Ensuring "MRVable" National Actions: An MRV Model with a Focus on Continual Improvement in Climate Performance

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The Bali Action Plan emphasized that nationally appropriate mitigation actions must be "measurable, reportable and verifiable" (MRV), and Parties to the UNFCCC have expressed a wide range of positions on elements of the Copenhagen agreement that touch on MRV issues (WRI, 2009). To date, however, few specific proposals to ensure the "MRVability" of national actions have been put forward – and we therefore have yet to see any convergence on this crucial aspect of the Copenhagen agreement.

This paper suggests one pragmatic approach to ensure that national actions are indeed measureable, reportable and verifiable, namely adopting standard procedural guidelines on basic elements of national climate¹ management systems, such as establishing a climate policy, setting national goals, implementing related national actions and tracking progress over time. The proposed MRV scheme therefore complements existing requirements for Parties to compile quantitative, aggregate national greenhouse gas inventories and national communications.

The paper explicitly does not comment on what types of legally binding or other mitigation obligations or commitments Parties may ultimately enter into under the Copenhagen agreement.

Similarly, this approach would not dictate which policies, targets, actions and indicators countries select, but would provide assurance at the international level that national actions are indeed MRVable and are resulting in continual improvement in climate performance. Even countries with limited resources could therefore start small and fast, and develop strategies most suited to their national emissions profiles and development priorities, adapting these over time. Given that climate change will be a long-term global challenge, reflecting a mindset of continual improvement in the Copenhagen agreement, while encouraging immediate, nationally appropriate action, would be an important outcome of the Bali Roadmap process.

Proposed MRV Approach

The proposed model draws heavily on the International Organization for Standardization (ISO) family of management system standards – and related national / regional standards – which have been applied voluntarily with great benefit to public and private organizations to improve their quality management (ISO 9000 series), environmental management (ISO 14000 series) and, most recently, energy management (ISO 50000 series)².

The MRV model that we propose has the following characteristics:

• Function of the MRV system: To recognize national actions that are measurable, reportable and verifiable and to encourage continual improvement in climate performance. These functions are distinct from and complementary to the crucial functions of (i) national greenhouse gas inventories under the UNFCCC (i.e., to compile aggregate data on anthropogenic greenhouse gas emissions and to

¹ We have opted to refer to "climate" management systems in this paper to encompass national climate mitigation and adaptation actions across sectors, recognizing that these ideally should be embedded in broader sustainable development frameworks and may be referred to differently.

² Additionally the ISO TC7 standards related to greenhouse gases, 14064 (quantification, monitoring, reporting and verification of GHG reductions/removals) and 14065 (requirements for GHG validation and verification bodies) provide valuable input to the development of MRV protocols.

assess compliance with quantified emission reduction and limitation obligations) and (ii) procedures to quantify emission reductions under carbon offset schemes.

- Elements of the MRV system: Our proposal would require that (i) the Conference of the Parties (COP) adopt standard guidelines for national climate management systems, (ii) Parties implement nationally appropriate mitigation actions in the context of climate management systems consistent with the COP guidelines, (iii) independent third parties accredited by the COP and appointed by each Party certify compliance of national climate management systems with the standard guidelines, (iv) the COP acknowledge the certified actions in some form.
- Applicability: All Parties (mandatory certification for Parties that seek COP recognition of nationally appropriate mitigation actions³, voluntary for others).
- Scope: We propose guidelines for climate management systems, which would cover all aspects of climate performance (e.g., mitigation, adaptation). However, the guidelines themselves would not stipulate any specific policies or measures, and countries would be free to determine the proper scope and scale of their own climate policies, consistent with the UNFCCC, and nationally appropriate actions. The proposed MRV system would apply to all national actions included within the scope of the national climate management system, as defined by each Party (and could therefore include both supported and unsupported actions of developing countries, as well as any actions by developed countries).
- Relationship to Registries, Schedules, National Communications and Mitigation Commitments: The proposed MRV system would ensure that national actions are measureable, reportable and verifiable and that they are embedded in a climate management system that demonstrates continual improvement. This MRV approach would be consistent with existing requirements, such as national communications, as well as the full range of new proposals included in the current draft of the negotiating text (AWG-LCA, 2009). A "registry", for example, might be open to national actions included in certified national climate management systems. Similarly, national "schedules" could be subject to the proposed standard guidelines for climate management systems.

