



PMR Technical Work Program:
Building Readiness for Implementation

Introduction

1. A core element of Implementing Country Participants' engagement in the PMR involves the formulation of a Market Readiness Proposal (MRP), which serves as a roadmap to develop market readiness capacity and to assess and design market-based instruments. For some countries, it also includes plans for piloting such instruments.
2. Through the MRP development process, Implementing Country Participants identify gaps and needs in their technical and institutional capacities to scale up mitigation efforts and to design and implement market-based instruments. As demonstrated by countries that have already submitted a final MRP, some gaps and needs—in terms of readiness components—are common among countries. To complement the work these countries will be doing as they implement their MRP activities, support can be provided at the PMR level to share experience and knowledge in addressing common questions and issues, outline options to address them and their respective implications, highlight best practices and to build compatible national systems. Therefore, the PMR Secretariat proposes a Technical Work Program that focuses on these common market readiness issues, beginning with the following components:
 - Facility-level GHG monitoring, reporting, and verification (MRV), data management, and registries/tracking tools;
 - Baseline setting;
 - Offset standards; and
 - Modeling work on carbon pricing instruments.
3. Based on feedback and guidance from the PA, the work program may be modified to include additional components.

Action by the PA

4. PMR Participants are invited to provide feedback on this proposed work program and consider it for endorsement at PA6 in Barcelona, May 27-28, 2013. Following endorsement, the secretariat will report back to the PA periodically work program progress and seek further guidance on its scope and activities.

I. Technical Work Program Components

5. The technical work program addresses issues that are common to Implementing Country Participants and can benefit from technical assistance provided in a comprehensive and programmatic manner. The technical work program will deliver the following outputs and products:
 - **Knowledge products and resources** such as technical notes, guidance documents, and other analytical products, which can be used as tools to support countries enhance their market readiness;
 - **Technical meetings/trainings** to promote knowledge sharing among countries, practitioners, and experts, and increase hand-on experience, as well as both North-South and South-South exchanges; and
 - **E-Learning modules** to disseminate knowledge products and experience, in collaboration with the World Bank Institute.¹
6. To the extent possible, the PMR Secretariat will implement the technical work program in partnership with other initiatives and organizations, including relevant agencies within PMR Participant countries.

A. MRV/Data Management/Tracking Tools & Registries (MRV Programs)

7. MRV programs comprise GHG accounting and reporting protocols and verification processes, data management systems, GHG asset tracking tools, and registries. Collecting, organizing, and managing relevant information to implement mitigation policies, including market-based instruments, involves significant technical requirements along with associated skills and expertise.
8. A robust MRV program is critical to all types of market instruments. For the purposes of the PMR technical work on this issue, focus will be on the collection and managements of data from individual installations and at an aggregated level. Reflecting the PMR's purpose to support country-led initiatives, the target audience for guidance documents, technical notes, and workshops on this issue is ultimately government agency personnel, as they will have responsibility for designing and implementing MRV-related programs and systems.

