

**PARTNERSHIP FOR MARKET READINESS (PMR)**  
**TECHNICAL WORK PROGRAM:**  
**REPORT ON FY17 ACTIVITIES AND PROPOSAL FOR FY18**

PMR Note PA16 2017-2

March 6, 2017

Draft version, for review and endorsement

## I. INTRODUCTION

1. The Technical Work Program (TWP) of the Partnership for Market Readiness (PMR) complements Participant's readiness activities by providing support in a programmatic manner on those elements that are common across countries. Its objectives are to facilitate experience and knowledge sharing; develop practical guidance on common issues; identify good practice and common standards; and to help build necessary capacity.
2. The TWP will enter its fifth year in fiscal year 2018 (FY18).<sup>1</sup> This note provides a status update on the FY17 activities through March 2017 and proposes a work plan for FY18 that builds on previous activities. The Partnership Assembly (PA) is invited to provide feedback on this proposed work program and consider it for endorsement at PA16 in New Delhi, March 20-22, 2017.

## II. STRATEGIC PLANNING FOR THE TECHNICAL WORK PROGRAM

3. For a number of years, the TWP has been informed by the strategic planning approach [presented at PA10 in Santiago](#). This approach looks to ensure the activities of the TWP are guided by the activities and priorities of the Implementing Country Participants (ICPs). The TWP therefore, supports all the carbon pricing instruments that ICPs are pursuing, including emissions trading systems, carbon taxes, and crediting instruments – both scaled-up and project-based offset instruments. Some activities and products focus on a particular type of instrument while others focus on a technical component that will be relevant to more than one type of instrument. The TWP also includes a range of different types of activities (see Annex I for further details).
4. Importantly, the TWP reflects the natural cycle of capturing and generating knowledge, disseminating it, applying it as readiness activities are implemented, and capturing and sharing experience and lessons, which in turn will enrich the collective knowledge on carbon pricing instruments. With the TWP entering its fifth year, a breadth of knowledge products has been generated, therefore the focus now shifts to enhancing dissemination and application. In FY18, it will be timely to consolidate the TWP by finalizing those knowledge products that have already been identified as beneficial and assisting countries to apply the guidance and knowledge already generated, for example, in the preparation and implementation of their PMR activities. Some countries will be more advanced in their implementation throughout FY18 and the TWP can help facilitate the sharing of lessons learnt, for example, through the development of case studies and country-to-country exchanges. Further, it is important for the TWP to look to the future and support countries in the design and implementation of carbon pricing beyond 2020.
5. The PA has encouraged the PMR Secretariat to ensure that the TWP collaborates with other relevant World Bank initiatives and partners including with, for example, the Carbon Pricing Leadership Coalition (CPLC), the Networked Carbon Market (NCM) Initiative, the Transformative Carbon Asset Facility (TCAF), CF-Assist, the Carbon Initiative for Development (Ci-Dev), the NDC Partnership and the Forest Carbon Partnership Facility (FCPF). With the strategic realignment of its Climate Change Group, the World Bank has committed to enhance efforts to cooperate across its different initiatives to

---

<sup>1</sup> The PMR follows the World Bank Group fiscal year, which begins on July 1 and finishes on June 30.

benefit its clients and support its overall climate change objectives. The TWP is one avenue to achieve this, with its technical work having great value to other initiatives, while at the same time being able to leverage the knowledge and expertise generated under other initiatives for the benefit of ICPs. The FY18 work plan of the PMR TWP will therefore include more activities in collaboration with other initiatives and partners.

### III. STATUS REPORT ON FY17 ACTIVITIES AND PROPOSED WORK PLAN FOR FY18

6. This section provides a status update on the activities undertaken in FY17 and proposes the work plan for FY18. It should be noted that, due to the timing of PA16, the status update for FY17 includes work completed through end-February 2017 and an estimate regarding what will be completed by the end of the fiscal year on June 30, 2017. The work plan for FY18 can also be expected to evolve over the coming months. The PMR Secretariat will therefore seek further guidance at PA17 to any additional activities for FY18 that might be subsequently identified. A summary of the activities is presented below in table 1, with more detail provided below in relevant subsections.

**Table 1: Summary of the PMR TWP’s activities for FY17, and planned for FY18<sup>2</sup>**

Work Stream	FY17	FY18
<b>ETS</b>	TN: ETS Handbook (translations) TT: In-country training on ETS design and operation (Ukraine) E-learning: Byte-Sized Learning on ETS	E-learning: Update of E-learning course on ETS TT: In-country training on ETS design and operation (Mexico, other countries)
<b>Carbon Tax</b>	TN: Carbon Tax Guide TW: Carbon Taxes: Design and Implementation in Practice E-learning: Development of E-learning course	TN: Translation of Carbon Tax Guide E-learning: Development of E-learning course (cont’d) TT: In-country trainings on carbon tax design
<b>Crediting</b>	TN: Assessment and creation of demand TN: Baseline setting at the aggregate level TW: New generation of crediting	TN: Crediting Guide
<b>MRV</b>	TT: MRV and GHG reporting programs E-learning	TN: Guidance on guidance on verification and accreditation systems TN: Guidance on establishing GHG measurement protocols TN: Template for comparing MRV systems TT: MRV and GHG reporting programs E-learning
<b>Data Management and Registries</b>	TN: Guidance on Emissions Trading Registries Webinar: GHG reporting platforms TW: Registries and Accounting	TT: Data management and registries on demand TN/TW: Data management and registries for post-2020 carbon markets
<b>Baselines</b>	TN: Compendium of Baselines in collaboration with other agencies (completion of chapter on manufacturing)	TN: Compendium of Baselines in collaboration with other agencies

<sup>2</sup> Note: “TN” denotes a technical note or similar knowledge product; “TT” denotes a technical training; “TW” denotes a technical workshop or similar event.

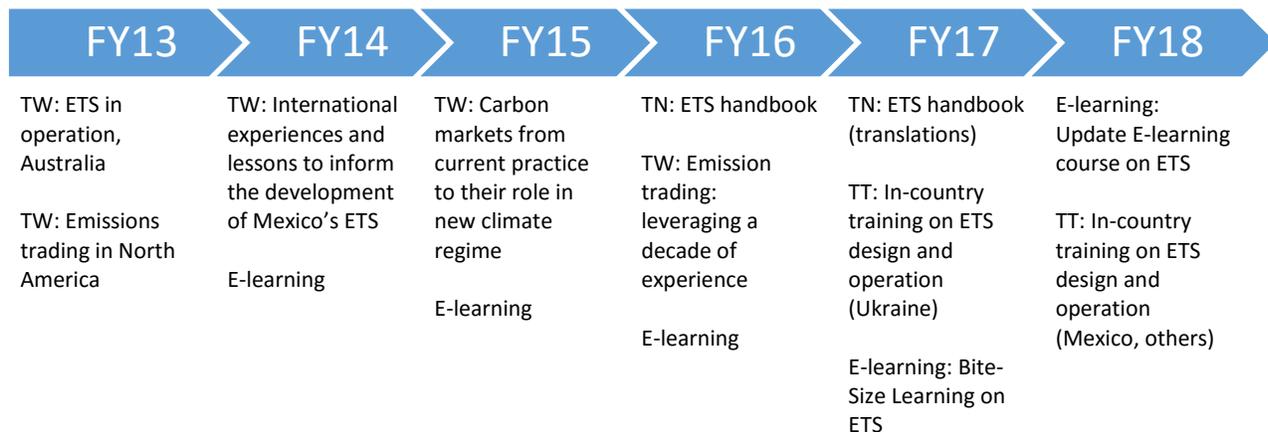
	TW: Baselines	(completion of chapter on cross-cutting baselines) Webinar: Compendium of baselines
<b>Benchmarking</b>	TN: Similarities and differences of benchmarking approaches TW: Benchmarking Webinars: Benchmarking	TT: Benchmarking (as demanded)
<b>Stakeholder Engagement and Preparedness</b>	TN: Training material for private sector readiness	TN: Communicating carbon pricing TW: Communicating carbon pricing.
<b>Other</b>	Report: State and Trends of Carbon Pricing 2018 TW: Post 2020 accounting Brief: China carbon market monitor	Report: State and Trends of Carbon Pricing 2017 Brief: China carbon market monitor TN: Governance TN: Use of Revenue

