United Nations Framework Convention on Climate Change

Methodology development under the Article 6.4 mechanism

Virtual webinar

Bonn, 15 January 2026

Mitigation Division

UNFCCC secretariat

Objectives

- Explain the methodology submission and assessment process
- Provide guidance to new methodology submitters in order to:
  - → Increase the quality of methodology submissions
  - → Maximize the chances of approval and pace of approval of proposed new methodologies
  - → Reduce the processing effort related to issues detected in methodology submissions
    - Environmental integrity issues
    - Clarity and transparency issues
    - Alignment with A6.4 regulatory framework
    - Etc…

In this presentation

- The methodology development and submission process
- Key regulatory provisions related to methodologies
- ***Do's and don'ts***
- Open Q&A

Status-quo of MEP-relevant outcomes

Decision 3/CMA.3 (RMP) ← Glasgow (2021)

- Application of the requirements of Chapter V.B (**Methodologies**) for the development and assessment of Article 6.4 mechanism methodologies
- Requirements for activities involving **removals** under the Article 6.4 mechanism ← Baku (2024) decision 5/CMA.6 (took note)

Approved

- Additionality
- Baseline
- Leakages
- Reversal
- Suppressed demand
- Tool common practice
- Methodology: Flaring or use of LFG (AMM-001)
- Tool: emission from solid wastes
- Tool investment analysis
- Tool: mass flow from GHG in gaseous stream
- Tool: project emissions from flaring

