Agenda item 3.4.
Paragraph 16 (a) of the annotated agenda

PMM002: N_2O abatement from nitric acid production

Methodological Expert Panel – 12th meeting
9 to 13 March 2026
Bonn, Germany

UNFCCC Secretariat
Mitigation Division

Procedural background

MEP011 considered the proposed mechanism methodology “PMM002: N2O abatement from nitric acid production” and agreed to continue working on the proposed methodology at its next meeting.

The proposed new methodology is intended for projects that **reduce nitrous oxide (N_2O) emissions from the production of nitric acid**. These emissions can be reduced through:

- process optimization (primary abatement)
- secondary abatement (using catalysts within the reactor to decompose N_2O)
- tertiary abatement (by treating the flue gases to remove most of the N_2O)

The methodology is based on the CDM methodology ACM0019.

The history of this bottom-up submission can be viewed on the UNFCCC website.

Applicability conditions

- Three distinct project types considered: (i) Introduction; (ii) Restart; (iii) Enhancement of N_2O abatement → activities need to clearly specify the project type
  - Enhancement: potentially with NSCR or secondary abatement in the baseline
  - Restart: only if discontinuation of abatement since 01 January 2021
- Only applicable to existing plants (commercial operation started before 31 December 2025)
- Abatement system is newly produced (not removed from another plant)
- No policies in place which would influence N_2O emission levels
  - Host Parties can still specify a baseline emission factor for N_2O emissions

Key issues and proposed solutions (1)

- **Additionality** demonstration
  - Regulatory analysis (project-specific)
  - Common practice analysis tool be used with Approach A (project-specific)
  - Investment analysis and lock-in analysis demonstrated demonstrated at the methodology level)

- **Baseline emissions**
  - Best available technology (BAT) for primary abatement
  - Extensive data analysis
  - Consultation with industry experts
  - BE = (production capped at maximum from last 5 years) x (BAT emission factor) x (downward adjustment)
  - Annual increase in downward adjustment: Different values, depending on abatement performance
  - Determination of conservative BAU and BAT at the methodology level

Key issues and proposed solutions (2)

- **Leakage emissions**
  - Neglected due to their size (<0.01% of emission reductions) and other conservative assumptions (in particular the BAT emission factor)

- **Project emissions:**
  - Remaining N_2O emissions from plant
    - Mass flow tool with technical specifications added
    - Conservative approach for missing data
  - Tertiary abatement (fossil fuels, steam, electricity, other inputs)

- **Monitoring**
  - Continuous monitoring, rather than exclusion of certain intervals

MEP012 to finalize the methodology. Two possible ways forward:

- Recommend for adoption by Supervisory Body
  (in accordance with procedure)
- Exceptionally conduct a second call for public inputs, given significant revisions to the original proposed methodology