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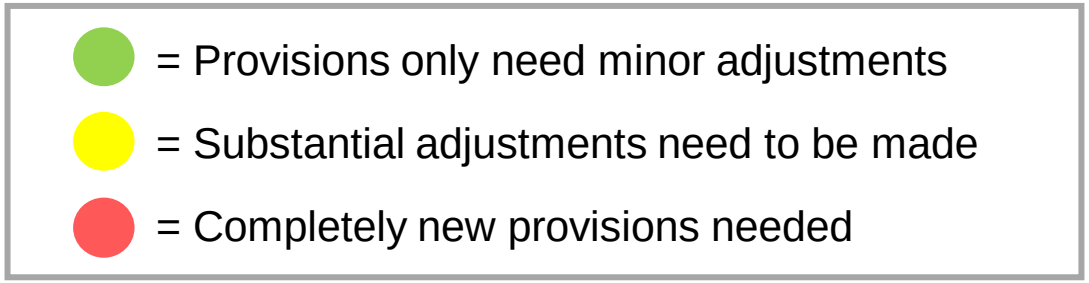
Lessons learned from the Kyoto Mechanisms for the Article 6.4 Mechanism

Lambert Schneider | COP 28 – Side event | 5 December 2023

Introduction

- The Supervisory Body is in the process of developing the rules for the Article 6.4 mechanism
- Parties mandated that the Article 6.4 mechanism should draw on the Kyoto mechanisms

→ **Where can Supervisory Body use approaches from the CDM and where should new approaches be developed?**



Additionality

Experiences with the CDM

- Some tests relied heavily on **subjective assessments**
- Trade-off between comprehensive additionality tests and **transaction costs**
- **Positive lists** were too broad
- **Prior consideration** test was important

Recommendations

- **Barrier analysis** or **common practice test** should not be used as stand-alone tests ?
- **Reassess regulatory surplus** at appropriate intervals ?
- Use **standardization** to keep transaction costs manageable, for example through negative lists ?

Quantification of emission reductions

Experiences with the CDM

- Default values and data sources were sometimes **outdated** or **not conservative**
- Heavy reliance on **historical data**
- **Attributing** emission reductions to the mitigation activity was challenging for some project types

Recommendations

- ► **Update** methodologies regularly ✗
- ► Assess **uncertainty** systematically ✗
- ► Ensure that calculated emission reductions or removals are largely **attributable** to the mitigation actions ✓

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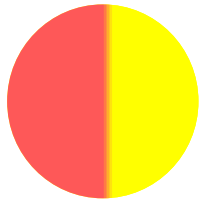
Non-permanence



Experiences with the CDM

- Reversal **risk assessment** required for CCS but not for afforestation
- Reversals may not be addressed if the **transition** from the Kyoto Protocol to the Paris Agreement is not managed properly
- Temporary crediting approach of the CDM was **unattractive for buyers**
- Reversals not addressed for displacement of **non-renewable biomass** (e.g., efficient cookstoves)

Recommendations

- ✓ Establish risk assessments and **incentives to reduce reversal risks**
- ? Install **long-lasting institutional arrangements** for accounting and compensation approaches
- ? **Buffer pools** should cover reversal risks, also considering future climate change
- ✗? Address non-permanence **for all project** types with reversal risks

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Transparency and project cycle

Experiences with the CDM

- Generally, CDM procedures are **well-established**
- CDM had a **high degree of transparency** of project documents as well as the decision-making process of the CDM Executive Board
- **Default parameters** helped decrease transaction costs
- Especially **small-scale projects** encountered high transaction costs

Recommendations

- **Adopt the CDM process**, with some adjustments ✓
- **Transfer transparency provisions** of the CDM to the Article 6.4 mechanism ✓
- **Streamline processes** to reduce transaction costs ?
- Continue using the **PoA concept** for small projects ✓

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Validation and verification

Experiences with the CDM

- The **accreditation system** of the CDM is well-established
- Performance **monitoring and sanctions** proved to be critical
- **Trade-offs** between comprehensive processes and transaction costs
- Concern about **impartiality of auditors**

Recommendations

- ► **Adopt** the CDM process, with some adjustments ✓
- ► **Restrict the choice** of project developers in selecting auditors, for example through a lottery system ✗

Environmental and social impacts

Experiences with the CDM

- **Host country authorization** was insufficient to ensure no harm
- No **monitoring** of adverse effects
- No **grievance mechanism**
- Local **stakeholder consultation** required but depended upon host country rules
- No general **safeguards**

Recommendations

- ► Make **reporting** on sustainable development impacts mandatory, and include negative impacts ?
- ► Implement **grievance mechanisms** ✓
- ► Require **free prior informed consent** from affected indigenous groups ?
- ► Develop **safeguards** ?