#### A. ETS Work Stream

7. This work stream was initiated in FY15 in response to the number of ICPs interested in establishing an emissions trading system (ETS) to achieve emissions reduction goals. It focuses on the design and implementation of ETSS, building on earlier PMR activities and the extensive experience gained to date among PMR Participants.
8. The main focus of the work in FY17 was on the dissemination of the publication [“Emissions Trading in Practice: Handbook on design and Implementation”](#) that was launched in March 2016 and developed in collaboration with the International Carbon Action Partnership (ICAP). The Handbook distills best practices and key lessons from more than a decade of experience worldwide. It sets out a 10-step process, with concrete decisions and actions to be taken to assist with the design, implementation and operation of an effective ETS. The preparation of the Handbook involved experts from the Environment Defense Fund (US), Motu (New Zealand), Vivid Economics (UK), Öko-Institute (Germany), MIT (US), and Tsinghua University (China), as well as input from over 100 international policy practitioners and technical experts.
9. In order to improve access to the Handbook and facilitate ICPs efforts to build ETS understanding with local stakeholders, the PMR Secretariat has worked with ICAP and PMR Participants, and other partners to translate (or facilitate the translation of) the Handbook in additional languages. The Handbook is now available in [Chinese](#), [Turkish](#), and [Spanish](#), with other languages to be made available in the future (e.g. Ukrainian). The handbook has been widely disseminated with more than 10,000 downloads from the World Bank’s website.
10. A more systematic collaboration with ICAP was explored in FY17 in order to disseminate the Handbook further, and offer interested Participants **in-country training** on ETS design and operation. A first PMR/ICAP ETS training will be organized in Ukraine in April 2017, and in Mexico with the date still to be determined. The PMR Secretariat is open to arranging similar training for other interested ICPs. However, demand for country-to-country exchange and in-country training will need to be managed in accordance with the capacity and resources of the Secretariat to deliver.

11. An **E-learning** course “*Emissions Trading Systems: Using Markets to Promote Low Emissions Development*” was developed in FY14 in collaboration with the Carbon Finance-Assist (CF-Assist) program. The facilitated E-learning course will be offered twice during FY17. The first session, in October 2016, had 138 registrations. The second delivery will take place in May-June 2017. Given the continued interest in ETS related distant learning, the PMR Secretariat has been working with the World Bank CF-Assist to (i) develop a Bite-Size Learning drawing on the ETS Handbook (May 2017), and (ii) update the existing E-learning course on ETS to run additional sessions in FY18.

**Summary ETS work stream activities, achieved and planned**



Note: Related activities from previous are years included. “TW” denotes a technical workshop or similar event, “TN” denotes a technical note or similar knowledge product; “TT” denotes a technical training.

**B. Carbon Tax Work Stream**

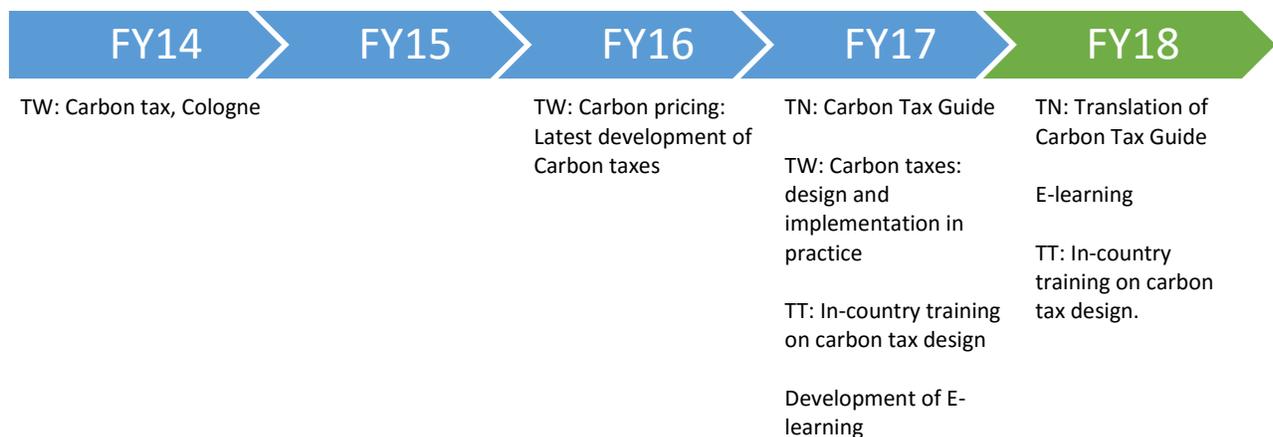
12. The carbon tax work stream was initiated in FY14 reflecting the interest of some Participants in pursuing carbon taxes as a way to achieve emission reduction goals. The work stream focuses on the design and implementation of carbon taxes, building on previous PMR activities and international experience.
13. The main focus of work in FY17 was the preparation of a **Carbon Tax Guide**. Like the ETS Handbook, it provides step-by-step guidance on the design of carbon taxes. It distills best practices and key lessons from more than two decades of experience worldwide. It sets out the key steps for policy makers, with concrete decisions and actions to be taken to assist with the design, implementation and operation of an effective carbon tax. The preparation of the Guide was led by a team of consultants from Climate Focus, Indiana University, and the Gnarley Sustainability Institute. It benefited from inputs from over 50 international policy practitioners and technical experts. The Guide will be launched at a luncheon on March 22, 2017, and will be followed by a Technical Workshop

“Carbon Taxes: Design and Implementation in Practice”, held in New Delhi, India, on the margin of the 16<sup>th</sup> Meeting of the Partnership Assembly.

14. In FY18 the focus will be on disseminating the Guide. It will be made available on the PMR website and the World Bank’s Open Knowledge Repository. In order to improve access and facilitate ICPs efforts to build understanding with local stakeholders, the PMR Secretariat will work with Participants to translate the Guide in other languages than English.
15. In addition, an **E-learning** course on the design of carbon taxes, similar to that which was prepared on emissions trading, will also be developed. It will draw largely on the Carbon Tax Guide, providing the material in a pedagogical format. The terms of reference for this e-learning are under development with the work expected to commence this fiscal year and completed in FY18.
16. The PMR Secretariat will also work with Participants to identify opportunities for **country-to-country exchanges** on carbon taxes. For example, the TWP could facilitate dialogues, meetings, or study tours between PMR Participants including with Technical Partners. The PMR Secretariat will also provide **in-country technical training** based on the Guide and tailored to national or regional context. Interested ICPs should contact the PMR Secretariat to discuss further. Demand for country-to-country exchange and in-country training will need to be managed in accordance with the capacity of the Secretariat to deliver.