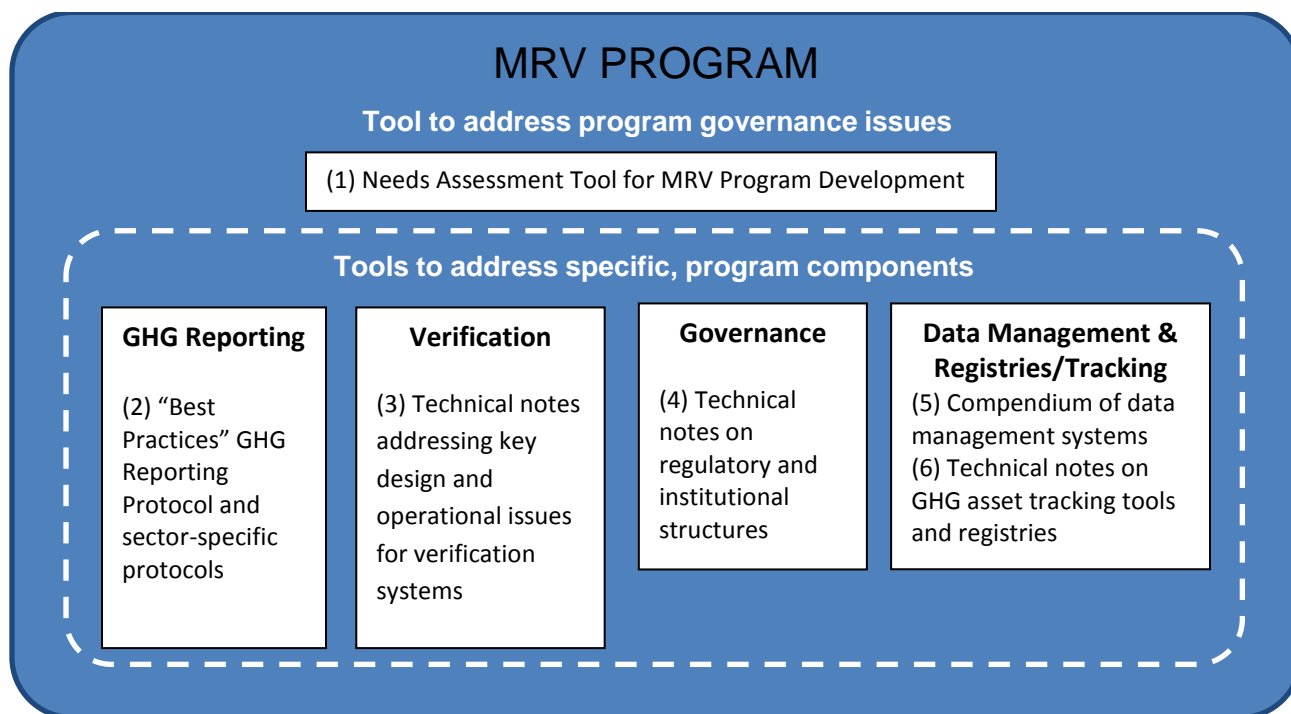
Knowledge Products

9. Products for the MRV program will include a comprehensive package of tools to address overarching MRV program governance issues, as well as specific tools pertinent to GHG reporting rules and procedures, emissions report verification, and data management and registry systems (Figure 1). Among the tools listed in Figure 1, the secretariat recommends prioritizing the following three: the *Needs Assessment Tool for MRV Program Development*,

¹ The World Bank Institute (WBI) is a global connector of knowledge, learning and innovation for poverty reduction. WBI connects practitioners and institutions to help them find suitable solutions to their development challenges. For more information, visit <http://wbi.worldbank.org/wbi/>

which will help evaluate the status of MRV program development capabilities; the *Best Practices GHG Reporting Protocol*, which would create a standard for GHG accounting and reporting rules and regulations; and the *Compendium of Data Management Systems*, which would provide information on data management system features and functionality to inform data system evaluations.

Figure 1: Knowledge Products – MRV, Data Management, GHG Asset Tracking Tools and Registries



10. The following descriptions provide initial thoughts on the content of the seven proposed technical knowledge products and include comments on their purpose.

- a. **Needs assessment tool for MRV program development** – A guidance document to help Implementing Country Participants organize and prioritize key structural elements for designing an MRV program and corresponding data management system. It would primarily serve to help countries determine the “readiness” status of core MRV program components and, like a process management tool, develop a plan to address issues pertinent to setting up an installation-level MRV program appropriate for their national circumstance. The needs assessment tool would help countries organize and prioritize basic design and implementation tasks under key issue-areas. For example, it would cover programmatic issues such as governance structures, institutional relationships, stakeholder engagement, confidential business information, public disclosure, GHG reporting (i.e., using the Best Practices GHG Reporting Protocol), data management options, and verification, among other things.

- b. **“Best Practices” GHG reporting protocol; and sector-specific model GHG reporting protocols** – A guidance document that covers the topics and requirements for installation-level GHG reporting, written in regulatory-like language so countries can use it as a starting point for their respective program development process. MRV programs that follow the Best Practices GHG Reporting Protocol would have comparable GHG reporting systems, which share internationally-developed minimum quality standards for calculating emissions and reporting data. The Model MRV Protocol would be drawn from existing programs (e.g., those of Australia, the European Union, and the United States), thus providing consistency among established and emerging MRV systems. Sector-specific model protocols would include data collection procedures and emissions calculation methodologies for GHG sources within particular sectors.
- c. **Technical notes on design options for verification systems** – Reports presenting design options to incorporate emissions verification into GHG reporting programs. Implementing Country Participants have different capabilities and appetites to implement systems and processes to verify GHG emissions reports, the “V” in MRV. Therefore, the PMR Secretariat will produce reports that discuss different options to incorporate verification into an MRV program (i.e., third-party versus regulator), along with the benefits and costs of the different approaches. These technical notes would closely correspond with the training workshops and information seminars, creating a package of materials to support this topic.
- d. **Technical notes on legal requirements to underpin MRV programs and governance structures to support program implementation** – Reports analyzing legal, regulatory, and institutional structures and, where possible, providing recommendations on best practices. Example could include:
- Comparing programs with different lead responsible agencies (e.g., environment vs energy vs statistics) and assessing effectiveness;
 - Assessing the relationship between federal and subnational governments in running programs and identifying problem areas to avoid; and
 - Providing recommendations on how to address questions and concerns around issues such as provision of confidential business information.
- e. **Compendium of data management systems** – Based on *PMR Technical Note 4: Supporting GHG Mitigation Actions with Effective Data Management System*,² the secretariat would conduct a survey of data management technologies (i.e., databases and software tools), which would result in summary tables organized by key system parameters. The compendium would serve as a tool to assist in technology assessment and decision-making. Instead of countries spending time and resources identifying providers and learning about their system’s capabilities and attributes, the compendium would help countries assess options and make decisions more efficiently by advancing the starting point of the process.