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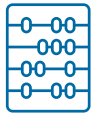
What makes mitigation activities suitable for the Article 6.4 mechanism?


High hanging rather than low hanging fruits


Enhancing ambition


High likelihood of additionality


Attributability of calculated emission reductions to the mitigation actions


Synergies with other sustainable development objectives


Long-term climate benefits

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Summary of findings

- Additionality
- Quantification of emission reductions
- Non-permanence
- Transparency & project cycle
- Validation and Verification
- Environmental and social impacts

Key take-aways

→ Mixed but valuable experiences with the CDM

→ Significant revisions needed in many areas (additionality, quantification, non-permanence, environmental and social safeguards)

→ Minor adjustments needed in some areas (project cycle, validation and verification, governance and transparency)

Thank you for your attention!

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Adapting CDM methodologies for use under Article 6 of the Paris Agreement

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COP28 Side Event

Dubai, 04/12/2023

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Introduction

- SB to take up **revision of CDM methodologies** – potential application to Art 6.4 activities in 2024 **provided we get agreement on methodology guidance at COP28**
- Project focused on adjustment needs in **two CDM methodologies**

ACM0005: clinker replacement

Incl. the following tools:

- Tool to calculate the emission factor for an electricity system (TOOL07)
- Tool for the demonstration and assessment of additionality (TOOL01)
- Assessment of the validity of the original/current baseline and update of the baseline at renewal
- Project and leakage emissions from road transportation of freight (TOOL12)

ACM0006: biomass power

Incl. the following tools:

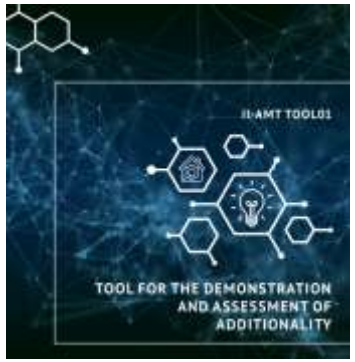
- Combined tool to identify the baseline scenario and demonstrate additionality (TOOL02)
- Tool to calculate project or leakage emissions
  - From fossil fuel combustion (TOOL03)
  - From biomass (TOOL16)
- Emission from solid waste disposal sites (TOOL04)
- Baseline, project and/or leakage emission from electricity consumption (TOOL05)

Key Article 6.4 requirements

Additionality	Quantification of A6.4ERs	Further requirements
"taking into account **all relevant national policies**, including legislation"	"shall encourage **ambition over time**"	"minimize the risk of non-permanence of emission reductions over multiple implementation periods"
"representing mitigation that **exceeds** any **mitigation** that is **required by law of regulation**"	"be [...] conservative, credible and **below** 'business-as-usual'"	"**address reversals**, where applicable"
"taking a **conservative approach**"	"Each mechanism methodology shall require the application of one of the approach(es) [...]"	"monitor potential reversals over a period to be decided by the Supervisory Body"
"**avoids locking in** levels of emissions, technologies or carbon-intensive practices"	"contribute to reducing emission levels in the host Party, and align with its NDC, [...] LT-LEDS [...] and the **long-term goals** of the PA [...]"	"minimize, and, where possible, avoid **negative environmental and social impacts**

International Initiative for Development of Article 6 Methodology Tools (II-AMT)

- **Independent international expert group** developed **generic tools**, building on the well-known and established principles for carbon crediting (e.g., accuracy, conservativeness, consistency)



- Documents **operationalise principles enshrined in the Article 6.2 guidance and the Article 6.4 RMPs** and adhere to “shall” as well as “should” requirements
- Scope
  - No coverage of sectoral or policy level interventions
  - Sector and technology agnostic
- Currently in third phase: Testing with pilot activities

Adjustment needs: Applicability conditions

Implications at the methodology-level

ACM0005

- **To avoid emissions lock-in**: Revision of applicability conditions for greenfield cement plants required
  - Proposal: **Emissions intensity threshold** of below 0.5 t CO_2e/t cement)
- Plants need to show that **alternative fuels are used** beyond the extent that they are **cost competitive**
  - Proposal: Share of **alternative fuels** at least **5% higher** than it would be if only cost-competitive alternative fuel is to be used

ACM0006

- Applicability conditions will need to be adjusted
  - Proposal: **Fossil fuel may be co-fired as to the minimum needed** to start-up and maintaining combustion process
- To avoid locking in a use, it would need to be ensured over time: Biomass only to be combusted after it has been used for other purposes before (**cascade use of biomass**)

Adjustment needs: Additionality

Implications at the methodology-level

ACM0005

- CDM TOOL01 only tests consistency with mandatory laws and regulations
  → needs to **consider all mitigation policies**
  - Proposal: References to said tool to be replaced by the II-AMT additionality tool
- CDM Tool leaves it up to project participants to select appropriate additionality test → does not take into account **uncertainty** which implies that risk-prone activities are not allowed to choose the approach at their discretion
  - Proposal: Activities with **higher non-additionality risk need investment analysis**

