

THE DEVIL IS IN THE DETAIL

Madlen King writes on the whys and the wherefores of MRV

One cannot read about carbon markets without coming across numerous acronyms. One which appears more often than most is MRV. But what does it mean and why does it matter?

The three letters belie the complexity and contentiousness involved in their meaning: the monitoring (or measuring), reporting and verification of climate change actions. MRV provides the means for countries to have confidence to cooperate in setting ambitious targets for action, and establishes the rules by which all must adhere to ensure consistent, comparable and accurate submissions. Most importantly, it provides trust.

You will come across MRV in relation to organisational carbon reports; emission reduction and removal enhancement projects; and actions taken by nations to mitigate emissions. This includes their reporting through national inventories and communications, and more recently to climate finance, adaptation, capacity building and technology transfer.

What does MRV mean? The 'monitoring' or 'measuring' component refers to a wide variety of methods by which actions, emissions or reductions can be quantified. And these methods have varying degrees of complexity; of effort required; and therefore of uncertainty. From the simplest calculation approaches, such as those applying an estimation of the emissions based on the amount of fuel consumed or industrial activity and the carbon content of that fuel or intensity of the processes, to the more complex such as direct measurement within flue gases, the 'M' covers a great deal of effort to quantify and aggregate.

The 'reporting' component refers to the means by which the data and information that has been monitored is then reported; the method of reporting – whether through online systems or more simpler

submissions and whether or not defined reporting formats are used; the content – whether it is simply the top level numbers and facts, or much of the underlying raw data and calculations; to whom it is reported – the UN, national regulators or publicly; and at what frequency – perhaps annually such as in an emissions trading system (ETS) and the national communications of parties for example.

Finally, the 'verification' component refers to how the emissions and supporting information that have been monitored and reported are independently assured. For the national communications of developed countries participating in the Kyoto Protocol, this is by an international expert review process, but for national market systems this can be by national regulators or expert independent third party verifiers. The depth and breadth of scrutiny involved in that process is described by the level of assurance and the materiality applied.

What is all the fuss about? Well, if you were reviewing the performance of a business you may look at the previous years' accounts. You would want those accounts to have been prepared in a standard way that ensures their completeness, you would want to be able to read those accounts in a way that is sufficiently transparent to be understandable, and is consistent and comparable with those of other businesses, and finally you would want to be assured that those accounts have been independently confirmed to be a true, fair and accurate representation. In essence, you would want to have trust in what was reported.

GHG emissions and actions to mitigate, adapt, finance and capacity build are no different, whether it is comparing national

actions and inventories, organisational reports for regulatory compliance purposes, or project emissions reductions. Their completeness, transparency, comparability and accuracy through well-defined MRV are essential to have confidence in the results, and to build trust and cooperation from the outset.

Robust MRV provides confidence for the users of these systems – whether they be national governments, the boards of organisations, or all stakeholders – that all parties are pulling together, are being held to the same standards and requirements, and that the information that is being reported can be trusted and relied upon. At the top level, this is critical for international negotiations on climate agreements and targets, to ensure that the parties can and do move forward together with common aims and responsibilities. This also helps ensure that targeted actions are sufficient to meet the global objective of limiting global warming to 2°C.

MRV is by no means a new phenomenon. Since the start of the UK ETS in 2002 and followed by the EU ETS in 2005, organisations captured by these systems have been familiar with the requirements of an annual MRV cycle for their obligated emissions. Since 2001, the first year that GHG emission reduction projects could be registered under the Clean Development Mechanism (CDM), project developers have been used to MRV processes required both before and after project implementation.

However, MRV is a more recent development on the international stage. Since the inception of international action on climate change with the UNFCCC and the Kyoto Protocol, which established

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the concept of national communications and national inventory reports, the MRV of parties' progress has been an important building block for agreements and action on mitigation. However it wasn't until the Bali Action Plan in 2007 that the term MRV was first used in this forum – and not until 2010, in Cancun, when a more detailed package of rules and guidelines were defined.

From the international perspective, there is therefore still much work to be done. Parties were invited to develop Intended Nationally Determined Contributions (INDCs) and submit them in the first quarter of 2015. While these are still trickling in, these should provide the necessary information to facilitate the clarity, transparency and understanding of the intended actions. However, the components of the more detailed future MRV systems in relation to the 2015 agreement still require definition in the upcoming negotiations at the end of the year in Paris and beyond.

What is needed is a means to be able to track progress toward the global objective of limiting global warming to below 2°C, by quantifying emissions reductions of individual actions, attributing them to individual nations in a consistent manner that avoids double counting, and to be able to tally those actions against the ambition gap. This would allow us to understand

if actions are sufficient, or if further collaboration is needed to close the gap.

What is also needed is that the lessons from the experiences of MRV at a smaller national and regional scale under ETSs are learned from at the international level. These lessons have already taught us much, but not least is the importance of: testing and continually improving the MRV systems as time and experience progresses; the need for flexibility of approach to apply to different levels of process and experience; establishing an accurate baseline to ensure that targets are sufficiently ambitious and that emission reductions are truly being achieved; clear reporting formats and guidance to ensure that monitoring and reporting practices are consistently applied; and a robust independent and consistent verification process to assure the accuracy and completeness of the monitoring and reporting.

But these lessons are so far limited to the MRV of GHG emissions mitigation. The MRV systems required for the future must be designed to cover all commitments that we hope will be embodied in the Paris Agreement relating not just to mitigation but also to finance, adaptation, capacity building, and technology transfer and cooperation – subject to how these are all defined. If the “what” that the MRV is addressing is not detailed appropriately, then the system will not function effectively

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Without a robust MRV architecture in place, we risk further stalemate where parties have no confidence in the intentions, actions and achievements of each other. The many elements of MRV are essential for all parties to provide trust to commit to what are challenging contributions; trust that all are tested by common responsibilities; and trust that the reported results are a true and accurate account.

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