the paper is to analyse the current status of the Article 6.4 negotiations regarding their suitability for up-scaled cooperative mitigation action and to develop recommendations on how to enable the uptake of such activities in the future.

For this purpose, section 2 first presents the key features of scaled-up crediting and how policy and sectoral crediting differ from stand-alone (project- and programme-based) activities. Key differences are derived by looking at a prototypical up-scaled activity cycle and the various steps it entails.

Building on these observations, section 3 asks whether Article 6.4 can be expected to allow for scaled-up crediting. The analysis focuses on the Rules, Modalities and Procedures (RMPs) for the Article 6.4 mechanism that are currently subject to the negotiations under the UNFCCC. By looking at key definitions of the RMPs, the actors and their roles as well as the requirements and features of future methodologies the section assesses whether there will be room for policy-based and sectoral crediting under Article 6.4 or if the focus is put exclusively on project and programme-based activities.

Section 4 of the paper summarizes the analysis, discusses the observations made and derives approaches for supporting the uptake of up-scaled crediting under Article 6.4.

2 What are up-scaled crediting activities?

2.1 Background

The debate on increasing the scale of crediting activities has a long track record and was mainly driven by perceived shortcomings of the Clean Development Mechanism (CDM). Critics have claimed that the process leading to the registration of individual projects and the issuance of credits was too cumbersome and costly. The project-based design of the CDM has further been held responsible for the regional and sectoral imbalance of the mechanism: While the project-by-project approach seems well suited for targeting emissions from large facilities, reaching small and dispersed emission sources is much more challenging. These circumstances have benefited project development in specific sectors such as energy and industry, where large emission sources can be easily reached. With large industrial plants being predominantly existent in emerging economies such as China, India and Brazil, these countries host the vast majority of CDM projects while less developed regions could not benefit accordingly. In addition, mitigation activities targeting small and dispersed emission sources in households or the transport sector are associated to particularly strong contributions to sustainable development. This has led to complaints that the CDM is unable to fulfil its target to contribute to host countries' sustainable development. Due to its design as a project-based mechanism, some even consider the CDM as incapable of achieving fundamental changes in the host countries' economies (Sterk and Wittneben 2005;

Michaelowa 2012; CDM Policy Dialogue 2012).

One important step in addressing these concerns was made with the introduction of the programmatic CDM in 2005, which allowed an unlimited number of component project activities (CPAs) to be registered under one single Programme of Activities (PoA). While initial uptake of the programmatic CDM was slow (Kreibich, Arens, and Fechtner 2011), the number of programs has increased steadily, also in Africa, a largely underrepresented region under the CDM (Kreibich et al. 2017).

Despite these achievements of the programmatic CDM and significant potential, the debate on further increasing the scale of the CDM continued. The CDM Policy Dialogue, a discussion process on the future of the CDM initiated by the CDM Executive Board in 2011 also recommended the CDM to be scaled-up (CDM Policy Dialogue 2012). The debates on reforming the CDM finally fed into discussion on the design of future market mechanisms which are to become operational by 2020 under the Paris regime.

2.2 Key features of scaled-up crediting

Up-scaled crediting can be distinguished from project and programme-based approaches through the following features (Broekhoff et al. 2017):

- Baseline emissions are established collectively for a predefined group of greenhouse gas emission sources;
- Credits are issued based on aggregate reductions achieved across this group of GHG sources;
- mitigation actions can be diverse and may be undertaken by multiple entities responding to incentives;
- Credits may be issued to a single entity responsible for establishing and implementing policies that foster emission reductions across all GHG sources targeted.

Up-scaled crediting can further be differentiated into two types:

Under **policy-based crediting**, a host Party is supported in its efforts to introduce and implement a national climate policy instrument by being provided financial assistance. In exchange of the support received the Party exports (a portion of) the emission reductions achieved by the national climate policy. These emission reductions could then be used by another Party for NDC attainment (offsetting), ambition raising or for compliance with climate finance commitments. The mitigation outcomes transferred are contin-

gent on the results of the specific policy. Policy crediting is also possible if the policy has already been introduced: In this case, the host Party is assisted in its efforts to increase the ambition level of the policy concerned (Kreibich and Obergassel 2018). Policy crediting must not be restricted to the national level nor to public entities being the activity proponents. In countries with a strong federal structure and where subnational governments are particularly progressive in terms of climate action, policy crediting schemes could also emerge at subnational level. In principle, sectoral crediting could also be implemented by a private entity with the scheme being based on a private policy instead of a public policy. For the sake of clarity, however, we will in the following consider a crediting scheme that is based on a national policy implemented by a national government to be the prototype of policy-based crediting.

