



MRV:

- NAMA's
- Future and challenges

11th Annual IEA-IETA-EPRI Workshop on Greenhouse Gas Emission Trading

Luc Larmuseau, DNV Climate Change and Environmental Services

Paris, 04 October 2011

MRV for NAMA's

- NAMA's that lead to indirect and long term emission reductions pose particular challenges for establishing systems to measure, report and verify (MRV) the results. The reason is that emission reductions resulting from new EE standards (for example) are difficult if not impossible to quantify.
- In the absence of effective means to measure long term emission reductions from enabling activities, it may be sufficient to ensure an MRV that ensures
 - A certain magnitude of GHG emission reductions is achieved
 - The developing country uses the financing for the stated purpose
 - The proposed actions are actually undertaken
 - The implementation is done effectively
- For NAMA's leading to direct emission reductions, the MR is straightforward. Existing systems for measurement, modelling and proxies, such as guidelines set forth by IPCC for GHG measurement are effective at calculating GHG reductions, which could then be reported through National Communications
- In all cases, verification of the actions will depend on whether the NAMA was implemented and financed domestically – “unilateral NAMA” or with the help of international assistance – “supported NAMA”
- The Copenhagen Accord calls for domestic verification of unilateral NAMA's and international verification of supported NAMA's

Types of MRV

- MRV of NAMAs with **direct** effects can be based on existing methods, namely:
 - modeling [ex-ante],
 - measurements [ex-post],
 - proxies on the basis of data and emission factors [similar to national GHG inventories]
- For certain NAMAs, it is only possible to monitor emissions **indirectly**. In these situations, the focus of MRV could lie on the activities and outcomes. Possible indicators would be; build units, number of vehicles, funds granted, investment triggered or feasibility studies completed.
- A third category of NAMAs can only be rated by its broader sustainable development benefits such as its reduction of other pollutions, job creation or other social and economic effects. In this situation, MRV is sometimes more qualitative.

Monitoring the climate change value of NAMAs

- *International funding will require some form of measurable result in exchange, although the political debate regarding Measuring, Reporting and Verifying [MRV] NAMAs is very difficult.*

Following practical experiences, the value of NAMAs can be greater than just short-term emissions reductions. MRV needs to be simple, allowing an element of freedom to pinpoint the sustainable development benefits.

- Any project generating credits that can be used on the carbon market requires a stringent MRV system. The reason for that is that carbon markets can not afford to be diluted by credits that represent lower or even virtual reduction values on the market. Supported NAMAs will not however, be used to any offset emissions in developed countries.
- It can therefore be argued that MRV of supported NAMAs does not need to be as stringent as MRV for credited projects or actions and that NAMA MRV does not necessarily need to be based on emissions reductions. MRV should however, prove that greenhouse gas emissions will be reduced, that financing is used for the stated purpose and that proposed actions are actually and effectively undertaken.
- The direct emissions reduction of NAMAs can not always be measured. Certain NAMA elements [such as capacity building] will have rather indirect impacts and certain measures will only generate direct and indirect effects over a longer period, [e.g. policy development]. Conversely, a feed-in tariff for renewables often leads to direct [and short-term] emission reductions.

MRV needs to be specific to the NAMA type

- a wide range of mitigation actions exists
 - Climate Neutrality
 - GHG emissions below BAU level
 - GHG emissions below base year
 - GHG intensity
 - Enabling conditions (capacity building)
 - Programs, projects, sectoral approaches
- Type and extent of MRV and International Consultation should vary by type

What is measured, reported and verified?

Type		What is verified?
Capacity Building		<ul style="list-style-type: none"> ▪ Progress of inventory ▪ Identification of NAMAs ▪ Design of programs, execution of programs
Projects, Programs, Sectors		<ul style="list-style-type: none"> ▪ T CO₂e reduced ▪ Quality of MR ▪ Design of programs, execution of programs
Carbon Neutrality		<ul style="list-style-type: none"> ▪ T CO₂e emitted ▪ Quality of MR
Emission reduction targets	Intensity based	<ul style="list-style-type: none"> ▪ T CO₂e /gdp ▪ Quality of MR
	Absolute – base year	<ul style="list-style-type: none"> ▪ T CO₂e ▪ Quality of MR
	Absolute - BAU	<ul style="list-style-type: none"> ▪ T CO₂e delta from BAU ▪ Quality of MR

Verification opinion on quantity estimate reported, and quality of process and controls.

Successful verification?

- Success in verification requires a focus on measurement and reporting at the design phase of the framework
- The MR framework should address:
 - Governance, roles and responsibilities
 - Design and implementation of internal controls (QA/QC)
 - Documentation of procedures
 - Systems and Tools

Reporting and Verification Guidance

- High quality guidance exists that could serve as a bridge
- Developed through broad based consultative process (e.g. ISO 14064, WBCSD...)
- Can contribute to capacity building for MRV process
- Quantification protocols exist for both inventory and project reporting

MRV complexity versus cost

- Adopt a risk based approach
 - Significant sources of emissions and GHG's
 - Significant sources of potential error
- Frequency of reporting
- Stakeholder involvement in establishment of materiality

Challenges and future of MRV

- Complex
 - differentiated expectations on MRV from govts, stakeholders and also the market as we move into what is likely to be a fragmented market and increasingly sophisticated buyers.
 - At least four groups of countries: LDC, Developing, Rapidly developing, Developed
 - very different sectors with very different MRV issues.
- in the absence of a global agreement, even if the Australia/Norway proposal gets up, we have a minimum 3-4 year period where there will be a lot of uni-/bilateral programs established, sitting within and outside current annexes and country accounts.
- Top down frameworks will lag bottom up action. The challenge is to start developing top down frameworks that are modular, flexible, and scaleable.
- ➔ MRV development should be object-oriented. A set of framework objects that can be applied in any scheme, but can be harmonized over the longer term (Communality)

MRV: Challenges and future

- different jurisdictions can achieve the same through different mechanisms i.e. US approach version EU approach.
- Learn from the past when scaling up
- Achievable versus impractical
- Use existing tools

Safeguarding life, property and the environment

For more information

please contact luc.larmuseau@dnv.com (Tel. +32 478 34 26 41)
or visit our website www.dnv.com



MANAGING RISK