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Document reference number and title:
A6.4-MEP010-A01: Draft Methodological tool: Emissions from electricity generation and/or consumption (version 01.0)

Item	Section no. (as indicated in the document)	Paragraph/Table/Figure no. (as indicated in the document)	Comment (including justification for change)	Proposed change (including proposed text)
1	Cover note, Section 3.2; Methodological approaches, Section 5	8; 17	The stepwise approach is provided whereas few steps may or may not be applicable, such as in context of emission factor either it corresponds to electricity system or from captive fossil fuel power plants. Thus, the Step 7 and Step 8 should be merged.	Step 7 and Step 8 could be merged as: Step 7: Determine the emission factor Step 7.1: for electricity system, where applicable; Step 7.2: for electricity sourced from captive fossil fuel power plants, where applicable;
2	Cover note, Section 3.2.6 Uncertainty determination Section 5.11	34; 122-123	It is indicated that the uncertainty of emissions or emission factors shall be determined following the guidance of Volume 1, Chapter 3 of the 2019 Refinement of the 2006 IPCC Guidelines. The uncertainty section in the given context with mostly the emission factors being used from IPCC with upper/lower bound and further noting the conservativeness already built in the earlier steps it would pose unnecessary burden and deduction of emission reductions and thus should be removed. Also noting that the tool is in context of CO2 emissions and with reference to Table 3.4 of Volume 1, Chapter 3 of the 2019 Refinement of the 2006 IPCC Guidelines, the indicative combined uncertainty for same is fairly low.	The uncertainty determination is to be removed/simplified.

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3	Applicability	10	It is stated that the version of the methodological tool applies only to Article 6.4 activities undertaken at the project level and may be amended in the future to cover activities at other scales (e.g., programmes of activities, policies, sectoral approaches) once the standards for the development of mechanism methodologies (e.g., the "Standard: Setting the baseline in mechanism methodologies" (A6.4-STAN-METH-004) have been revised to incorporate other scales	Noting that the same methodology(ies) and associated application of the tool may get applied at project and PoA level, the need for such distinction should be clarified or the clause for interim till the PoA specific tool emerges may be excluded.
4	5.4	34	The paragraph 34 talks about the net total electricity generation and also about differentiating on an hourly basis the Case 1 (higher emissions) and Case 2 (lower emissions) with example of landfill gas activity (footnote 11). The practicality of such an approach and the incremental benefit (if any) from such an approach is questionable. Further, in instances wherein the electricity system emission factor is provided by the government authority the differentiation for case 1 or case 2 may not be made available.	The hourly differentiation for Case 1 and Case 2 should be removed. Further, the Case 1 and Case 2 differentiation in context of electricity system should be removed.
5	5.4	35	It is stated that "This approach may also be applied where one of the two cases makes up less than [1 per cent] [X per cent] of the amount of electricity generation and/or consumption compared to the other case". Noting that generally for power plants the auxiliary consumption is about 10% (and even less as in case of wind or solar), the percentage herein could be stated as 10%.	"This approach may also be applied where one of the two cases makes up less than [10 per cent] of the amount of electricity generation and/or consumption compared to the other case".
6	5.6	41, 43	It is stated that emission factor for the electricity system under Case 1 and Case 2 respectively are to be applied. However, in instances wherein the electricity system emission factor is not computed by the activity participant and is directly provided by the government authority the differentiation for case 1 or case 2 may not be made available.	The Case 1 and Case 2 differentiation in context of electricity system should be removed.

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7	5.7	72, 95	The ex-ante and ex-post option for Simple OM and Average OM is cited in para 72, whereas the subsequent para 95 states annual update of BM for first crediting period. Uniformity of approach should be applied for both OM and BM.	Uniformity of approach should be applied for both OM and BM.
8	5.7.2	102, 103, 104	It is stated that the default emission factor depending upon the share of electricity generation from renewable (excluding solar and wind) and nuclear energy in the electricity system. The reason for excluding solar and wind is unclear and should rather be removed. Also, the stated values too for Case 1 are on much higher side noting current grid emission factors across different geographies and their respective grid mix. Furthermore, in certain geographies around 90% of total electricity generation is hydro-based and therein the use of such default factors would not be appropriate either.	Correction as "…share of electricity generation from renewable ~~(excluding solar and wind)~~ and nuclear energy in the electricity system…".
9	5.9	118, Table 5	The voltage level value are not defined to classify as High voltage (HV), Medium voltage (MV) and Low voltage (LV). Further, as the consumption likely would be at low voltage, the differentiation of HV, MV and LV is unclear.	It should be clarified that T&D losses are only to be applied in context of consumption and not generation.

