

PMR TECHNICAL WORK PROGRAM Report on FY15 Activities and Proposal for FY16

PMR Note PA12 2015-2

May 18, 2015

I. INTRODUCTION

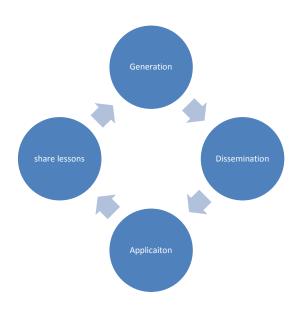
- 1. Through the development of their Market Readiness Proposals, Implementing Country Participants have identified the gaps in their technical and institutional capacities needed to scale-up their mitigation efforts, and to design and implement their carbon pricing policies. The Technical Work Program 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 PMR Technical Work Program will enter its third year in FY16. This paper reports on the activities from FY15 and proposes a work plan for FY16 that builds on previous activities. It will also discuss the plans for improved dissemination of PMR knowledge. The PA is invited to provide feedback on this proposed work program and consider it for endorsement at PA12 in Barcelona, May 29-30, 2015. Following endorsement, the secretariat will report back to the PA periodically on the Technical Work Program and seek further guidance on its activities throughout the year.

II. STRATEGIC PLANNING FOR THE TECHNICAL WORK PROGRAM

3. Recognizing that the Technical Work Program will need to evolve as more Implementing Country Participants finalized MRPs and begin to implement readiness activities, the secretariat presented a strategic planning approach for the Technical Work Program at PA10 in Santiago. The FY16 work plan has been informed by that strategic planning approach.

A. Scope of activities

- 4. The Technical Work Program supports all the carbon pricing instruments that Implementing Countries are pursuing, including emissions trading schemes, carbon taxes, and crediting instruments both scaled-up and project-based offset instruments. Some activities and products will be focused on a particular type of instrument but others will focus on a technical component that will be relevant to more than one type of instrument.
- 5. By clustering countries according to their readiness activities the Technical Work Program can provide support that is targeted and timely. The secretariat has assessed the MRP activities, as well as other market-based activities Participants are pursuing to more systematically identify common needs and shape the work plan for FY16 (see annex). The Secretariat will continue to map countries' activities and needs as they evolve over time to inform the technical work program.



- 6. The PMR is unique in that it brings together more than 30 countries who are leaders in climate action. An important element of the technical work program is therefore to enable PMR Participants to collectively build knowledge and to share their insights, experience and lessons learned when designing and implementing carbon pricing policies.
- 7. Naturally the activities of the technical work program will reflect a cycle, focusing on the capture and generation of knowledge, the dissemination of that knowledge, the application as readiness activities are implemented, and the capture and sharing of that experience and lessons, which in turn will enrich the collective knowledge.

B. Types of activities

- 8. The Technical Work Program has, and will continue in FY16, to use a range of activities and delivery modes to achieve its objectives.
- Knowledge Products such as Technical Notes that provide tools and guidance on the design and
 implementation of carbon pricing instruments; country case studies that capture experience,
 insights and lessons as readiness activities are implemented; and technical briefs that provide
 timely insights or advice on specific issues as needs are identified.
- **Country-to-Country Exchanges** that support knowledge sharing directly among the 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** that provide an opportunity for PMR Participants to engage in technical discussions with experts and other relevant stakeholders (e.g, the private sector) to enhance capacities and collective understanding.
- **Technical Trainings** that focus on capacity building. Technical trainings are designed as practical learning events. They can accommodate participants from multiple countries or focus on participants from a single country. These build on the knowledge products and compliment planned capacity building activities at the country level.
- Electronic modes such as the PMR's website, the World Bank's Open Knowledge Repository, webinars, and E-Learning courses. These modes and activities can be used to effectively and efficiently disseminate knowledge products and experience among PMR participants and to a wider audience.

III. REPORT ON FY15 ACTIVITIES AND PROPOSED WORK PLAN FOR FY16

9. This section reports on the activities of FY15 and proposes the work plan for FY16 according to the different work streams of the Technical Work Program. It also discusses the working arrangements including the continued use of working groups.