² A draft of this technical note will be presented during the PMR Technical Work Program Workshop on May 26, 2013 in Barcelona.

Potential parameters to organize the comparison tables include main system features, functionality, types of data covered, cost considerations (e.g., licensing fees, customization/implementation charges, ongoing maintenance), ease of use and user interface options, and other applicable criteria for selecting a data management system appropriate to an Implementing Country Participant's needs and limitations. The PMR Secretariat would also produce a corresponding technical paper that provides analysis to the research.

- f. **Technical notes on GHG asset tracking tools and registries** – Reports describing the types of GHG asset tracking tool registry design options for Implementing Country Participants to address a range of market-based instruments. Like a banking system, registries track and account for the transfer of carbon assets. The reports would provide technical discussions on the functions of registries to securely support the goals and objectives of all PMR countries to facilitate financial flows to emissions reduction activities. They would also address linkage issues to existing asset trading registries, as well as emissions registries that are a part of a country's domestic MRV program.

Technical Meetings/Training

11. To complement the development of knowledge products that address the common needs of Implementing Country Participants to establish MRV programs, the secretariat proposes several training workshops to foster capacity building and encourage knowledge sharing at national, sub-national and facility levels.
12. The format of the training workshops would consist of government-to-government sessions, in which representatives provide lessons learned from designing and implementing MRV programs. They would also include expert-led, topic-specific training sessions on relevant technical matters such as GHG reporting rules, data management and registry design, program governance, implementation, data collection and organization challenges and limitations, and program management. As appropriate, meetings could also present a company-oriented perspective with respect to complying with MRV rules and procedures and using data management systems and registries.
13. Over the next two years, the PMR Secretariat envisions hosting (and co-hosting) six, multi-day regional training/workshops (i.e., three per year). Initial topics may include:
 - Fundamentals of MRV, data management, GHG asset tracking tools and registries;
 - Verification system design options;
 - MRV and carbon markets;
 - Understanding and applying the MRV Needs Assessment tool;
 - Understanding and applying the Model MRV Protocol;
 - Review of data management tools – types and functionality; and
 - Registry design options.

E-Learning

14. Working with the World Bank Institute (WBI) and experts, e-learning modules would supplement the regional training workshops and focus on specific educational goals and objectives. They would cover entry-level topics on GHG accounting and reporting fundamentals, for instance, and nuanced issues like the relationship and interaction between emissions registries and carbon asset registries and tracking tools.

Process and Engagement – Getting Started

15. Following the endorsement of this work plan by the PA, the PMR Secretariat will invite PMR Participants to nominate experts to participate in a working group(s) to define priorities for knowledge products, clarify their scope of work, and set a plan for MRV program execution. Similarly, this consultation process will identify goals and objectives for regional training workshops and corresponding e-learning tools.

B. Baselines

Knowledge Products

16. Baselines are a critical element of the readiness work for market based instruments, as identified in Building Block 4 of the MRP Tool. To date, the PMR has hosted a technical workshop on baseline setting (May 2012 in Cologne) and written a technical note, *PMR Technical Note 3: The Nuts and Bolts of Baseline Setting: Why, What, and How?*
17. The PMR formed the Baseline Working Group³ to develop a guidance document on baseline setting in Implementing Country Participants. The document aims to identify key considerations and steps in the development of baselines, along with different options to address them and potential implications (and trade-offs) to consider. This work will be used to further elaborate the baselines elements in the MRP Tool. The guidance document is expected to be finalized summer 2013.

Next Steps

18. It will be important to “road-test” the guidance document; therefore, the secretariat proposes to engage in between two and three case studies, ideally crediting mechanism cases in PMR Implementing Country Participants. Countries are invited to express interest in participating in these case studies, which will be carried out in close collaboration with the PMR Secretariat and experts.
19. Case study work would complement work undertaken by relevant Implementing Country Participants through the MRP Implementation Phase funding. In turn, the information from the

³ The working group is comprised of PMR participants and external experts. Ms. Ulla Blatt Bendtsen (Denmark) and Ms. Iliana Cardenas (Mexico) steer the work of the group. Interaction among members of the Baselines Working Group (via telephone, email or in person) have been valuable to provide feedback on the general direction of the guidance note and to highlight missing or insufficiently addressed issues, as well as to suggest key issues for consideration and ideas for next steps.

case study(ies) would be shared broadly to shed light on different baseline options and considerations and their real-world implications.

