

# PMI ANNUAL REPORT 2024



## Building Partnerships for a **Low-Carbon Future**



**WORLD BANK GROUP**  
Climate Change

## DONOR ACKNOWLEDGEMENTS

The Partnership for Market Implementation (PMI) Facility is an umbrella trust fund managed by the World Bank to help accelerate global decarbonization efforts. The program was launched in 2021 with the generous financial support of 11 development partners: Australia, Canada, the European Commission, Finland, Germany, Japan, Norway, Spain, Sweden, Switzerland, and the United Kingdom.

## DISCLAIMER

This work is a product of the staff of the World Bank with external contributions. The findings, interpretations, and conclusions expressed in this work do not necessarily reflect the views of the World Bank, its Board of Executive Directors, or the governments they represent.

The boundaries, colors, denominations, links/footnotes, and other information shown in this work do not imply any judgment on the part of the World Bank concerning the legal status of any territory or the endorsement or acceptance of such boundaries.

No use of this publication may be made for resale or any other commercial purpose without the prior written consent of the World Bank. All images remain the sole property of the copyright holder and may not be used for any purpose without written permission from the copyright holder.

The report covers the fiscal year from July 1, 2023, to June 30, 2024 (FY24). The financial contribution and expenditures reported are reflected up to June 30, 2024. All amounts in \$ are US dollars unless otherwise indicated.

PMI,  
World Bank,  
1818 H Street NW  
Washington, DC, 20433  
Telephone: 202-473-1000  
[www.pmiclimate.org](http://www.pmiclimate.org)  
[www.worldbank.org](http://www.worldbank.org)

# Contents

<b>Acronyms</b> .....	<b>2</b>	<b>Pillar 3: Innovation</b> .....	<b>27</b>
<b>Foreword</b> .....	<b>3</b>	▪ <a href="#">Ensuring high-quality credits through the Supply workstream</a>	
<b>Welcome Note</b> .....	<b>4</b>	▪ <a href="#">Developing innovative approaches through the Demand workstream</a>	
▪ <a href="#">Key achievements</a>		▪ <a href="#">Demonstrating proof of concept to inform infrastructure development</a>	
<b>About the Partnership</b> .....	<b>7</b>	▪ <a href="#">Coverage of carbon market infrastructure engagement</a>	
<b>for Market Implementation</b>		▪ <a href="#">Working towards a shared enabling environment</a>	
▪ <a href="#">Accelerating momentum</a>			
▪ <a href="#">Vision, mission, and strategy</a>		<b>Pillar 4: Advocacy, Partnerships, and Outreach</b> .....	<b>33</b>
<b>Progress made and key achievements</b> .....	<b>12</b>	▪ <a href="#">Expanding and evolving partnerships</a>	
<b>Pillar 1: Country Engagement</b> .....	<b>14</b>	▪ <a href="#">Knowledge partners</a>	
▪ <a href="#">Window 1: Implementation Support</a>		▪ <a href="#">Innovate4Climate and regional climate weeks</a>	
<a href="#">Box 1: Towards Net Zero: Türkiye's strategic steps for ETS and carbon pricing</a>		▪ <a href="#">Communications and outreach</a>	
▪ <a href="#">Window 2: Readiness Support</a>		<b>Compact with Africa - Green Business Fund</b> .....	<b>38</b>
<a href="#">Box 2: Making strides towards pricing carbon: Malaysia increases its readiness</a>		▪ <a href="#">Policy dialogue and enabling environment</a>	
▪ <a href="#">Window 3: Small Grant Targeted Support</a>		▪ <a href="#">Capacity building and technical assistance</a>	
<a href="#">Box 3: Towards a greener future: Brazil's progress on emissions trading with PMI's support</a>		▪ <a href="#">Innovative financial instruments</a>	
▪ <a href="#">Regional Programs</a>		<b>Annex 1</b> .....	<b>41</b>
<a href="#">Box 4: Fostering regional collaboration for carbon markets in sub-Saharan Africa</a>		▪ <a href="#">PMI Financial Overview</a>	
<b>Pillar 2: Global Knowledge</b> .....	<b>23</b>	<b>Annex 2</b> .....	<b>45</b>
<a href="#">Box 5: PMI Global Knowledge Forum 2024</a>		▪ <a href="#">PMI Results Framework</a>	
		<b>Annex 3</b> .....	<b>54</b>
		▪ <a href="#">PMI Country Engagements</a>	

## Acronyms

<b>ASCENT</b>	Accelerating Sustainable and Clean Energy Access Transformation Program
<b>BAU</b>	Business as usual
<b>CAD</b>	Climate Action Data Trust
<b>CBAM</b>	Carbon border adjustment mechanism
<b>CDM</b>	Clean Development Mechanism
<b>CPI</b>	Carbon pricing instrument
<b>CPAT</b>	Climate Policy Assessment Tool
<b>CPLC</b>	Carbon Pricing Leadership Coalition
<b>CwA</b>	Compact with Africa
<b>CwA-GBF</b>	Compact with Africa—Green Business Fund
<b>ERC</b>	Emissions reduction credit
<b>ESMAP</b>	Energy Sector Management Assistance Program
<b>ETS</b>	Emissions trading system
<b>EU</b>	European Union
<b>FI</b>	Financial institutions
<b>FY</b>	Fiscal year
<b>GHG</b>	Greenhouse gas
<b>I4C</b>	Innovate4Climate
<b>ICAP</b>	International Carbon Action Partnership
<b>IETA</b>	International Emissions Trading Association
<b>IFC</b>	International Finance Corporation
<b>MRV</b>	Measurement, reporting, and verification
<b>NDC</b>	Nationally determined contribution
<b>PMI</b>	Partnership for Market Implementation
<b>PMR</b>	Partnership for Market Readiness
<b>SMEs</b>	Small and medium enterprises
<b>UN</b>	United Nations
<b>UNDP</b>	United Nations Development Programme
<b>UNIDROIT</b>	International Institute for the Unification of Private Law
<b>VCC</b>	Verified carbon credit
<b>WBG</b>	World Bank Group

# Foreword

Thirteen years have passed since the predecessor to the Partnership for Market Implementation (PMI) Facility, the Partnership for Market Readiness (PMR), was launched in 2011, and we have made important inroads supporting countries in designing and implementing domestic carbon pricing instruments and accessing international carbon markets. What is markedly different today from when PMR was first launched is that the impact of climate change on the most vulnerable populations is more apparent. The World Bank's mission has therefore evolved to integrate climate and development and to end poverty on a livable planet.

At the core of PMI's thesis is that domestic resource mobilization through carbon pricing and international climate finance mobilization through high-integrity carbon markets are critical to achieve climate and development goals. Over the past few years, PMI has established itself as a leading platform driving global progress in carbon pricing and markets. With a growing and diverse membership, PMI now supports over 30 client countries, including large emerging markets and developing economies like China, Brazil, and Indonesia, in advancing implementation. At a pivotal moment for carbon markets, PMI is helping countries seize opportunities from the finalization of the Article 6 rulebook—expanding carbon pricing, mobilizing climate finance, and enhancing national ambitions.

Looking ahead, PMI will continue to deepen its engagement with countries, ensuring our support is demand-driven and aligned with national priorities. Our approach will focus on three key areas: (i) scaling up country programs to support both major emitters and smaller, climate-vulnerable countries in designing and implementing effective carbon pricing and market instruments, (ii) strengthening the integration of PMI financing with larger regulatory and policy reforms to maximize long-term impact, and (iii) enhancing our role as a global knowledge hub to support harmonization, capacity building, and the broader carbon pricing and markets ecosystem.

As we move forward, PMI will continue fostering strategic partnerships, including those focused on advancing high-integrity carbon markets, supporting developing countries' engagement in international cooperation under Article 6, and driving innovation in carbon pricing. By anchoring our work in a robust pipeline of country programs and knowledge-driven initiatives, PMI will ensure that carbon pricing remains a central pillar of climate policy, mobilizing critical finance to support ambitious and sustainable climate action.



**Hania Dawood**  
Practice Manager  
Climate Finance and Economics  
World Bank

# Welcome Note

As we reflect on the achievements of the past year, it is with a sense of pride and optimism that we present this annual report. Fiscal year 2024 has been a landmark year for the implementation of the Partnership for Market Implementation (PMI).

Our engagement with country programs has made substantial headway in advancing domestic carbon pricing and international carbon market in over 32 countries. We are thrilled to report that 14 out of 17 countries have achieved full approval for their carbon pricing initiatives, with two additional countries undergoing a revision of their scope. This progress is not just a statistic; it represents our collective commitment to fostering implementation of carbon pricing policies and empowering countries to enhance their carbon market strategies aligned with their NDCs. The momentum is undeniable.

Moreover, the demand for small, targeted grants has surged, reflecting the increasing desire for targeted support in this critical area. From starting the year with one activity to now allocating 12 grants, the enthusiasm for innovation and responsiveness is palpable. With three additional proposals pending final approval and many more in the pipeline, we are excited to see this trend continue.

In parallel to our programmatic successes, we have made significant strides in delivering cutting-edge research, data, and analytics on carbon markets and pricing, including our State and Trends report on Carbon Pricing and on International Carbon Markets. Our focused guidebooks, technical notes, and reports have provided invaluable insights, while our knowledge fora have cultivated a community of practice among stakeholders.

As we work to shape sound and trusted carbon markets, we remain committed to tackling the critical bottlenecks that hinder progress working with all stakeholders. PMI is providing critical technical support to design and help implement carbon finance in strategic World Bank operations, such as the programs aligned with the World Bank Group's, together with the African Development Bank's, commitment to provide access to electricity to 300 million people in Sub-Saharan Africa by 2030. Such strategic partnerships have been instrumental in fostering collaboration and knowledge-sharing, amplifying our impact across the globe.

In closing, this year's accomplishments reflect not only our strategic priorities but also the dedication of our partners and stakeholders who share our vision for a sustainable future. Together, we are building a robust framework for carbon markets and domestic carbon pricing that will drive meaningful change and facilitate a greener economy for generations to come.

In summary, PMI is exceptionally equipped to assist countries in developing Article 6 operationalization strategies, engaging in voluntary carbon markets, and enhancing carbon market infrastructure, as well as in making informed decisions across various carbon pricing instruments. PMI is also uniquely positioned to build on the innovation work of the Climate Warehouse to catalyze the development of high integrity Paris-aligned carbon markets and to scale its domestic carbon pricing capacity building, including in new areas such as the Carbon Border Adjustment Mechanism (CBAM).

PMI is willing, ready, and able to scale this important work.

We invite you to delve into the details of this report, celebrating the progress made and looking forward to the challenges and opportunities that lie ahead.



**Flavia Rosembuj**  
Program Manager  
World Bank

# Key achievements

July 2023 to June 2024



## Broadened network and deeper country engagements

Advisory services and capacity building delivered to 32 countries through PMI's Country Engagement program. Of which:

- 22 countries are supported with designing, piloting, or implementing domestic carbon pricing instruments,
- 22 countries are supported with building an enabling environment for international carbon markets.
- 25 countries are supported with developing and establishing carbon market infrastructure and enhanced MRV architecture for carbon pricing policies.

Rapidly increasing demand for grants from the Small Grant Targeted Support Window, resulting in:

- 12 grants allocated;
- 3 proposals in process;
- several proposals in the pipeline.

Regional programs that have increased familiarity on carbon pricing and carbon markets and opened opportunities for regional harmonization. Currently focused on the energy sector in the Southern and Western Africa region and in the Pacific Islands.



## More analytical output to strengthen global knowledge

Publication of the [State and Trends of Carbon Pricing](#), which witnessed 28,000 downloads in just two months.

Reports focused on specific themes, such as [Balancing Act: Political Economy and the Pursuit of Ambitious Carbon Pricing in Developing Countries](#), were launched during Innovate4Climate 2024.

Climate Market Club approach papers and knowledge events on the Article 6 cooperative mechanism.

Contributing to the World Bank Group Academy on [Carbon Pricing and Carbon Markets](#), which aims for the standardization of training materials and making them accessible to broader audiences.

Improved the interface of the [Carbon Pricing Dashboard](#), an interactive online tool showcasing new and existing direct carbon pricing initiatives and carbon market mechanisms.

# Key achievements

July 2023 to June 2024



## Catalyzing the next generation of carbon markets through innovation and convening change agents

Advancing digital MRV approaches, including through innovative pilots:

- Design of digital tools for a high-integrity MRV platform for the [Accelerating Sustainable and Clean Energy Access Transformation \(ASCENT\)](#) program in Eastern and Southern Africa, which aims to deliver access to clean and sustainable energy to 100 million people.

Expanding country support for the development of carbon market infrastructure, e.g. assisting the deployment of national carbon registries, through an open-sourced simplified system for tracking, managing, and transacting carbon credits.

As of June 2024:

- 4 countries are in the development phase;
- 7 countries are in the testing phase;
- 11 countries are undertaking consultations.

Support of countries' onboarding to the [Climate Action Data Trust \(CAD Trust\)](#), a decentralized metadata platform which reduces risks of double counting by gathering real-time, comparable, and auditable emissions reduction data from registries around the world.



## Mobilizing commitments through advocacy, outreach, and partnerships

Event highlights include:

- Contribution to the organization of more than 70 national, regional, and global events, including four Regional Climate Weeks ahead of COP28. The events (in Africa, the Middle East, Latin America and the Caribbean, and the Asia-Pacific region) gathered 20,000 participants.
- Preparation of the annual [Innovate4Climate](#) conference, the WBG's flagship event on carbon pricing and carbon markets.

Launch of the Carbon Action Forum, which convenes potential sellers and buyers from the public and private sectors to tackle challenges related to transactions in carbon markets.

Continued participation in important fora such as the [Multilateral Development Bank Working Group on Article 6](#), the [International Carbon Action Partnership](#), and the [Digital4Climate \(D4C\) working group](#).



# About the Partnership for Market Implementation



# Accelerating momentum

**Carbon pricing and carbon markets are proving resilient and witnessing accelerating momentum.**

Consider the progress: 75 emissions trading schemes and carbon taxes are operational around the world<sup>i</sup>, and middle-income countries such as Brazil and India are advancing towards implementing carbon pricing.

With strong political commitment, carbon pricing policies can cover almost 30% of global emissions if implementation proceeds for the carbon taxes and emissions trading systems (ETS) now under consideration. There is cause for optimism as carbon pricing and carbon markets evolve and expand. The introduction of new schemes and instruments has driven revenues from domestic carbon pricing mechanisms to a record \$104 billion in 2023.

**This progress is not without challenges.** Price levels remain below expectations. Trust in the consistent quality of carbon credits remains variable. At the country level, a critical implementation gap remains between the commitments of countries and the policies they implement.

**The Partnership for Market Implementation (PMI) serves to close this implementation gap.** Demand is increasing to support governments on policy choice, design, and operationalization. In response, PMI provides strategic advice and builds capacity on preparing, designing, and implementing policies on carbon pricing and carbon markets, strengthening institutions and governance structures, and developing infrastructure.

**Since its inception in 2021, PMI has charted astonishing progress.**

In 2024, PMI is supporting more than 30 countries in designing and implementing carbon pricing instruments and/or boosting country-readiness for participation in carbon markets. In the last year alone, PMI has seen extraordinary demand, expanding small grant targeted support to commitments in fifteen new countries.