A. ETS work stream

- 10. This work stream was initiated in FY15 in response to the number of Implementing Country Participants that are interested in establishing an emissions trading system (ETS) to achieve emissions reduction goals. It focuses on the design and implementation of cap and trade schemes, building on earlier PMR activities and the extensive experience gained to date among PMR Participants.
- 11. The primary focus in FY15 was the preparation of an ETS Handbook in collaboration with ICAP. This 'how to' handbook will address the practicalities of establishing and operating an Emissions Trading System (ETS). It will also capture the substantial international experience including in Australia, China, the European Union (EU), Kazakhstan, New Zealand, North America, and Republic of Korea.
- 12. The PMR and ICAP participants have nominated focal points with relevant expertise in ETS design and operations to help with the preparation of the handbook. A number of policy makers and experts from academia and the private sector are engaged to share their expertise. Significant effort has gone into capturing expert input and in raising awareness about the project, for example with interviews, in-country workshops (e.g., China, EU, New Zealand, and the United States) and other events (e.g., the PMR/ICAP side event at Carbon Expo 2015).
- 13. The Handbook is expected to be completed by October 2015. In FY16 the focus will be on finalizing and disseminating the Handbook. Following its launch, at least two **webinars** and a **workshop** are proposed. Other outreach events or country specific **trainings** will be explored as appropriate. To keep the Handbook current and relevant it will be updated as appropriate.
- 14. The secretariat will also work with Participants to identify opportunities for **country-to-country** exchange on emission trading. For example, the Technical Work Program could facilitate dialogues, meetings, or study tours between PMR Participants including with Technical Partners.
- 15. 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 was offered twice during FY15 with 508 registrations. Given the positive feedback provided by participants, the secretariat proposes to offer the facilitated **E-learning** course twice in FY16.

Summary ETS work stream activities, achieved and planned

FY12	FY13	FY14	FY15	FY16	FY17
TW: Domestic ETS, Shenzhen	TW: ETS in operation,	TW: International experiences and	TN: ETS handbook	Disseminate ETS handbook	TN: update ETS handbook
TN: domestic Emission trading schemes	Australia TW: Emissions trading in North	lessons to inform the development of Mexico's ETS	E-learning	E-learning	E-learning
schemes	America	E-learning			

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

B. Carbon tax work stream

- 16. The carbon tax work stream was initiated in FY15 reflecting the interested 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.
- 17. In FY15 the preparation of a design guide providing step-by-step guidance on the design of carbon taxes was initiated, building on related notes developed during the preparation of some Market Readiness Proposals and drawing on other relevant international experience.
- 18. In FY16 the proposal is to enhance and finalize the guide with greater consultation and input from PMR Participants (as with the ETS Handbook) so that the guide is comprehensive and authoritative. Once finalized, the focus will be on dissemination and application of the guide, with at least two **webinars** and, if useful, a further **workshop**.
- 19. An **e-learning** course on the design of carbon taxes, similar to that which was prepared on emissions trading is also planned. The objective of this course would be to inform policy makers and practitioners on the rationale behind using carbon taxes, how carbon taxes work, and their key design elements. It would largely be based on the guide providing the material in a pedagogical format.