Sectoral crediting, by contrast, would be based on an agreed emissions threshold or “no-lose target” at sectoral level. A Party would define a level of emissions for a specific sector. This threshold could be either in terms of absolute emissions or intensity-based, for example in terms of emissions per

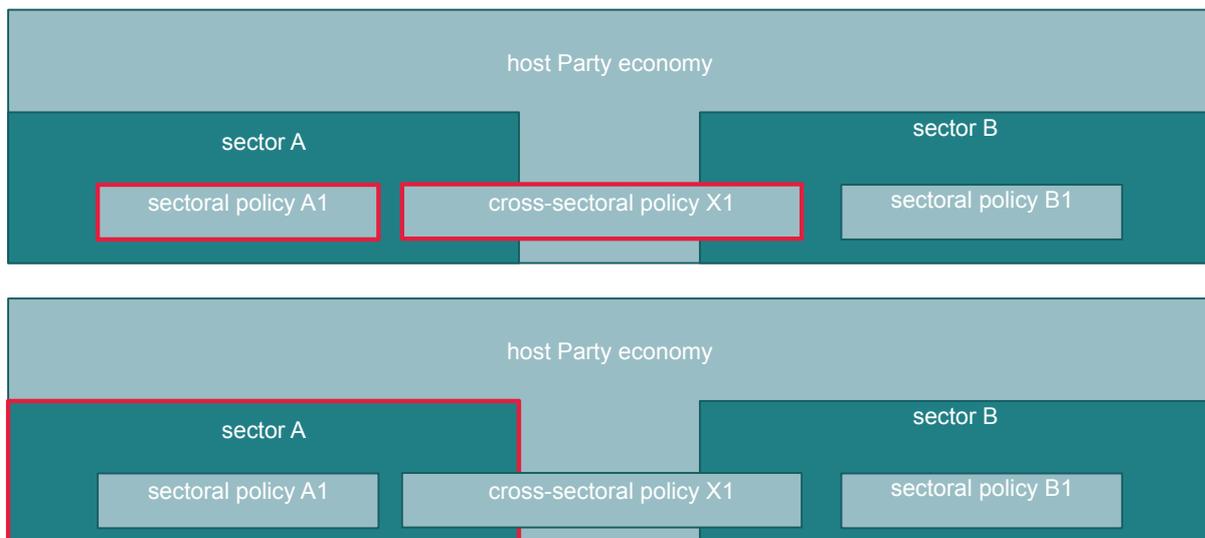


Figure 1: Functioning of policy crediting (upper figure) and sectoral crediting (lower figure). The red line indicates the crediting level.

unit of gross domestic product (GDP), emissions per unit of electricity generated, etc. The host Party government could then undertake actions (i.e. implement policies) to reduce the emissions in the sector to (or below) the agreed level. If emissions are reduced below the target level, the host Party would receive credits (Sterk 2010). Under specific circumstances, sectoral crediting could also be undertaken by private entities, such as industry associations. This, however, requires private entities to take responsibility for entire sectors.

Figure 1 illustrates the functioning of the two approaches with the red line indicating the level at which credits are issued. Policy crediting (upper figure) can either be based on the success of a policy in a specific sector (sec-

toral policy A1 in sector A) or a sectoral policy that affects emissions from several sectors (cross-sectoral policy X1 affecting emissions from sector A and sector B).

Sectoral crediting (lower figure) is based on the development of the emissions in the sector which can be influenced by sector-specific policies (sectoral policy A1) and by cross-sectoral policies (cross-sectoral policy X1).