**The progress reflects the program's potential and ambition.**

Managed by the World Bank, PMI aims to support as many countries as possible in developing robust regulatory approaches. Partnership is key. By collaborating with country policymakers, a small grant to support a specific challenge can evolve into a broader, more sustained commitment to carbon pricing and market readiness. PMI's emphasis on context-specific approaches also strengthens engagements and their potential to scale.

**PMI also brings together stakeholders to ensure strategy harmonization.**

It upholds the principle of the [One World Bank Group Partnership Charter](#), which states that World Bank Group (WBG) institutions draw on the strength of its shareholders and partners. The PMI community extends from country experts and knowledge partners to other multilateral development banks and financial experts; each contribute their expertise to the partnership in different ways. PMI's convening role starts with the partnership of the 11 donors – Australia, Canada, the European Commission, Finland, Germany, Japan, Norway, Spain, Sweden, Switzerland, and the United Kingdom – that help shape and guide PMI's vision.

<sup>i</sup>[State and Trends of Carbon Pricing 2024.](#)

# PMI Donor Partners



AUSTRALIA



CANADA



EUROPEAN  
COMMISSION



FINLAND



GERMANY



JAPAN



NORWAY



SPAIN



SWEDEN



SWITZERLAND



UNITED KINGDOM

# Vision, mission, and strategy

The World Bank, through PMI, is uniquely positioned to support countries in navigating a complex space of international carbon markets under Article 6 and the voluntary carbon market, domestic carbon pricing instruments, and countries' NDC and sustainable development objectives.

**The vision and mission of PMI are outlined below:**



### **PMI Vision**

The vision of PMI is to serve as the one-stop-shop for capacity building on carbon pricing and carbon markets, and for delivering cutting-edge research, data, and analytics in this field.



### **PMI Mission**

To support as many developing countries as possible in the design and implementation of carbon pricing policies that are tailored to their domestic context and aligned with their sustainable development priorities. In 2024, the PMI provided tailored support to 32 countries.

To catalyze the growth of carbon markets and facilitate countries' participation in the next generation of international carbon markets.

## PMI Priority Pillars

**Underpinning PMI's vision is a strategy for delivery under four priority pillars: Country Engagement; Global Knowledge; Innovation; and Advocacy, Outreach and Partnerships.** The pillars deliver

capacity development and support countries through strategic advice on carbon pricing and carbon market strategies, institutional strengthening, policy design, and infrastructure development.



### Country Engagement

Country capacity building focused on design and implementation of carbon pricing & markets policies

Advisory support to more than 25 jurisdictions through:

- Grants to support carbon pricing & carbon markets capacity building
- Multi-year or small grant targeted support for upstream work, readiness assessments, design & implementation
- Country-level and regional capacity building



### Global Knowledge

Carbon pricing and markets analytics, technical products and knowledge programs

- Up-to-date market intelligence: Annual State and Trends of Carbon Pricing/ Carbon Markets report; Carbon Pricing Dashboard
- Guidebooks/ technical notes on carbon markets and carbon pricing
- Learning & knowledge academies: training, workshops focused on carbon pricing and carbon markets



### Innovation

Catalyzing next generation of carbon markets through innovation and convening

- Innovation to support generation of and demand for carbon credits
- Infrastructure for carbon markets
- Convening of key stakeholders to catalyze the creation of high integrity Paris-aligned carbon markets



### Advocacy, Outreach, Partnerships

Strategic partnerships and flagship climate conferences

- Innovate4Climate (I4C)
- Regional Climate Weeks (RCWs)
- Carbon Pricing Leadership Coalition (CPLC)
- Knowledge partners under PMI

The strategy entails delivering efficiently and expediently, working hand-in-hand with WBG delivery teams - from the regions, country management units, Global Practices, and other Climate Change Group trust funds - as well as knowledge and technical partners to leverage synergies that enable greater impact.

**The launch of the World Bank's [Carbon Markets Engagement Roadmap](#) in 2023 underscored the strategic importance of deepening country-level engagement on carbon markets.** As concerns over quality and integrity persist, there is a risk of eroding trust in these markets. The World Bank is well placed to play a catalytic role in building trust and confidence given the potential of carbon markets to provide non-debt financing while delivering emission reductions and ensuring environmental

and social integrity and transparency. PMI is at the forefront of these efforts, offering a one-stop shop for best-in-class capacity building and innovation in Paris-aligned carbon pricing and carbon markets, complemented by cutting-edge analytics and data, and leveraging the World Bank's convening power to gather stakeholders in tackling the critical bottlenecks faced by carbon markets.

PMI also includes the Compact with Africa - Green Business Fund (CwA-GBF), an associated trust fund with a well-defined mandate **to assist SMEs and financial institutions (FIs) in participating in climate action.** The Fund supports the 13 countries participating in the G20 Compact with Africa initiative: Benin, Burkina Faso, Côte d'Ivoire, the Democratic Republic of Congo, Egypt, Ethiopia, Ghana, Guinea, Morocco, Rwanda, Sénégal, Togo, and Tunisia.

# Progress made and key achievements



**In the 2024 fiscal year, which runs from July 1st 2023 to June 30th 2024, PMI achieved important milestones across its four pillars.** The Compact with Africa-Green Business Fund also charted notable progress.

**There is a broad range of accomplishments.** First, the partnership **broadened its network of partner countries and deepened engagements, while focusing on delivery of the country support.** Second, PMI strengthened its offering of knowledge products and platforms.

In its effort to streamline processes and reduce transaction costs in carbon markets, the Innovation pillar **developed and piloted new methodologies**, including to raise financing and to enable interoperability between carbon market infrastructure. Fourth, PMI's advocacy and outreach work continued to **foster knowledge sharing, on-the-ground support, and convening platforms to build consensus and mobilize climate commitments.** Lastly, the Compact with Africa (CwA) - Green Business Fund **increased their efforts to foster policy dialogue, build capacity, and develop innovative financing** for SME climate action financing.



An aerial photograph of a coastline. The top half of the image shows clear, turquoise water with white foam from waves crashing against a rocky shore. The rocks are brown and jagged. The bottom half of the image shows a dense, lush green forest covering a hillside that meets the water's edge.

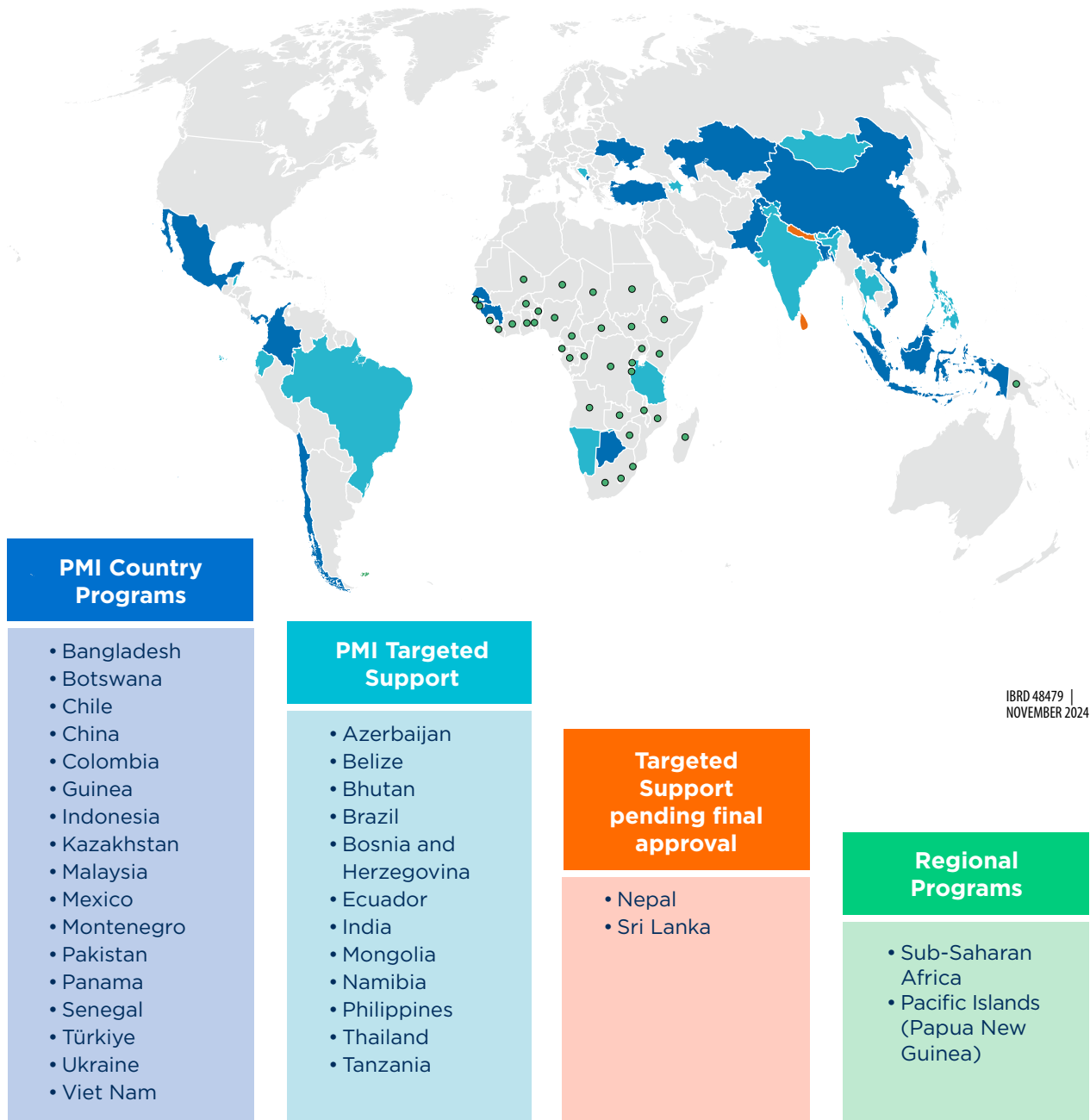
# **Pillar 1: Country Engagements**



**PMI's core work involves engaging with countries aspiring to implement domestic carbon pricing instruments and benefit from high-integrity carbon markets.** Significant progress was made during FY24, with 32 countries now receiving support from the program. In addition to assisting countries and jurisdictions in developing and implementing carbon pricing instruments, these partnerships ensure that identified best practices are shared with other carbon pricing efforts and markets.

**The support provided varies according to the specific context of each country.** Twenty-three countries receive support for designing, piloting, and implementing domestic carbon pricing instruments. Another set of 22 countries are supported in their efforts to build an enabling environment for international carbon markets. In addition, 25 countries are being assisted in designing and deploying carbon market infrastructure. Many countries are supported on several of these topics.

**Figure 1: PMI country and regional coverage**



The country engagement program encompasses three key activity windows, focused on the following priority areas:



**Upstream policy analysis:** This area involves advisory work to support and inform policy decisions on carbon pricing including assessment of carbon pricing instrument (CPI) options, modelling, policy analysis, co-benefit analysis, and political economy considerations.



**Core technical, institutional/regulatory and market infrastructure readiness:** This work includes components for developing carbon pricing policies, such as assessing needs and designing the market infrastructure required to support implementation. Examples include establishing institutional mechanisms, carbon asset registries, and project-level MRV systems.



**Design and/or implementation of carbon pricing policy instrument / policy mix:** This area involves the development of a roadmap for the design and implementation of the CPI prioritized by the participating country, which may include domestic emissions trading, a carbon tax, and/or domestic carbon crediting mechanisms.



**International carbon market readiness:** This area focuses on enabling activities and technical assistance to support countries in preparing for and participating in international carbon markets under the Paris Agreement and voluntary carbon markets. Activities include developing a national carbon crediting strategy; assessing domestic potential for international carbon markets; establishing and/or strengthening institutional and governance arrangements; and building the required infrastructure, such as registry systems, to support country participation in international carbon markets.



**Cross-cutting capacity building.** This work includes training policy makers and domestic stakeholders on carbon pricing instruments and/or on international carbon markets, as well as other stakeholder engagement and communications.

**Figure 2: Overview of PMI country engagements and topics of support provided**

Country	Domestic Carbon Pricing Policy Development				International Carbon Market Readiness			MRV infrastructure for carbon pricing & trading			Cross-cutting (national level interventions)		
	CPI Policy Analysis	CPI design: Cap-&-Trade	CPI design: Carbon Tax	CPI design: Domestic Crediting	National strategic assessments	Policy framework & Institution	ERC pilot projects	MRV regulation	GHG reporting & accounting systems	Mitigation outcomes & carbon asset registries	Capacity-building, training, learning	Communications, stakeholder engagement	Advocacy, outreach, others
<b>Window I: Implementation support (multi-year program, up to \$ 5 million)</b>													
Chile	■	■	■	■	■	■		■	■	■	■	■	■
China	■	■	■	■				■	■	■	■	■	■
Colombia	■	■		■				■	■	■	■	■	■
Indonesia	■	■		■	■	■		■	■	■	■	■	■
Kazakhstan	■	■		■				■	■	■	■	■	■
Mexico	■	■		■		■		■	■	■	■	■	■
Türkiye	■	■	■	■	■			■	■	■	■	■	■
Ukraine		■		■				■	■	■	■	■	■
Viet Nam	■	■		■				■	■	■	■	■	■
<b>Window II: Readiness support (multi-year program, up to \$ 2 million)</b>													
Bangladesh	■				■	■	■	■	■	■	■	■	■
Botswana	■		■		■	■		■	■	■	■	■	■
Guinea	■	■	■		■	■		■	■	■	■	■	■
Malaysia	■	■	■	■	■			■	■	■	■	■	■
Montenegro	■	■	■	■				■	■	■	■	■	■
Pakistan	■	■			■	■	■	■	■	■	■	■	■
Panama	■			■				■	■	■	■	■	■
Senegal	■		■		■	■	■	■	■	■	■	■	■
<b>Window III: Targeted support (prioritized enabling activities, up to \$ 200k)</b>													
Azerbaijan	■				■	■				■			
Belize	■					■				■	■		
Bhutan					■	■				■	■	■	
Bosnia and Herzegovina		■											
Brazil		■											
Ecuador				■							■	■	
India		■		■				■	■	■			
Mongolia	■				■			■	■	■	■		
Namibia					■	■				■			
Nepal					■	■				■	■		
Philippines	■									■	■	■	■
Sri Lanka					■	■				■	■		
Tanzania					■	■		■		■			
Thailand	■									■			
<b>Window III: Regional programs</b>													
Pacific Islands (pilot: Papua New Guinea)					■	■				■	■	■	
Sub-Saharan Africa	■				■						■		

## Window 1: Implementation Support

The Implementation Support Window, also known as Window 1, supports countries that are committed to putting a price on carbon through mandatory regulations or time-bound policies. All countries in Window 1 have either started implementing a carbon pricing instrument or finalized design elements and are seeking to advance in their carbon market journey. In FY24, grant agreements were finalized with Chile, Colombia, Indonesia, Kazakhstan, Türkiye, and Ukraine, with grants to China, Mexico, and Viet Nam pending finalization.

In this Window, PMI plays a key role in helping countries align their needs with appropriate solutions. For example, in Chile, PMI teams are assisting policy makers in implementing the missing elements needed for the operation of the compensation mechanism to its carbon tax. In Colombia, the focus is on assessing infrastructure requirements while also preparing for an ETS pilot which they aim to operationalize by the end of 2025. Throughout this process, PMI provides technical support to ensure successful outcomes.