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

C. Offsets and Crediting work stream

- 20. Many PMR Participants are pursuing some form of crediting instrument, whether it is an offset program to complement an ETS, carbon tax, or other domestic policy; or a scaled-up crediting instrument to be the primary vehicle to provide incentives for emission reductions. Since FY14, the Technical Work Program has had an offset work stream focusing primarily on project-based approaches. While offset instruments have some specific design elements there are many considerations and issues that are relevant for all types of crediting instruments. In FY16 it is therefore proposed that the focus of the work stream be broadened to explicitly capture issues relevant to scaled-up crediting approaches.
- 21. The offsets work stream has delivered two **technical notes** and one **technical brief**. The first technical note 'An Overview of Carbon Offset Programs: Similarities and Differences' was completed in FY14. Following positive feedback on its usefulness it was updated to include California's Compliance Offset Program (CA COP), Australia's Carbon Farming Initiative (AU CFI), and Switzerland's Offset Program (CH OP). The update also includes developments under all of the originally covered offset programs. The note will be updated as needed so that it remains current.
- 22. Responding to specific requests for guidance, a second **technical note** was prepared providing a framework to assist countries in assessing options for using existing international offset standards in the domestic context. In FY16 the focus will be on dissemination and application of this framework.
- 23. A new **technical note** is proposed for FY16 that will provide comprehensive guidance for policy makers designing domestic offset instruments. This note would complement and build on the other technical notes, literature, and international experience. The Secretariat proposes to partner with USAID who has prepared such guidance for Kazakhstan that intends to develop a domestic offset program to complement its emissions trading scheme. That guidance can provide a basis of a more comprehensive guidance relevant to more countries, including those that are considering domestic offset programs to compliment a carbon tax or other domestic policy.
- 24. Also in FY15 a **technical brief** was prepared by the UNFCCC Secretariat for the Technical Work Program to explain the use of voluntary cancellation of Certified Emissions Reductions under the Clean Development Mechanism in the context of domestic offset arrangements. The topic was identified as a priority during the PMR workshop held in March 2014, Mexico City. Based on the preferences of the working group, a second **technical brief** on the topic of 'additionality' is underway. Capacity will be maintained in FY16 to prepare additional technical briefs as needed.
- 25. Other offset activities in FY16 will focus on dissemination, including at least two **webinars** to explain the framework and new technical briefs; a **workshop** bringing together representatives from interested PMR Participants, relevant experts and offset program administrators to discuss the framework in more detail; and support for interested PMR Participants to apply the framework and assess the options that best suit their national circumstance.
- 26. Also In FY15, the PMR Secretariat commissioned a study *Crediting-related activities under the PMR: Status and support for implementation*. Based on the outcomes of the study, the PMR Secretariat

organized a session during PA11 in London for Participants to provide feedback and exchange views on the ways forward for the PMR support to the crediting-related activities. Feedback from that session and suggested steps forward are discussed in PA12 note 2015-x.

- 27. Based on that discussion, the Secretariat proposes to develop guidance for those countries that are planning to design and implement scaled-up crediting instruments (similar to the ETS Handbook, Carbon Tax Guide, and guidance on domestic offset design). Unlike for other types of instruments, international experience in the design and implementation of scaled-up crediting to date has been limited. The PMR is therefore uniquely placed to gather existing literature, analytical work and lessons to develop guidance on emerging practices. The **technical note** would build on the PMR's other work and include guidance on establishing baselines; measurement, reporting and verification; designing incentives to achieve emission reductions; identifying potential sources of demand; data management and registries; stakeholder engagement and preparation; and establishing governance and institutional arrangements to support the crediting instrument.
- 28. The Secretariat also proposes to prepare additional **technical briefs** based on countries needs and preferences. For example, a technical brief exploring the role and relationship of crediting instruments with broader climate policy goals and instruments, including the INCDs (e.g., avoidance of double counting) as discussed in PA12 note 2015-x.

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

FY12	\rightarrow	FY13	$\overline{}$	FY14	$\overline{}$	FY15		FY16		FY17
TN: crediting mechanisms overview TW: Mitigation			scope	nar to clarify of work for component 'P	dome progr	sing CERs in estic offset am pdate of	use ir		Simil diffe	Jpdate of arities and rences of et standards
Programs for scaled-up crediting mechanisms,			Dome	eveloping estic Offset nes, Mexico	differ	erities and ences of standards	for do	esign guide omestic t instrument		
Istanbul			and d	milarities ifferences standards	use e interr	Options to xisting national programs in				
				nar: luction to rnia's offset	a don conte	nestic				
			progra	am	relate unde Statu suppo	rediting- ed activities r the PMR: s and ort for mentation				
					TB: C	arifying ionality				

