Best Practice Case:
Vanuatu’s Integrated MRV Tool

Vanuatu has ratified the Paris Agreement on 18th June 2016 and submitted its Intended Nationally Determined Contribution (INDC) on 21th September 2016. Vanuatu is a small island nation in the South Pacific with negligible contribution to global greenhouse gas (GHG) emissions (0.0016 percent of world emissions), yet in its INDC, the country has taken a very ambitious mitigation target of transitioning to close to 100% renewable energy in the electricity sector by 2030. This target would replace nearly all fossil fuel requirements for electricity generation in the country and be consistent with Vanuatu’s National Energy Road Map (NERM) target of 65% renewable based electricity generation by 2020.

Since the submission of its INDC, Vanuatu has taken significant steps towards enabling the implementation of its climate pledges: With support of UNDP’s NDC Support Programme, the Department of Climate Change, under the Ministry of Climate Change, has launched Vanuatu’s NDC Implementation Roadmap in March 2019, that aims to provide a pathway towards implementing specific climate change mitigation actions which can assist in achieving the targets defined in Vanuatu’s NDC and NERM. Furthermore, to enable the tracking of the impacts of its climate actions, Vanuatu has introduced its integrated, Monitoring, Reporting and Verification (MRV) Tool in April 2019.

The Integrated MRV tool is a first of its kind initiative which enables tracking, reporting and verification of:
1. GHG emissions
2. Impacts of mitigation (including NDC) actions
3. Impacts of adaptation actions
4. Climate finance flows and
5. SDG impacts.

Components of the Integrated MRV Tool

Integrated National MRV Framework

Component 1: National GHG Inventory
- 1. GHG emission sectors
- 2. Monitoring and data collection
- 3. GHG emission calculation
- 4. Analysis and reporting
- 5. Results and communication

Component 2: NDC Implementation / Mitigation Actions
- 1. NDC implementation roadmap
- 2. Priority mitigation actions
- 3. Tracking mitigation actions
- 4. Monitoring and reporting
- 5. Results and communication

Component 3: NDC Adaptation Actions
- 1. NDC implementation roadmap
- 2. Priority adaptation actions
- 3. Tracking NDC adaptation actions
- 4. Monitoring and reporting
- 5. Results and communication

Component 4: Climate Finance Flow
- 1. Climate finance for NDC implementation actions
- 2. Finance and resources deployment schedule
- 3. Monitoring and reporting
- 4. Results and communication

Component 5: Sustainable Development Goals (SDGs)
- 1. SDGs mapping and monitoring for NDC actions based on UNDP CAIT
- 2. Data for SDGs impact monitoring
- 3. Review and analysis
- 4. SDGs impact reporting


Supported by:
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- aecid Special Agency for International Development Cooperation
- Federal Ministry for Economic Cooperation and Development

Based on a decision of the German Bundestag
The Integrated MRV Tool is an IT-based tool designed to fulfill all monitoring requirements of NDC targets and actions, including data collection. The Tool has a central data repository and desktop-based data input feature to efficiently and effectively track, report and verify the performance of NDC actions (including projects and programmes); GHG emissions, financial flows and SDG impacts of NDC actions.

### Structure of the Integrated MRV Tool

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<th>Input</th>
<th>Process</th>
<th>Output</th>
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<td>GHG Emissions and Activity Data</td>
<td>National GHG Inventory Analysis</td>
<td>National GHG Inventory Report</td>
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<tr>
<td>NDC Mitigation Action and Activity Data</td>
<td>NDC Action GHG emissions Analysis</td>
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<td>Central Repository Data Base/IT Interface</td>
<td>Integrated MRV Report</td>
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The Integrated MRV Tool has been developed with simple design principles to provide an ‘Enabling’ system for users with a user-friendly interface and simple guidance, as opposed to stringent rules and requirements. The ‘Flexible’ modular approach gives more freedom of MRV and accommodates specific national circumstances and opportunity for future development. The Tool is ‘Leveraging’ existing and emerging work in the country and utilizes domestic expertise while also applying a ‘Participatory’ approach to engage stakeholders broadly in the development process.

The Integrated MRV Tool is operating through a cloud server and users can access it with their login credentials. The users of the Tool are the members of the Climate Change Department, the key coordinating entity of Vanuatu’s MRV system or any other members designated by the Department.
Success factors of the Integrated MRV Tool

- The Integrated MRV Tool is robust but also flexible to accommodate the needs of government and stakeholders keeping in mind the capacity and resource constraints. The integrated approach is modular and can be tailored to align with the host country climate change and development policies including communicating the progress reports domestically and under international transparency framework.

- The unique feature of the Integrated MRV Tool is the ability to monitor, track and report the SDG impacts (as per the UNDP CAI Tool) for each climate action at the both project and programme levels which assists in aligning climate actions including NDCs, NAPs, NAMAs with SDGs.

- The integrated MRV Tool fulfills most of the defined requirements of the Enhanced Transparency Framework (ETF) under the Paris Agreement (PA) and can be expanded for market and non-market approaches under Article 6 of the Paris Agreement.

- Reporting on GHG emission reductions, SDG parameters and financial flows for each project and programme will build trust towards donors and other partners resulting in enhanced bilateral/international cooperation.

- Beyond tracking of GHG emissions and the progress of climate actions and NDCs, it supports integrated national planning and the assessment of transformational impacts resulting from processes and outcomes of policies and actions, that drive structural changes in society towards climate change mitigation, adaption and sustainable development.

- Finally, the integrated MRV Tool with its versatility and modular nature has a great potential for replication in other regions assisting the host countries in progressing towards achieving the ambitious goals under the PA.

Lessons Learned – Linking the MRV of NDC and SDG targets

Vanuatu has linked its MRV system on climate change and the monitoring and evaluation of the SDGs to enable policymakers to assess the sustainable development impacts of mitigation and adaptation actions. The SDG-Tracker of the Integrated MRV Tool proposes different steps to monitor and report on the SDG impacts of climate change actions including the identification of NDC projects and programs and their possible SDG benefits or impacts, the identification of parameters and data to be monitored and stored in a central database, analysis of SDG data and the verification, communication and reporting of the analysis results.

The outcomes of the analyses for all projects and programs are expected to be aggregated into an SDG performance report, whose key results will be communicated under the ETF of the Paris Agreement. Leveraging sustainable development impacts of climate actions can provide concrete entry points to enhance NDCs. Capitalizing on existing processes, systems and institutional capacity will maximize synergies and reduce cost of achieving dual goals. Aligning the MRV of NDCs and SDGs also supports coordinated decision-making processes, ensuring accountability, engaging stakeholders and maintaining political will at all levels.

Next steps

With support from UNDP and funding from the Climate Action Enhancement Package (CAEP) and the German Federal Ministry for the Environment, Nature Conservation, and Nuclear Safety (BMU), Vanuatu is currently in the process of revising its NDC, including raising ambition and accelerating NDC implementation through a metabolic assessment to identify resource use and associated pollution hotspots across the whole economy. Furthermore, Vanuatu is also working on enhancing its integrated MRV tool to cover other mitigation sectors such as land transport, waste, forestry, agriculture and other potential high impact sectors identified through the metabolic assessment that can contribute to a low–carbon development pathway.