2.3 Requirements for scaled-up activities under Article 6.4

Assessing policy-based or sectoral schemes

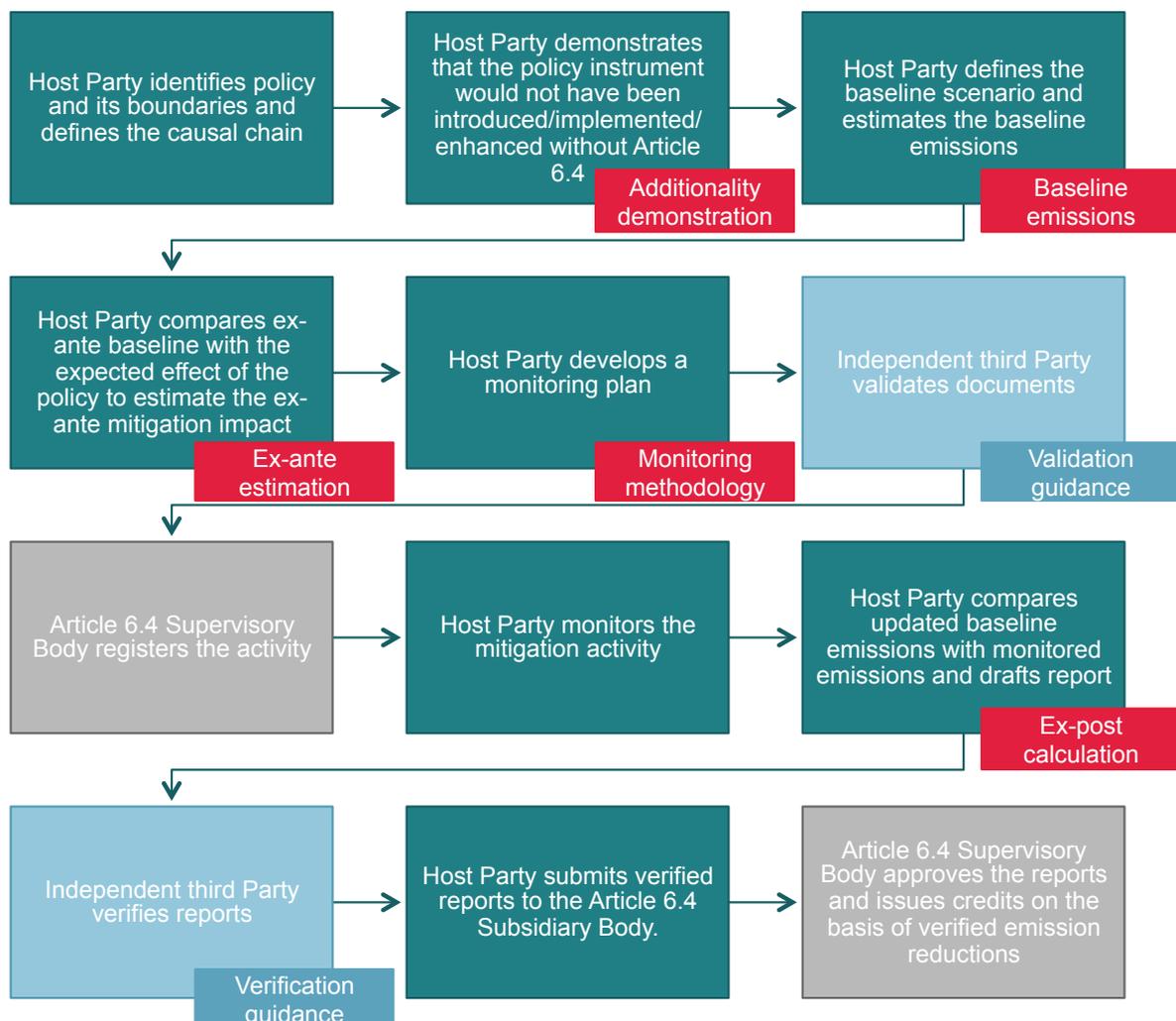


Figure 2: Stylized activity cycle of a policy crediting scheme

has some differences compared to the assessment of projects and programmes. Provisions, processes and tools for up-scaled crediting will therefore need to differ correspondingly. What these differences are can be derived by looking at prototypical activities and the various steps they entail. Kreibich and Obergassel (2018) develop a prototypical activity cycle for policy crediting. A stylized version of this activity cycle is illustrated in Figure 2 below. The following section goes through the individual steps of this activity cycle to identify differences between project/programmatic and up-scaled approaches that would need to be accounted for. While the focus is on policy crediting, under sectoral crediting most steps will be identical. In cases where individual steps differ this will be highlighted.

Step 1: Identifying the policy and its boundaries

In this first step, the host party as the proponent of the policy crediting activity defines the policy that will be subject to crediting. It defines what changes will be considered an impact of the intervention (causal chain) and where the boundaries of the intervention are. Under sectoral crediting, this step is similar: The coordinator of the sectoral scheme must define the sector that will be subject to crediting and define its limits. However, defining the causal chain of the intervention is not required.

By definition, the boundaries of policy- or sector-based schemes may be much wider than the boundaries of projects or programmes. Robust methodologies will therefore be required to accurately delineate what emission sources will be impacted by the scheme. With individual policies having their specific functional logic, individual methodologies will presumably be required per each type of policy subject to crediting, resulting for instance in a feed-in-tariff methodology, a

energy efficiency regulation methodology, etc. Similarly, for sectoral crediting sector-specific methodologies will be required to take account of the systemic functioning within the sector.

Step 2: Additionality demonstration

In this step, the host Party demonstrates that the policy instrument subject to crediting would not have been introduced / implemented or enhanced without the cooperation under Article 6. To demonstrate the additionality of the policy, methodologies for additionality demonstration will have to be adopted at the international level through approval by the Article 6 Supervisory Body.

Under sectoral crediting there is no need for dedicated additionality demonstration processes as the performance of the entire sector is assessed, not the performance of individual activities. The environmental integrity of sectoral crediting is determined by the robustness of the baseline (see next section).

Over the last twenty years, the global community has gained valuable experience with the concept of additionality and numerous approaches have been developed. These, however, were designed for projects and programmes and cannot simply be transferred to up-scaled crediting activities. In general, demonstrating additionality of policies can be expected to be even more difficult than for individual projects, as the introduction and implementation of climate policies usually depends on the political economy in the country and might in most cases be motivated by several policy objectives not directly linked to climate change mitigation. In addition, Parties are now bound to the Paris Agreement and to the (long-term) goals enshrined therein. Therefore, even if a mitigation policy might not seem attractive today from a static point of view, early action might stimulate learning

and avoid lock-in effects and thereby in the long term reduce compliance costs and put the Party in a better position to align its economy with what is needed to meet the Paris Agreement objectives. This reduces the applicability of investment analysis as an approach for additionality demonstration. Alternative approaches such as focusing on the barriers that are preventing Parties to adopt the policies or taking the NDC as a basis for assessing additionality do also entail challenges. A barrier analysis, for instance, suffers from the fact that in particular non-technical barriers cannot be operationalized in a robust way. Think of, for instance, political or cultural barriers. Similarly, NDC-based approaches that focus on mitigation activities included in the conditional part of an NDC might provide a perverse incentive not to expand the scope of the unconditional part. This requires new approaches to be developed (Kreibich and Obergassel 2018).