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

D. Monitoring, Reporting and Verification (MRV)

- 29. The MRV of emissions or emission reductions is fundamental to the operation of carbon pricing instruments. Accordingly, most PMR Implementing Country Participants have identified readiness activities that relate to MRV with several pursing the development and implementation of entity-level GHG reporting programs. The technical work program has had a work stream on MRV since FY14.
- 30. The primary focus of the work stream in FY15 was the finalization of the 'Guide for Designing Mandatory GHG Reporting Programs' while at the same time initiating more specific guidance on data management system and registries under a separate work stream (details below).
- 31. The guide was prepared in partnership with WRI and provides step-by-step guidance for policy makers on designing GHG reporting programs based on experiences and insights from existing programs. In FY16 the work stream will focus on dissemination and application of the guide, including a dedicated side event during Carbon Expo 2015, and at least to **webinars**. Other outreach activities, **workshops**, and **in-country training** will be considered as demanded.
- 32. The preparation of an **e-learning** course focusing on mandatory GHG reporting programs was also initiated in FY15, with the first course expected to be held before the end of 2015 and a second course held before end FY16. It will draw heavily on the design guide but make the material more accessible in a pedagogical format.
- 33. The third regional MRV **technical training** was also held in September 2014 in Izmir, Turkey, with the support of the Ministry of Environment and Urbanization of the Republic of Turkey. Representatives from Jordan, Kazakhstan, Morocco, South Africa, Tunisia, Turkey, and Ukraine participated. The training covered methods used to monitor emissions at the national and facility levels, and explored opportunities to enhance MRV frameworks in PMR Participants, including NAMAs. It also reviewed GHG data management and registry infrastructure systems that support GHG monitoring and reporting needs, as well as verification approaches for countries to consider when developing MRV systems.
- 34. Building on the MRV activities to date, three areas for additional work are proposed for FY16. The first new **technical note** will provide guidance on verification and accreditation systems. It would draw on existing experience and practice, and provide step-by-step guidance for policy makers to support them in the design and implementation of verification and accreditation systems that best suit their national circumstance while at the same time take advantage of international norms and standards. The note would be complemented by a dedicated **workshop** for interested Participants to discuss verification and accreditation in more detail.
- 35. The second new **technical note** will provide guidance on establishing GHG measurement protocols. It would 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 note would be complemented by a dedicated **workshop** for interested Participants to discuss these technical matters in more detail.

36. Third, a template for describing and comparing different MRV systems will be prepared. In July 2014 the PMR published a technical note that surveyed the MRV systems of the seven Chinese Pilot emission trading schemes. 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 for their particular case.

FY13
TN: Supporting GHG Mitigation Actions with Effective Data Management Systems

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

E. Data management and registries

- 37. A dedicated work stream focusing on data management and registries was established in FY15. Substantial research and consultation were carried out to identify the priorities of PMR Participants and other countries in regards to the technical infrastructure needed to support carbon pricing policy. Two practical guidance reports are under preparation and are expected to be finalized by the end of 2015 after wide peer-review and consultation of PMR Participants:
- Guidance on the Development of GHG Data Management Platforms for Corporate/Facility Level Reporting. This **technical note** is intended to complement the 'Design Guide for Mandatory GHG Reporting Programs' and provide more specific guidance with respect to designing and implementing platforms for reporting facility/corporate-level GHG emissions data (i.e., "GHG registries"). These systems are instrumental in enhancing the consistency and quality of GHG

data; and foundational to and enabling of other policy instruments. The report will help policy makers take informed and context-appropriate decisions about reporting systems and tools, taking into account the varied policy objectives, levels of capacity, and national circumstances of countries.

- Guidance on Transaction Registry Development and Management. This technical note is targeted to countries planning to develop or enhance a transaction registry (the system that processes the issuance of carbon assets and supports their transfer between account holders within the registry and to other linked registries). The technical note is being jointly developed with the World Bank's Forest Carbon Partnership Facility (FCPF) and is intended to support countries in identifying their individual registry needs and to adequately plan for specific functional, technical, legal, administrative, and regulatory developments.
- 38. In FY16 the focus will be on finalizing the guidance, dissemination and application, including at least two **webinars** for each note, dedicated **workshops** for each, and **in-country** training as demanded.

Summary data management and registries activities, achieved and planned **FY12 FY14 FY15** FY16 FY17 TW: Baseline TN: Supporting TN: Guidance on TW: GHG data setting and **GHG** Mitigation the Development management registry set up, Actions with of GHG Data platforms Management Cologne **Effective Data** Management Platforms for Webinar on GHG Systems facility/corporate data management reporting platforms TN: Guidance on TW: Transaction Transaction registries Registry Development and Webinar on Management transaction registries

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

F. Baselines

39. The PMR Secretariat is currently exploring an opportunity in FY16 to collaborate with the UNFCCC, UNDP, UNEP, GIZ, and FAO to develop a Compendium on Baselines that will build on the PMRs 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 literature (e.g., IPCC, IEA LECB, GIZ, and CDM), 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).