### Box 1: Towards Net Zero- Türkiye's strategic steps for ETS and carbon pricing

Türkiye is taking steps to establish an emissions trading system (ETS) by 2026. Other efforts are also underway to advance the country's goal of reaching net zero by 2053. These activities, supported over the next five years by a \$ 5 million PMI fund, include identifying pathways for efficient implementation of carbon pricing within the country's policy mix; developing a roadmap for supporting Article 6 of the Paris Agreement; elaborating a communications strategy; and continuing to strengthen capacity for implementing carbon pricing. The government is already progressing to the next step: selecting firms that will help the Ministry of Environment, Urbanization, and Climate Change in their carbon market journey.



The developments build on Türkiye's prior actions to advance the adoption of carbon pricing. The establishment of a monitoring, reporting, and verification system in 2014 is expected to strengthen trust in the ETS, which will profoundly impact the country's economy. Putting in place the Climate Change Office - a high-level government agency - also reflects Türkiye's commitment to carbon pricing. These endeavors signal an anticipation of Europe's Carbon Border Adjustment Mechanism (CBAM). Türkiye is establishing critical elements for carbon pricing implementation: a strong technical foundation, transparency in governance, and a willingness to move forward.

## Window 2: Readiness Support

**The Readiness Support Window, known as Window 2, assists countries that have identified carbon pricing as a potential tool to achieve their climate ambition but have not yet developed the necessary elements of ‘readiness’ for eventual implementation.** PMI supports these countries in deepening policy assessments, facilitate inclusive policy decision-making processes, and designing a carbon pricing instrument tailored to their jurisdictions’ development priorities and circumstances. In FY24, the Bank-executed grants were launched for Bangladesh, Guinea, Malaysia, Montenegro, Pakistan, Panama, and Senegal, with the grant to Botswana pending finalization.

**As with Window 1, PMI collaborates closely with governments in finding solutions that fit their needs.** In Guinea, where mining is a significant economic driver, policy makers are exploring the feasibility and subsequent design of a carbon pricing instrument for the mining sector. In Senegal, PMI is assisting the government in assessing the potential impact of a carbon tax, initially targeting the electricity generation sector. Even when leadership changes occur at the ministerial or national level, discussions at the technical level continue, ensuring that progress can be sustained over time.

### Box 2: Making strides towards pricing carbon: Malaysia increases its readiness

Building on the release of the National Guidance on Forest Carbon Market and National Guidance on Voluntary Carbon Market Mechanisms in 2021 and the establishment of the Bursa Carbon Exchange (BCX) in 2022, Malaysia has made significant progress in its efforts to establish domestic carbon pricing instruments. Through a readiness grant under the PMI, Malaysia’s Ministry of Finance, in cooperation with key ministries such as the Ministry of Natural Resources and Environmental Sustainability, is leading the way in progressing analysis, building capacity, and broadening support for carbon pricing. PMI support in Malaysia is focused on five key elements: undertaking analysis to assess the impacts of carbon pricing, conducting an assessment of MRV and registry infrastructure requirements, evaluating a potential carbon crediting and offset system in meeting national objectives, and preparing a comprehensive strategy for building capacity on carbon pricing and carbon markets across stakeholder groups.

The PMI has facilitated the technical analysis required to progress these important components. The project has already delivered a summary of international carbon pricing experiences, a draft technical assessment modelling the impacts of carbon pricing, a draft report outlining design options, a plan for capacity building, and a report summarizing the potential use of offsets and the integration of credits with a domestic compliance instrument. The project is expected to be completed in 2025, placing Malaysia in position to implement carbon pricing.

Based on the PMI’s outputs, the government is now submitting the Climate Change Bill for the approval of the Parliament of Malaysia and preparing the National Carbon Market Policy. Both will allow the government to implement carbon pricing instruments.

## Window 3: Small Grant Targeted Support

**At the country level, technical assistance is enhanced by focused support for countries with specific needs; this assistance is referred to as Small Grant Targeted support.** This assistance, along with the regional capacity building, is part of Window 3. The demand for this targeted support is constantly growing, with 12 small grants allocated in FY24, three proposals in process, and many more in the pipeline. More importantly, this engagement often marks the start of a longer and deeper commitment to carbon pricing and carbon markets. Through small grant support, PMI can gauge both the climate ambitions and political will of participating countries.

Countries supported under Window 3 include Azerbaijan, Belize, Brazil, Bhutan, India, Mongolia, Namibia, Nepal, Sri Lanka, Tanzania, Thailand, and Zambia, with the expectation to further support Brazil, and potentially India and Thailand, in the Readiness or Implementation Support window.

**For Window 3, PMI prioritizes agility in responding to countries' evolving receptiveness toward carbon pricing instruments.** In Brazil, a relatively small grant has sparked discussions that have led to the country's interest in progressing to the Implementation Window. In Belize, PMI teams supported the government's interest in pursuing a blue carbon strategy, which subsequently catalyzed funding from other financing sources.

### Box 3: Towards a greener future: Brazil's progress on emissions trading with PMI's support

Brazil is now closer to establishing an emissions trading system (ETS) to help achieve its ambitious climate commitments, with an ETS Bill presented before the Brazilian Congress.\* The proposed ETS has been welcomed by key stakeholders, including the Brazilian Business Council for Sustainable Development and the National Confederation of Industry.

These developments highlight the importance of PMI support to Brazil's Ministry of Finance in their efforts to introduce a carbon price. The work program - funded by a small, targeted grant from PMI - includes providing advice and insights on key elements of ETS policy design, the experience of other countries, and the role of supporting infrastructure (including registry systems). PMI also delivered an updated assessment of macroeconomic impacts from carbon pricing in Brazil, which was originally undertaken as part of the [Partnership for Market Readiness](#). Lastly, PMI support included assistance in preparing an ETS Implementation Roadmap, which can serve as a practical guide for government agencies implementing the ETS.

Brazil's next challenge will be to implement the ETS within the tight timeframe established in the draft ETS Bill. The World Bank, through PMI, stands ready to continue to support Brazil at this critical juncture.

\*The Brazilian Greenhouse Gas Emissions Trading System (SBCE) bill was signed into law on December 12, 2024.

*A farmer in Rio Canoas in the Amazon region, Brazil. Photo by Julio Pantoja / World Bank.*



## Regional Programs

**The Regional Programs were developed in response to the growing recognition that certain regions face similar challenges in carbon pricing and carbon markets participation.** For instance, many small countries struggled to fulfill the readiness requirements under the Paris agreement and found it difficult to justify the high transaction costs relative to their limited resources. While carbon pricing was explored in various parts of the continent, it has only been implemented in South Africa.

**The Regional Programs strive to build familiarity with carbon pricing and carbon markets while creating opportunities for regional harmonization in regions with diverse contexts.** Knowledge sharing on standards, methodologies, and approaches leverages the work of participating countries, facilitating a South-South exchange.

Initially focusing on the energy sector in the Southern Africa and West Africa region, this work includes a series of workshops on carbon markets, climate finance, and greater regional harmonization. Participants in Southern Africa expressed interest in renewable energy certificates and endeavors towards harmonization. Meanwhile, the Pacific Islands regional program pursues a demand-driven approach. An engagement in Papua New Guinea progressed from a workshop to a gaps assessment study, which was well-received by the government. A regional level workshop is being planned in collaboration with UN Climate Change and other interested regional partners.

**Overall, PMI is adopting a strategic approach to both country specific and regional engagements.** While the pipeline of interested countries continues to grow, strategic regional engagements are also gaining momentum.

*Fishermen on Vanuatu's Malekula Island. Photo by Tom Perry / World Bank.*



## Box 4: Fostering regional collaboration for carbon markets in sub-Saharan Africa

Sub-Saharan Africa was notably underrepresented in the Partnership for Market Readiness, PMI's predecessor program, as well as in carbon markets under the Clean Development Mechanism. PMI adopted a regional approach to build familiarity with the concept of carbon pricing and to build capacity for engagement.

Subsequently, workshops supported by PMI were delivered in West Africa with the West African Power Pool, UN Climate Change's Regional Collaboration Center (RCC) in Lome, and the West African Alliance on Climate Finance and Carbon Markets, and in Southern Africa with the Southern African Power Pool and the Southern African Development Community, in coordination with UN Climate Change RCC Kampala. In-person and virtual workshops were delivered in both regions.

A harmonized approach at the regional level could benefit the regions since it would reduce barriers to participation in carbon markets at the national level and ensure inter-operable data systems. This approach has particular relevance for sub-Saharan Africa, which has interconnected power systems, a high proportion of transboundary water resources, and forest resources that often span across national boundaries. A report outlining the potential leadership role of regional entities was developed. However, potential limitations related to institutional mandate and funding were noted.

PMI will build on this work to develop simplified carbon market assessment frameworks. PMI will also engage the Common Market for Eastern and Southern Africa (COMESA), in the context of the Regional Energy Access Acceleration Platform it manages, to build capacity for generating high-quality emission reduction credits associated with energy access and clean cooking interventions under the World Bank Accelerating Sustainable and Clean Energy Access Transformation (ASCENT) program covering Eastern and Southern Africa, and for supporting the capacity and enabling environment to allow their monetization. It will also build dialogue and capacity under the Bank's operational engagements in the region.

*Power lines in Ghana, West Africa. Photo by Nataly Reinch / Shutterstock.*





## Pillar 2: Global Knowledge



## PMI places knowledge at the center of its efforts to promote carbon pricing and carbon markets.

The Global Knowledge pillar complements the readiness and implementation efforts of country engagements by providing technical know-how on best practices and emerging areas. By making its knowledge products publicly accessible, PMI extends impact beyond its immediate network, enabling a broad range of stakeholders to engage with and promote carbon pricing and carbon markets.

In FY24, the Global Knowledge pillar developed new analytical and technical reports and bolstered platforms for capacity building. These achievements were realized through the pillar's three workstreams: flagship trends analysis; focused guidebooks and technical reports; and learning programs.

**First, the program provides a comprehensive overview on carbon pricing and carbon markets through its data and trends analysis work.** Now in its eleventh year of publication, the data-rich [State and Trends of Carbon Pricing](#), published in May 2024, continues to serve as a cutting-edge platform source for carbon pricing and carbon markets data and analytics, complemented by the [State and Trends of International Carbon Markets 2024](#).

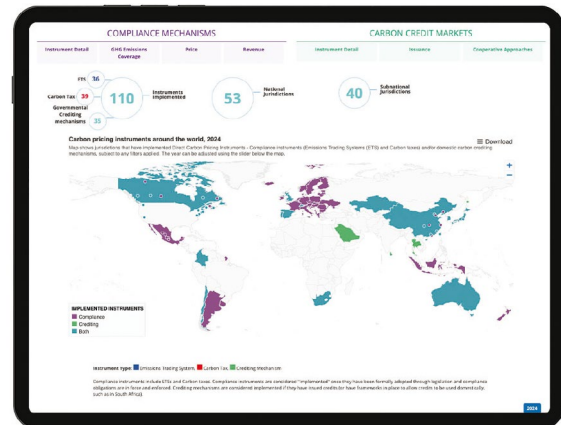
The [Carbon Pricing dashboard](#), an interactive online tool that outlines new and existing direct carbon pricing initiatives and carbon market mechanisms with user-friendly visualizations, benefited from a new interface. The dashboard's internal systems for data collection, management, and analysis were also upgraded.

**Complementing the flagship reports are the focused guidebooks, technical notes and reports that comprise the pillar's second workstream.** These policy notes are enriched by capturing the experiences and lessons learned from country engagements.

In FY24, these reports included:

- [Carbon Pricing in the Power Sector](#), a joint publication with the World Bank's Energy Global Practice, the Energy Sector Management Assistance Program (ESMAP), the International Energy Agency, and the International Carbon Action Partnership. Featuring detailed case studies of Colombia, China, South Africa, and Ukraine, the report outlines the critical aspects of introducing carbon pricing in the power sector.
- [Balancing Act: Political Economy and the Pursuit of Ambitious Carbon Pricing in Developing Countries](#), a collaboration with the London School of Economics and Adelphi. Based on interviews with more than 100 government officials, academics, and practitioners, this important resource offers insights on advancing domestic carbon pricing in the face of political economy challenges.

Snapshot of the Carbon Pricing Dashboard.



Additional reports that were initiated in FY24 include: *Carbon Pricing and the Climate Policy Mix*; *Future Proof MRV*, which will look at the international compatibility of national MRV systems; and *Carbon Pricing and International Maritime Organization*, supported by the World Bank's Maritime Transportation Group.

## Box 5: PMI Global Knowledge Forum 2024

A space for dialogues on carbon pricing challenges and showcases of progress, the 2024 PMI [Global Knowledge Forum](#) in Cartagena, Colombia, focused on the interplay between domestic carbon crediting mechanisms and international carbon markets.

Representatives from participating countries as well as development and knowledge partners joined the interactive sessions. Countries shared their diverse experiences with carbon pricing instruments and of working with PMI.

Nirwan Noh, Deputy Undersecretary of the Fiscal and Economics Division at Malaysia's Ministry of Finance, thanked PMI for "providing the right data, doing all the modelling exercises, looking at the impact on the economy, the GDP... We have all the information we need to make a good case to the government to make a decision."



**Learning initiatives form the third workstream of the Global Knowledge pillar.** In FY24, the main efforts included the annual Global Knowledge Forum, regional training workshops such as the Asia-Pacific Regional Capacity Building event on Emissions Trading Systems, and a series of webinars titled Carbon Markets 101. These events are designed to create a collaborative and inclusive environment that promotes learning and exchange among different country experiences.

**Drawing on the diverse experience of PMI partners, content is also being created for the World Bank Group Academy.** Aiming to provide a unified platform for fostering country capacity, these

capacity building efforts will involve increased collaboration with knowledge partners and the standardization of training materials, broadening the reach of PMI knowledge.

**In FY24, PMI also contributed to more than 70 events - virtual and at the global, regional, and country level - to share its vision, mission, and strategy and add to the technical dialogues on carbon pricing and carbon markets.** As participating countries advance in their carbon pricing and carbon market journey, PMI will distill the lessons learned during preparation and implementation and share the learning with its growing network of stakeholders.