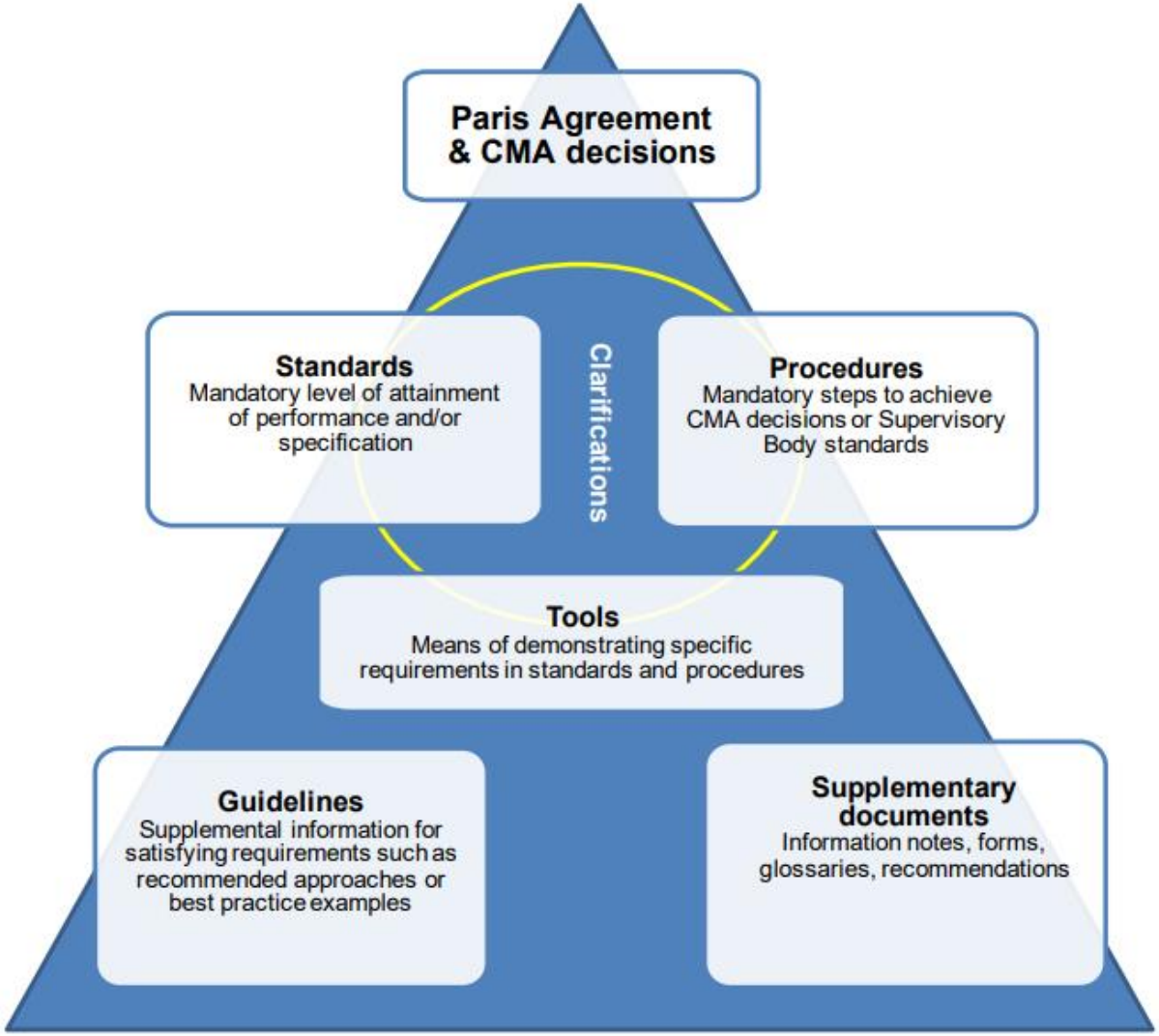
Call for public input

- Tool: Technical lifetime
- Tool: EF electricity system

Work in progress

- fNRB tool
- Sampling guideline
- Sampling standard
- Lock-in risk tool
- Reversal risk tool
- Baseline efficiency tool
- Cookstove methodology
- RE methodology

Standards and the hierarchy of documents



Status-quo of bottom-up methodologies submissions

- Total: **30** bottom-up methodology submissions
- Proposed mechanism methodologies which have passed the initial assessment: **6**

Ref. number	Title
A6.4-PMM006	Fertilizer production with renewables-based ammonia
A6.4-PMM005	Savanna Fire Management (SFM)
A6.4-PMM004	Comprehensive Lowered Emission Assessment and Reporting (CLEAR) Methodology for Cooking Energy Transitions
A6.4-PMM003	Pumped Hydro Storage and Supply of Electricity to the Grid
A6.4-PMM002	N2O abatement from nitric acid production
A6.4-PMM001	Production of Ammonia through electrolysis of water, air separation and synthesis of hydrogen and nitrogen

The methodology submission process

Development of methodologies and tools

Top-down process

Development of a methodology by the UNFCCC secretariat

Consideration of the methodology by the MEP and then the SBM

➔ Generally, priority according to the latest MEP workplan

Bottom-up process

Development of a methodology by an external stakeholder

Consideration of the methodology by the secretariat (CC and IA), MEP and then the SBM