---

**Summary carbon tax work stream activities, achieved and planned**




---

Note: Related activities from previous years included. “TW” denotes a technical workshop or similar event, “TN” denotes a technical note or similar knowledge product, “TT” denotes technical training.

**C. Offsets and Crediting Work Stream**

17. The main focus of the Offsets and Crediting work stream in FY17 has been on advancing the preparation of the technical notes that focus on the priority topics that the countries are facing when building readiness and planning for the use of the new generation of crediting, including as the part of the NDC implementation strategies and boarder national climate policy instruments.

18. This work aims to directly contribute and inform the development of a **Crediting Guide**, that was agreed as part of the FY16 work plan. The guide will explore the main elements of design and implementation of crediting instruments, with a particular focus on the new generation of scaled-up crediting. It will also provide an overview of the developments around the world, introducing various country experiences. The Guide will however reflect the infancy of scaled-up crediting concepts and limited practical experience in implementation. It will also capture any emerging guidance on the new generation of international mechanisms under the Paris Agreement and, in turn, will help to **inform the international policy and technical discussions underlying the preparation of the Article 6 “Rule Book”** that is expected to be agreed before the end of 2018. This work will continue throughout FY17 with the comprehensive Guide likely to be finalized in FY18.
19. The following two **technical notes** agreed as part of the FY17 work plan have been initiated with drafts to be circulated shortly to the Offset and Crediting Working Group for their review and input:
  - a. **“Assessing and mobilizing international and domestic sources of demand for scaled-up crediting-related programs”**. The note will give an overview of the existing and announced sources of demand for crediting programs at the international and domestic level, including the potential role of result-based climate finance in supporting early action and piloting. The main emerging features and expectation vis-à-vis to the scaled-up crediting programs will be discussed. The note will provide an overview of the key policy considerations and analytical approaches that could be taken into account to design and implement scaled-up crediting programs in a way to meet the demand expectations and to mobilize underlying financial and institutional resources to ensure implementation (create supply), including through mobilization of private sector investment, and considering the expected contribution of crediting programs to the implementation of the NDCs. The final draft is expected to be shared with the Working Group in March 2017 and the publication is planned for May 2017.
  - b. **“Baseline setting at the aggregate level in the context of broader policy development, including INDCs.”** The note will provide an overview of the key policy considerations and emerging analytical approaches to the setting of baselines in a context of broader national and sectoral policies, facilitating demonstration of expected contribution of crediting programs to the implementation of NDCs and avoiding double counting. In particular, the note will discuss three important aspects of NDC process that could impact the way baselines are set for scaled-up crediting: “conditionality” of NDC pledges; heterogeneity of NDC goals and their translation into sectoral emission pathways through implementation policies; and emerging processes and tools used to support policy planning process. The final draft is expected to be shared with the Offset and Crediting Working Group in March 2017 and the publication is scheduled for May-June 2017. The final draft is expected to be shared with the Working Group in March 2017 and the publication is planned for May/June 2017.
20. A third technical note **“MRV approaches beyond facility-level (for example, in transport, residential communities), including MRV of policy-driven mitigation actions”** was initially proposed. After more fully scoping this note, the Secretariat now proposes to address these issues as part of the general Crediting Guide.

21. Similarly, a separate technical note was also initially proposed to provide guidance for policy makers designing domestic offset instruments to accompany their other domestic policies (such as ETS, carbon tax, or other policies that rely on domestic offsets). After further consideration of the overlaps and potential for duplication, the PMR Secretariat proposed at PA15 to widen the scope of the Crediting Guide so that it addressed not just new generation “scaled-up” crediting but also domestic offsets program.
22. In order to increase the relevance of the crediting-related work stream, the PMR Secretariat further strengthened the coordination with other initiatives, through:
  - a. **Organization of joint technical workshops** allowing to contribute the outcomes of the crediting work stream to a broader agenda related to the operationalization of the Article 6 and to the preparation for NDC implementation. This approach allows to maximize knowledge sharing, capacity building and networking opportunities between interested countries and leading experts in these inter-connected fields.
  - b. **Cross-fertilization with the PMR Policy Analysis Work Program:** Within the PMR, the technical guidance and outcomes of the country-level activities under the Policy Analysis Work Program of the PMR are being more systematically incorporated into the recommended tools and approaches for scaled-up crediting design within the context of NDCs.
  - c. **Knowledge exchange and feedback process with the Transformative Carbon Asset Facility (TCAF)** has been set-up to help create synergies and take into account relevant issues identified through the preparation of TCAF piloting activities.
23. Given that some of the topics are relevant both work streams, planning for future work under the Offsets and Crediting Work Stream is also being closely aligned with the **PMR Dialogue on Post-2020 Carbon Markets** (see Section J below).<sup>3</sup>
24. Similar to the joint technical workshop on [“Implications of the Paris Agreement for a New Generation of International Crediting Mechanisms”](#) which took place in Paris, in May 2016, a second joint **technical workshop** on the “Operationalization of the Article 6 of the Paris Agreement” will take place in Barcelona in May 2017, during the Innovate 4 Climate (I4C) week, in collaboration with the Results-Based Climate Finance team of the Carbon Markets and Innovation Practice of the World Bank Group. This workshop will focus on the integrated approach required to support the new generation of carbon markets, bringing together several other relevant World Bank Group initiatives working on issues from carbon pricing advocacy to results-based financing and piloting. As part of this workshop, dedicated events to discuss the outcomes of the technical notes on baseline setting for crediting and on the assessment of demand will be discussed, together with the recommendations from the technical work on benchmarking.

---

<sup>3</sup> E.g., accounting and avoidance of double counting; implication of future international decisions on the scope and modalities for the approaches established under Articles 6.2 & 6.4 of the Paris Agreement, transparency requirements for NDC, etc.

### Summary of offsets and crediting work stream activities, achieved and planned

FY12	FY13	FY14	FY15	FY16	FY17	FY18
TN: crediting mechanisms overview	Webinar to clarify scope of work for offset component of TWP	TB: Using CERs in domestic offset program	TN: Options to use existing international offset programs in a domestic context	TN: Assessment and creation of demand	TN: Crediting Guide	
TW: Mitigation Programs for scaled-up crediting mechanisms, Istanbul	CE: Developing Domestic Offset Schemes, Mexico	TN: Update of Similarities and differences of offset standards	TN: Crediting-related activities under the PMR:	TN: Baseline setting at the aggregate level	TW: New generation of crediting mechanisms, as part of joint TW on the Operationalization of Article 6 (including events on baselines and benchmarking)	
	TN: Similarities and differences offset standards		TN: Additionality			
	Webinar: Introduction to California's offset program		TW: Crediting and RBCF workshop.			

Note: Related activities from previous years included. "CE" denotes country-to-country exchange, "TW" denotes a technical workshop or similar event, "TN" denotes technical note or similar knowledge product.