Summary baselines activities, achieved and planned

FY15 FY12 FY13 FY14 FY16 FY17 TW: Baseline TN: Nuts and TN: Options and TN: Compendium setting and bolts of baseline guidance for the of Baselines in registry set up, setting development of collaboration with Cologne baselines other agencies Webinar to

Webinar to discuss Compendium of baselines.

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

G. Benchmarks

40. In FY15 the PMR supported studies on benchmarking in South Africa (as part of the preparation of the Market Readiness Proposal) and in Kazakhstan (as part of the technical assistance provided). Beyond these two studies, there is a breadth of experience in PMR Participants in the use, development, and implementation of benchmarks for a range of different purposes to support carbon pricing. The secretariat proposes to draw this experience together into a **technical note** summarizing the similarities and differences of benchmarking approaches developed to date, explaining their different uses, what is involved in establishing and implementing benchmarks (including understanding the data requirements), and exploring the opportunities to leverage benchmarks already developed.

Summary of benchmarks work stream activities, achieved and planned

FY12 > FY13 > FY14 > FY15 > FY16 > FY17

TN: Similarities and differences of benchmarking approaches

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

41. PMR Participants are increasingly engaging with a range of local and international stakeholders on carbon pricing, in particular in view to prepare and implement their MRP activities. A dedicated workshop on stakeholder engagement and communication was held in Marrakesh in October 2013. Taking into account the discussions and feedback received during that workshop, follow-up activities mainly focused on private sector engagement and preparedness. The secretariat worked with think-tank C2ES and companies Royal Dutch Shell, Rio Tinto, and Pacific Gas and Electric (PG&E), to capture their experiences and lessons learned preparing for and operating under carbon pricing policies in the

technical note Preparing for Carbon Pricing: Case Studies from Company Experience published in January 2015.

- 42. The PMR Secretariat has also been strengthening its collaboration with the International Emissions Trading Association (IETA) and its Business-PMR, in particular through a series of joint technical workshops including:
- Preparing for Carbon Pricing: a Business-Government Dialogue (Cologne, Germany May 2014)
- Interactions between Energy and Carbon Pricing Policies (Santiago, Chile November 2014)
- Carbon Markets: From Current Practices to their Role in the New Climate Regime (London, United Kingdom – March 2015)
- Carbon Pricing Readiness: Perspectives from Companies (Barcelona, Spain Carbon Expo, May 2015)
- 43. Going forward, the secretariat will continue to find opportunities for dialogue with the private sector. In addition, opportunities to facilitate input and engagement of the private sector into Implementing Countries' readiness activities will be explored.
- 44. The secretariat will also work with those Implementing Country Participants that have stakeholder engagement readiness activities planned to identify what, if any, additional assistance can be provided in a programmatic way.

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

FY13 FY15 TW: Stakeholder TN: Preparing for TW: Joint with Engagement and Carbon Pricing: IETA and B-PMR Communication, Case Studies from Marrakesh Company Experience TW: Preparing for **Carbon Pricing** TW: Interactions Policies: A between Energy **Business**and Carbon Government Pricing Policies, Dialogue, Cologne Santiago TW: Carbon Markets: From **Current Practices** to their Role in the New Climate Regime, London TW: Carbon **Pricing Readiness:** Perspectives from Companies Barcelona

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

I. Flagship report

A key proposal for FY16 is to partner 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 Implementing Countries. The 'State and Trends' report has a long history and wide readership. By partnering with this well-established report the PMR can benefit from its wide dissemination. It is the eminent report that documents global developments on carbon pricing. With Implementing Country Participants now implementing their readiness activities and moving ahead with their carbon pricing policies it will be important that this progress be captured and highlighted. Progress in PMR Participants will over time become a much bigger part of the global carbon market picture. It is therefore timely that the PMR take a more active role in the preparation of the 'State and Trends' report, including by providing some financial support.

J. Other activities

46. In addition to the dedicated work streams, the technical work program has undertaken a number of other relevant activities.

Competitiveness and carbon leakage.