➔ Reflects priority those of the stakeholder

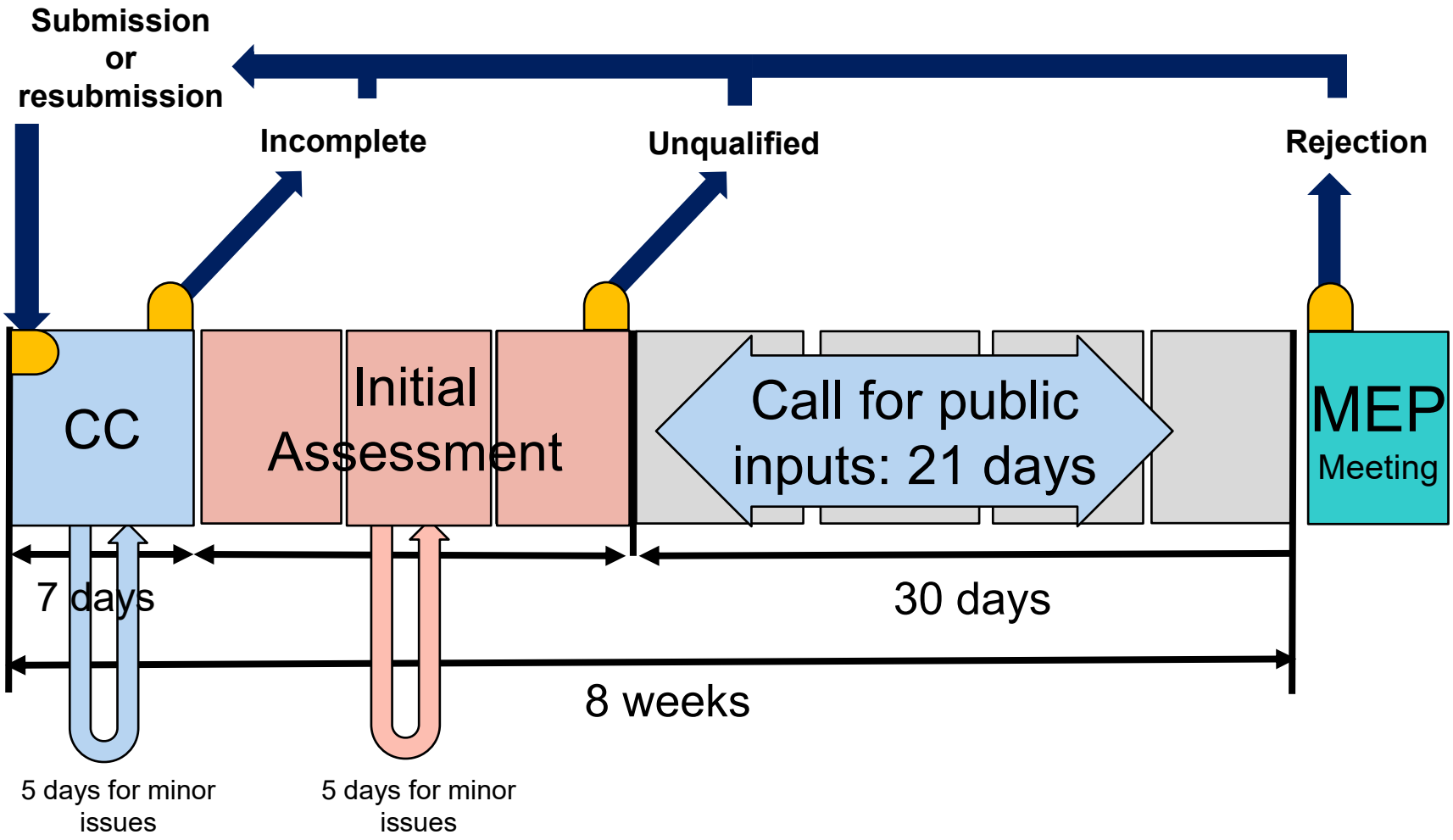
- Can be on the basis of an existing CDM methodology (or from other sources)
- **Risk of duplication/overlap cannot be excluded !**
- Need to align with the A6.4 regulatory framework

The bottom-up methodology submission process

Procedure:	Development, revision and clarification of methodologies and methodological tools (A6.4-PROC-METH-001)
Who can submit:	Any stakeholder
When to submit:	Anytime (but 8 weeks ahead of the next MEP meeting for MEP consideration)
What to submit:	3 documents

1. Form: New baseline and monitoring methodology or methodological tool proposal (A6.4-FORM-METH-001)
2. Proposed new methodology or methodological tool (A6.4-FORM-METH-002)
3. Draft PDD or PoA-DD with relevant sections completed (A6.4-FORM-AC-020 or A6.4-FORM-AC-041)

The methodology submission process: steps



Next? A PMM will be considered by..