Step 3: Definition of a baseline scenario and ex-ante estimation of mitigation impact

The definition of a baseline scenario is a key step for both, sectoral crediting and policy crediting. The baseline determines the reference point against which emission reductions are quantified. Under policy crediting, the types of baseline scenarios required depend on whether the policy focuses one or several sectors. If only one sector is targeted by the policy, a sectoral baseline will be required. Such a baseline is also required for sectoral crediting.

In any case, the baselines needed for policy crediting and sectoral crediting are highly different from the baselines known from project- or programme-based approaches. A single renewable energies project, for instance, must develop assumptions on how the additional power generated would have been sourced in the absence of the project.

For up-scaled crediting, by contrast, the development of entire sectors must be taken into account when developing the baseline. This requires the use of sectoral projections that also consider factors such as economic and population growth. Such developments could be internalised by using baselines that are indexed to economic indicators, such as gross domestic product (GDP). Other unpredictable events, such as sudden changes in global oil prices, by contrast, could not be internalised (Sterk et al. 2015).

Another key question is how to take domestic policies and the host country's NDCs into account when developing the baseline. Here, different approaches are being discussed. Baselines could either be derived from NDC targets or they could be established below business as usual allowing the host country to manage transfers. Another possibility would be to set a BAU baseline but to restrict transfers in order to ensure that the host country's NDC can be met (see: Broekhoff et al. 2017).

More generally, development of baselines for scaled-up crediting could benefit from the experiences gained with economic and energy modelling. Due to their large scale, however, such modelling is susceptible to sudden economic changes, such as economic recessions and fast technological developments. One potential avenue in dealing with rapid and unpredictable developments could be the development of dynamic baselines, where the approach on how to calculate the baseline is defined ex-ante, while the specific data for this calculation is included ex-post (Michaelowa and Butzengeiger 2017).

Step 4: Development of a monitoring plan

To ensure that the credits generated by the policy or the sectoral crediting scheme have quality, robust monitoring plans must be developed. The monitoring plan must at least

cover all emission sources within the activity boundary. To control for carbon leakage and other adverse effects, monitoring could even go beyond the boundaries of the activity.

The challenges associated to monitoring under policy crediting or sectoral crediting depend on the specific design of the activity. If the boundaries of a sectoral scheme coincide with national inventories, these might be used for monitoring the effect of the scheme. However, this requires the inventory to have a sufficiently high granularity.

If building on the national inventory is not an option, the development of a dedicated monitoring system is required. If the scheme addresses large-scale emission sources, organising monitoring could be relatively simple. This is one reason for the boundaries of the EU ETS, which focuses on large sources in specific sectors such as power and heat generation, energy-intensive industry and others.

Monitoring emissions from many geographically dispersed small-scale sources is more challenging and costly, requiring alternative approaches to direct measurement of emissions such as sampling or use of upstream data such as fuel sales. Innovative monitoring approaches that build on the potential of digitisation might further address some of the challenges. Automated data collection and processing might be particularly relevant for up-scaled activities covering a large number of small and dispersed emission sources (Füssler et al. 2019).

Whether robust monitoring is possible will in the end depend on the design of the scheme. With the incremental improvement of national inventories and the new technical possibilities for monitoring small-scale sources at reasonable costs it can be assumed that robust monitoring will be possible for many types of activities.

Step 5: Validation

During validation of the main mitigation activity, project documentation is assessed. Under project-based approaches, this is usually done by independent third parties. In principle, validation of up-scaled activities could take a similar form.

The larger scale of policy-based and sectoral crediting, however, entails significant technical challenges: The validator must be able to assess additionality of policies and robustness of baseline and monitoring plans, requiring staff with specific knowledge and profile. Building on the validation capacities established under the CDM, for instance, may only be possible to a limited extent since DOEs are experts on evaluation of individual investment decisions and not of entire policies. Other actors, for instance from academia or international organisations such as the OECD might be in a better position to evaluate up-scaled mitigation activities.

Another relevant aspect is that the evaluation of policy crediting activities and of sectoral crediting schemes that are coordinated by public entities may raise institutional challenges: One could argue that it may be questionable whether it is appropriate for private entities to judge the robustness of national policies. On the other hand, participation in Article 6 is voluntary. If Parties want support for their policies, an external assessment of these policies seems appropriate. Furthermore, such external validations are well-known from other areas, such as climate finance or generally development finance.

Step 6: Host country approval

A host country approval will only be required for sectoral crediting schemes that are coordinated by private entities or policy schemes of sub-national governments. The institutional capacities required to properly assess

the robustness of the sectoral or policy scheme are considerable. In its assessment, the host country could however build on the validation report. In addition, the capacities established during the development and enhancement of NDCs could also contribute to this step.

An additional layer of complexity is added by the fact that the approval of the sectoral or sub-national policy scheme is also a decision to allow non-Party actors to export mitigation outcomes. This could make it more difficult for the country to achieve its mitigation target. While this is also the case for individual projects and programmes, the potential impacts of approved sectoral or sub-national policy schemes can be expected to be considerably larger due to the scale of the mitigation outcomes to be achieved.

