INTRODUCTION TO SECTORAL BASELINE SETTING IN THE CONTEXT OF NDCS: PERSPECTIVE OF VIETNAM

Technical workshop on scaled-up crediting approaches

The implications of the Paris Agreement for a New Generation of International Market Mechanisms

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VIETNAM MONRE

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- Identify decisions needed for baseline setting;
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Vietnam (i)NDC

Contribution to GHG emission reductions

- **Contribution (no support)**
  - By 2030, with only domestic resources: reduce by **8%** total GHG emissions compared to BAU, including:
  - **20%** emission intensity per unit of GDP compared to 2010.
  - Increase forest cover of 45%.
- **Contribution (with intl support)**
  - By 2030, with only domestic resources: reduce by **25%** total GHG emissions compared to BAU, including:
  - **30%** emission intensity per unit of GDP compared to 2010.

Source: Vietnam's INDC

Vietnam (i)NDC

- **Scope of works:**
  - Energy
  - Agriculture
  - LULUCF
  - Waste
- **Target GHG:**
  - Carbon dioxide (CO2),
  - Methane (CH4),
  - Nitrous oxide (N2O),
  - Hydro fluorocarbons (HFCs),
  - Perfluorocarbons (PFCs),
  - Sulfur hexafluoride (SF6).
- **BAU:**
  - 2010: 225.6 million tCO2e
  - 2020: 474.1 million tCO2e
  - 2030: 787.4 million tCO2e

Identify decisions needed for baseline setting

- **What is the purpose of baseline?**
  - Reference from which crediting is established;
  - Highly dependent on the sector's definition, and the nature of projects/sub-sectors/regions to be covered by the mechanism;
  - National vs international baseline;
- **How will the baseline be defined?**
  - Threshold size for eligibility to the scheme / mechanism;
  - Base years / BAU used to measure past emissions and production levels;
  - Best available technologies, and how the baseline ought to be set in relation with these;
  - Percentage improvement from today's average emission levels / intensity defining the baseline;
  - Country's specific socio-economic needs and capacity.
- **Developmental and environmental ambition of baseline?**
  - Other priorities?
  - Influences from existing policies / strategies / treaties

Aspects to be determined in baseline setting

- **Scope**
  - Project
  - Programme
  - Sub-sector or sector
  - Technology type
  - Management models
- **Metric**
  - Absolute GHG or CO2 emissions
  - Relative GHG emissions
- **Historical / activity data**
  - Single time period
  - Multiple time periods
- **Future assumptions**
  - Assumed continuation of historical emissions (project)
  - Continued rate of growth of emissions/emission intensity (sector)
  - Modelling, based on policies included in baseline (BAU)

Challenges for Sectoral Baseline Development (1)

GHG inventory / baselines frequency

Issues

- Too frequent development of sector-based baseline under NC/ BUR by MONRE.
- Updating policies and measures is endless. There is no need to update BAU for each and every NC/BUR
- Creating too many baselines only creates confusions among stakeholders.

Possible solutions

- For the period of 2021-2030, develop 2 baselines at most (Ex-ante, and if possible ex-post baseline).
- Ex-ante should be used for annual monitoring during 2021-2020 for attainment of NDC target,
- Ex-post is used to adjust overall achievement level of NDC target after 2030 (in order to claim Vietnam indeed achieves NDC target).
- For international reporting, stick to the above 2 baselines but not develop something new.

Challenges for Sectoral Baseline Development (2)

Coordinating sectoral baselines developed by line ministries (through NC/BUR)

Issues

- Sectors develop own baselines and MONRE (coordinating entity) develops sectoral baselines with little coordination
- End results creates discrepancy between baselines (e.g. LULUCF baseline under BUR and the submitted REL for REDD+)

Possible solutions

- Develop cross-checking mechanism for sanity checks (over-estimation, under-estimation, legitimacy of assumptions), and open up for coordination.
- Use the same sector-based baselines used by both line ministries to enable coherent explanation to both domestic and international audience to ensure credibility.

Challenges for Sectoral Baseline Development (3)

Projection models

Issues

- Only separate, simple projection models are used for baseline at moment. Interactions of mitigation measures across sectors are usually not taken into account (e.g. SA fertilizer that involves both MOIT (production) and MARD (utilization)).
- Using only free, trial beta version (COMAP/LULUCF) is not very robust for a country
- Discrepancy between projection model used at central level and provincial/municipality level (no comparability)

Possible solutions

- Plan gradual exposure and acquisition of technical skills to run different projection models (e.g. AIM). Even though complexity of a model doesn't ensure its accuracy, intricate relationship among policies can be elaborated.
- Start exercising informed-policy decision making by comparing the results of multiple, different projection models (not to depend on the results of just one projection model)

Challenges for Sectoral Baseline Development (4)

Scope / sectors

Issues

- No inclusion of emissions from industrial processes

Possible solutions

- Use more sophisticated/complex projection model which also cover IP sector.
- Some portion of emission from IP is already included in energy sector. Other categories under IP may not require complex model for estimating BAU.

Challenges for Sectoral Baseline Development (5)

Cross-cutting coordination and policy mainstreaming

Issues

- Interaction of mitigation options should be reflected not only to NDC but also to each sectoral strategy/ plan to strike consistencies.
- In a longer run, adopting an absolute emission target would be required even for Vietnam as the appropriate form of national target instead of relative target to BAU.

Possible solutions

- In-depth analysis on interaction is a source of perplexity in target setting. At the same time, it could also provide opportunity for mainstreaming and integration of the national emission goal.
- Explore paths to adopt absolute emission level of the proposed national target.

Conclusions

- Much to be done.. Within a limited timeframe (2016-2020)
- Policies for non-credited mitigation actions (2016-2018)
  - Comprehensive institutional framework
  - National specific policies followed by sectoral policies
  - Supported by awareness raising and capacity building
  - Technology and Finance are key to trigger the whole process
- Scaling-up crediting works
  - Depends on how legal systems developed and operated
  - Potential is high but needs appropriate approaches
  - Credited mitigation actions / mechanism need clearer international context before national system can adapt
- Immediate actions
  - Pilots in various sectors (learning by doing)
  - Speed up policy making at national level (for non-credited Mas)
  - Mobilise resources for awareness raising and capacity building for leaders at central level (enhance political will)

Thank you very much



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