1. Consideration by the **MEP**

- Recommendation to the SBM to
  - (a) Approve
  - (b) Reject

2. Consideration by the **SBM**

(a) Approve ➔ publication within 7 days

(b) Reject

(c) Back to MEP

*Note: **Public comments** can still be provided on the methodology or tool as part of the call for public input on the SBM annotated agenda*

At any step

(CC, IA, MEP or SBM consideration)

Additional information may be requested

Key regulatory provisions related to methodologies

The baseline standard

Full name: "Setting the baseline in mechanism methodologies"
Ref: A6.4-STAN-METH-004

Baseline approaches

Selection of only one approach per component.
Justification of choice needed.

33 (i) Best Available Technology (BAT)

➔ Needs to follow the procedure of para. 46

33 (ii) Ambitious benchmark

➔ Needs to follow the procedure of para. 52(a) to (i)

➔ At least: weighted average of 20% best performers

✹ Requires extensive data

33 (iii) Historical emission adjusted downwards

Can be based on:
(i) site specific data
(ii) Control group
(iii) Model
(iv) Default factor

The baseline standard

Step 1. Select one of the baseline approaches from paragraph 36 of the RMPs and justify the choice (Section 5)

Step 2. Apply the selected approach (Section 6), prior to implementation of a downward adjustment, including:

- Determination of the baseline scenario
- Quantification of the unadjusted baseline emissions and/or removals

Step 3. Apply the downward adjustment, unless exemptions apply (Section 7), including

- Quantification of the downward adjustment
- Quantification of the resulting downward adjusted baseline emissions and/or removals

Step 4. Identify a conservative BAU baseline (Section 8), including

- Determination of the BAU scenario
- Quantification of the BAU emissions and/or removals

Step 5. Compare the downward adjusted baseline from Step 3 and the conservative BAU baseline from Step 4 (Section 9)

- Is the downward adjusted baseline < conservative BAU baseline?

NO: Apply a further adjustment to ensure that the downward adjusted baseline is lower than the conservative BAU baseline

YES: Select the downward adjusted baseline as the crediting baseline

The baseline standard

Full name: "Setting the baseline in mechanism methodologies"
Ref: A6.4-STAN-METH-004

The downward adjustments: 2 components:

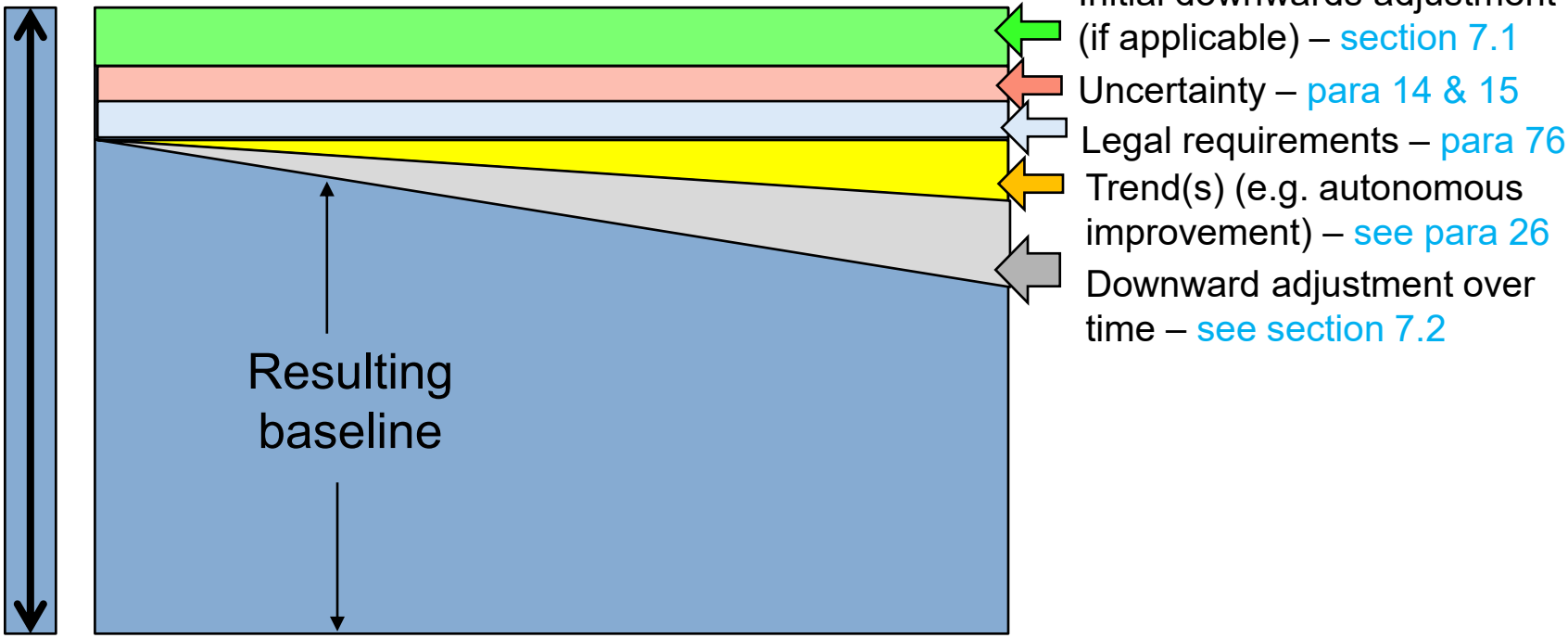
- An initial adjustment (for RMP 36(iii)) ➔ Section 7.1 of BL standard
  - Standard approach (para. 64(a)) or
  - Own approach as per para. 64(b) – with sufficient justification
- An adjustment over time (for RMP 36(i), (ii) & (iii)) ➔ Section 7.2 of BL standard (min. 1% per year)

Baseline approach		36(i) BAT	36(ii) ambitious benchmark	36(iii) existing actual or historical emissions
Downwards adjustment	Initial adjustment	No	No	Yes
	Adjustment over time	Yes *(unless an exemption* applies)*	Yes *(unless an exemption* applies)*	Yes

The baseline standard

Full name: "Setting the baseline in mechanism methodologies"
Ref: A6.4-STAN-METH-004

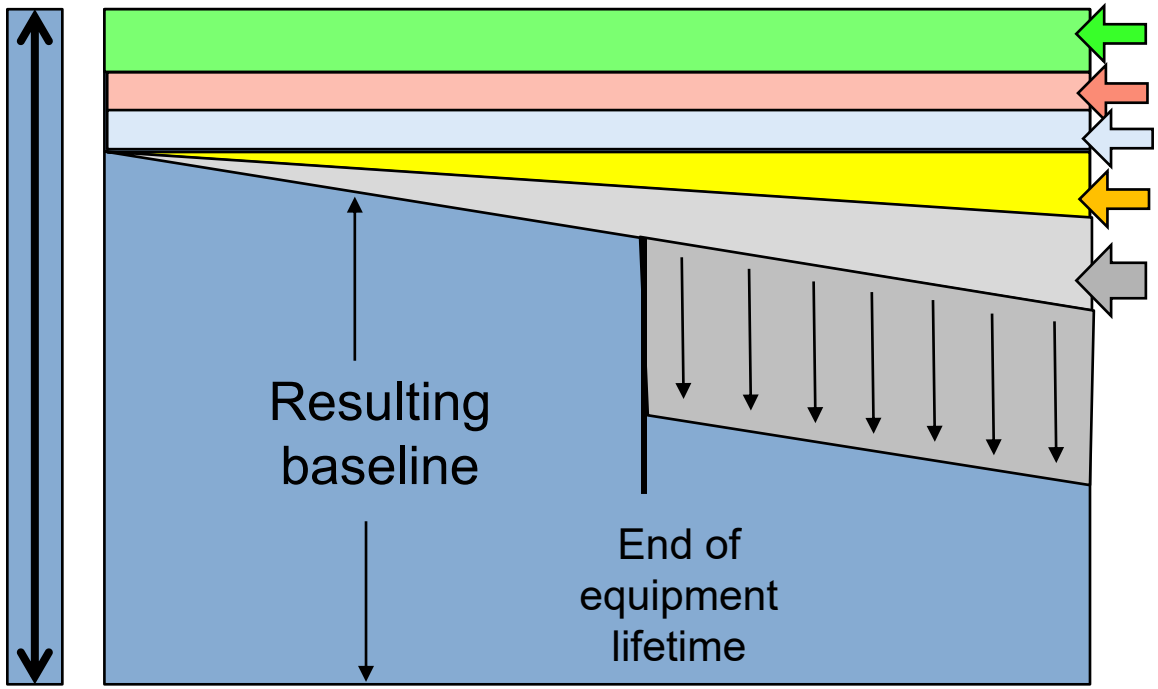
Elements to take into account in the baseline:



The baseline standard

Full name: "Setting the baseline in mechanism methodologies"
Ref: A6.4-STAN-METH-004

Elements to take into account in the baseline:



Initial downwards adjustment (if applicable) – section 7.1

Uncertainty – para 14 & 15

Legal requirements – para 76

Trend(s) (e.g. autonomous improvement) – see para 26

Downward adjustment over time – see section 7.2

The baseline standard

Full name: "Setting the baseline in mechanism methodologies"
Ref: A6.4-STAN-METH-004

Principles from **Appendix I** to the baseline standard

- ❑ Definition of activity boundary
- ❑ Calculation of emission reductions vs. removals: need to distinguish
- ❑ Conservativeness and uncertainty
- ❑ Attributability: no A6.4 for exogenous factors (not resulting from the activity)
- ❑ Perverse incentives: e.g. if A6.4 incentive increases the production level
- ❑ Rebound effect: to be taken into account (but consideration of suppressed demand possible – see applicable standard)

The baseline standard

Full name: "Setting the baseline in mechanism methodologies"
Ref: A6.4-STAN-METH-004

Principles from **Appendix I** to the baseline standard

- ❑ Avoidance of double counting
  - With other carbon crediting mechanisms
  - With mandatory domestic mitigation schemes (e.g. domestic ETS)
  - With other environmental markets (e.g. green hydrogen scheme)
- ❑ Aggregation of information
- ❑ Validity for A6.4 methodologies

The additionality standard

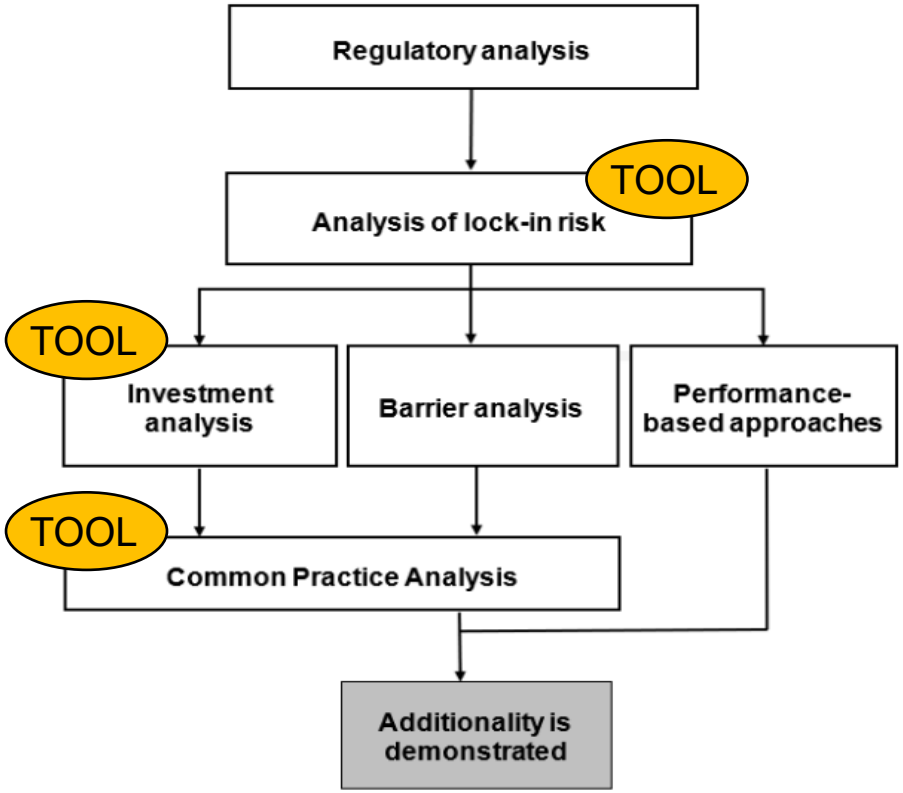
Full name: "Demonstration of additionality in mechanism methodologies"