#### D. Monitoring, Reporting and Verification (MRV) Work Stream

25. The MRV work stream was initiated in FY14. This reflects that most ICPs have identified MRV readiness activities in their MRPs, with several pursuing the development and implementation of entity-level GHG reporting programs.
26. Dissemination of the **"Guide for Designing Mandatory GHG Reporting Programs,"** released in May 2015, continued into FY17. The Guide is now available in Spanish and can be translated into other languages if there is demand for this from ICPs. Upon request, the PMR Secretariat can also facilitate country- or regional-specific **training** to help Participants better understand the Guide and its application to national circumstance.
27. The **E-learning course** based on the guide and developed in collaboration with World Resources Institute and CF-Assist is now available on the World Bank's Open Learning Campus. It is a free, publicly-available self-paced course. A facilitated session of the course was held in October 2016, with 186 persons registered. The second facilitated session for FY17 will be offered in May 2017 with another two facilitated sessions to be offered in FY18.
28. The terms of reference for a **technical note on verification and accreditation** systems (agreed as part of the FY17 work plan) has now been completed. The note will draw on experience and practice, and provide step-by-step guidance to policy makers for the design and implementation of verification and

accreditation systems that best suit national circumstance while at the same time taking advantage of international norms and standards. The procurement process to engage a consultant to lead the development of the new technical note has been initiated, with the work expected to commence before the end of FY17. The note will be published in FY18.

29. Similarly, scoping has progressed for a **technical note on establishing GHG measurement protocols** also agreed as part of the FY17 work plan. It will draw on existing programs and literature to establish guidance on aspects such as specifications for direct measurement and emissions calculation methodologies, including sampling and testing requirements for location specific emissions factors. The procurement process to engage a consultant to lead the work is also expected to commence before the end FY17. The note will be published in FY18.
30. A **template for describing and comparing different MRV systems** was also agreed as part of the work plan for FY17. In July 2014, the PMR published a technical note that surveyed the MRV systems of the seven Chinese pilot emission trading systems. This kind of survey is very useful for others in the process of designing MRV systems. Having a detailed understanding of the MRV systems that underpin other countries' instruments also assists in assessing the potential compatibility of instruments. Building on this earlier technical note, the template would allow for different MRV systems to be described and compared in a consistent and easy way. The technical work program would then work with Participants as they finalize their own arrangements to complete the template. Work on the template is expected to continue into FY18.
31. A standalone **technical workshop** to discuss these elements of MRV is also planned for FY18, with the current proposal to have this workshop in December 2017.

### Summary monitoring, reporting and verification activities, achieved and planned

FY13	FY14	FY15	FY16	FY17	FY18
TN: Supporting GHG Mitigation Actions with Effective Data Management Systems	TT: first regional training on MRV, Beijing  TT: second regional training on MRV, Mexico City  TN: A Survey of the MRV Systems for China's ETS Pilots  TW: MRV-ing GHG Emissions Under Existing and Developing Pricing Mechanisms, Bonn	TT: Third regional training on MRV, Izmir  TN: Design guide for mandatory GHG reporting programs	E-learning development  TT: MRV and GHG reporting programs  Case study: South Africa's MRV program	TT: MRV and GHG reporting programs  E-learning	TN: guidance on guidance on verification and accreditation systems  TN: guidance on establishing GHG measurement protocols  TN: template for comparing MRV systems  TW: Verification & Accreditation; and measurement protocols

TT:MRV and GHG  
reporting  
programs

E-learning

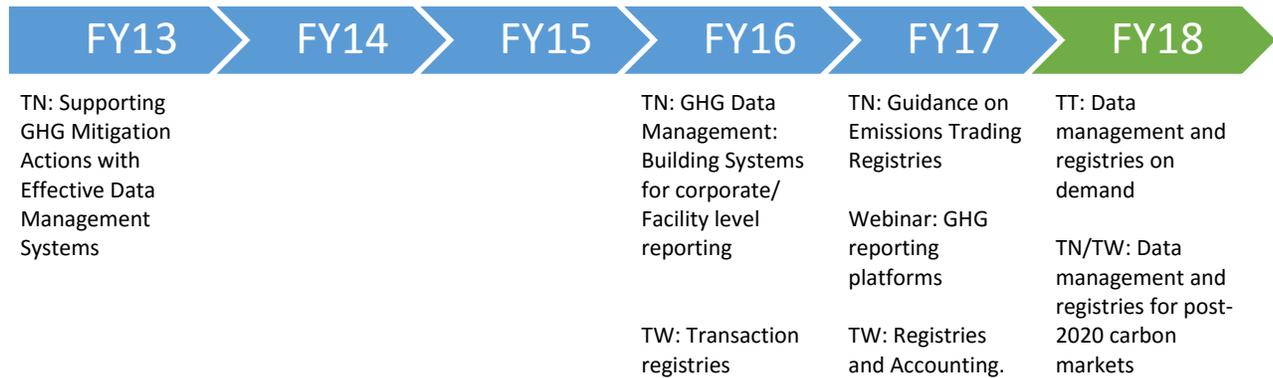
---

Note: Related activities from previous years included. "TT" denotes technical training, "TW" denotes a technical workshop or similar event, "TN" denotes a technical note or similar knowledge product.

### **E. Data Management and Registries Work Stream**

32. One key deliverable for this work stream in FY17 was the Report "[Emissions Trading Registries: Guidance on Regulation, Development, and Administration](#)" launched in October 2016 and jointly developed with the World Bank's Forest Carbon Partnership Facility (FCPF). Given the length of time and capacity needed for the development of a registry, it is essential for countries that are in the process of designing market mechanisms to factor in specific regulatory, administrative, functional, and technical aspects of registry development. Against this backdrop, and to further facilitate future registry design and implementation, this report provides policy makers and other stakeholders with technical insights and guidance on how to support country-specific decision making and activities related to registry development.
33. The report was presented to PMR Participants during the Technical Workshop "[Post-2020 Accounting: Implications for Carbon Pricing and Registries](#)" held on 17 October in Hanoi, Vietnam, on the margins of PA15. The report's findings were also presented and discussed in a number relevant avenues, such as UNFCCC' Registry Systems Administrators Forum (September 2016) and ICAO's Committee on Aviation Environmental Protection (December 2016). The report has also served as a key reference for the stakeholders engaged in the Global MBM Technical Task Force (GMTF) to design the registry architecture supporting ICAO's market-based measures for international aviation.
34. In FY18 focus will be on the dissemination and application of the technical notes developed under the work stream. In addition to the registry report, the report "**Greenhouse Gas Data Management: Building Systems for Corporate/Facility Level Reporting**" (April 2016) will continue to serve as a key reference to guide the work in countries designing and developing IT systems that support GHG reporting programs.
35. In addition to directly supporting developments in countries, the PMR will work in collaboration with the World Bank Networked Carbon Market Initiative and other stakeholders to explore challenges and options related to the post-2020 carbon market infrastructure.