*Global Knowledge Forum, June 2024.*



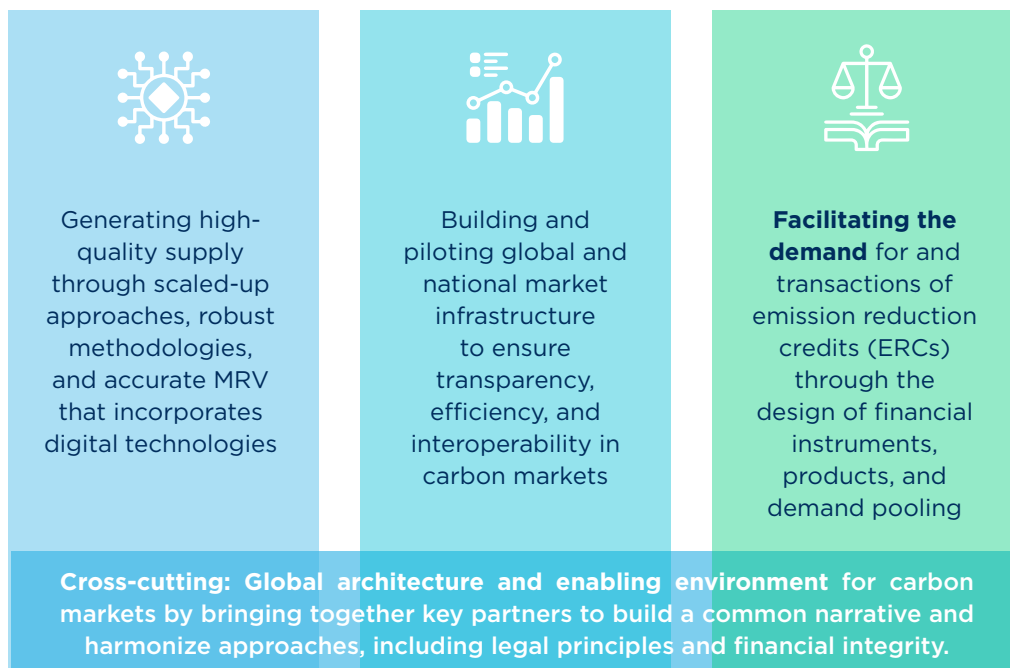


**Pillar 3: Innovating new tools,  
financial instruments,  
and technologies**

**PMI's Innovation pillar develops tools, financial instruments, technologies, and mechanisms to build enabling environments for carbon markets.** The Innovation team's work includes, but is not limited to, developing a global carbon

market architecture, innovative methodologies for emissions accounting, and financial solutions for voluntary and compliance markets. The pillar comprises of four workstreams:

**Figure 3: Work-streams of the Innovation Pillar**



## Ensuring high-quality credits through the Supply workstream

The Supply workstream focuses on ensuring high-quality and high-integrity ERCs in carbon markets, including from the World Bank's lending operations. Currently in a pilot phase, PMI has reviewed the Bank's portfolio to identify projects with the potential for substantial emission reductions. The process also enables partner countries to understand the implications of their investments and to potentially receive additional benefit out of lending projects that create emission reductions. One initiative that will incorporate this approach systematically is the ASCENT program in Eastern and Southern Africa, which aims to deliver access to clean and sustainable energy to 100 million people. Integrating carbon market approaches at the program level is expected to substantially reduce transaction costs, thereby enabling scale and efficiency.

**The Supply workstream assists country partners in exploring different methodologies to ensure the generation of high-quality carbon credits.** Methodologies that consider digital MRV, sectoral/ jurisdictional approaches, and large-scale programs that support energy transition for generating carbon credits are usually unavailable or in need of updating. PMI provides support by updating existing methodologies to enhance accuracy and effectiveness, or by developing new methodologies for focus areas that are not sufficiently addressed, such as battery energy storage systems. Participating countries benefit from hands-on experience in creating carbon assets and making informed decisions that guide their domestic process.

## Developing innovative approaches through the Demand workstream

**A reliable demand signal is essential to incentivize the generation of high-quality carbon credits.** The Demand workstream designs financial instruments, products, and demand pooling mechanisms to facilitate this demand signal. The Demand workstream is also exploring opportunities to increase participation, including by providing guarantees.

Going forward, PMI will continue to assist partner countries in understanding the diverse types of markets and approaches for carbon trading, including listing on exchanges to auctions, and exploring different options for pooling demand in carbon markets. For example, entities may seek to purchase credits based on internal carbon pricing mechanisms.

## Demonstrating proof-of-concept to inform infrastructure development

**Carbon market infrastructure comprises the systems and platforms that support the underlying frameworks and institutions enabling the operation and functioning of carbon markets.** Such infrastructure includes the platforms for the monitoring, reporting, and verification of greenhouse-gas emissions reductions or removals, and the issuance, trading, and tracking of carbon credits or allowances.

**The Paris Agreement permits different reporting and verification approaches for carbon markets, leading to market fragmentation and limited transparency and liquidity.** Digital technologies that automate monitoring and reporting, such as blockchain and artificial intelligence, help address these concerns by reducing transaction costs and generating real-time data, which can enable the generation of carbon credits at shorter intervals. By generating technical and analytical outputs and demonstrating proofs of concept, this work is shepherding the development of a digital ecosystem for carbon markets that is efficient, secure, and accurate.

*By Stephen Davies. Adobe Stock.*



The Infrastructure workstream charted significant progress in FY24, including the following achievements:

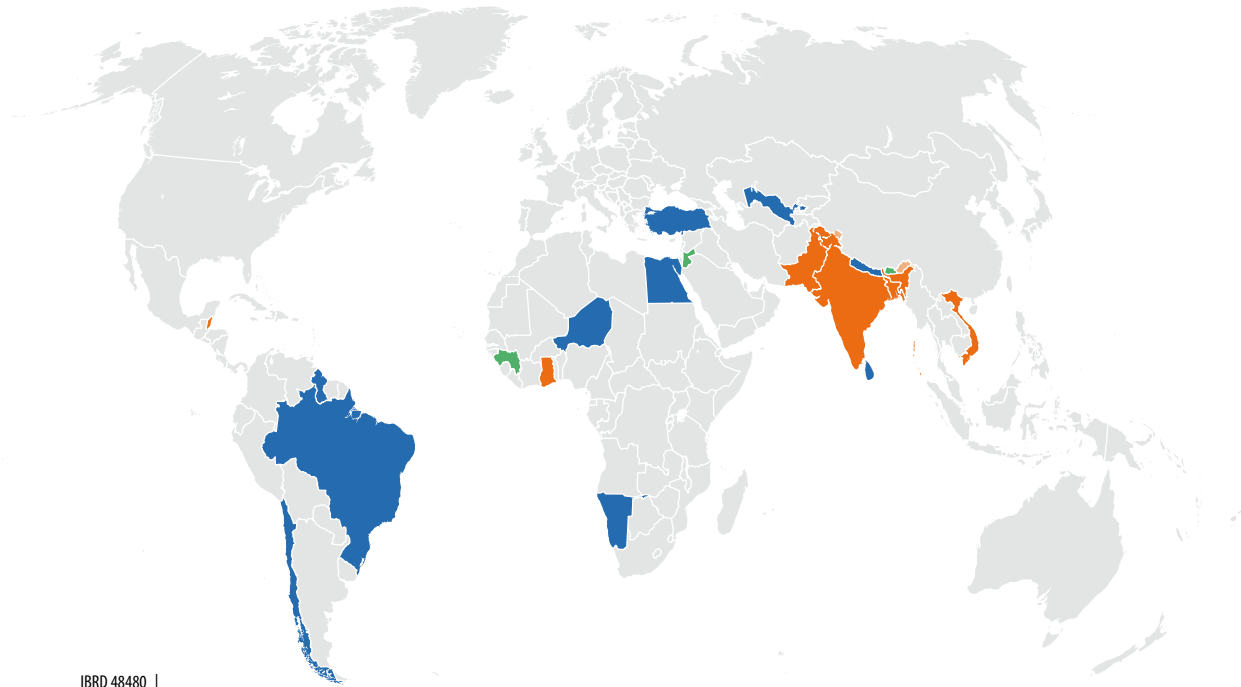
- Provision of technical support to countries, such as MRV gap assessments, developing Terms of Reference or technical content development, supporting registry development, and testing for countries that do not have a system in place. The countries supported include Jordan, Bhutan, India, Ghana, and Bangladesh.
- Piloting of harmonized MRV approaches towards an end-to-end digital ecosystem. Carried out with the members of [Digital4Climate Working Group](#), this activity builds harmonization and interoperability in the capacity building provided to countries on carbon markets infrastructure.
- Supporting the onboarding of countries to the Climate Action Data Trust (CAD Trust), which reduces risks of double counting by bringing together real-time, comparable, and auditable emissions reduction data from registries around the world. A partnership with the government of Singapore and the International Emissions Trading Association, the CAD Trust is overseen by a council which includes the governments of Chile, Bhutan, Senegal, and the United Kingdom, and major carbon registries such as Verra, American Carbon Registry, and Global Carbon Council. Countries slated for onboarding include India, Bangladesh, Viet Nam, Thailand, Chile, and Guyana.
- Assisting the deployment of national carbon registries, through an open-sourced simplified system for tracking, managing, and transacting carbon credits. The core registry allows users to practice creating digital assets and conducting transactions with credentialed wallets. Integration with the CAD Trust advances the aggregation and harmonization of data across systems. Participating countries include India, Nepal, Pakistan, and Sri Lanka.

*Monitoring and Evaluation System. Jutta Benzenberg/World Bank*





**Figure 4: Coverage of carbon market infrastructure engagement**



IBRD 48480 | NOVEMBER 2024

INFRASTRUCTURE		
<b>4 COUNTRIES DEPLOYMENT PHASE</b>		
<b>Registry/CADT:</b>	<b>dMRV:</b>	
Jordan Bhutan	Guinea Jordan	
<b>7 COUNTRIES TESTING PHASE</b>		
<b>ASSESSMENT/ TESTING PHASE</b>		
<b>Registry/CADT:</b>		
India Pakistan Bangladesh Belize	Ghana Viet Nam Chile	
<b>10 COUNTRIES ACTIVITY UNDER PREPARATION</b>		
<b>CONSULTATIONS PHASE Registry/CADT/dMRV</b>		
Chile Namibia Guyana Nepal Sri Lanka	Brazil Uzbekistan Türkiye Niger Egypt	

Building country-level capacity is another focus of the Infrastructure workstream, achieving the following in FY24:

- Developing a knowledge base on digital infrastructure to enable countries to make informed decisions about their infrastructure needs and ensuing strategies.
- Assisting countries in testing prototypes to improve their understanding of the technical and functional specifications required for establishing market infrastructure.

These efforts encourage national and international cooperation in building an interoperable international architecture for carbon markets.

- Facilitating countries' assessment of their carbon market infrastructure. Several countries are participating in early-stage consultations, which involve gap assessments related to specific MRV needs. During the testing phase, several countries are using the core registry to learn its adaptability to specific contexts.

## Working towards a shared enabling environment

### **Creating an enabling environment is essential to manifest the next generation of carbon markets.**

Enabling environment refers to efforts at ensuring a common understanding of required regulatory and institutional frameworks. Two key engagements - the Climate Market Club and the Carbon Action Forum - form the core of this workstream.

### **The Climate Market Club brings together 15 governments to develop common approaches for operationalizing carbon markets.**

Club members share lessons from their experiences, which become approach papers and template policy documents for use by other countries. Ghana, for example, has used these papers as a starting point for its carbon market journey. To date, 10 approach papers and policy documents have been published.

The Club achieved the following in FY24:

- Development of an approach paper to outline the Club's strategic guidance on international carbon markets and the interplay between domestic carbon pricing and international carbon markets.
- Updating of the Club's Country Program Framework to include aspects of voluntary carbon markets and provisions related to financial and market integrity.

### **Launched at COP28, the Carbon Action Forum is dedicated to developing solutions related to transactions in carbon markets.**

Established in partnership with the government of Singapore, the Forum includes both potential sellers and buyers, such as Bank of America, Rand Merchant Bank, ESCOM in South Africa, and the Moroccan Agency for Sustainable Energy. Recognizing that both buyers and sellers face challenges in accessing carbon markets, the Forum focuses on, among others, boosting demand for high-quality credits from countries and identifying ways to mitigate regulatory uncertainty.

### **In addition, PMI convenes discussions on the legal nature and regulatory framework for carbon credits.**

To boost confidence in voluntary carbon credit transactions, an ongoing project with the Unification of Private Law (UNIDROIT) and the International Swaps and Derivatives Association provides guidance on private law issues, including verified carbon credits (VCC). The legal nature of VCCs determines the creation, transfer, and retirement of VCCs and impacts broader considerations like fungibility, collateralization, and insolvency matters.

The diverse endeavors of the Innovation pillar are available on the [Climate Warehouse website](#), ensuring that both the public and PMI's institutional partners have access to the same knowledge. The website averages over 1,300 users per month.

# Pillar 4: Mobilizing commitments through advocacy, outreach, and partnerships



**Advocacy and partnerships play a key role in PMI's efforts to catalyze carbon pricing, carbon markets, and climate action.** The World Bank's convening power has enabled PMI and its partners to mobilize commitments on carbon pricing and carbon markets development at the global, regional and national level. Initiatives such as Innovate4Climate strengthens PMI's outreach and advocacy, and World Bank communication channels amplify PMI's messages to the broader public.

### Expanding and evolving partnerships

**Partnerships are at the core of the PMI** present already in the trust fund's name and throughout all its pillars and workstreams. The shape of these partnerships varies depending on their purpose, from South-South and North-South exchange among countries' experiences with carbon pricing, to convening financial and private sector stakeholders when thinking through effective carbon market design.

**Different types of partnerships emphasize different strategies towards advancing carbon pricing and carbon markets readiness in countries.** Implementation partnerships emphasize capacity building, practical knowledge transfer, and on-the-ground support for countries navigating the complexities of carbon markets. PMI has partnered with several organizations to leverage and maximize its impact, bring technical expertise, and enhance its role as a knowledge sharing platform. Knowledge partners include global organizations

such as the UN Climate Change Secretariat and national institutions such as Québec's Ministry of the Environment and the Fight against Climate Change (See Figure 5). Ongoing collaboration with the International Carbon Action Partnership has strengthened the capacity of several regions to establish and manage emissions trading systems. Additionally, the linkage of the open-source national carbon registry to the CAD Trust would not have been possible without the collaboration with the UN Development Programme (UNDP).

**Socialization partnerships create platforms for stakeholders to collaborate, exchange insights, and drive progress.** For example, the Multilateral Development Bank Working Group on Article 6 fosters understanding of market-based mechanisms by collaborating on simulations, providing feedback, and sharing inputs for initiatives such as the Integrity Council for the Voluntary Carbon Market and the Voluntary Carbon Markets Integrity Initiative. These partnerships ensure that diverse perspectives contribute to the development of core carbon principles and assessment frameworks.

Partnerships with UNIDROIT and the International Swaps and Derivatives Association have enhanced the understanding of legal frameworks and bolstered confidence in carbon markets. Technical collaborations have also contributed to the development of critical quantification methodologies, such as those for early coal decommissioning.

**Figure 5: PMI knowledge partners**

	Global Green Growth Institute (GGGI)
	International Carbon Action Partnership (ICAP)
	International Emissions Trading Association (IETA)
	International Energy Agency (IEA)
	Article 6 Implementation Partnership (A6IP)
	Korea Energy Agency (KEA)
	Québec's Ministry of the Environment and the Fight against Climate Change
	Singapore's National Climate Change Secretariat (NCCS)
	United Nations Climate Change (UNFCCC)
	United Nations Development Programme (UNDP)

## Carbon Pricing Leadership Coalition

Hosted by the World Bank, the Carbon Pricing Leadership Coalition (CPLC) convenes leaders from government, business, civil society, and academia to promote carbon pricing for accelerating climate action. In the last seven years,

the CPLC has been a strong advocate for carbon markets and the many related initiatives now taking root at the global, regional, and national level. As the CPLC repurposes its mission, the PMI continues to engage the private sector.

## Innovate4Climate and Regional Climate Weeks

Since 2017, Innovate4Climate (I4C) has distinguished itself as an unmissable forum for sharing technical knowledge on climate-related finance, carbon markets, policies, and technology. As the World Bank's flagship event on climate action, the gathering draws thousands of participants from the public and private sectors, international organizations, civil society, academia, youth, and media.