- 47. Concerns about the impacts on competitiveness and the risks of carbon leakage due to the introduction of carbon pricing have been raised in a number of countries. In FY15, the technical work program initiated the preparation of a **technical note** that synthesizes the current knowledge and experience on assessing and addressing these impacts and concerns; and provides guidance for PMR Participants on how to address the issues as and when they arise in their national context. The note addresses three broad questions:
- How to evaluate the expected competitiveness and emissions leakage impacts (negative and positive) due to carbon pricing policies for different sectors and the entire economy?
- How to mitigate the risk of negative impacts and strengthen the positive impacts (through instrument design or complementary policies) in the short and long term, and for different levels of expected decarbonization?
- How to manage the process of dialogue between a government, business and civil society on the implications for competitiveness and risks of emissions leakage; and their mitigation?
- 48. The technical note is expected to be finalized by mid-2015. Following its released the PMR will host at least two **webinars** to explain and help disseminate the note. The Technical Work Program will also facilitate country-to-country engagement on the issues and in-country training as demanded.

Technical discussion to support post-2020 carbon markets

49. In FY15, the Technical Work Program 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 are 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. Two workshops and a roundtable discussion were held in FY15, including:

- The technical workshop *Different market based approaches and implications for a future carbon market*, November 2014, Santiago;
- The technical workshop *Carbon Markets: From Current Practices to their Role in the New Climate Regime*, March 2015, London; and
- A roundtable discussion on what it means, in practice, for carbon assets to be real, additional, permanent and verified, to be held in Bonn during the June 2015 negotiating session.
- 50. A further workshop and opportunities for discussion will be organized in FY16 in the lead up to Paris and beyond if PMR Participants continue to find these useful.

Interactions between Energy and Carbon Pricing Policies

- 51. A study is being jointly developed with the World Bank Energy Practice (Energy Sector Management Assistance Program, i.e. ESMAP) to advance the understanding of policy makers on how carbon pricing policies introduced to support climate change mitigation objectives can be designed to align with existing energy policy objectives. The study will:
- inventory energy policies (e.g. taxation, markets, subsidies, regulation/organization of the energy sector etc.), and their objectives (e.g. energy security, energy affordability, protection of captive customers or competitiveness) and how these have evolved over time in OECD and non-OECD countries;
- discuss how carbon pricing instruments may positively interact or conflict with each of these energy policy objectives and the existing instruments used to pursue these objectives;
- discuss possible design arrangements for carbon pricing instruments to mitigate possible conflicts or maximize possible synergy with energy policy instruments and increase their efficiency in mitigating GHG emissions; and
- propose an analytical framework for PMR Implementing Countries to explore how to use and design carbon pricing instruments consistently with existing energy objectives.
- 52. The study will be finalized by the end of the year. Following, ESMAP/PMR will continue to collaborate with the preparation of country specific-case studies that use the analytical framework.

China carbon market monitor

53. In FY15, the Technical Work Program initiated the preparation of a China Carbon Market Monitor that will provide timely and regular (every two months) information on the seven Chinese pilot carbon markets. It also provides analysis of the climate policy and market developments at the national level. The monitor will continue to be prepared throughout FY16 and into FY17. The first edition will be published in May 2015.

Governance and institutions

54. Many PMR Participants have identified readiness activities to explore the governance and institutional arrangements to support their planned carbon pricing policies. Many of these activities will be country specific and reflect national circumstances. Furthermore, governance and institutional arrangements will be covered as part of other guidance prepared by the Technical Work Program. For example, the design guide on GHG reporting programs has a section dedicated to governance and institutional arrangements, as will the technical notes on data management and registries, the ETS handbook and so on. Nonetheless the secretariat will consult Implementing Country Participants to assess if there is any further assistance that can be provided at the program level.

Summary of other activities, achieved and planned

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FY12	> FY:	13 >	FY14	>	FY15		FY16	FY17	
	TW: Building Readiness for Implementati Barcelona TW: Modeling Tools & Data Reporting, Syd TW: Tackling Climate Chang Pricing Carbon Achieve Mitigation, Washington TW: Expert meeting on modelling for carbon pricing Washington TW: Policy Mapping & Effective Instruments for GHG Mitigatio Urban Transp	to the control on, Dome Action Carbo Instruction The Learn ge: Linking to Tradi	Stepping Up to Challenges: testic Climate on and on Pricing uments, to City tessons ted from tessions	Marke Approx Implication Future Marke TW: Ca Marke Currer to their the Ne Regim TN: De Compe and ca leakag	ifferent t-Based aches & ations for a c Carbon t, Santiago arbon ts: From at Practices ir Role in ew Climate e, London realing with	betwo	nteractions een energy arbon ig nar dealing petitiveness arbon ge concerns hina carbon et monitor	 hina carbon et monitor	