Step 7: Registration

The Supervisory Body responsible for the registration of mitigation activities under Article 6.4 would need a strong political standing and high legitimacy in order to pass judgment on government-led activities. Legitimacy and acceptance by Parties proposing up-scaled activities might be increased if its composition ensures a sound representation of different (groups of) countries.

Some literature suggests that this should rather be done by the COP (see: Sterk et al. 2015). However, requiring all Parties to the Paris Agreement to reach consensus on individual Article 6 activities seems at least questionable, as it would make the registration process cumbersome and political. Furthermore, the argument about the voluntary nature of Article 6 could again be raised to address these concerns: Parties are not forced to have their policies assessed if they do not want to export the mitigation outcomes under Article 6.4.

Step 8: Monitoring and ex-post calculation of mitigation impact

This step consists of the implementation of the monitoring plan developed under step 4. In this section, the specific challenges associated to monitoring of scaled-up activities have been discussed. The entity responsible for monitoring national policy-based approaches is the national government while under sub-national policies or sectoral crediting it is the (private or public) coordinating entity of the scheme. The monitoring data is then processed to calculate the mitigation impact of the activity. In a next step, the information is compiled in a report that provides the basis for the request for issuance and which is verified.

Step 9: Verification

In this step the monitoring report is verified by an independent third party. In order to ensure robustness of the verification a uniform verification guidance with robust criteria is required. The challenges associated to the verification of up-scaled activities may raise similar technical and institutional concerns as under validation (see step 5 above).

Step 10: Issuance

The issuance is the final step of the activity cycle. It is performed by the Supervisory Body. The discussion about the legitimacy and political standing of the Supervisory Body is similarly relevant for this stage as it is for the registration of activities as it requires the Supervisory Body to make a final judgement on the policy or sectoral crediting scheme at stake.

3 Will Article 6.4 allow for scaled-up crediting?

3.1 The focus of the analysis

In order to allow for environmentally sound up-scaled crediting activities to take place under Article 6.4, different types of provisions will be required, as was shown in the preceding section. Provisions can have different levels of legal bindingness and prescriptiveness and they can be expected to be enshrined in different areas of the legal architecture.

Principles

Principles will mainly be derived from the Paris Agreement and the provisions on Article 6 and Article 6.4 included therein. These principles are characterized by a low prescriptiveness and can therefore be expected not to directly restrict the scale of activities to be implemented under Article 6.4.

Rules, modalities and procedures

The policies and rules governing Article 6.4 will have to be designed in a way that assures that the overarching principles will be respected. By narrowing down the generic principles into specific rules, modalities and procedures, the scope of future crediting activities might be impacted.

Methodologies and tools

Methodologies and tools ensure a certain degree of uniformity when activities are implemented according to overarching provisions. They reduce the scope for interpretation of these overarching provisions. Building on the observations of how the CDM was operationalized it can reasonably be assumed that methodologies and tools will emerge during the operation of the mechanism. We

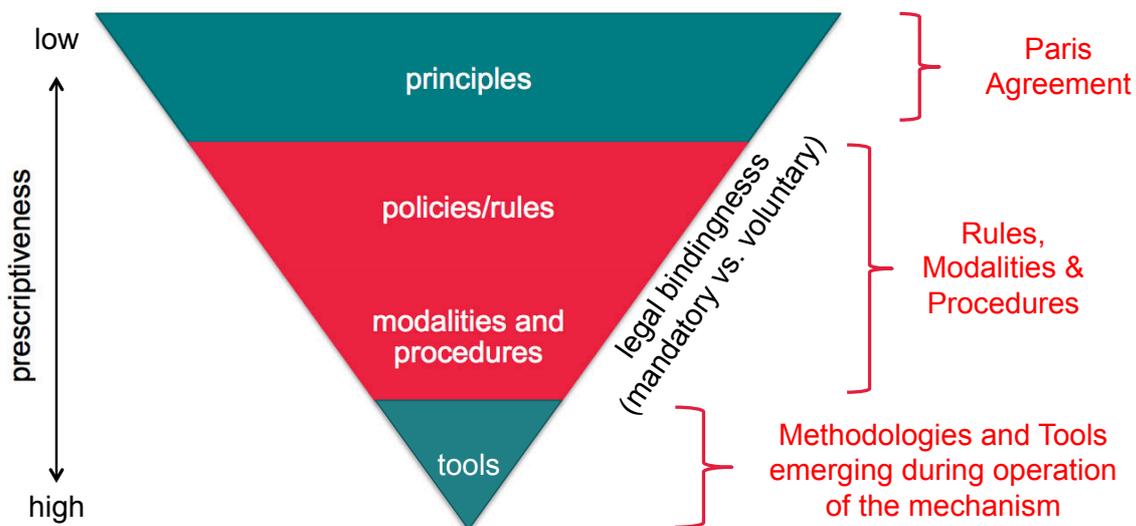


Figure 3: Overview on different types of provisions and focus of the analysis (highlighted in red)

therefore do not expect to find methodologies and tools at the current development stage of the Article 6.4 mechanism. It can be analysed, however, if the provisions for developing and approving such methodologies are in line with what is required for up-scaled crediting.