The eighth edition of I4C convened in September 2024 in Berlin, Germany, under the theme "Advancing Carbon Pricing and Forestering Carbon Markets for a Livable Planet". Focusing on carbon pricing and carbon markets and their role and potential to help emerging markets and developing economies achieve their climate goals, the 3-day conference featured two high-level plenary events, 4 technical plenaries, 21 workshops, and a marketplace.

I4C is also collaborating with knowledge and donor partners to develop a business model for the event that ensures its longevity. Its organization has been a collaboration with the International Emissions Trading Association (IETA) and the International Carbon Action Partnership (ICAP), supported by the governments of Germany and Spain through PMI.

**Regional Climate Weeks bring together governments and diverse stakeholders to showcase climate action initiatives and explore strategies to foster climate resilience.** A joint initiative of UN Climate Change, the WBG, UNDP, and UNEP, FY24 welcomed four climate weeks - in Africa, the Middle East and North Africa, Latin America and the Caribbean, and the Asia-Pacific region. PMI contributed to the organization of more than 70 events and knowledge sessions across the climate weeks, which gathered more than 20,000 participants.

Plenary podium at the Middle East and North Africa Climate Week 2023.



Anna Wellenstein, Regional Director, Sustainable Development, East Asia and the Pacific delivering remarks at the High-Level Opening Ceremony of Asia-Pacific Climate Week 2023.



# Communications and outreach

Effective communication and outreach are essential components across PMI pillars. In FY24, PMI continued to make substantial progress in strengthening its communication channels to increase awareness, facilitate information sharing, and positioning the program as a knowledge hub for carbon pricing and carbon markets.

PMI rolled out several communication initiatives in FY24.

## Communications & Visibility Plan

Through a strategic approach, this document outlines a communication and visibility plan for PMI over the next five years. The plan highlights strategic messages, main audiences, communication objectives per target audience, main channels of communication, and activities, and provides recommendations for PMI's branding and visibility across its various programs and initiatives. Output consists of the following:

- **Newsletters.** Delivered in a concise format to a database of several hundred recipients, quarterly newsletters support engagement with client

countries, knowledge partners and donor partners.

- **Revamped website.** In FY24, PMI's main website was revamped to feature relevant and up-to-date information on its various initiatives across countries and regions. The updated site aims to provide an enhanced user experience for PMI partners and clients.
- **Reports dissemination.** Communication campaigns have actively supported the dissemination of flagship reports, including the State and Trends of Carbon Pricing report series. Communication of the report's findings through strategic messaging shared across social media platforms and internal WBG channels has increased downloads.
- **Marketing materials.** To enhance PMI's visibility in forums and events, a range of marketing materials has been developed in both printed and digital formats. These include slide decks, posters, branded merchandise (e.g., notebooks and pens), brochures, QR codes, postcards, and branded knowledge booths at events.

An aerial photograph of a large-scale solar farm. The solar panels are arranged in long, parallel rows on a flat, light-colored ground. The sun is low on the horizon, creating a warm, golden glow and long shadows. A semi-transparent blue circle is overlaid on the left side of the image, containing the text.

# Compact with Africa Green Business Fund (CWA-GBF)





**An associated trust fund to the PMI, the Compact with Africa - Green Business Fund (CwA-GBF) assists small and medium-sized enterprises (SMEs) and the financial institutions (FIs) that enable them to participate in climate action.** The Fund supports the 13 countries participating in the G20 Compact with Africa initiative: Benin, Burkina Faso, Côte d'Ivoire, Egypt, Ethiopia, Ghana, Guinea,

Morocco, Rwanda, Sénégal, Togo and Tunisia. In FY24, the Democratic Republic of Congo joined the CwA and is now eligible to receive funding.

Three pillars comprise the CwA-GBF: Policy Dialogue and Enabling Environment; Capacity Development and Technical Assistance, and Innovative Financial Instruments.

## Pillar 1: Policy dialogue and enabling environment

**Under this pillar, activities focus on creating an active ecosystem of SMEs, entrepreneurs, and policymakers who understand the policy and regulatory barriers for SMEs and FIs in accessing climate finance.** Sharing knowledge of climate change risks and solutions is also prioritized.

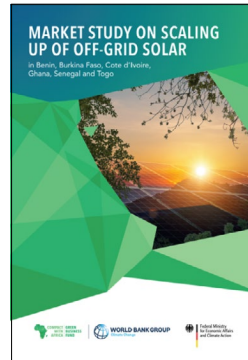
In FY24, this pillar noted the following milestones:

- Completion of a study on green and blended finance options for agriculture SMEs in Egypt, to inform the design of the World Bank's Climate Resilient Agri-Food Transformation Project.

*Farmers in Egypt*



- Completion of a market study on off-grid solar to inform the design of CwA-GBF additional financing to the Regional Off-Grid Electricity Access Project,



*Market Study on Scaling Up of Off-Grid Solar in Benin, Burkina Faso, Côte d'Ivoire, Ghana, Senegal, and Togo.*

- Side event at Africa Climate Week, Nairobi, Kenya, in September 2023, on 'Innovative Financial Instruments to De-risk Climate Investments in Africa', bringing together governments, development partners and the private sector; and other outreach events.

*Panel in the World Bank-led Affiliated Event at Africa Climate Week 2023, featuring Climate Change Global Director Jennifer Sara.*



## Pillar 2: Capacity building and technical assistance

**The pillar for capacity building and technical assistance creates tailored capacity building packages (training, toolkits, guidance) for SMEs and FIs.** The goal: to build their expertise on understanding the risk and opportunities for innovation in a rapidly changing climate. Activities include supporting SMEs in identifying and developing business models for climate-smart products and services, particularly in the energy and nature-based sectors, and developing toolkits that can help them assess climate risks.

In FY24, this pillar heralded the following activities:

- Identification and approval of ten new activities that leverage World Bank financing for greening SMEs, covering multiple sectors in most CWA partner countries.
- Preparations for operationalization of the virtual Center of Excellence on Sustainable Finance for Francophone West Africa. Conceptualized with the IFC, the Center will help close a critical information gap and ensure sustainable and continued access to knowledge and networking in the region.
- Convening of five workshops with IFC's Africa Green Banking Academy in Cote d'Ivoire, Ethiopia, Ghana, Rwanda, and Senegal.

*Climate Finance Training Workshops for Financial Institutions. Addis Ababa, Ethiopia - June 19-20, 2024, hosted by CWA-GBF.*



## Pillar 3: Innovative financial instruments

**Development progressed in 2024 for the piloting of business models for climate-smart products and services for FIs and SMEs in the region.** Financial instruments with quantifiable climate outcomes were developed in selected countries.

Two important projects were prepared in FY24 and expected to launch in FY25:












- A risk-sharing facility which aims to scale up finance for standalone solar and strengthen the ecosystem for solar SMEs in CWA countries in Western Africa.
- A results-based climate finance mechanism for climate-smart agriculture that is expected to incentivize practice change.

# Annex 1: PMI Financial Overview



## PMI Donor Contributions

From inception through June 30, 2024, total signed contributions to PMI were \$ 124.2 million, received from 11 donor partners. Japan's Ministry of Energy, Trade and Industry (METI) joined PMI as a new donor with a contribution of \$ 2.2 million in March 2024.

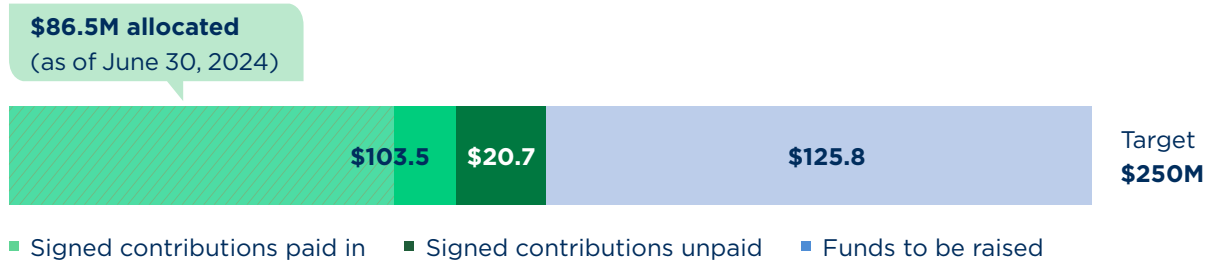
Donor Partner	Institutions	Contributions [\$ millions]	Share (%)
 AUSTRALIA	Department of Foreign Affairs and Trade	3.0	2.4
 CANADA	Global Affairs Canada Environment and Climate Change Canada (ECCC)	16.0	12.9
 EUROPEAN COMMISSION	Directorate-General for Climate Action (DG CLIMA)	3.3	2.7
 FINLAND	Ministry of Foreign Affairs	6.5	5.2
 GERMANY*	Federal Ministry of Economic Affairs and Climate Action (BMWK) Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU)	27.2	21.9
 JAPAN	Ministry of Environment (MOE) Ministry of Energy, Trade and Industry (METI)	5.2	4.2
 NORWAY	Ministry of Climate and Environment	7.0	5.6
 SPAIN	Ministry of Economic Affairs and Digital Transformation (MINECO) Ministry for the Ecological Transition and the Demographic Challenge (MITECO)	13.9	11.2
 SWEDEN	Swedish Energy Agency (SEA)	4.4	3.5
 SWITZERLAND	Swiss State Secretariat for Economic Affairs (SECO)	12.13	9.9
 UNITED KINGDOM	Department for Energy Security and Net Zero (DESNZ)	25.4	20.5
<b>Total</b>		<b>124.2</b>	<b>100.0</b>

\* Germany (BMWK) has contributed an additional \$ 24.4 M to PMI's associated trust fund, Compact with Africa.

As of FY24, a total of \$ 86.5 million has been allocated through PMI since its inception. Furthermore, \$ 20.5 million has been allocated for FY25, and the rest of the funding has been programmed for the following fiscal years. Out of the total \$ 124.2 million in

signed contributions, \$ 20.7 million is unpaid and yet to be received. To meet its initial funding target of \$ 250 million, PMI expects to raise additional funding in the upcoming years.

**Figure 6: Funding Status, FY24-30 (\$ millions)**



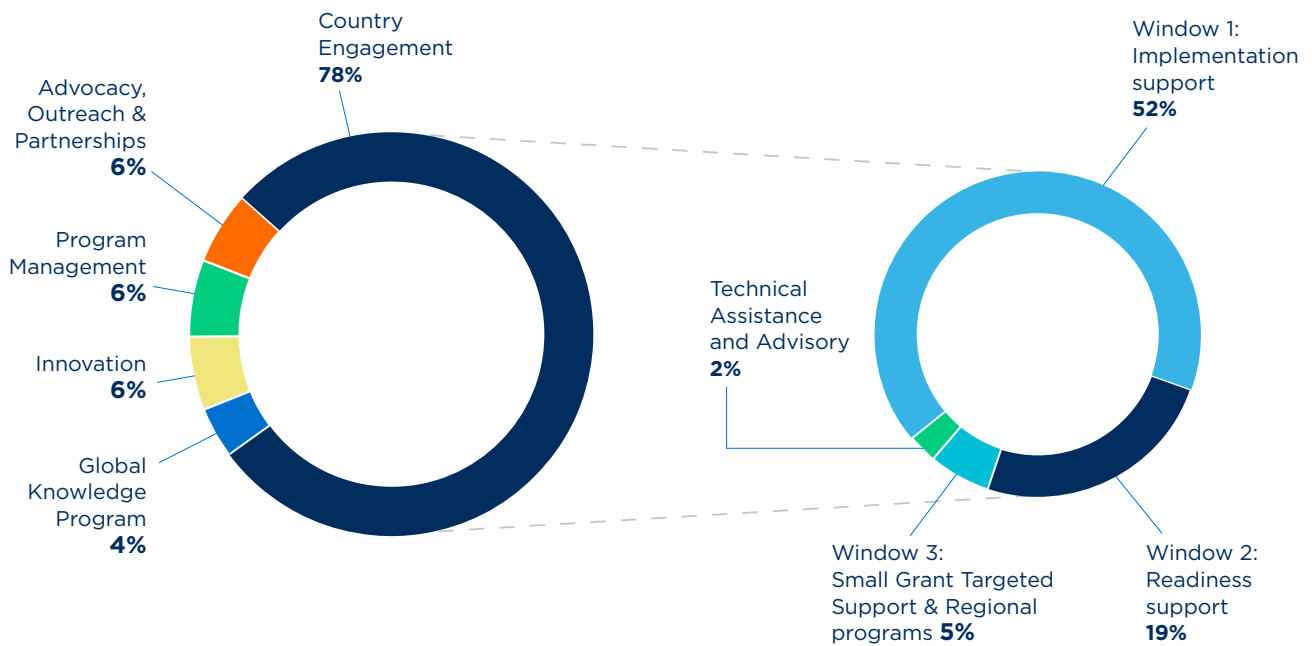
### PMI FY24 Overview

For FY24, the Partnership Council approved a budget of \$ 25.8 million for PMI. Across various trust funds and activities under the umbrella, \$43.9 million were allocated in FY24.

FY24 was a year of strong implementation for PMI country programs, with 13 country programs operational out of 17 approved Readiness Support

and Implementation Support Plans (Windows 1 and 2). Furthermore, PMI allocated resources to 12 Small Targeted Support grants under Window 3. Total allocations made in FY24 is \$43.9 million, with the largest share being towards the country programs (\$34.6 million or 79%), another \$14.4 million in pipeline.

**Figure 7. PMI Total Approved Budget by Pillar, FY21-24**



**Figure 8: PMI Budget by Pillar**

No.	Pillars	Total Approved Budget FY21-24 (\$M)	FY24 Budget (\$M)		
			PC Approved Budget	Allocations (\$M)	Approved Pipeline* (\$M)
<b>A</b>	<b>Country Engagement</b>	<b>67.85</b>	<b>17.24</b>	<b>34.62</b>	<b>14.40</b>
1	Window 1: Implementation support	44.98	10.48	30.25	11.15
2	Window 2: Readiness support	16.64	4.56	1.70	2.45
3	Window 3: Just in Time & Regional programs	4.24	0.75	1.88	0.80
4	Supervision and Delivery Support	2.00	1.45	0.80	
<b>B</b>	<b>Global Knowledge Program</b>	<b>3.44</b>	<b>1.15</b>	<b>1.74</b>	
<b>C</b>	<b>Innovation</b>	<b>4.98</b>	<b>2.98</b>	<b>2.98</b>	
<b>D</b>	<b>Advocacy, Outreach &amp; Partnerships</b>	<b>5.18</b>	<b>3.03</b>	<b>3.15</b>	
<b>E</b>	<b>Program Management</b>	<b>5.00</b>	<b>1.40</b>	<b>1.40</b>	
	<b>TOTAL</b>	<b>86.45</b>	<b>25.80</b>	<b>43.90</b>	<b>14.40</b>

\*This column reflects the amount in pipeline for programs already approved, but that have not yet been formally established in the WB accounting systems as of June 30, 2024.

## Compact with Africa FY24 Overview

FY24 saw significant commitment of Compact with Africa Green Business Fund (CWA GBF) resources. Under Pillars 1 and 2, eleven new grants were approved for Bank-executed work to strengthen the enabling environment and build capacity of stakeholders to promote SMEs’ access to finance and climate action.