**Summary data management and registries activities, achieved and planned**

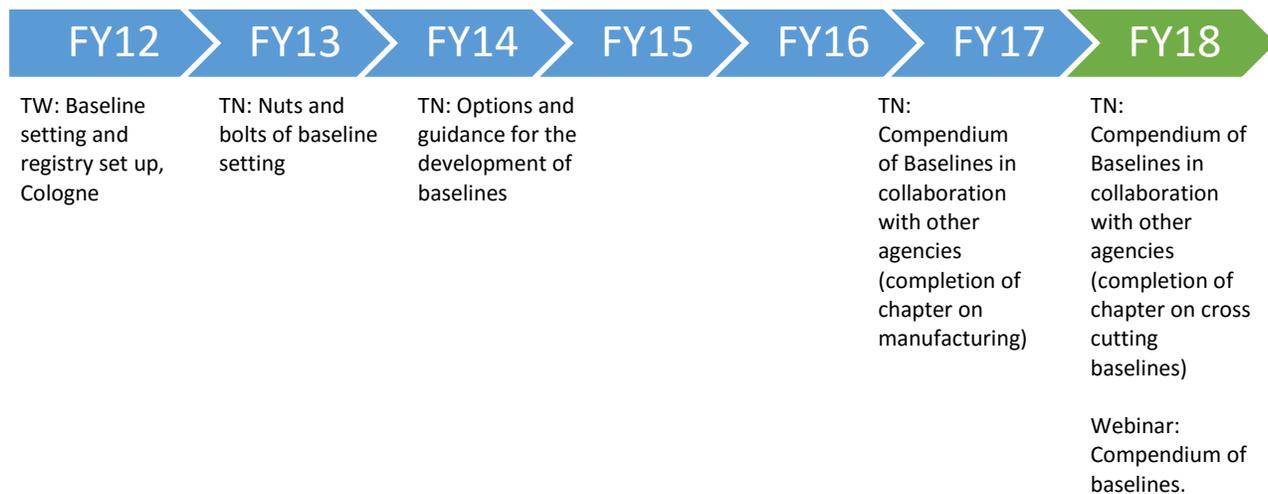


Note: Related activities from previous years included. “TW” denotes technical workshop or similar event, “TT” denotes technical training, “TN” denotes technical note or similar knowledge product.

**F. Baselines Work Stream**

36. The PMR Secretariat is collaborating with the UNFCCC, UNDP, UNEP, WRI, GIZ, and FAO on the development of a **Compendium on Baselines** that will build on the PMR’s previous work on baselines. The Compendium will provide generic approaches to baseline setting that can be applied to mitigation action at different levels (national, regional, sectorial, or facility-level actions) and provide links to data sources where more detailed guidance can be obtained. Specifically, the information will provide an overview of different approaches used to project baseline emissions available in the literature, key steps in scenario building, data requirements and ways of addressing data gaps, and provide guidance on projecting baseline emissions at different levels (national, sub-national, sectoral, or project). The Compendium will not propose or develop any new or additional baseline approaches.
37. UNFCCC is proposing to make the Compendium a working document to allow updating for new developments in baseline setting at different levels over time. Most likely, the Compendium will be a static knowledge product that is linked to a dynamic website that is regularly updated. The operation, frequency of the update of the website, etc., will be decided at a later stage. The full Compendium is expected to be available by the end of 2017.
38. The general structure of the Compendium has been finalized, as well as, the generic approaches and key technical elements identified for baseline setting by different schemes and applications. Each participating partner is taking the lead on one or more of the sectors. A chapter on baselines at the national level has been finalized. The PMR has agreed to lead on manufacturing industries and construction; as well as a chapter on cross-cutting baseline such as at the city level. Other sectors to be included in the compendium are energy industries, transport, buildings, other energy, carbon capture and storage, AFOLU – livestock, AFOLU – land, and waste – including waste water and solid waste. The chapter on manufacturing industries is expected to be finalized by June 2017.

**Summary baselines activities, achieved and planned**



Note: Related activities from previous years included. "TW" denotes technical workshop or similar event, "TN" denotes technical note or similar knowledge product.

**G. Benchmarking Work Stream**

39. The **technical note on Benchmarking** is in final stages of development. It provides an overview of approaches and practical guidance for policy-makers and practitioners, with step by step guidance on the development, implementation and management of benchmarks. The note also captures the experience with benchmarking from around the world, and considers the similarities and differences in design and implementation.
40. A consortium of consultants, led by Ricardo AEA, has been engaged to help develop the note. The Benchmarking Working Group has also provided input through interviews, surveys and review of the drafts. The final draft has been submitted, with the note expected to be published by May 2017.
41. The PMR Secretariat proposes to have a technical workshop on benchmarking in combination with a workshop on baseline setting for crediting mechanisms in May 2017 on margins of the Innovate 4 Climate week in Barcelona. These will be conducted in collaboration with Results Based Climate Financing work stream of the Carbon Markets and Innovation Practice (of which PMR is also a part). In addition, the PMR Secretariat will hold at least two webinars to disseminate the benchmarking note further.
42. In FY18 the focus will be on dissemination of the note and application of the guidance. Upon request, the PMR Secretariat can also facilitate country- or regional-specific training to help Participants better understand the Guide and its application to national circumstance.

**Summary of benchmarking work stream activities, achieved and planned**



TN: Similarities and differences of benchmarking approaches  
 TT: Benchmarks (as demanded)

TW:  
 Benchmarking

Webinars:  
 Benchmarking

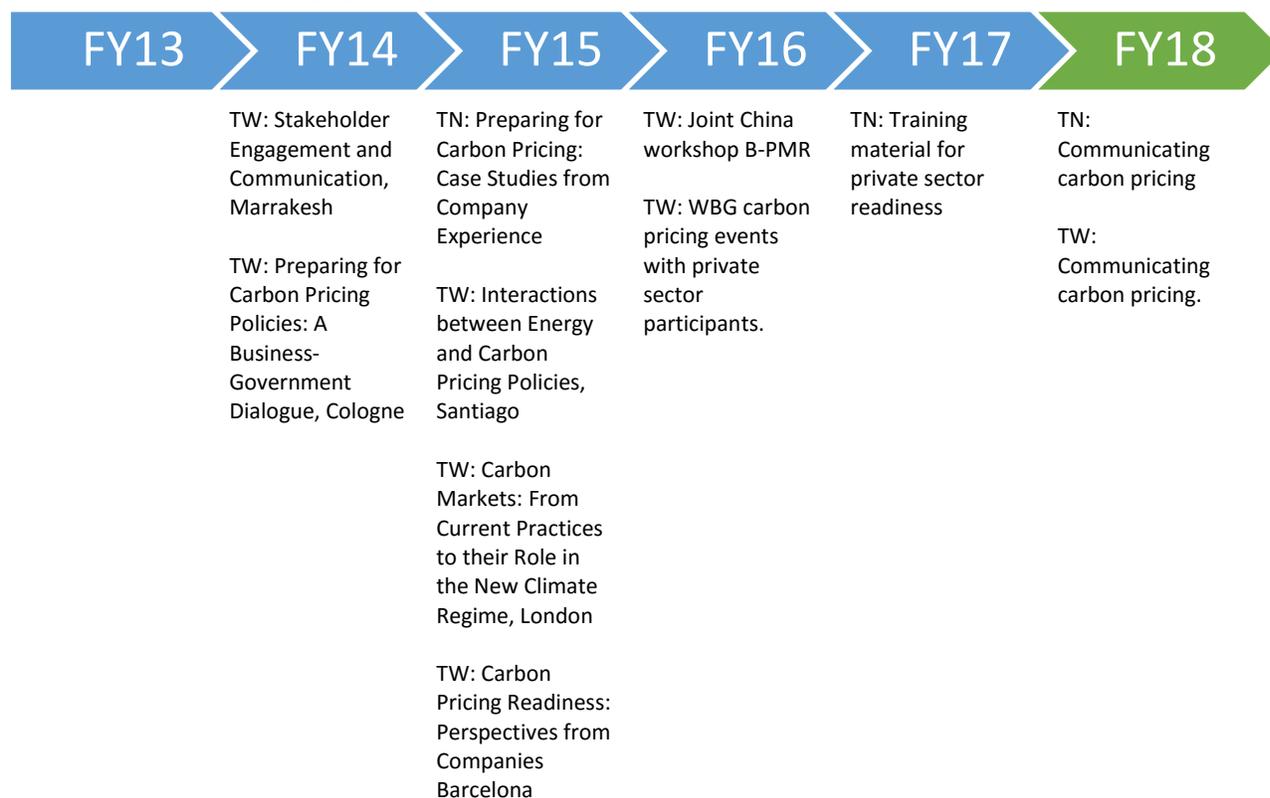
Note: Related activities from previous years included. "TW" denotes technical workshop or similar event, "TN" denotes technical note or similar knowledge product.