Ref: A6.4-STAN-METH-003

Key principles: ➔

Complemented by:

- Tool: investment analysis
- Tool: lock-in analysis *(WIP)*
- Tool: common practice analysis



The additionality standard

Full name:	"Demonstration of additionality in mechanism methodologies"
Ref:	A6.4-STAN-METH-003

Regulatory analysis:

- ✓ Mitigation resulting from an A6.4 activity would not occur as a result of any law or regulation, unless the law or regulation refers to or formally integrates the mechanism as an instrument for implementation.
  - ✓ Includes: support schemes; laws and regulations which would require directly or indirectly the activity (requiring certain performance levels; preventing alternatives)
- ✓ Would generally need to be re-assessed at least every renewal of crediting period

The additionality standard

Full name:	Demonstration of additionality in mechanism methodologies"
Ref:	A6.4-STAN-METH-003

Investment analysis: (see corresponding tool) – 3 options

<table>
<tr><th>Simple cost analysis:</th><th>Benchmark analysis:</th><th>Investment comparison analysis</th></tr>
<tr><td rowspan="2">A6. activity does not generate cost savings or revenues (other than A6.4 ERs)</td><td>Without A6.4ERs, activity is not viable</td><td>Without A6.4ERs, activity is not the most financially viable scenario</td></tr>
<tr><td colspan="2">Incentives from the mechanism enable the implementation of the activity</td></tr>
</table>

→ Details contained in the tool
→ Methodology may specify how to use the tool
→ Methodology can adapt the tool

The leakage standard

Full name: "Addressing leakage in mechanism methodologies"
Ref: A6.4-STAN-METH-005

Key principles:

- Positive leakage (desirable) vs. negative leakage (detrimental)
- Process for leakages: (1) avoid, (2) reduce, and (3) account for
- Sum of all leakages: if positive, considered=0; if negative, have to account for (thus subtracted from emission reductions).

Type of leakages: (i) Baseline equipment transfer; (ii) Competition for resource use (e.g. residual biomass); (iii) Diversion of existing production processes (e.g. afforestation displacing cattle farming); (iv) Environmental leakage (flooding from dam)

Note: International leakages matter!

Recommendations to methodology proponents

What makes a high-quality methodology submission?

Complete

- No missing documents
- All relevant sections completed/addressed

Quality of formatting

- Follows the formatting instruction (core meth text in black – explanatory noted in grey)
- No alteration of the original formatting
- Equations are in the right format and numbered

Clear, concise and user-friendly

- No unnecessary text or steps and use concise language
- Easy to understand and apply
- Steps to be applied/followed are clear
- Consistency

What makes a high-quality methodology submission?