Under Pillar 3, project development and approval cycles were completed for two of the recipient-executed activities envisaged under that pillar, with funds formally committed towards the Rwanda Climate Smart Agriculture Results-Based Financing pilot and the Risk Sharing Facility for Off-Grid Solar in pipeline.

The program also supported program management and coordination and a number of knowledge management and outreach efforts to raise awareness, share lessons learned, and build a network of practitioners, including a major side-event at Africa Climate Week. Cumulatively, since

the inception of the fund, about \$ 9.9 million has been allocated.

**Figure 9: CwA FY24 Budget by Pillar**

No.	Pillars	Pillar FY24 Allocations (\$M)
<b>A</b>	<b>Pillar 1: Enabling Environment</b>	0.90
<b>B</b>	<b>Pillar 2: Capacity Building</b>	2.67
<b>C</b>	<b>Pillar 3: Innovative Financial Instruments</b>	4.05
<b>D</b>	<b>Knowledge Management</b>	0.06
<b>E</b>	<b>Program Management</b>	0.52
<b>TOTAL</b>		<b>8.19</b>



# Annex 2: PMI Results Framework

<b>Goals</b>	<p><b>Development Objective (LONG-TERM GOAL - LT)</b></p> <ul style="list-style-type: none"> <li>Acceleration of low-carbon development efforts achieved globally as a result of the implementation of carbon pricing policy instruments and partner countries' participation in international carbon markets.</li> </ul>			
	<p><b>Program Objective (MEDIUM-TERM GOAL - MT)</b></p> <ul style="list-style-type: none"> <li>By 2030, the number and coverage of explicit CPIs in place and fully operational in PMI implementing countries increased in scope and depth, aligned with what is needed to achieve the Paris decarbonization goals, and deliver sustainable development benefits.</li> </ul>			
<b>Outcomes</b>	<p><b>OC1: Implementation capacities for carbon pricing</b> Capacity to design, implement and operate carbon pricing and climate finance instruments has been developed and strengthened across key stakeholder groups in PMI participant countries.</p>	<p><b>OC2: Knowledge generation &amp; sharing</b> Knowledge generated, shared and delivered through PMI program activities (at national, regional, and global level) has informed carbon pricing policy-making processes and has been applied in the design, implementation, and operation of carbon pricing, carbon markets and climate finance instruments.</p>	<p><b>OC3: Catalyzing the next generation carbon markets</b> International cooperation through carbon crediting mechanisms, within and beyond the UN Paris Agreement regime, has been enabled and fostered by PMI program.</p>	<p><b>OC4: Advocacy for carbon pricing and markets</b> Policy discussions at the global, regional, and national level to realize the full potential of carbon pricing and markets and climate finance to support deep decarbonization have been informed and influenced by PMI.</p>
	<p><b>Outputs/output indicators OP1</b> to monitor progress regarding outcome OC1, such as: Carbon pricing policies and governance arrangements, MRV and registry implementation, capacity building programs and policy impact assessments.</p>	<p><b>Outputs/output indicators OP2</b> to monitor progress regarding outcome OC2, such as: Global knowledge products; global, regional, or country level knowledge sharing and learning events; or, online presence and reach.</p>	<p><b>Outputs/output indicators OP3</b> to monitor progress regarding OC3, such as: Country policy frameworks for international carbon markets, infrastructure, pilots and regional strategies and alliances.</p>	<p><b>Outputs/output indicators OP4</b> to monitor progress regarding OC4, such as: Technical exchanges, lessons learned, and best practices shared between program participants (extended community, including observer organizations), UNFCCC Secretariat, Compact with Africa, other jurisdictions, other relevant institutions/ organizations.</p>
	<p><b>Output indicators OP5</b> to monitor progress regarding: Cross-cutting   PMI Strategic and Operational Management</p>			
	<p><b>Output indicators OP5</b> to monitor progress regarding: Cross-cutting   PMI Strategic and Operational Management</p>			



Development Objective / Goal	Indicators	Reference values
<p><b>LONG-TERM</b></p> <p>Substantial climate mitigation achieved globally as a result of the implementation of carbon pricing instruments (CPIs).</p>	<ul style="list-style-type: none"> <li>• <b>LT1:</b> Proportion of global GHG emissions covered by an explicit carbon pricing instrument increases.</li> <li>• <b>LT2:</b> Global weighted average carbon rate across carbon pricing instruments increases</li> </ul>	<p><b>LT1</b> <b>Metric:</b> % of annual global emissions subject to an explicit carbon price has increased [Y/N]</p> <p><b>LT2</b> <b>Metric:</b> Weighted average carbon price increased [Y/N]</p>
<p><b>MEDIUM-TERM</b></p> <p>By 2030, the number and coverage of explicit CPIs in place and fully operational in PMI implementing countries has increased in scope and depth, aligned with what is needed to achieve the Paris decarbonization goals, and delivers sustainable development benefits.</p>	<ul style="list-style-type: none"> <li>• <b>MT1:</b> PMI implementing countries that have strengthened existing CPIs or introduced new ones.</li> <li>• <b>MT2:</b> PMI jurisdictions' emissions covered by an explicit CPI increases.</li> <li>• <b>MT3:</b> Carbon revenues raised from carbon pricing instruments in place in PMI participant countries increases.</li> </ul>	<p><b>MT1</b> <b>Metric:</b> PMI jurisdictions have passed new CPI legislation and regulation [Y/N]</p> <p><b>MT2</b> <b>Metric:</b> Share of jurisdiction's emissions subject to explicit carbon price increased [Y/N]</p> <p><b>MT3</b> <b>Metric:</b> Jurisdiction's public revenue from carbon pricing higher than baseline [Y/N]</p>

Outcomes	Outcome Indicators	Metrics/Baseline/Target Values
<p><b>Program outcome 1: Implementation capacities for carbon pricing</b> Capacity to design, implement and operate inclusive carbon pricing and climate finance instruments has been installed and strengthened across key stakeholder groups in PMI participant countries.</p>	<ul style="list-style-type: none"> <li>• <b>OC 1.1:</b> Share of PMI countries that have made a decision on choice, design and implementation of carbon pricing instruments with support of PMI technical assistance.</li> <li>• <b>OC 1.2:</b> Number of PMI countries that have developed or implemented MRV/registry infrastructure for carbon pricing and/or markets</li> <li>• <b>OC 1.3:</b> Share of PMI country program stakeholders that report their capacity to design, implement and operate carbon pricing instruments has increased substantively.</li> <li>• <b>OC 1.4:</b> [#JustTransition] Share of PMI implementing countries that have assessed socio-economic impacts of carbon pricing policies with support of the PMI</li> <li>• <b>OC 1.5:</b> [#CwA-GBF] Number of financial instruments designed and/or piloted</li> </ul>	<p><b>OC 1.1</b> <b>Metric:</b> PMI jurisdictions with new/ updated policy, regulation, or roadmap adopted and in place [%]</p> <p><b>OC 1.2</b> <b>Metric:</b> countries with MRV/ registry infrastructure developed or implemented [#]</p> <p><b>OC 1.3</b> <b>Metric:</b> Country survey with set of questions and scoring [%]</p> <p><b>OC 1.4</b> <b>Metric:</b> Countries with reported assessments, strategies, plans, policies, regulation [%]</p>
<p><b>Program Outcome 2: Knowledge generation &amp; sharing</b></p> <p>Knowledge generated and delivered by PMI program has informed carbon pricing policy-making processes and has been applied in the design, implementation and operation of carbon pricing and climate finance instruments.</p>	<ul style="list-style-type: none"> <li>• <b>OC 2.1:</b> Share of global PMI stakeholders that evaluate PMI knowledge products as effective for the understanding, assessment, design, and implementation of carbon pricing policies across regions and countries.</li> <li>• <b>OC 2.2:</b> Number of PMI participant jurisdictions that have used PMI knowledge outputs to inform domestic decisions on instrument choice, design and/or implementation.</li> </ul>	<p><b>OC 1.5</b> <b>Metric:</b> Number</p> <p><b>OC 2.1</b> <b>Metric:</b> Surveys to PMI stakeholders [% affirmation]</p> <p><b>OC 2.2</b> <b>Metric:</b> PMI country surveys and reporting [% of total participating jurisdictions]</p>

Outcomes	Outcome Indicators	Metrics/Baseline/Target Values
<p><b>Program outcome 3:</b></p> <p><b>Catalyzing the next generation carbon markets</b></p> <p>International cooperation through carbon crediting mechanisms, within and beyond the UN Paris Agreement regime, has been enabled and fostered in PMI program countries.</p>	<ul style="list-style-type: none"> <li>• <b>OC 3.1:</b> Number of countries supported with readiness and participation activities in international carbon markets under the Paris Agreement and beyond.</li> <li>• <b>OC 3.2:</b> Number of GHG mitigation activities supported for Art. 6 or other international carbon markets.</li> <li>• <b>OC 3.3:</b> Number of regional initiatives established with PMI support aimed at deepening regional carbon market collaboration.</li> </ul>	<p><b>OC 3.1</b> <b>Metric:</b> Design documentation, regulations [# jurisdictions]</p> <p><b>OC 3.2</b> <b>Metric:</b> Mitigation activities for Art.6 with direct PMI support [# activities]</p> <p><b>OC 3.3</b> <b>Metric:</b> Programmatic collaboration among countries incl. an objective and work program supported by the PMI (agreement, policy, etc.) [# collaborations]</p>
<p><b>Program outcome 4:</b></p> <p><b>Advocacy for carbon pricing and markets</b></p> <p>Policy discussions at the global, regional, and national level to realize the full potential of carbon pricing and/or markets and climate finance to support deep decarbonization have been informed and influenced by PMI.</p>	<ul style="list-style-type: none"> <li>• <b>OC 4.1:</b> PMI has established processes and capacities to convene global and regional champions and mobilize collective action on carbon pricing and/or markets.</li> <li>• <b>OC 4.2:</b> PMI country programs that have established and facilitate an effective national network of change agents to advance the carbon pricing and/or markets policy objectives.</li> <li>• <b>OC 4.3:</b> [#JustTransition] Climate policymakers and practitioners acknowledge the PMI partnership as thought leader on incorporating Just Transition into carbon pricing and/or markets.</li> </ul>	<p><b>OC 4.1</b> <b>Metric:</b> Survey [% response: PMI as driver]</p> <p><b>OC 4.2</b> <b>Metric:</b> Share of PMI country work programs with national multi-stakeholder network established [% jurisdictions]</p> <p><b>OC 4.3</b> <b>Metric:</b> Survey [% affirmation]</p>

Outcomes	Outcome Indicators	Baseline & Target values
<p><b>Output indicators</b> to monitor progress regarding outcome OC1:</p> <ul style="list-style-type: none"> <li>Capacity to design, implement and operate carbon pricing and climate finance instruments has been installed and strengthened across key stakeholder groups in PMI participant countries.</li> </ul>	<ul style="list-style-type: none"> <li><b>OP 1.1:</b> Number of carbon pricing policies and/or governance arrangements adopted in PMI implementing countries.</li> <li><b>OP 1.2:</b> Number of PMI implementing countries that put carbon asset registries in place with PMI support.</li> <li><b>OP 1.3:</b> Number of in-country inter-institutional coordination mechanisms on carbon pricing in place.</li> <li><b>OP 1.4:</b> Number of national or multi-country stakeholder capacity building programs delivered with PMI program assistance o #Gender: Strive for gender balance.</li> <li><b>OP 1.5:</b> [#JustTransition] Number of PMI implementing countries that have carried out impact assessments and account for them in their carbon pricing policy design.</li> </ul>	<p><b>OP 1.1</b> <b>Metric:</b> One per country to fulfill; needs to be adopted to count [#]</p> <p><b>OP 1.2</b> <b>Metric:</b> PMI country reporting [#]</p> <p><b>OP 1.3</b> <b>Metric:</b> PMI country reporting [#]</p> <p><b>OP 1.4</b> <b>Metric:</b> PMI country reporting and annual report [#]</p> <p><b>OP 1.5</b> <b>Metric:</b> Impact assessments and derived considerations for policy design described in PMI country reporting [#]</p>

Outcomes	Outcome Indicators	Baseline & Target values
<p><b>Output indicators</b> to monitor progress regarding outcome OC2:</p> <ul style="list-style-type: none"> <li>Knowledge generated and delivered by the PMI program has informed carbon pricing policy-making processes and has been applied in the design, implementation, and operation of carbon pricing and climate finance instruments.</li> </ul>	<ul style="list-style-type: none"> <li><b>OP 2.1:</b> Number of global knowledge products, guidebooks, technical notes, and/or bite-sized knowledge products published by the PMI. <ul style="list-style-type: none"> <li>#JustTransition, #Gender: Subset of KPs that focus on JT considerations and/or gender impact discussions.</li> <li>#CwA-GBF: Subset of KPs that focus on SME climate financing in Africa.</li> </ul> </li> <li><b>OP 2.2:</b> Number of international knowledge events including PMI Knowledge Forum, technical workshops, technical trainings, webinars and e-courses/e-learning held. <ul style="list-style-type: none"> <li>#JustTransition, #Gender: Number that feature or concentrate on JT considerations and/or gender impact discussions.</li> <li>#CwA-GBF: Number of events that focus on SME climate financing in Africa.</li> </ul> </li> <li><b>OP 2.3:</b> Number of Country-specific communication strategies and/or stakeholder engagement plans developed and delivered.</li> <li><b>OP 2.4:</b> Number of information sharing vehicles (website, newsletters, annual reports, etc.) established, and regularly updated.</li> </ul>	<p><b>OP 2.1</b> <b>Metric:</b> Number, separated by type; number of downloads [#s]</p> <p><b>OP 2.2</b> <b>Metric:</b> Number, separated by type and online/in-person; number participants [#s]</p> <p><b>OP 2.3</b> <b>Metric:</b> PMI country reporting [#]</p> <p><b>OP 2.4</b> <b>Metric:</b> established yes/no; number of clicks; number of mailing list; number countries accessed [#s]</p>