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

K. Working arrangements

55. Some components of the Technical Work Program 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. Specifically in FY15:

- ETS focal points provided valuable input on the outline and drafts of the ETS handbook and participated in workshops to inform the content;
- the MRV Working Group provided valuable input and comments on the GHG reporting design guide; and
- the Offset Working Group met virtually in February 2015, provided valuable input and comments on the two technical notes relating to offsets, and shaped the work plan including selecting the topic for the next technical brief.
- 56. The secretariat proposes to continue to use working groups to support the Technical Work Program in FY16. The following working groups are expected to be active throughout the year:
- ETS working group (largely comprising the ETS focal points involved in the preparation of the ETS handbook);
- Carbon tax working group;
- Crediting working group (expanding the scope of the current offset working group);
- MRV working group (noting that a separate data management and registries working group was contemplated but given overlap in substance and nominated representatives is no longer proposed); and
- Baseline working group (that has not been active during FY15 but with proposed activities for FY16 will be).
- 57. Typically working groups engage via email and meet virtually. The secretariat will consider face-to-face meetings where this is identified as being beneficial for the work-stream's activities. The PA is encouraged to nominate the most relevant representatives to participate in the working groups. Representatives can be changed or added at any time by emailing the secretariat.

IV. IMPROVED DISSEMINATION

- 58. The PA identified improved dissemination of the knowledge generated by the Technical Work Program as a priority at PA10, Santiago. The first independent review of the PMR also highlighted this as an area for improvement. Accordingly, the secretariat undertook to report on a plan for improved dissemination in FY16.
- 59. The PMR will have access to a knowledge management specialist in FY16 who will work with the secretariat to develop and implement a more detailed and comprehensive knowledge management plan. The plan will be presented to the PA for its endorsement.
- 60. Some steps have already been taken to improve dissemination of PMR knowledge. For example, the PMR website will continue to be a primary vehicle for dissemination of knowledge. Work is underway to restructure, update, and improve the accessibility of knowledge available on the website.
- 61. In addition, knowledge products are now being formerly published and disseminated through the World Bank's Open Knowledge Repository (OKR) that has a wide and far reaching general audience. The OKR also provides user statistics that can help the secretariat better track dissemination.

- 62. Furthermore, the most recent knowledge products have been translated into Russian after a specific request from Kazakhstan. This significantly increased dissemination in Russian speaking countries. The secretariat proposes to work with PMR Participants to translate those knowledge products that are identified as being useful in languages other than English. Given the associated costs, translation would only be undertaken where there is a genuine demand.
- 63. The PMR has for some time prepared a regular newsletter that is circulated via email to a wide distribution list of PMR Participants, Observers, as well as, other interested stakeholders. Knowledge products and events will continue to be reported via the newsletter.
- 64. The PMR also sends notifications of its activities and release of products through other distribution channels such as Climate-L. It will also continue to work with partners such as ICAP and IETA to make sure that their networks are also kept informed of PMR developments.
- 65. This year the PMR activities will be featured at a number of events over the course of the Carbon Expo. This will provide improved visibility of PMR activities. Similarly, the PMR Secretariat will continue to attend and speak at other various climate change conferences to communicate the PMRs activities and build awareness.
- 66. The PA is invited to provide feedback on the proposed approach and to recommend any additional steps that the secretariat can take to improve dissemination.

V. TECHNICAL WORK PROGRAM BUDGET

- 67. For FY15, the PA approved a budget of \$1 million for delivery of the Technical Work Program. Actual expenses totaled \$USD 822 million¹ to support the activities described above.
- 68. Based on the planned activities, the secretariat proposes to allocate \$1 million for the delivery of the Technical Work Program in FY16. Some flexibility is needed for the allocation to individual work streams.

VI. ACTION BY THE PA

69. The PA is invited to provide feedback on the proposed activities and budget for the PMR Technical Work Program in FY16 and consider it for endorsement at PA12 in Barcelona, May 29-30, 2015. Following endorsement, the secretariat will report back to the PA periodically on progress of the work program and seek further guidance on its scope and activities.

¹ This represents actual expenditures until March 31 and estimates from April 1 to June 30 2015.