Building on these observations, the analysis of what is needed for up-scaled activities will focus on the rules, modalities and procedures for the Article 6.4 mechanism that are subject to the negotiations under the UNFCCC.

3.2 Current status of the negotiations on Article 6.4

Market-based instruments have been a contentious issue in the climate negotiations for several years. In Paris, Article 6 was the last issue to be included in the agreement and was the only item that remained unresolved after COP24 in Katowice, Poland.

For the mechanism included under Article 6.4 of the Paris Agreement, paragraph 38 of Decision 1/CP.21 adopted in Paris requests the SBSTA “to develop and recommend rules, modalities and procedures [for the Article 6.4 mechanism] for consideration and adoption by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement at its first session” (para 38, Decision 1/CP.21 UNFCCC 2016).

Parties in Katowice, however, were unable to find consensus on the RMPs for the mechanism in particular and on the functioning of Article 6 more broadly. The Katowice outcome on Article 6 contains references to two texts (Decision 8/CMA.1 UNFCCC 2019a), the draft texts resulting from SBSTA 49 and the text proposal by the Polish Presidency.

Having to deal with two texts had put an additional burden on the negotiations and con-

sumed a significant amount of the negotiations time at the 50th session of the Subsidiary Bodies in Bonn. Parties were able to agree on a common new text as a basis for the upcoming round of negotiations in Santiago de Chile (UNFCCC 2019b). This new version, however, contains numerous brackets and mutually exclusive options as a result of Parties wanting to see all of their preferred options to be reflected in the text. In the following analysis, this latest version of the negotiation text will be used for assessing the compatibility of the draft RMPs with scaled-up crediting.

3.3 Compatibility of the RMPs with scaled-up crediting

The following analyses how the draft rules, modalities and procedures relate to the requirements for scaled-up crediting identified in the previous sections.

3.3.1 Activity types

The definitions section of the draft M&P refers to “Article 6, paragraph 4, activities” therefore not *per-se* limiting the access to activities of a specific scale. The activity cycle section further specifies that “the activity shall be a project, programme of activities, or other type approved by the Supervisory Body;” (UNFCCC 2019b, para 39 (b)). Para 39 contains two options regarding the relationship between Article 6.4 mechanism activity and the NDC: To allow activities to be registered under the Art. 6.4 mechanism also if they are not covered by an NDC or to restrict eligibility to those covered by an NDC.

These definitions are compatible with the requirements for scale-up crediting activities, see above. While policies or sectoral crediting schemes are not explicitly mentioned as one possible activity type, the draft RMPs give the

Art. 6.4 Supervisory Body the mandate to approve such types of activities. The provisions regarding the relationship between the crediting activity and the NDC could, however, impact the provisions required for up-scaled crediting approaches: If crediting will also be allowed for activities not covered by an NDC, more detailed additionality demonstration processes will be required, as highlighted by Michaelowa et al. (2019).

3.3.2 Key Actors

Supervisory Body

The draft RMPs contain a lengthy description on the composition of the Art. 6.4 Supervisory Body and its modes of operation (rules of procedure) which seem to be in line (or at least not conflict) with the requirements for scaled-up crediting. In terms of composition, these provisions remain rather generic, for instance requiring members to “possess relevant scientific, technical, socioeconomic or legal expertise”. The draft text further outlines that the Supervisory Body is to define rules for the operationalisation of the mechanism and also operate the mechanism in terms of

- Accreditation of operational entities
- Registration of activities and issuance of credits
- Development and/or approval of methodologies
- Maintaining the mechanism registry
- Approving the issuance of emission reductions

Some of these functions are disputed among Parties, such as the development and approval of methodologies. Furthermore, there is an additional proposal that envisages to allow host Parties to exercise some of these functions while giving the Supervisory Body

the task to supervise and review these national arrangements.

Our analysis shows that there is no agreement yet on the role of the Supervisory Body and that the division of tasks between the Supervisory Body and the host Parties may impact the compatibility with scaled-up crediting: a governance structure that would allow host Parties to register activities while providing the Supervisory Body the task to supervise the national arrangements may raise concerns about conflicts of interest. Under a policy crediting scenario the host Party could be both, the proponent of the activity and the entity responsible for its registration. To avoid potential conflicts of interest, Art. 6.4 activities proposed by national governments or other public entities should exclusively be registered by the Supervisory Body. With sectoral crediting schemes operated by private entities these concerns about conflicts of interest might be limited.

Activity proponents

With regard to the proponents of an activity, the activity cycle included in the draft RMPs indicates that these could be public or private entities denominated “activity participants” (UNFCCC 2019b para 39).

By not restricting the participation to a particular type of actor (private) or a specific governance level (e.g. subnational) this wording is compatible with up-scaled crediting approaches.