Climate Management System Standard Guidelines

As outlined above, the heart of the proposed approach would be standard guidelines to be adopted by the COP for national climate management systems. Nationally appropriate mitigation actions would be deemed to be MRVable, if they were undertaken under a national climate management system voluntarily certified to comply with the standard guidelines.

Drawing on existing national and international management system standards, basic elements of climate management system standard guidelines might include its (i) scope, (ii) terms and definitions and (iii) the climate management system requirements themselves, typically covering the following aspects⁴:

- General requirements, such as defining the scope and boundaries of the climate management system. Whereas some countries might wish to take a comprehensive approach, others may wish to focus on certain gases, sectors, technologies or other system boundaries.
- Management responsibility, which should include establishing and maintaining the climate policy; providing sufficient resources to implement the climate management system; appointing a climate management system team; communicating the importance of climate management; ensuring that

³ There could be special provisions for least developed countries and/or small economies with low greenhouse gas emissions, and financial and technical support to achieve certification should be provided to qualifying developing countries.

⁴ Each ISO management system standard also typically includes an informative annex that provides practical guidance on how to apply the standard in practice, thus preventing misinterpretation of the requirements.

climate performance targets are met; including climate considerations in long-term planning; and conducting management reviews.

- Policy statement, which would articulate a commitment to continual improvement in climate performance, under top management responsibility.
- Planning requirements, including developing and maintaining a climate profile (which would document GHG sources and sinks, evaluate past emissions trends and estimate future trends, as well as identify and prioritize opportunities for improving climate performance); establishing performance benchmarks; defining performance indicators to track progress towards objectives and targets; defining measurable climate objectives, targets and timetables for achievement.
- Implementation of national actions, which includes ensuring sufficient human and financial resources and may therefore require support from developed countries for developing country actions, particularly in the case of LDCs. These provisions typically also address documentation requirements, communication, and specific opportunities for improving climate performance (such as in the context of: (i) designing equipment, systems, processes and facilities; (ii) operating and maintaining significant GHG sources/sinks; or (iii) purchasing of goods, services and energy).
- Checking implementation of actions and resulting climate performance, internal corrective and preventive action and review of the climate management system by top management, with a view to ensuring its continued suitability, adequacy and effectiveness.

As a basic principle, these climate management system requirements can and should be formulated in such a way that they are applicable to all countries, all sources and sinks of greenhouse gases and all types of organizations, from governments at various levels to individual private companies or facilities. The work on drafting the standard will have to consider how the standard can be applied in practice at these different levels of aggregation and responsibility and whether any special provisions are needed for the different levels.

Interface Between ISO and UNFCCC

The International Organization for Standardization is well placed to prepare an international climate management system standard of the type proposed above, given its mandate, membership, vast experience with international standard setting, and specific expertise in the field of environmental, energy and climate standards. Initial consultations with the secretariat for the ISO Technical Committee 207 on Environmental Management (which has a scope that covers "standardization in the field of environmental management systems and tools in support of sustainable development"), as well as with the chairpersons of its key subcommittees on greenhouse gas management (Dr. Kook Weng Chan, Malaysia) and on environmental management systems (Anne-Marie Warris, UK / Noer Adi Wardojo, Indonesia), have been conducted, and COP15 and preparatory sessions will offer further opportunities for exchanging views with Parties.

In adopting standard guidelines for climate management systems, the COP could rely on the resulting ISO standard, yet would still have the authority to issue any special provisions that it sees fit to make the generic standard suitable to meet the MRV needs of the Copenhagen agreement. An analogy would be the UNFCCC Reporting Guidelines on Annual Inventories, which specify that Annex I Parties shall use the Guidelines for National Greenhouse Gas Inventories prepared by the Intergovernmental Panel on Climate Change to estimate and report on anthropogenic emissions by sources and removals by sinks of greenhouse gases not controlled by the Montreal Protocol. Similarly, many CDM methodologies require use of national or international testing or performance standards developed elsewhere.