**H. Stakeholder Engagement and Preparedness Work Stream**

43. In FY17 the PMR continued its collaboration with IETA's Business-PMR (B-PMR) with the objective to develop comprehensive training material on corporate preparation to carbon pricing in order to facilitate and conduct industry outreach and consultations on emissions trading and carbon pricing with PMR ICPs. The training material on corporate preparation will consist of (i) an in-depth PMR/BPMR Carbon Market Readiness Training Guide for the PMR outlining all key elements industry must prepare for ahead of carbon pricing/carbon market involvement and compliance; (ii) a PMR/BPMR Instructors Guide which will explain how to instruct all modules in the training guide to provide direct training via the B-PMR-PMR partnership in countries; and (iii) Multimedia videos of industry practitioners describing and providing lessons of the key elements for industry preparation and compliance with carbon markets.
44. The training material on corporate preparation to carbon pricing will be completed in April/May 2017 and will in turn help establish a more systematic mode of cooperation between the PMR and BPMR in countries – such as through joint PMR/BPMR training workshops for local stakeholders. Enhanced private sector preparedness and public-private dialogue is critical to PMR's mission which is to help countries prepare for and implement robust and sustainable carbon pricing policies.
45. Many ICPs will, as part of their MRP activities, prepare communication plans and activities around the introduction of carbon pricing. These communication plans will look to address not just the private sector but also other groups, the general public and political stakeholders. While each country will need to design a communication plan for their own specific context, several participants have indicated that some guidance and collaboration on this aspect of their readiness would be beneficial. Accordingly, the terms of reference for a new guidance note agreed as part of FY17 work plan is in the final stages of development. The guidance will be based on best communication practice, as well as, previous international experience in communication around carbon pricing. A communication expert will be engaged to develop the guidance, and an ad hoc working group established with relevant experts to provide input. The procurement process is to commence shortly, with consultant engaged to start work before the end of FY17. The Guidance would be published later in FY18. In addition, a

technical workshop on communicating carbon pricing is planned for October 2017 on the margins of the Partnership Assembly meeting (PA117).

### Summary stakeholder engagement and preparedness work stream activities, achieved and planned



Note: Related activities from previous years included. "TW" denotes technical workshop or similar event, "TN" denotes a technical note or similar knowledge product.

#### I. Flagship Report "State and Trends of Carbon Pricing"

46. In FY17 the PMR agreed to continue partnering with the World Bank's flagship report "**State and Trends of carbon pricing**" to more fully report and disseminate information on carbon pricing developments in PMR ICPs. [The 2016 report](#) was officially launched on 18 October 2016 in Hanoi, on the margins of PA15. In addition to providing an update on carbon pricing activities around the world, the 2016 report provided analysis on the importance of aligning carbon pricing with the broader policy landscape. The analysis provides lessons for policymakers on how maximize synergies between climate mitigation and other related policies, while managing potential tensions and tradeoffs. It also provides new modelling analysis to demonstrate the crucial benefits that an international carbon market established under Article 6 of the Paris Agreement could provide in reducing the costs to countries of achieving their emission reduction targets. An international carbon market could thus enable greater ambition in taking steps to reduce greenhouse gas emissions to a level consistent with the 2°C climate stabilization goal.

47. Work on the 2017 report has commenced and is expected to be released in October 2017. In addition to providing an update on carbon pricing schemes worldwide, the State and Trends 2017 edition will include two analytical chapters on aligning carbon pricing and fiscal policy, and another on carbon markets and climate finance – global resource mobilization to achieve two degrees.
48. In FY18 the PMR Secretariat proposes to continue this partnership with the State and Trends Report and provide financial support for its preparation.

***J. Other Activities under the PMR TWP***

49. In addition to the dedicated work streams, the TWP has undertaken a number of other relevant activities in FY17.

*Post-2020 Carbon Markets*

50. In FY15 and FY16 the TWP initiated a series of **workshops** to provide PMR Participants and relevant experts an opportunity to engage in technical discussion on post-2020 markets. The objective of the workshops was to build knowledge on key technical market related issues discussed at the international level; exchange views and facilitating common understanding for how the carbon market will develop, to bridge the gap between carbon market practitioners and negotiators, and to inform PMR activities accordingly.
51. A further **technical workshop** was held on April 25, 2016 on the margins of the Partnership Assembly meeting, in Lima, Peru (PA14), where Participants had the opportunity to collectively analyze any potential implications for the PMR stemming from the Paris Agreement, with a view to further advancing the various strategic discussions under the PMR and identifying related activities for its different work programs including its technical, policy analysis and in-country work programs. A consultant was engaged by the PMR Secretariat to undertake some analysis to support the workshop and to make any recommendations or conclusions relating to implications for the PMR and its work programs. The consultant's report was finalized and circulated to the PA in advance of PA15.
52. Accounting was identified by participants as a topic for further discussion. Accordingly, a "[Technical Workshop: Post-2020 Accounting: Implications for Carbon Pricing and Registries](#)" was held on the margins of PA15 to explore further issues around accounting for trade and the role of registries in supporting effective accounting. The agenda and presentations for the workshop are available from the PMR website.
53. The PMR proposes to stay engaged in discussions and activities that support the development of post-2020 carbon markets. This work will be done in close collaboration with other initiatives and partners. More specifically, a joint workshop to discuss further the "Operationalization of Article 6 of the Paris Agreement" is planned for May 2017, on the margins of the Innovate 4 Climate week, in collaboration with the Results-Based Climate Finance team of the Carbon Markets and Innovation Practice of the World Bank Group (which also houses the PMR).

China Carbon Market Monitor

54. In FY16, the TWP launched the first [China Carbon Market Monitor](#), a quarterly publication that provides market analysis on the performance of China’s seven pilot ETSs. The Monitor also provides updates on policy developments toward the launch of the National China ETS. The Monitor is published in English and Chinese and publicly available for download on the PMR Knowledge. To date, seven issues have been published. The Monitor is expected to be published at least until the launch of the National China ETS.