ACM0006

- Parts of the additionality determination to be replaced by II-AMT additionality tool, others to remain due to nature of combined CDM TOOL02

Adjustment needs: Quantification of mitigation outcomes

Implications at the methodology-level

ACM0005

- Adjustment factor for the **additives-blended cement ratio** (2% increase yearly) reflect market trend and is BAU
  → not in line with *below BAU* requirement
  - Proposal: incorporate step 1 of II-AMT baseline tool (selection) to align CO_2 emissions per tonne of clinker in base year with Art6 requirements
    → BAT approach to be chosen
- No provisions yet for baseline to **become more ambitious over time**
  - *Paris Goal Coefficient* to be applied to baseline emissions (sub-step of II-AMT baseline tool)

ACM0006

- Selection of baseline scenario: reference to II-AMT baseline tool to set *below BAU* baseline
  → existing actual or historical emissions, *downwards adjusted* (except: new plants)
- **Grid emission factor** adjusted to be *below BAU*
- *Downward adjustment* to be ensured through **Paris Goal Coefficient**

Adjustment needs: MRV

Implications at the methodology-level

ACM0005

- Inclusion of **monitoring parameters** to minimise/avoid negaitve impacts in the monitoring methodology section

ACM0006

- Inclusion of **monitoring parameters** to minimise/avoid negaitve impacts in the monitoring methodology section

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Thank you!

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CARBON MARKET WATCH

Reflections on Article 6.4 SB's recommendations: methodological requirements and removals

05.12.2023

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Supervisory Body's work over last 1.5 years

- Article 6.4 Supervisory Body (SB) mandated to give recommendations for COP27: *methodological requirements* (not ready by COP) + *removals* (rejected at COP)

- Same mandate for COP28 + more consultations:
  SB meetings #4 - #9 on these recommendations & more

- Both recommendations finalised at SB mtg #9 (Nov 16-17) and sent to COP28, for consideration by CMA

SB’s recommendations on methodologies (i)

- Several good elements overall
  - Conservative estimates & baseline + no overestimation (shall)
  - “Downward adjustment” / “baseline contraction factor” required for all baseline-setting approaches (BAT, ambitious benchmark, actual/historical) & regularly updated (each CP renewal)
  - Additionality: investment analysis + optional barrier analysis (not stand-alone) + regulatory + conservative w/o lock-in
  - No positive lists

SB’s recommendations on methodologies (ii)

- A few unclear elements + future work to be done
  - Downward adjustments: some ambiguities (economic viability) + mostly bottom-up (host Party + SB, or host Party)
  - Barrier assessment: language could be clearer
  - Missing in additionality: requirement to demonstrate project considered carbon credit revenue *before* starting
  - Tools to be developed: baseline-setting, additionality, leakage

SB’s recommendations on removal activities (i)

- Some minimum elements:
  - Net-removal = deduction of activity emissions, reversals, leakage
  - Risk assessment revised every 5 years or after significant reversals
  - Notification of potential reversal: 30 day deadline + freezing issuance/transfer/use of ERs until monitoring report or remediation
  - Reversal = increased risk rating

- But…

SB’s recommendations on removal activities (ii)

- Many problematic, unclear, or unresolved issues
  - Definition: open to storage in products or short-term sites/reservoirs
  - Clause to stop monitoring after crediting period if: i) evidence of negligible risk, or ii) remediation potentially based on risk rating. Can lead to poor outcome for addressing reversals (reversal risk tool to be developed)
  - No consequences yet if monitoring simply stops
  - Most details on buffer design and direct credit replacement deferred
  - Avoidable reversals must use direct credit replacement (not necessarily ok)
  - “Minimize, and where possible, avoid negative enviro and social impacts”
  - Questions on host Party liability: corresponding adjustments appropriate?

Conclusion

- Methodological text could be adopted, with CMA guidance:
  - Require developers to demonstrate they considered carbon credit revenues as significant source of income *before* starting project (additionality tool)
  - Assess likelihood of additionality of common activity types, to inform more specific methodological rules on additionality testing
- Removals text should not be adopted. Strong guardrails still needed:
  - Minimum durability + exclude storage in products & short-term sites/reservoirs
  - Risk tool: mandatory, updated w/ science, default risk + activity risk (most conservative)
  - Minimum post-crediting monitoring period that cannot be shortened
  - Late/incomplete/no monitoring: consequences, e.g. no issuance or transfer + deemed avoidable reversal unless justification + monitoring report
  - Positive outcomes for biodiversity, ecosystem restoration and LCIP where relevant

Panel discussion

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