Outcomes	Outcome Indicators	Baseline & Target values
<p><b>Output indicators</b> to monitor progress regarding outcome OC3:</p> <ul style="list-style-type: none"> <li>• “International cooperation through carbon crediting mechanisms, within and beyond the UN Paris Agreement regime, has been enabled and fostered by the PMI program.”</li> </ul>	<ul style="list-style-type: none"> <li>• <b>OP 3.1:</b> Number of country policy frameworks for participation in international carbon markets developed and implemented with PMI support.</li> <li>• <b>OP 3.2:</b> Number of enhanced national infrastructure systems (e.g. carbon asset registries) enabling participation in international carbon markets with integrity and transparency.</li> <li>• <b>OP 3.3:</b> Number of regional strategies or action plans developed promoting regional carbon market collaboration.</li> </ul>	<p><b>OP 3.1</b> <b>Metric:</b> PMI reporting and ad-hoc program results [#]</p> <p><b>OP 3.2</b> <b>Metric:</b> PMI reporting and ad-hoc program results [#]</p> <p><b>OP 3.3</b> <b>Metric:</b> Strategies and roadmap documents [# regions]</p>
<p><b>Output indicators</b> to monitor progress regarding outcome OC4:</p> <ul style="list-style-type: none"> <li>• Technical exchanges, lessons learned, and best practices shared between program participants (extended community, including observer organizations), UNFCCC Secretariat, Compact with Africa, other jurisdictions, other relevant institutions/ organizations.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>OP 4.1:</b> Number of global/ regional leadership and stakeholder discussions and dialogues convened or supported by PMI. <ul style="list-style-type: none"> <li>○ #JustTransition, #Gender: Subset of events that focus on JT considerations and/or gender impact discussions</li> </ul> </li> <li>• <b>OP 4.2:</b> Number and frequency of international, high-visibility events in which PMI member countries advocated for carbon pricing (e.g. UN Climate Week, I4C, COP, etc.).</li> <li>• <b>OP 4.3:</b> Number of country-specific policy dialogues and technical discussions supported by PMI at the national or subnational level.</li> <li>• <b>OP 4.4:</b> Number of PMI in-country programs that have developed and implemented communications strategy and stakeholder engagement plan to support its carbon pricing policy-making roadmap.</li> <li>○ #JustTransition considerations included in strategy and engagement plan.</li> </ul>	<p><b>OP 4.1</b> Metric: Events and activities [#]</p> <p><b>OP 4.2</b> Metric: Events with active PMI member engagement on carbon pricing [#]</p> <p><b>OP 4.3</b> Metric: PMI country reporting [#]</p> <p><b>OP 4.4</b> Metric: PMI country reporting [# jurisdictions]</p>

Outcomes	Outcome Indicators	Baseline & Target values
<p>Output indicators to monitor progress regarding:</p> <ul style="list-style-type: none"> <li>• PMI Program Management Unit, grant assistance delivery system, and country project implementation units provide efficient operation support.</li> <li>• Funding is mobilized to implement carbon pricing instruments (as may be prioritized, for relevant technical, institutional, regulatory building blocks).</li> </ul>	<ul style="list-style-type: none"> <li>• <b>OP 5.1:</b> PMI Program Management Unit and grant delivery system is in place and functioning.</li> <li>• <b>OP 5.2:</b> Share of country level project implementation units that complete the execution of the agreed country work program.</li> <li>• <b>OP 5.3:</b> Share of the capitalization of the PMI funding committed.</li> <li>• <b>OP 5.4:</b> #Gender: Gender parity speakers in PMI events.</li> </ul>	<p><b>OP 5.1</b> Metric: [yes/no]</p> <p><b>OP 5.2</b> Metric: PMI country reporting [% countries]</p> <p><b>OP 5.3</b> Metric: Budget monitoring [%]</p> <p><b>OP 5.4</b> Metric: Share of non-male speakers [%]</p>

# Annex 3: PMI Country Engagements





## Window 1: Implementation Support



### Chile

PMI Program Objectives	Carbon Pricing Policy: Context & Developments
<ul style="list-style-type: none"><li>▪ Support the roll-out of the domestic offsetting mechanism by advising on detailed regulation, methodology development, infrastructure architecture and capacity building.</li><li>▪ Improvement of the carbon pricing instrument mix in the country by providing analytics on the interaction of the carbon tax and potential cap-and-trade mechanisms established by the Framework Law for Climate Change.</li><li>▪ Support development of a cap-and-trade pilot in the energy sector.</li><li>▪ Development of a country strategy and governance for Art. 6.</li><li>▪ Explore international cooperation and linked carbon markets, especially in the Latin American region.</li></ul>	<ul style="list-style-type: none"><li>▪ Carbon tax implemented in 2017.</li><li>▪ Carbon Offsetting mechanism to the carbon tax with first transactions in March 2024.</li><li>▪ Framework Law for Climate Change provides for the implementation of cap-and-trade systems for sectoral NDC and LTS compliance. No instrument yet designed.</li><li>▪ Art. 6 working group established to define country strategy; currently Art. 6 draft regulation in public consultation.</li><li>▪ Explorations of increasing the carbon tax value to \$10 per ton CO<sub>2</sub>eq.</li></ul>
PMI Country Program Highlights FY24	
<ul style="list-style-type: none"><li>▪ Signature of grant agreement with the Ministry of Energy and the Chilean International Cooperation Agency for Development (AGCID, Implementing Agency) on November 27, 2023.</li><li>▪ PMI collaboration agreements signed between AGCID, Ministry of Energy and Ministry of Environment.</li><li>▪ Project Implementation Unit is set up and operational.</li><li>▪ Technical Terms of Reference (TOR) under development.</li><li>▪ Official PMI launch event in October 2024.</li></ul>	



## China

### PMI Program Objectives

- Improvement of carbon pricing policies (role of CP in achieving carbon neutrality, interaction and synergies with other sectoral policies).
- Improvement of the national ETS (governance, cap setting, auctioning, sector expansion, MRV and trading infrastructure, derivative trading products).
- Accelerating legislative process for emission trading, studies on carbon tax, domestic voluntary carbon markets (CCER), and CBAM.
- Strengthened institutional capacity, advocacy and communication strategy (including for Just Transition) in support of expansion of the national ETS.

### Carbon Pricing Policy: Context & Developments

- National ETS (since 2021).
- 8 pilot ETSs (since 2013).
- Domestic voluntary crediting mechanism relaunched in 2024.
- [China Country Climate and Development Report](#) completed which provides analysis and recommendations on integrating the country's efforts to achieve high-quality development with the pursuit of emission reduction and climate resilience.
- National ETS is expected to expand to steel, cement, and electrolytic aluminum.

### PMI Country Program Highlights FY24

- PMI Implementation Support Plan approved.
- Grant agreement is underway in the process of Bank's operations approval, expected to be signed in July 2024.
- China convened the first national forum on carbon markets in September 2023.
- China's delegation comprised of government officials and businesses regulated under the national ETS participated in the PMI ETS training workshop in Thailand in October 2023.
- Initial dialogues to explore collaboration on carbon taxes and CBAM analytical research.



## Colombia

### PMI Program Objectives

- Support finalization of the detailed regulation for the national ETS (Programa Nacional de Cupos Transables de Emisiones PNCTE).
- Roll-out of the National Emissions Reporting System (ROE), including system adequacy and capacity building.
- Development of ETS registry and trading platform.
- Support the ETS pilot phase and associated capacity building needs in public and private sector.
- Evaluation of ETS pilot phase and finalizing.

### Carbon Pricing Policy: Context & Developments

- Carbon tax implemented since 2017; currently at about \$6 per ton CO<sub>2</sub>eq.
- Domestic offsetting mechanism allowing compensation of up to 50% of carbon tax payment.
- ETS approved by law, detailed regulation under development.
- ETS pilot planned to start late 2025; full operation mandated by 2030 but planned for 2027.

### PMI Country Program Highlights FY24

- Signature of grant agreement with the Ministry of Environment and Sustainable Development (MADS) and Fondo Accion (Implementing Agency) on December 28, 2023.
- Project Implementation Unit is set up and operational. Lead PMI focal points at MADS and the National Planning Agency (DNP) contracted.
- Technical Terms of Reference under development.



## Indonesia

### PMI Program Objectives

Enhance institutional capacity to implement and administer carbon pricing policy instruments and to enable access to international carbon markets with the following technical components:

- Policy analysis and implementation roadmaps.
- Institutional strengthening and capacity development.
- ETS instrument design and MRV infrastructure.
- Coordination, communication, and consultation.
- Establishment of Carbon House as a one-stop consultation facility for carbon pricing and climate change, and establishment of Indonesia Carbon Exchange.

### Carbon Pricing Policy: Context & Developments

- 2021 Presidential Regulation on Economic Valuation of Carbon established a legal framework for developing and implementing carbon pricing policies in Indonesia.
- 2022 Environment and Forestry Ministerial Regulation governs implementation of carbon pricing instruments, including rules and modalities for domestic carbon crediting, and general provisions for allowance-based trading.
- 2022 Energy and Mineral Resources Ministerial Regulation launched a 3-phased emissions trading program in the power generation sector.
- 2023 Environment and Forestry Ministerial Regulation governs implementation procedure of carbon pricing in Forestry Sector through carbon offsetting.
- 2023 Financial Services Authority regulation governs carbon trade requirements through the carbon exchange and obligation of carbon exchange operator.

### PMI Country Program Highlights FY24

- Signature of recipient-executed grant agreement with national implementing agency, the Indonesian Environment Fund (IEF).
- Establishment of PMI-Indonesia technical project unit at IEF, and support to operationalization of the Carbon Markets advisory unit (Carbon House) at MOEF.



## Kazakhstan

### PMI Program Objectives

- To contribute to Kazakhstan’s updated 2030 NDC targets and 2060 carbon neutrality goals.
- To strengthen the effectiveness of the Emission Trading Scheme (ETS).
- To support carbon pricing expansion.
- To support stakeholder engagement and Just Transition.

### Carbon Pricing Policy: Context & Developments

- National ETS (since 2013) – currently 5th National Allocation Plan (2022-2025), covering 40% of national GHG emissions.
- Current ETS design provides limited incentive to shift investments and retirements in a transition to lower-carbon generation in the energy sector.
- Kazakhstan updated NDC’s unconditional target is a reduction of GHG emissions by 15% by 2030 relative to 1990.
- Kazakhstan has a goal to achieve carbon neutrality by 2060.

### PMI Country Program Highlights FY24

- agreement was signed on April 24, 2024.
- Kazakhstan PMI project launch event is planned in June 2024.
- Kazakhstan case study was included as part of [the World Bank’s Carbon Pricing in the Power Sector](#) report.

**PMI Program Objectives**

The original scope of the proposed implementation support plan (2021) was focused on strengthening the country's ETS and supporting the transition between the pilot phase and operational phase of the ETS.

**Carbon Pricing Policy:  
Context & Developments**

- Mexico's ETS started with a 'pilot phase' (2020 - 2021), to be followed by a 'transition phase' in 2022. The 'operational phase' was originally planned to start in 2023, but has been delayed; rules for the 'operational phase' have yet to be announced.
- Mexico also has a carbon tax imposed on the sale and import of fossil fuels (with the exception of natural gas); the tax (~\$4/tCO<sub>2</sub>) is imposed on the additional CO<sub>2</sub> emissions content compared to natural gas.
- A number of Mexican States (e.g., Querétaro, Guanajuato, and Tamaulipas) are implementing carbon pricing mechanisms at the state level.

**PMI Country Program Highlights FY24**

- Engagement with the Ministry of Finance (SHCP) on their areas of responsibilities linked to carbon pricing (e.g., assessment on options to coordinate carbon pricing instruments in Mexico).
- Development of ToRs.
- Follow-up to be done with the incoming administration.

**Initial PMI Project Deliverables**

- Assessment of coordination of carbon pricing instruments in Mexico is expected in FY25.
- For FY25, expected discussion and re-definition of scope of PMI support expected.



## Türkiye

### PMI Program Objectives

- Support the design and implementation of carbon pricing.
  - ETS design and implementation including legislation support.
  - Carbon Tax assessment, modeling, and legislative support.
  - Design and implementation of Domestic Crediting Mechanism.
- Support cross-cutting activities.
  - Support on Communication Strategy.
  - Support on Article 6 Strategy through capacity building.
  - Just Transition through modeling social impacts of ETS.

### Carbon Pricing Policy: Context & Developments

- National Climate Change Strategy (2010–23), with short-, medium-, and long-term objectives on adaptation and mitigation.
- National Climate Change Action Plan (NCCAP) (2011–23), covering key areas, including energy, buildings, industry, transport, waste, agriculture, land use, forestry, and adaptation.
- NCCAP Monitoring System.
- National Climate Change Adaptation Strategy and Action Plan (2011–23).

### PMI Country Program Highlights FY24

- PMI Implementation Support Plan approved.
- Grant agreement signed.
- ETS Design Inception Event.



## Ukraine

PMI Program Objectives	Carbon Pricing Policy: Context & Developments
<ul style="list-style-type: none"> <li>▪ New Program Objectives:               <ul style="list-style-type: none"> <li>○ Development of ETS design elements.</li> <li>○ Technical support for ETS legal framework.</li> <li>○ Communication, stakeholder engagement, capacity building.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▪ NDC2 approval in 2021 committing to reduce emissions by 65% by 2030, reaching carbon neutrality in 2060.</li> <li>▪ Law on the Main Principles of the State Environmental Policy of Ukraine until 2030, adopted in 2019.</li> <li>▪ Energy Strategy until 2035 approved in 2017.</li> <li>▪ Low emission development strategy until 2050 approved in 2017.</li> </ul>
PMI Country Program Highlights FY24	
<ul style="list-style-type: none"> <li>▪ Work impacted by Russia's invasion.</li> <li>▪ Technical work and engagement continues.               <ul style="list-style-type: none"> <li>○ Consultant hired and work on the design of ETS law has started (inception report received in June)</li> </ul> </li> <li>▪ Work on requirements temporarily suspended.</li> <li>▪ Ministry is seeking accelerated agenda for ETS implementation.</li> </ul>	





## Viet Nam

### PMI Program Objectives

- To facilitate Viet Nam’s transition to a low-carbon economy through the implementation of carbon pricing instruments:
  - Designing and implementing the national crediting program and ETS.

### Carbon Pricing Policy: Context & Developments

- Viet Nam has developed and enacted various legislative and regulatory frameworks to support climate action.
- Key developments include the introduction of the Law on Environmental Protection (revised in 2020) and subsequent regulations that provide a legal basis for carbon pricing mechanisms such as the Emissions Trading System (ETS) and potential carbon taxes.
- A National Steering Committee for Implementing Viet Nam’s Commitments was established in 2021 to direct development and implementation of strategies, action programs, plans, and schemes to implement Viet Nam’s commitment.

### PMI Country Program Highlights FY24

- Roadmap for ETS implementation outlined, emissions reporting requirements for facilities established.
- Revision to the Decree 6 to provide a framework for participation in Article 6 and voluntary carbon markets under progress.

### Initial PMI Project Deliverables

- Grant agreement signature expected by the end of Q3/2024.
- Training on national registries conducted.

## Window 2: Readiness Support



### Bangladesh

#### PMI Program Objectives

Readiness support, with a focus on enabling activities for international carbon credit trading and development of market infrastructure:

- International carbon markets: development of country policy framework and institutional arrangements.
- MRV and registry: assessment of options for registry systems including the suitability of open-source tools; customization and piloting of core registry to support carbon credit trading.
- National carbon pricing policy: technical assessments around feasibility and impact of introducing an explicit carbon pricing instrument in Bangladesh, to inform policymaking.
- Cross-cutting: development and execution of capacity-building plan, communication strategy, knowledge management/ outreach activities.

#### Carbon Pricing Policy: Context & Developments

- Bangladesh has recognized the importance of market-based instruments to support the achievement of its climate commitments in key policy documents, including the Mujib Climate Prosperity Plan, the Bangladesh updated NDC (2021), and its Action Plan.

#### PMI Country Program Highlights FY24

- Bangladesh is engaged in readiness activities for international carbon trading (voluntary carbon market and Article 6) with support of the PMI & Ci-Dev programs, including establishment of the designated national authority for Article 6 and adoption of core carbon market rules, modalities, and procedures.
- Training sessions to prepare for implementation and management of a national carbon asset registry, with the Bank's Climate Warehouse Program.