ANNEX I: MAPPING IMPLEMENTING COUNTRY PARTICIPANT'S READINESS ACTIVITIES

- 1. The Technical Work Program will need to evolve as more Implementing Country Participants finalized their MRPs and begin to implement readiness activities. There should be a coherence in the different activities and products; and continuous and systematic support to Implementing Country Participants. It should also target the needs of Implementing Country Participants, provide in-time support, and capture and share lessons as readiness activities are implemented.
- 2. To help inform the strategic planning for the Technical Work Program, the secretariat mapped the readiness activities of Implementing Country Participants using a matrix of the different carbon pricing instruments and the various cross-cutting technical components. A summary of the mapping exercise is presented in table 1 and general observations described below.
- 3. The Secretariat will continue to map Implementing Country Participant's readiness activities and needs as they evolve over time to inform the Technical Work Program.
- 4. The mapping exercise indicates there are a number of readiness activities planned relating to policy mapping and analysis of different market based instruments. Relevant programmatic support is proposed to be provided through the Up-stream policy work stream.
- 5. Support for readiness activities relating to instrument design is also warranted. These activities are likely to be instrument specific. Design guides drawing on relevant experience can usefully be prepared at the program level to assist Participants and capture lessons learned.
- 6. Almost all Implementing Country Participants have MRV readiness activities planned. There are synergies between the MRV activities planned in support of ETS, carbon tax and some scaled-up crediting instruments those that will use emissions reporting at the entity level. Guidance at the program level will be beneficial. Participants are at different stages of readiness so some clustering could be useful. This also provides opportunities for some Participants to learn from those who are more advanced through country-to-country exchange and lesson sharing.
- 7. Not all MRV readiness activities will relate to entity level reporting. This indicates there could be benefit in some additional activities focused on MRV for domestic offsets and scale-up crediting instruments.
- 8. Most Implementing Country Participants also have readiness activities planned relating to data management and registries. Again there are synergies in these activities across the different instruments so it makes sense to support countries at the program level and where possible develop guidance and solutions that are relevant to the various instruments and national circumstances.
- 9. There are also a lot of readiness activities planned relating to stakeholder engagement and preparedness, and governance and institutions. Further analysis is needed to assess, what if any, assistance can be provided at the program level.

Table 1: Summary of mapping exercise

rable 21 cannilary	Cap & Trade	Carbon Tax	Offsets	Scaled-up
	Cap & Trauc	Carbon Tax	Offsets	crediting
Policy mapping/ MBI analysis	Brazil, China, Indonesia, Thailand, Turkey, Ukraine, Kazakhstan	Brazil, Chile, South Africa, Turkey		Columbia, Morocco, Mexico, Thailand, Turkey, Vietnam
Instrument design	Brazil, China, Thailand, Ukraine	Brazil,	China, Columbia, Costa Rica, South Africa, Ukraine	Columbia, Morocco, Mexico, Vietnam
MRV	China, Morocco, Thailand, Turkey, Ukraine	Chile, Morocco, South Africa, Turkey	Columbia, Costa Rica, South Africa	Columbia, Morocco, Mexico, Turkey, Vietnam
Data management and registries	Brazil, China, Thailand, Ukraine	Brazil, Chile, South Africa,	Costa Rica, South Africa	Columbia, Morocco, Vietnam, Mexico
Baselines			Columbia, Costa Rica	Morocco, Mexico, Vietnam
Allocations/ exemptions	China, Thailand, Kazakhstan	South Africa		
Linking	China			
Use of revenue		South Africa		
Trading infrastructure and oversight	China			Mexico
Stakeholder engagement & preparedness	Brazil, Thailand, Turkey, Ukraine	Brazil, Chile, South Africa,	Costa Rica, South Africa	Columbia, Morocco, Mexico, Vietnam
Governance & institutions	China, Thailand, Ukraine	Chile, South Africa,	Columbia, Costa Rica, South Africa	Columbia, Morocco, Mexico, Vietnam
Compliance & enforcement	China			

Note: Implementing Country Participants with activities to assess different instruments have been mapped to all possible instruments. The readiness activities of those Implementing Country Participants who are still in the process of preparing their MRPs will be added to the matrix as MRPs are finalized. For Indonesia a new PMR focal point is expected, following changes in government. Indonesia's readiness activities will be added to the mapping exercise once the focal point is confirmed and areas for support have been confirmed.