Governance and Institutions

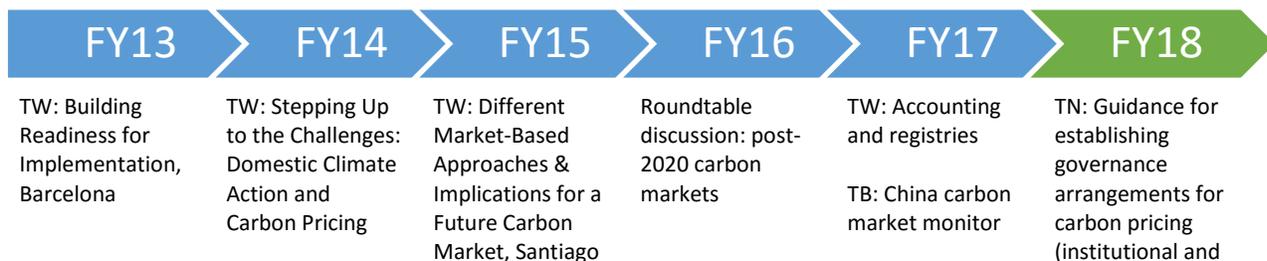
55. A new technical note providing guidance and lessons learned on establishing governance arrangements (both institutional and legal) to support carbon pricing policies was agreed as part of the FY17 work plan. A number of ICPs have identified readiness activities to explore governance arrangements as part of the PMR activities and expressed an interest in specific guidance and collaboration on this aspect of their work. The terms of reference for this work is in early stages of development, with work expected to be completed in FY18. A consultant will be to be engaged to lead the development of the guidance and an ad hoc working group established with relevant experts to provide oversight and input. A technical workshop on the issue is also planned for FY18, currently proposed to take place on the margins of PA18.

Use of Carbon Pricing Revenue

56. Depending on the design, carbon pricing instruments have the potential to raise significant revenue. Carbon pricing revenue can be used in any number of ways including to address competitiveness and distributional concerns; reduce or supplement other taxes for general revenue purposes, or be target toward other climate policies and measures. Often, consideration of how carbon pricing revenue is to be used is an important part of the policy development process. As part of the FY17 work plan the Secretariat undertook to explore if further work was warranted to help countries who are considering how to use carbon pricing revenue in their national context. The initial scoping indicates strong relevance and interest, so it is proposed that this work be taken forward as part of the FY18. The work will collaborate with other initiatives across the World Bank as well as external partners. In the meantime, the Carbon Tax Guide has a dedicated chapter on use of revenue that would be relevant for revenue generated from other instruments as well.

---

**Summary of other activities, achieved and planned**



TW: Modeling Tools & Data Reporting, Sydney	Instruments, Mexico City	TW: Carbon Markets: From Current Practices to their Role in the New Climate Regime, London	TW: PMR insights for post-2020 carbon markets	legal arrangements)
TW: Tackling Climate Change: Pricing Carbon to Achieve Mitigation, Washington	TN: Lessons Learned from Linking Emissions Trading Systems	TB: China carbon market monitor	TW: Carbon Pricing: Maintaining the momentum after Paris.	TW: Governance
TW: Expert meeting on modelling for carbon pricing, Washington			TW: Implications of the Paris Agreement for the PMR	TN: Use of Carbon Pricing Revenue
TW: Policy Mapping & Effective Instruments for GHG Mitigation in Urban Transport, Washington			TN: Carbon leakage: theory, evidence and policy	TB: China carbon market monitor
			TW: Carbon leakage: theory, evidence and policy	
			Webinar: Carbon leakage: theory, evidence and policy	
			TN: Interactions between energy and carbon pricing	
			TB: China carbon market monitor	

---

Note: Related activities from previous years included. "TW" denotes technical workshop or similar event, "TN" denotes technical note or similar knowledge product, "TB" denotes a technical brief or similar.

### ***K. Technical Workshops and Trainings***

57. In FY17, the PMR Secretariat changed the format of its technical workshops slightly to facilitate knowledge sharing. Two- to three-day stand-alone technical workshops were added to the roster of events in addition to the technical workshops that customarily accompany PA meetings. In FY17, technical workshops accompanied both PA meetings (one on accounting and registries and another on carbon taxes). Workshops on benchmarking, and baselines for crediting will take place in May 2017 to coincide with the World Bank's Innovate 4 Climate conference to be held in Barcelona. These will be conducted in collaboration with Results Based Climate Financing work stream of the Carbon Markets and Innovation Practice
58. In FY18, Technical Workshops on Communicating Carbon Pricing, MRV (covering verification & accreditation, and development of measurement protocol), Governance, and Use of

Revenues are envisioned. Please note that program for the technical workshops (both schedule and focus) may change to better accommodate needs of ICPs and to leverage opportunities to collaborate with partners.



59. In addition to these workshops, regional or in-country technical training on the different aspects of the Technical Work Program is also proposed. These trainings are expected to leverage PMR knowledge products and to help participants apply guidance to specific regional or national contexts. Possible topics for such training could include design and implementation of ETS, carbon taxes, and MRV system as well as on carbon leakage and/or benchmarking. The Secretariat will work with interested ICPs to maximize the benefits of such training.

60. Interested ICPs are encouraged to inform the PMR Secretariat so that demand can be mapped. Request for this support will need to be managed within the overall capacity of the technical work program to deliver on the training. The Secretariat will also look for opportunities to leverage partnerships and other events to deliver regional or in-country specific activities.

#### **L. E-Learning**

61. The PMR has over time collaborated with partners on the development of a number of different e-learning courses. Each course is available through the World Bank’s Open Knowledge Campus for any person to undertake in their own time. In addition, at least one facilitated session is typically held for each course annually.

62. The current course available include:

- a. [Policy Instruments for Low Emissions Development](#)
- b. [Emissions Trading Systems: Using Markets to Achieve Low Emission Development](#)
- c. [Designing MRV Systems for Entity Level GHG Emissions](#)

63. The World Bank CF-Assist, with technical support from the PMR Secretariat, is developing a “Byte-Sized Learning” module based on the ETS Handbook which will be available on-line by April 2017.
64. A new e-learning on carbon taxes is also planned to be made available in FY18.
65. Some of these courses are now some years old and require updating to remain current; and while they each provide very valuable information and training, they were not developed as a series so there is some overlap and inconsistencies. The PMR Secretariat plans to work with other initiatives (such as the CPLC and CF-Assist) to ensure a more comprehensive and systematic approach to carbon pricing e-learning. The idea would be to develop a common syllabus around carbon pricing that would avoid overlap, ensure consistency and allow interested participants to undertake the training in a more modular way.

#### **M. Working Groups**

66. Some components of the TWP are supported by a working group comprising nominated representatives from PMR Participants, observers and experts. Working groups provide guidance on the work plans, input to workshops, and feedback on knowledge products and other deliverables.
67. The PMR Secretariat proposes to continue to use working groups to support the Technical Work Program in FY18. The following working groups are expected to be active throughout the year:
  - ETS working group;
  - Carbon Tax working group;
  - Offsets and Crediting working group; and
  - MRV working group.
68. The PMR Secretariat will also likely establish ad-hoc working groups to support its new work on governance, communication and use of revenue, as appropriate.
69. Typically working groups engage via email and meet virtually. The PMR Secretariat will consider face-to-face meetings where this is identified as being beneficial for the work-stream’s activities. Participants are encouraged to nominate the most relevant representatives to participate in the working groups that are of interest to them. Representatives can be changed or added at any time by emailing the secretariat.