## Botswana

### PMI Program Objectives

- Assess the potential impacts if a domestic carbon tax were to be introduced in terms of macroeconomic variables as well as potential distributional impacts.
- Design a domestic Renewable Energy Certificate (REC) mechanism.
- Support the development of a policy framework for participation in international carbon markets.
- Assess infrastructure needs for the use of carbon pricing instruments.
- Consultations for a coordinated approach that addresses the concerns of different stakeholders.

### Carbon Pricing Policy: Context & Developments

- Botswana's National Climate Change Policy, 2021, considered adoption and enforcement of a carbon tax.
- The original objective was to identify potential sources of additional revenues for the government while providing an incentive for green growth.
- Given the emphasis on prioritizing potential sources of revenues as well as concerns among stakeholders regarding the carbon tax, initial efforts have focused on understanding potential implications to facilitate informed discussions and the possibility of accessing carbon markets.

### PMI Country Program Highlights FY24

- Completed a preliminary Climate Policy Assessment Tool (CPAT) assessment that showed that the pace of recovery from the near-term impacts on macroeconomic variables from the introduction of a carbon tax would depend on the use of revenues.
- Held stakeholder consultations to identify immediate challenges and priorities related to increasing renewables in the generation mix in line with the National Development Plan and Vision 2036.
- Outlined an updated scope of work with reduced resource needs, recognizing current country context, to focus on 5 work packages (potential impacts of carbon tax, design of REC, carbon markets policy framework, infrastructure gap assessment, stakeholder consultations).

### Initial PMI Project Deliverables

- Constitution of Steering Committee for PMI work program.
- Updated scope of work and budget.



## Guinea

### PMI Program Objectives

- To design a carbon price signal instrument for, initially, the mining sector that is adapted to the specific characteristics of Guinea and reduces net emissions and promotes forest conservation without hindering economic growth.
- Development of the policy and regulatory framework for a CP and of the policy and regulatory framework and institutional infrastructure needed for meaningful participation in Art. 6 transactions.
- Measures to engage and build the capacity of stakeholders and to promote a just transition.

### Carbon Pricing Policy: Context & Developments

- No past experience with carbon pricing / Clean Development Mechanism (CDM).
- Guinea is a member of the West African Alliance on Carbon Markets and Climate Finance since its inception in 2017.
- Updated NDC July 2021 unconditional target: 13% / conditional 17% by 2030 compared to Business as Usual (BAU); commitment to net-zero for the mining sector by 2040.
- NDC expresses Guinea’s intention to engage in cooperative approaches under Art. 6 of the Paris Agreement to finance conditional mitigation efforts.
- National Strategy on Climate Change (2019) sets out Guinea’s vision and objectives for action on climate change.
- National intersectoral committee on Climate Change created in 2021.

### PMI Country Program Highlights FY24

- Launch of consulting assignment on ‘National climate infrastructure, monitoring, reporting, and verification and preparation for carbon pricing instruments,’ including development of a carbon price signal instrument and adaptation/implementation of WB open-source MRV.
  - Inception workshop, September 2023.
  - Multi-Stakeholder consultations and workshop, January 2024.
  - Technical validation workshop, agreement on the timeline for deployment of MRV system and confirmation of broad design elements for the CPI.
  - Draft report on infrastructure needs and gaps, May 2024.
- Launch of consulting assignment on ‘National forest and biomass monitoring system,’ June 2023.



## Malaysia

### PMI Program Objectives

- Preparatory work to support and inform policy decisions on carbon pricing:
  - Including carbon pricing impact analysis, international lessons learnt, national policy evaluation and options analysis, and regulatory requirements.
- Supporting domestic carbon crediting:
  - Including the use of existing standards to ensure effective implementation and integration into domestic compliance.
- Supporting MRV and registry infrastructure.
- Capacity building, communication, and stakeholder engagement.

### Carbon Pricing Policy: Context & Developments

- High-level political commitment for carbon pricing through its inclusion in the 12MP.
- Substantial experience with the CDM and other initiatives. Launch of Bursa Carbon Exchange in December 2022.
- A CPI is expected to interact with existing policy and regulation both at a sector and economy-wide level. In the electricity and transport sectors, existing price regulation and planning policy may reduce carbon price incentives.
- State of Sarawak has passed legislation for the introduction of carbon pricing policies to support the achievement of net zero by 2050.

### PMI Country Program Highlights FY24

- PMI Readiness Support Plan approved.
- Implementation is progressing, with modelling completed and initial reports on carbon taxes and carbon crediting prepared.
- Engaged firms to progress all workstreams, including a gap assessment for registry infrastructure requirements.



## Montenegro

### PMI Program Objectives

- Improvement of carbon pricing policies (role of CP in achieving carbon neutrality, NDC goals, synergies with other sectoral policies).
- Improvement of the national ETS (expansion to aviation and shipping sectors, alignment with EU ETS Phase 4 requirements).
- Accelerating legislative process for aligning national ETS with EU ETS, introduction of ETS 2 (for buildings, road transport, and small industry) and CBAM.
- Strengthened institutional capacity, advocacy, and communication strategy (including for Just Transition) in support of the expansion of the national ETS.

### Carbon Pricing Policy: Context & Developments

- National ETS (since 2020).
- Government declared intention to join the EU in 2028.
- National ETS is expected to expand to aviation and shipping sectors and align with EU ETS Phase 4 requirements.
- Since the EU will introduce ETS 2 in 2027, Montenegro will start preparation for ETS 2 introduction.

### PMI Country Program Highlights FY24

- CPI impact assessment on power sector generation planning.
- Assessment of potential carbon crediting scheme in forestry sector.
- Macroeconomic impact assessment of CPIs.
- Two consultation workshops on CPI impact assessments.
- In-country inter-institutional coordination mechanism.
- Proposed position of government on regional ETS in Western Balkans.
- Recommendations on CPI policy for government.



## Pakistan

### PMI Program Objectives

Readiness support, with a focus on enabling activities for international carbon credit trading and development of market infrastructure:

- International carbon markets: Development of country policy framework and institutional arrangements.
- MRV and registry: Assessment of options for registry systems including the suitability of open-source tools; customization and piloting of core registry to support carbon credit trading.
- National carbon pricing policy: Technical assessments around feasibility and impact of implementing an allowance-based emissions trading program in Pakistan, including preparation of a pilot to support stakeholder engagement.
- Cross-cutting: Development and execution of capacity-building plan, communication strategy, knowledge management/ outreach activities.

### Carbon Pricing Policy: Context & Developments

- Although carbon pricing is not explicitly mentioned in Pakistan's NDC, there are several policy documents in place that do make reference to carbon pricing and markets, notably the National Climate Change Policy.
- A National Committee on the Establishment of Carbon Markets was established but is not fully operational – it is meant to oversee the development of the carbon market landscape in Pakistan.

### PMI Country Program Highlights FY24

- Pakistan is engaged in readiness activities for international carbon trading (voluntary carbon market and Article 6), including signature of memoranda of understanding with partner countries and reputable market standards.
- Training sessions and piloting of Emissions Reduction Credits (ERC) registry prototype, with the Bank's Climate Warehouse Program.

**PMI Program Objectives**

- Support the implementation of Panama’s National Carbon Market, with a focus on the National Offsetting Mechanism.
- Institutional arrangements and initial piloting of specific components of the National MRV “National Reduce Your Footprint Program” (PNRTH).
- Implementation of the Energy Transition Agenda, focusing on energy efficiency and transport sectors.
- Design of the National Energy Efficiency Certificates Program.
- Cross-cutting capacity building, stakeholder engagement, communications, and knowledge sharing activities.

**Carbon Pricing Policy: Context & Developments**

- Between 2017-2021, the Partnership for Market Readiness (PMR) supported Panama’s efforts to develop the legal base and governance for the implementation of CPIs and identify policy instruments to transition to a low-carbon development.
- Regulatory framework:
  - October 2020 – Executive Decree 100 established the National Reduce Your Footprint Program to support carbon neutrality by 2050.
  - December 2021 – Executive Decree 142:
    - Established the legal structure for the National Carbon Market (Mercado Nacional de Carbono de Panamá).
    - Ministry of Environment to evaluate the economic, environmental, and distributive impacts of carbon pricing instruments.
- Panama is currently advancing the implementation of its NDC commitments through the National Climate Action Plan.
- The Ministry of Environment (MiAmbiente) and the National Energy Secretariat (SNE) will jointly implement Panama’s technical program under PMI.

**PMI Country Program Highlights FY24**

- PMI Project approved in February 2024.
- RETF countersigned on May 22, 2024.
- Effectiveness expected by October 2024.





## Senegal

### PMI Program Objectives

- Support to design and analysis of the impact of potential carbon tax and development of a roadmap for implementation.
- Regulatory and institutional infrastructure for Article 6, including operationalization of the regulatory framework for full and meaningful engagement.
- Reinforcing the infrastructure for carbon pricing mechanisms. Support to the finalization of the national MRV system.
- Cross-cutting activities: Supporting consensus building and commitment through the identification of key stakeholders and capacity-building needs, applying a Just Transition lens throughout.









### Carbon Pricing Policy: Context & Developments

- The Clean Development Mechanism (CDM) led to the creation of an institutional framework and increased stakeholder capacity.
- NDC unconditional target: -7% / conditional -29% by 2030 compared to BAU.
- Engaged in Art.6 bilateral cooperation arrangements (Japan, Korea, Norway, Singapore, Switzerland).
- Multi-stakeholder National Committee on Climate Change: outline strategy on Art.6 implementation and draft carbon market decree that would set out roles and responsibilities and broad authorizing environment.


### PMI Country Program Highlights FY24

- PMI launch workshop, May 26, 2023.
- CPAT modeling of carbon tax impact; draft analysis for review and stakeholder consultations, April 2024.
- Recruitment and launch of consulting assignment for the preparation of the Art.6 Operational Manual, October 2023.
  - Draft operational manual, March 2024; review and stakeholder consultation; validation workshop, May 2024.
- Recruitment and launch of consulting assignment for MRV, November 2023; ongoing.
- Cross-cutting activities: launch of procurement process for stakeholder engagement, May 2024.

## Status of countries receiving small grant targeted support

Country	 Scope	 Status
 INDIA	<ul style="list-style-type: none"> <li>■ Design of carbon market registry infrastructure.</li> <li>■ Assessment of market stability mechanism and design options for the domestic carbon crediting scheme (CCS).</li> </ul>	<ul style="list-style-type: none"> <li>■ Proposal approved.</li> <li>■ Implementation in FY24.</li> </ul>
 MONGOLIA	<ul style="list-style-type: none"> <li>■ Assessment on carbon markets readiness and infrastructure needs.</li> <li>■ Stakeholder and initiative mapping.</li> <li>■ Roadmap for accessing international carbon markets.</li> <li>■ A deep-dive on forestry sector and nature-based solutions.</li> </ul>	<ul style="list-style-type: none"> <li>■ Proposal approved.</li> <li>■ Scoping study ToR released.</li> <li>■ Implementation in FY25.</li> </ul>
 NAMIBIA	<ul style="list-style-type: none"> <li>■ Support carbon market governance and infrastructure.</li> <li>■ Advice on maximizing revenue from environmental attributes of new technologies like green hydrogen, including carbon markets.</li> </ul>	<ul style="list-style-type: none"> <li>■ Proposal approved</li> <li>■ Implementation: FY24/25</li> </ul>
 NEPAL	<ul style="list-style-type: none"> <li>■ Development of Host Country Strategy for international carbon markets.</li> <li>■ Scoping, training and piloting of carbon credit registry system.</li> </ul>	<ul style="list-style-type: none"> <li>■ Technical proposal received and under discussion with counterparts &amp; Bank team.</li> <li>■ Implementation in FY25.</li> </ul>
 PAPUA NEW GUINEA	<ul style="list-style-type: none"> <li>■ Identify concrete policy, institutional and infrastructure gaps and areas in which PNG would require additional support for participating in international carbon markets.</li> <li>■ Facilitate country stakeholder consultations, capacity building and roadmap development.</li> </ul>	<ul style="list-style-type: none"> <li>■ Proposal approved.</li> <li>■ Implementation in FY24/25.</li> </ul>
 PHILIPPINES	<ul style="list-style-type: none"> <li>■ Targeted technical support for the assessment and design options of planned national ETS.</li> </ul>	<ul style="list-style-type: none"> <li>■ Proposal approved.</li> <li>■ Implementation in FY24.</li> </ul>

## Status of countries receiving small grant targeted support

Country	 Scope	 Status
 AZERBAIJAN	<ul style="list-style-type: none"> <li>Total carbon pricing assessment, assessing existing carbon price incentives</li> <li>CBAM impact assessment and recommendations report</li> <li>Development of Art 6 national policy framework &amp; governance arrangements</li> </ul>	<ul style="list-style-type: none"> <li>Technical proposal received and under discussion with counterparts &amp; Bank team</li> <li>Implementation in FY25</li> </ul>
 BELIZE	<ul style="list-style-type: none"> <li>Needs assessment on infrastructure and institutional arrangements for carbon markets with focus on Blue Carbon</li> </ul>	<ul style="list-style-type: none"> <li>Presentation of readiness assessment to Belize counterparts &amp; stakeholders in May 2024. Final report: summer 2024</li> </ul>
 BHUTAN	<ul style="list-style-type: none"> <li>Governance framework for registry and BCF</li> <li>Developing Bhutan's carbon markets policy framework</li> <li>Carbon Markets Strategy</li> </ul>	<ul style="list-style-type: none"> <li>Proposal approved</li> <li>Implementation: FY24/25</li> </ul>
 BOSNIA AND HERZEGOVINA	<ul style="list-style-type: none"> <li>Modeling and macroeconomic impact assessment of different cap options for national ETS</li> <li>Design options based on European Union (EU) ETS design</li> </ul>	<ul style="list-style-type: none"> <li>Final assessment reports discussed with counterparts</li> </ul>
 BRAZIL	<ul style="list-style-type: none"> <li>ETS development roadmap and design support</li> </ul>	<ul style="list-style-type: none"> <li>Proposal approved</li> <li>Implementation: FY24/25</li> <li>Completed updated ETS modeling</li> <li>Currently developing ETS implementation roadmap</li> </ul>
 ECUADOR	<ul style="list-style-type: none"> <li>Carbon footprint program and compensation mechanism</li> </ul>	<ul style="list-style-type: none"> <li>Proposal being reassessed with new government</li> </ul>
 SRI LANKA	<ul style="list-style-type: none"> <li>Development of Host Country Strategy for international carbon markets.</li> <li>Scoping, training, and piloting of carbon credit registry system.</li> </ul>	<ul style="list-style-type: none"> <li>Implementation in FY25</li> </ul>
 TANZANIA	<ul style="list-style-type: none"> <li>Implementation roadmap for an integrated MRV system for carbon markets.</li> <li>Support enabling environment for carbon markets including governance and capacity building.</li> </ul>	<ul style="list-style-type: none"> <li>Proposal approved.</li> <li>Implementation in FY24/25.</li> </ul>
 THAILAND	<ul style="list-style-type: none"> <li>Economy-wide analysis of impacts of carbon pricing.</li> <li>Assessment of feasible carbon pricing instruments options.</li> </ul>	<ul style="list-style-type: none"> <li>Technical proposal received and under discussion with counterparts &amp; Bank team.</li> <li>Implementation in FY25.</li> </ul>



**WORLD BANK GROUP**  
Climate Change