Next Steps

Adoption of the procedural guideline approach for MRV purposes under the Copenhagen agreement at the informal AWG-LCA session in August 2009. This would require specific new language to be inserted in Chapter III ("Enhanced action on mitigation") of the current version of the negotiating text (FCCC/AWGLCA/2009/INF.1) on the topic of MRV along the following lines (the existing text on p. 72, indicated here by the *italic* font, could be either replaced or expanded upon by the proposed new text in red):

Measurement, reporting and verification

x.3 All Parties shall develop and regularly update and submit information relating to the implementation of their nationally appropriate mitigation strategies. Such information shall be reviewed and verified according to agreed rules and guidelines.

x.3bis The COP shall issue standard guidelines for climate management systems by the end of 2013. These guidelines shall take into account the ongoing consideration and development of management systems by the International Organization for Standardization (particularly with respect to environment, energy and climate) and should address:

(a) Scope

- (b) Terms and definitions
- (c) Climate management system requirements

Nationally appropriate mitigation actions shall be considered to be measurable, reportable and verifiable, if they are included in the scope of a national climate management system that has been voluntarily certified to conform to the COP guidelines for climate management systems.

x.4 All Parties, except for least developed countries and small island developing states, shall develop and regularly update and submit a national inventory of anthropogenic emissions by sources and removals by sinks of all gases not controlled by the Montreal Protocol.

x.5 National inventories shall be:

(a) Undertaken in accordance with the latest agreed Intergovernmental Panel on Climate Change Guidelines for National Greenhouse Gas Inventories; and

(b) Submitted, reviewed and verified according to agreed frequencies, rules and guidelines.

This proposal is formulated to be consistent with Structural Proposals 1 or 2, under which there would be a unique subheading "measurement, verification and reporting" that would apply to all Parties, but it could also be used if the text included separate sections with MRV provisions for developed and developing countries.

Note that this proposal would not require Parties to certify their climate management systems, unless they wanted recognition of their "MRVable" mitigation actions.

There are various precedents for the COP to adopt procedural requirements for climate management systems without the necessary guidelines already in place, as well as for the COP to build on the ongoing work of ISO as a competent technical institution for standard-setting. This is analogous to the way in which the INC process (Intergovernmental Negotiating Committee for a Framework Convention on Climate Change, which was active in 1991/92) agreed on national communications and national inventories (included in the UNFCCC text that was adopted in 1992), before the guidelines on how to prepare the inventories had been issued, as well as how the INC and subsequently the COP relied on the expertise of the IPCC to develop a methodology for national greenhouse gas inventories.

- Preparation of a climate management system standard by ISO under its Technical Committee 207 on Environmental Management. Based on past experience, it should be possible to accomplish this within a two- to three-year timeframe, drawing on the latest energy management system standard development process, which is expected to conclude in 2010.
- Decision by COP15 to issue standard guidelines and procedures for voluntary certification of national climate management systems by Parties that want COP recognition of their "MRVable" mitigation actions, which would form the core of the MRV framework under the post-2012 climate regime. The decision should stipulate that the guidelines will build on the ongoing work of ISO, with a view to issuing the COP guidelines by the end of 2013. It should also invite ISO to provide a progress report to COP16 on their work related to a climate management system standard.

References

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ISO 9001:2008, "Quality management systems -- Requirements"

ISO 14001:2004, "Environmental management systems -- Requirements with guidance for use"

ISO 14064-1:2006, "Greenhouse gases -- Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals"

ISO 14064-2:2006, "Greenhouse gases -- Part 2: Specification with guidance at the project level for quantification, monitoring and reporting of greenhouse gas emission reductions or removal enhancements"

ISO 14064-3:2006, "Greenhouse gases -- Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions"

ISO 14065:2007, "Greenhouse gases -- Requirements for greenhouse gas validation and verification bodies for use in accreditation or other forms of recognition"

ISO 50001 (under preparation), "Energy management systems - Requirements with guidance for use"

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