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10	5.11	123	It is stated that "…uncertainty shall be determined by considering the uncertainty associated with the methods, assumptions, data and measurements used, following the guidance of Volume 1, Chapter 3 of the 2019 Refinement of the 2006 IPCC Guidelines.". The uncertainty section in the given context with mostly the emission factors being used from IPCC with upper/lower bound and further noting the conservativeness already built in the earlier steps it would pose unnecessary burden and deduction of emission reductions and thus should be removed. Also noting that the tool is in context of CO2 emissions and with reference to Table 3.4 of Volume 1, Chapter 3 of the 2019 Refinement of the 2006 IPCC Guidelines, the indicative combined uncertainty for same is fairly low.	The uncertainty determination is to be removed/simplified.

-- (*Please add rows as required*) -

Draft Methodological Tool: Emissions from Electricity Generation and/or Consumption (A6.4-MEP010-A01)

General Comments

We commend the Article 6.4 Supervisory Body (SB) and the Methodological Expert Panel (MEP) for developing the draft methodological tool A6.4-MEP010-A01, which represents a substantial and necessary evolution of CDM TOOL05 and TOOL07. In particular, we welcome:

- The explicit alignment with the *Standard: Setting the baseline in mechanism methodologies* and the IPCC 2019 Refinement;
- Improved treatment of high shares of variable renewable energy (VRE), zero-emission operating hours, and storage;
- The structured use of Case 1 / Case 2 logic to ensure conservativeness;
- Expanded applicability to both electricity generation and consumption, including captive power scenarios.

At the same time, we note that several design choices in the draft tool, while strengthening environmental integrity, may significantly constrain implementability and reduce credited emission-reduction volumes in ways that are not always proportional to actual mitigation impacts. The comments below are intended to support further refinement of the tool to ensure that it remains environmentally robust, operationally feasible, and scalable across diverse national contexts.

 # 1: Limited Coverage of Hybrid and Emerging Power-System Configurations

The current version of the tool explicitly excludes or postpones applicability to:

- Captive renewable power plants;
- Hybrid systems combining grid electricity, storage, and behind-the-meter renewable generation;
- Electricity consumption associated with flexible demand, load shifting, or demand response.

A growing share of potential Article 6.4 activities—particularly in industrial decarbonization, green hydrogen production, EV charging infrastructure, and data-intensive facilities—operate in hybrid configurations. Excluding or only partially addressing these configurations may systematically underestimate their real displacement effects. To address this, at minimum, interim guidance should be provided to methodology developers on acceptable conservative approaches for such configurations.

 # 2: Binary Must-Run Classification May Not Reflect System Reality

The tool relies on a binary classification of power units as “must-run” or “non-must-run,” with most renewable power units automatically classified as must-run. In electricity systems with high VRE penetration, renewable generation is increasingly subject to curtailment, market-driven dispatch constraints, and seasonal variability. A binary must-run classification may therefore misrepresent actual marginal displacement, particularly under Case 2. We suggest refining the must-run concept by allowing:

- Explicit consideration of curtailment rates;
- Use of residual load or price-based indicators where available;
- Differentiation between technical must-run and economically dispatched renewables.

Such refinements would improve accuracy without compromising conservativeness.

 # 3: High Data Requirements Risk Unequal Access

The dispatch data OM method is presented as the most accurate approach but requires detailed, hourly unit-level dispatch data and transparent dispatch order information. In many developing countries, such data are not publicly available or are incomplete. As a result, activity participants in these contexts are more likely to rely on simplified methods or conservative defaults, leading to structurally lower credited emission reductions compared to projects in data-rich systems. We recommend introducing a clearer tiered approach, analogous to IPCC Tier methodologies, such as:

- Tier 1: Standardized or nationally approved grid emission factors;
- Tier 2: Simplified OM/BM approaches with safeguards;
- Tier 3: Full dispatch-based approaches where data permit.

 # 4: Calibration of Default Values and Uncertainty Ranges

Several default values and uncertainty parameters in the draft tool are placeholders and are not explicitly linked to national circumstances or official data sources. Overly conservative defaults, if widely applied, may function as implicit penalties rather than safeguards, particularly in least-developed countries or small electricity systems. We recommend that conservative default values:

- Be calibrated using national grid emission factors reported in national GHG inventories or official utility statistics;
- Be periodically updated (e.g., every 2–3 years);
- Be transparently linked to national data where available, while retaining conservative buffers.

 # 5: Limited Integration of System Transition Dynamics

While the tool includes discounting and updating rules for OM and BM emission factors, it does not explicitly address rapid power-sector transitions driven by policy reforms, coal retirements, or structural market changes. Projects implemented in fast-transition systems may face disproportionate discounting over their crediting periods, potentially undermining early-mover incentives. We encourage the SB to consider additional guidance on:

- Handling policy-driven structural changes in the power sector;
- Aligning baseline evolution with nationally articulated transition pathways;
- Ensuring consistency with national decarbonization strategies and long-term low-emission development strategies (LT-LEDS).

Others

- It might be useful to convert the section 5, para 17 into a flow chart format.
- Suggest the Tool also provides some additional guidance on how the IPCC uncertainty document should be used

We appreciate the opportunity to provide inputs and stand ready to engage further as the tool is revised.