Aligns with the A6.4 regulatory framework

- In line the A6.4 standards (baseline, additionality, leakages, etc.)
- Provisions of the leakage standard are applied
- If risk of reversal exists: follows the reversal standard
- Use of approved (or proposed) tools

Transparent and accurate and/or conservative assumptions

- Assumptions are logical / justified through best science
- Sources for assumptions / values transparently documented and traceable
- Values and procedures strike the necessary balance between accuracy and conservativeness

DO's and DON'TS

DO NOT:

- ⊗ Copy/paste entire methodologies from other standards
  - These are unlikely to align with the A6.4 regulations
- ⊗ Submit without having checked key methodology regulations (baseline, additionality, leakage standards, etc.)
  - Low likelihood of regulatory alignment – rejection is likely
- ⊗ Alter the formatting / diverge from formatting
  - Low readability for the reviewer; delay in processing
- ⊗ Put forward assumptions without transparent / robust / traceable justification/evidence
  - Readers /reviewers and participants to the public consultation cannot be expected to read a full list of references to identify the place where the assumption / source is located
  - Low readability for the reviewer; delay in processing

DO's and DON'TS

DO:

- ✓ Provide adequate justification (in grey) for key choices in the methodology
  - Indicates well what is (black font) and what is (grey font) not the core methodology for users
  - Clear documentation / justification of choices which will facilitate public consultation
  - Grey text will be deleted upon approval

Common pitfalls / mistakes

Common pitfalls / mistakes

- Use of all 3 baseline types (benchmark, BAT, historical…)
  - One baseline (per component)
- Inappropriate use of barrier analysis
  - Barrier analysis can only be used in specific cases or with proper justification (section 6.4 of additionality standard)
- Setting of “BAT” or “Ambitious benchmark
  - Step-wise procedure from the baseline standard shall be followed
- Applicability conditions are not clear and appropriate
  - Only allow intended activity types
  - Specify at what time the conditions shall be assessed and reassessed

Common pitfalls / mistakes

- Baseline or additionality based on non-enforcement of rules and regulations
  - Does not align with the regulatory framework for the A6.4 mechanism (para. 76 of the baseline standard)
- Insufficient consideration of potential double counting
  - Extensive guidance on the avoidance of double counting is found in Appendix 1 / section 8 of the baseline standard
  - Provisions go beyond just double counting with other crediting mechanisms
- Inadequate application of downward(s) adjustment(s)
  - For baselines based on historical emissions: two types of downward adjustments
    - Initial downward adjustment as per section 7.1 of the baseline standard
    - Downward adjustment in subsequent years as per section 7.2 of the baseline standard (min. 1%/year)

Q&A

FAQ

FAQ

Can I submit a methodology from the CDM or another carbon standard?

- Any new bottom-up submission would have to comply with the relevant procedures, forms and be submitted aligning with the 6.4 requirements.
- It will be reviewed as per the procedures and assessed accordingly.
- Relevant amendments are foreseen to align such methodologies with the A6.4 regulatory framework.

How can I contact the UNFCCC methodology team or removal team?

- Email to: A6.4mechanism-meth@unfccc.int

How should I proceed if my proposed new methodology relies on tools which are not approved (e.g. CDM tools; tools from other carbon standards)

- Option 1: Submit your tool along with the methodology
- Option 2: Standalone submission of a new methodological tool
- Option 3: Wait for the tool to be developed top-down

FAQ

Can I resubmit a methodology which was rejected (at any stage)

- Yes… after updating based on the issues raised (which will be re-assessed)

How will my methodology be assessed at the initial assessment (IA) stage?

- Evaluation criteria can be transparently found at: https://unfccc.int/sites/default/files/resource/A6.4-FORM-METH-003.pdf

Is it ensured that my methodology will be considered at the next MEP meeting

- The MEP shall “make every effort to initiate the consideration of proposals submitted on time”; however, this will be based on the available slots in that particular meeting. .

FAQ

What happens if another methodology (approved or proposed) covers exactly the same scope of activities?

- Likely outcome is a “consolidated methodology”

Q&A

Thank you very much for your attention

Questions are welcome!