#### **IV. DISSEMINATION**

70. The PA identified improved dissemination of the knowledge generated by the TWP as a priority at PA10, Santiago. The First Independent Evaluation of the PMR also highlighted this as an area for improvement. Accordingly, the PMR Secretariat undertook a number of actions to improve dissemination, including:
  - improvement of the PMR website to restructure, update and improve accessibility of knowledge available;

- translation of products when demanded;
- publishing and disseminating knowledge products on the World Bank’s Open Knowledge Repository that has a wide and far reaching general audience and provides statistics to track dissemination (see Annex II for a summary);
- use of social media, twitter, blogs, and media releases where appropriate, to communicate the release of knowledge products and events;
- circulation of a regular newsletter with new contacts added throughout the year to expand distribution;
- notifications of activities and release of products through other distribution channels such as Climate-L; and
- featuring the PMR at a number of events such as Carbon Expo (now Innovate 4 Climate), the Latin America and Africa Carbon Forums and Navigating the American Carbon World.

71. The PMR Secretariat proposes to continue to use these approaches to enhance dissemination in FY18. The PA is invited to provide feedback on the approach to enhance dissemination and to recommend any additional steps that the Secretariat can take to improve dissemination further.

#### V. TECHNICAL WORK PROGRAM BUDGET

72. For FY17, the PA approved a budget of USD 1.3 million for delivery of the Technical Work Program.

73. Based on the planned activities, the PMR Secretariat proposes to allocate USD 1.1 million for the delivery of the Technical Work Program in FY18. The estimated budget by type of activity is presented in Table 2 below. Some flexibility is needed for the allocation to individual work streams and the activities within.

**Table 2: Summary of Activities Planned in FY18 and Estimated Budget Broken Down by Type of Activity**

Activity	Timing	Budget FY17 USD
<b>Knowledge products</b>		<b>600,000</b>
Crediting Guide	Initiated FY17, finalized FY18	
Guidance on developing measurement protocols for GHG reporting Programs	Initiated FY17, finalized FY18	
Guidance on developing verification and accreditation arrangements for carbon pricing	Initiated FY17, finalized FY18	
Template for comparing GHG reporting programs	initiated FY17 and finalized FY18	
State and Trends	Initiated FY17, finalized FY18	

Guidance on Determining Governance Arrangements (institutional and legal) for Carbon Pricing	Initiated FY17, finalized FY18	
Guidance on the use of carbon pricing revenues	Initiated and finalized in FY18	
<b>Technical workshops</b>		<b>260,000</b>
Communicating Carbon Pricing	Held FY18	
Verification and Accreditation; and measurement protocols	Held in FY18	
Governance	Held in FY18	
Use of Revenue	Held in FY18 or FY19	
<b>Technical training and country to country exchange (based on demand)</b>	<b>Held FY18</b>	<b>160,000</b>
<b>Electronic modes</b>		<b>80,000</b>
ETS E-learning update	Initiated and finalized FY18	
ETS E-learning facilitated courses	Held in FY18	
Carbon Tax E-learning develop	Initiated in FY17, finalized in FY18	
MRV E-Learning facilitated courses	Held in FY18	
Webinars	Held in FY18	
<b>TOTAL</b>		<b>1,100,000</b>

## VI. ACTION BY THE PA

74. The PA is invited to provide feedback on the proposed activities and budget for the PMR Technical Work Program in FY18 and consider it for endorsement at PA16 in New Delhi, March 20-22, 2017. Following endorsement and as is the practice, the PMR Secretariat will report back to the PA periodically on its progress toward completing the work program.

## ANNEX I: TYPES of ACTIVITIES

1. The Technical Work Program uses a range of activities and delivery modes to achieve its objectives.
  - **Technical Notes and Guidance Documents:** The PMR publishes Technical Notes and Guidance Documents to provide insight and guidance on an array of aspects associated with carbon pricing. The publications contribute to the ongoing work of the PMR as well as to the general debate on carbon pricing.
  - **Newsletters:** The PMR circulates electronic newsletters regularly to provide periodic updates on its activities, both at the program and country levels. The Newsletter provides information of interest to the community, including an overview of upcoming and past events. The [China Carbon Market Monitor](#) provides timely information across the seven Chinese pilot carbon markets. It also provides analysis of climate policy and market developments at the national level in China.
  - **Country-to-Country Exchanges:** These events support knowledge sharing among PMR Participants, for example, through bilateral, regional or multi-country dialogues. Exchanges can be facilitated on the margins of PMR events or organized specifically on request.
  - **Technical Workshops:** Technical workshops provide an important platform for countries and other stakeholders to engage in discussion on technical, regulatory, and institutional aspects of carbon pricing. .
  - **Technical Trainings:** Training sessions are designed as hands-on learning events featuring case studies and group exercises to examine the practical considerations of a specific technical component, such as MRV. Trainings are offered tailored to country-specific or regional-specific needs..
  - **Webinars and E-Learning:** Webinars and E-learning present opportunities for knowledge sharing and capacity building by providing practitioners with a convenient and cost-efficient platform for collaboration.
  - **The PMR Knowledge Center:** The PMR Website ([www.thepmr.org](http://www.thepmr.org)) includes a publicly-available one-stop shop for access to all PMR knowledge products and information about knowledge events.

**ANNEX II: DISSEMINATION STATISTICS FOR PMR KNOWLEDGE PRODUCTS RELEASED SINCE JANUARY 2015<sup>4</sup>**

Title	Release	Abstract views	Downloads	Social media
<b>Emissions Trading Registries: Guidance on Regulation, Development, and Administration</b>	October 2016	1194	681	Tweeted by 2 On 2 Facebook pages
<b>Carbon Credits and Additionality</b>	May 2016	1664	969	Blogged by 1 tweeted by 9 On 1 Facebook page
<b>Greenhouse Gas Data Management: Building Systems for Corporate/ Facility-Level Reporting</b>	May 2016	858	2072	Tweeted by 41
<b>Emissions Trading in Practice: A Handbook on Design and Implementation</b>	March 2016	7362	10284	Picked up by 10 news outlets Blogged by 3 Tweeted by 322 On 1 Facebook pages
<b>Carbon leakage: theory, evidence and policy design</b>	October 2016	1993	1492	Tweeted 6 times
<b>Crediting-Related Activities Under the PMR: Status and Support for Implementation</b>	August 2015	884	442	Tweeted 6 times
<b>Options to Use Existing International Offset Programs in a Domestic Context</b>	August 2015	737	542	Tweeted 1 time
<b>Guide for Designing Mandatory Greenhouse Gas Reporting Programs</b>	May 2015	2453	867	Tweeted 17 times
<b>Preparing for Carbon Pricing: Case Studies from Company Experience--Royal Dutch Shell, Rio Tinto, and Pacific Gas and Electric Company</b>	February 2015	1291	2494	Tweeted 6 times Blogged by 2 On 2 Facebook pages
<b>Overview of Carbon Offset Programs: Similarities and Differences</b>	February 2015	940	1443	Tweeted 1 times

<sup>4</sup> Note: as of March 3, 2017