20. Drawing on lessons learned through these studies, the guidance document would be updated appropriately and would also inform the baselines elements in the MRP Tool. In addition, if need arises, the guidance document on baselines could be expanded to include work on other areas such as baseline setting in the context of cap-and-trade systems (e.g., the development of benchmarks that can be used in allocation processes).

C. Offset Standards

21. A number of Implementing Country Participants is considering the inclusion of domestic offset systems in the design of their domestic carbon markets. Therefore, the offset standards component of the Technical Work Program will aim to provide an overview of existing offset standards and to understand their varying approaches, procedures, and systems of governance, with the objective of providing useful and practical input to countries for the development of a transparent and credible domestic offset scheme.

Knowledge Products

22. A PMR Technical Note is being prepared to examine the similarities and differences between existing offset standards, including the Clean Development Mechanism (CDM), Joint Implementation (JI) the Gold Standard (GS), the voluntary Carbon Standard (VCS) and Climate Action Reserve (CAR), the Chinese Certified Emission Reduction (CCER), Quebec's offset system, and Japan's Joint Crediting Mechanism. This study includes the development of a framework for teasing out different standards' approaches and procedures and is based on publicly available information from each standard, as well as interviews with – and reviews by – officials from the different standards.

Next Steps

23. Future work should elaborate on “good practices” and provide recommendations, as well as a more in-depth examination of key issues and trade-offs associated with offsets and how they have been/are being addressed. The work would be conducted in full recognition of the different approaches taken by different standards (e.g., some are based on bottom-up processes; while others have taken a top-down approach) and their respective focus, with the ultimate objective of facilitating understanding, good practice and potentially (some) linking.
24. Depending on feedback and interest from PMR Participants, the following follow-up work may be considered:
 - The study could be expanded to be more comprehensive, and cover other existing and planned standards;
 - Building on the current study (as well as other existing work), one or two technical/guidance notes could be developed, covering e.g.,:

- Identification of emerging good/common practice (in what circumstance and according to what approach) - and potentially recommendations (if and as appropriate), along with identification of associated risks and pitfalls;
- Identification of indicators/features that can contribute to confidence and attractiveness of offset standards – including but not limited to GHG reductions. This proposed work could involve consultations/surveys with PMR Participants from both Implementing and Contributing Countries; and
- Examination of the emissions accounting issues associated with offsets.

D. Modeling

25. For a number of countries, modeling-based analytical work constitutes a key part of the MRP activities to be supported by the PMR. This reflects the reality that decisions on carbon pricing instruments need to be informed by robust technical analysis that helps understand the implications and incidence of different policy options and, together with other domestic policy considerations and goals, can feed into each country's respective domestic policy debate on its low emissions development strategy, the potential role of carbon pricing instruments, and their design.
26. The objectives of this component of the PMR Technical Work Program are to contribute to addressing the demand for knowledge and experience sharing around modeling for carbon pricing instruments, as well as to contribute to enabling a community of practitioners, connecting government experts and modelers within and across countries – from both developed and developing countries.
27. The Secretariat organized an Expert Meeting on the Modeling of Carbon Pricing Instruments on April 24-25, 2013. The summary of the report is included in PMR-Note-PA6-4.⁴ Presentations by countries and experts can be found on the [PMR website](#).

Next Steps

28. Based on feedback from the Expert Meeting, and depending on feedback and interest from PMR Participants, the following follow-up work may be considered:
 - Support for hands-on modeling guidance in a few countries that would also provide information for insights and lessons. Insights from this work would form case studies to be shared with the broader PMR group and inform future decisions on this part of the Technical Work Program.
 - Conduct expert meetings, when needed, on the modeling of carbon pricing instruments to bring experts and practitioners together to delve into greater details in the key issues and challenges that have been identified through the April 2013 expert meeting.
 - Develop technical guidance consisting of a mapping tool to link key policy questions associated with carbon pricing instruments to appropriate/suitable modeling/analytical

⁴ This note will be presented to the PA during the PMR Technical Work Program Workshop on May 26, 2013 in Barcelona.

tools, data and assumption requirements, as well as insights and lessons from practical country experience.

II. Technical Work Program Budget

29. A preliminary cost estimate for delivery of the proposed technical work program is US\$ 1 million for FY14,⁵ with a significant portion of this budget allocated to the MRV work program. Costs incurred for previous PMR technical work—including developing technical reports and conducting workshops—informed this budget estimate.

⁵ FY14 runs from July 1, 2013 to June 30, 2014.