Host Parties

The draft RMP require host Parties to:

- Be a Party to the PA and have prepared, submitted and be maintaining an NDC.
- Indicate how the mechanism contributes to its NDC

Other provisions are more controversial, such as the requirement to:

- Submit national inventory reports
- Provide information on Art. 6.4 activities and credits transferred and used.
- Apply corresponding adjustments

As outlined in section 2.3 above, host parties could not only play a role as proponents of up-scaled approaches (both policy-based and sectoral crediting), but also in the approval of private-led sectoral schemes as well as of sub-national policy crediting. The draft RMPs do not contain specific criteria for the authorization of up-scaled crediting activities but more generally require host Parties to inter alia confirm that the activity fosters sustainable development in the host Party and to explain how the activity relates to its NDC. It can, however, be questioned whether establishing criteria for this role would be feasible at the international level. Establishing uniform criteria for the authorization of crediting activities has not been possible under the CDM in the context of sustainable development. Similarly, uniform criteria for the authorization of (up-scaled) crediting activities under Article 6.4 are unlikely to be established at the international level and it will presumably remain the national prerogative of host Parties to authorize crediting activities on the basis of their own criteria.

Validators and verifiers

In the context of validation, verification and certification, the draft RMPs refer to designated operational entities (DOEs) being responsible for the evaluation of activities. While this terminology is borrowed from the CDM, the text does not contain additional information on the composition of DOEs or on the requirements these are expected to meet. Similarly, the criteria against which

DOEs are to carry out their evaluation of activities are not further specified.

Specific competencies are required to be able to assess policy-based and sectoral schemes (see the validation step under section 2.3 above). These specific requirements can presumably be established at the moment of developing the accreditation requirements while there is no need to already include these in the RMPs. This is similar to the CDM, where the modalities and procedures only contained generic provisions for DOEs.

3.3.3 Methodologies

The activity cycle contained in the draft RMPs outlines that methodologies shall be applied for the calculation of baseline emission, the demonstration of additionality and monitoring of the activities. These methodologies may be developed by activity participants, host Parties, stakeholders or the Supervisory Body.

Baseline-setting methodologies

The draft includes different approaches for setting a baseline.

Under the **performance-based approach**, methodologies are to take into account the following:

- Technologies that are economically feasible and environmentally attractive
- Emissions of alternative activities
- Investment barriers
- Contribution to the emissions level of the host party
- NDC-compatible emissions pathway

If the application of this approach is not appropriate, **approaches based on business as usual emissions or historic emissions** could be applied.

Another option included in the draft RMPs is a **benchmark baseline approach**, where a baseline is established on an ambitious benchmark that represents a level of GHG emissions for activities within a defined scope and boundary and which reflects the best available technology. When applying this approach, the relevant national circumstances are to be taken into account.

With these approaches being rather generic and only little information on how they will be operationalized, it is difficult to assess their compatibility with scaled-up approaches. In general, the approaches included in the draft RMPs do not exclude scaled-up activities.

Methodologies for additionality demonstration

The section on methodologies for demonstration of additionality contains some details on how additionality is defined and which aspects should be taken into account when assessing it. However, there seems to be little agreement on whether relevant national policies and legislation should be taken into account and whether these emission reductions must “represent mitigation that exceeds any mitigation required by law, regulation, or legally-binding mandate, at the national and subnational levels” (UNFCCC 2019b para 47 (a)).

As can be seen, this generic provision is problematic for policy-based crediting, as policy-based crediting itself will be based on a law, regulation, or legally-binding mandate, making it impossible by nature to exceed them. The language should therefore be specified to exclude existing laws, regulations or mandates, but not “any”.

By contrast, another (disputed) provision requiring emission reductions to be additional (or complementary) to the measures needed for the achievement of the host Party’s NDC

does not per-se exclude policy-based crediting activities but establishes the NDC as a baseline for assessing additionality.

Monitoring methodologies?

The RMPs do not contain dedicated provisions on the methodologies to be used for monitoring. There are, however, generic requirements applicable to all methodologies which are also relevant for those used for monitoring, such as:

- transparency,
- conservativeness regarding the choice of approach, assumptions, parameters, data sources, key factors
- take into account uncertainty

Other aspects are still disputed, such as whether net leakage due to the implementation of the Article 6.4 activity must be taken into account.

3.4 Key observations

The findings indicate that while the draft RMPs do not seem to conflict with the requirements of up-scaled crediting there are some areas where provisions will have to be modified to ensure compatibility with sectoral and policy-based crediting.

Most parts of the draft RMPs are largely compatible with the requirements of policy-based and sectoral crediting: Art. 6.4 activity types are not limited to a specific scale and there are no restrictions in terms of proportions of mitigation activities.

Other sections, such as on the validators are still too generic to judge their compatibility with up-scaled crediting, with only little information available on their composition and accreditation criteria. When further specifying the composition and accreditation crite-

ria of validators, policy makers should keep the specific requirements of up-scaled crediting in mind.

The role of host Parties is still unclear and its compatibility with up-scaled activities will depend on the decision on the division of tasks with the Supervisory Body. A governance structure that is currently included in the draft RMPs and which would allow host Parties to register activities while providing the Supervisory Body the task to supervise the national arrangements would not be compatible with scaled-up crediting.

The approaches for baseline-setting and monitoring included in the draft RMPs are still too generic to robustly assess whether they are compatible with up-scaled approaches. Methodologies for additionality demonstration, however, could become a contentious issue if Article 6.4 would only allow for activities that go beyond mitigation required by law or regulation, as this would de facto exclude policy crediting. In order to maintain compatibility with policy crediting, other definitions of additionality should be developed.

4 Making Article 6.4 ready for up-scaled crediting

The experience with the CDM has shown that project-based interventions can only have limited impact on driving entire sectors or even economies towards low-carbon sustainable development, making up-scaling an imperative for future market-based cooperation. And with Article 6.4 taking shape, the time is now to explore the possibilities to go beyond stand-alone project and programmes. Establishing the possibilities for up-scaled market-based cooperation is also in line with the bottom-up nature of the Paris Agreement that gives Parties a central role.

At the same time, the international community will be touching new ground by expanding the scale of market-based cooperation activities. Up-scaled approaches will be another new element in largely unknown new Paris world characterised by ambitious global mitigation targets, limited legal bindingness of individual commitments and large diversity of NDCs. Furthermore, there is an urgent need to implement immediate climate action to raise ambition while at the same time ensuring that these mitigation activities do not undermine the integrity of the Paris Agreement.

In light of these observations we suggest that up-scaled crediting should be phased into Article 6.4 while developing its Rules, Modalities and Procedures (RMPs). The analysis of the current draft RMPs has shown that there is only limited need for aligning them with the requirements of up-scaled crediting:

- While policies or sectoral crediting schemes are not explicitly mentioned as

possible activity types, the draft RMPs give the Art. 6.4 Supervisory Body the mandate to approve such types of activities.

- The draft RMPs do not restrict the participation to a particular type of actor (private) or a specific governance level (e.g. subnational).
- While assessing sectoral or policy-based schemes requires specific competences from DOEs, these can presumably be established at the moment of developing the accreditation requirements and do not need to be addressed in the RMPs.
- The approaches for baseline setting currently included in the draft RMPs are rather generic and do not exclude scaled-up activities.

Two areas would be problematic:

- There is no agreement yet on the division of tasks between the Supervisory Body and the host Parties. A governance structure that would allow host Parties to register activities while providing the Supervisory Body the task to supervise the national arrangements may raise concerns about conflicts of interest. Schemes where the host Party itself is the coordinator should therefore in any case be decided on by the Supervisory Body.
- The current draft RMPs include language that emission reductions must “represent mitigation that exceeds any mitigation required by law, regulation, or legally-binding mandate, at the national and

subnational levels". This provision would not be compatible with policy-based crediting, as policy-based crediting itself will be based on a law, regulation, or legally-binding mandate, making it impossible by nature to exceed them. The language should therefore be specified to exclude existing laws, regulations or mandates, but not "any".

Building on these observations policy makers willing to foster scaled-up crediting could proceed in three steps:

First, those sections that were found to be incompatible with up-scaled crediting should be prioritized and aligned with the requirements from policy-based and sectoral crediting. One example would be to (at least) restrict the mandate for host countries to register Art. 6.4 activities to stand-alone projects and programmes that have been proposed by private and sub-national entities. Similarly, definitions of additionality should be specified to ensure that they do not exclude policy crediting.

Second, those sections of the RMPs that currently lack detail should be made more explicit by including specific language on up-scaled crediting. This, for instance, relates to the definitions section of the RMPs, where sectoral and policy crediting could explicitly be mentioned as possible Art. 6.4 activities.

Third, attention should also be paid to the specific requirements of up-scaled crediting when further designing the mechanism and its institutions, including during its operation. When establishing the accreditation criteria for DOEs, for instance, the capacities needed for the assessment of sectoral dynamics and policy evaluation should be taken into consideration. Similarly, when deciding on the exact composition of the Article 6.4 Supervisory Body, sectoral expertise should be one criterion guiding the selection of members.

This approach could result in a common governance framework applicable to up-scaled crediting as well as stand-alone activities that takes the peculiarities of the different activity types into account while allowing methodologies and tools needed for up-scaled crediting to evolve dynamically during the operation of the mechanism. Such generic RMPs would allow Parties and private sector actors to start with the implementation of stand-alone projects or programmes at the earliest point possible while not preventing the development of tools and concepts that are aligned with the requirements of up-scaled approaches.

As the analysis has shown, up-scaled crediting requires tools and methodologies that are different from those known from project-based approaches. And each of the up-scaled crediting approaches will be confronted with specific challenges: Under policy-based crediting, demonstrating that the policy at stake is additional and showing its causality will be particularly challenging. Under sectoral crediting, by contrast, the main challenge will be to define a robust baseline, requiring innovative thinking and the development of new concepts. The development of solutions that are tailored to the needs of scaled-up crediting could benefit from the experiences made in the implementation of stand-alone activities under Article 6.4. When dealing with the new framework conditions of the Paris Agreement, the implementation of stand-alone activities will also require the development of innovative solutions, which might inform up-scaled crediting.

In addition, the implementation of up-scaled approaches under Article 6.4 could be supported through a number of ways. One possibility is the top-down development of methodologies. The Supervisory Body could request the UNFCCC Secretariat to develop methodologies for specific policy or sectoral

crediting activities. Providing capacity support to host countries in identifying their potential for up-scaled crediting would be another avenue in fostering the emergence of scaled-up crediting under Article 6.4.

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