WBG’S ROLE IN DEVELOPING CLIMATE MARKETS

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Paris signals a paradigm shift to a bottom-up approach with activities driven by national reality, economic growth and political priorities.

Countries have outlined actions through their NDCs, which focus on growth based on transition to low carbon economy, job creation and opportunity.

Private capital is required to leverage limited public/concessional finance to achieve those actions.

Many of these actions directly address countries’ development challenges and have important climate impacts as co-benefits.

Use of markets will result in increased ambition of action due to lowered costs and greater resource mobilization.

We do not have to wait for the development of international carbon markets to benefit from climate markets – domestic action will drive international cooperation.

To catalyze climate markets, the WBG will provide investment support, knowledge, advisory and advocacy services.
**VISION**

**ENHANCE GLOBAL AMBITION THROUGH CLIMATE MARKETS**

**MOBILIZE CAPITAL FOR RESILIENT & LOW CARBON GROWTH BY CONNECTING CLIMATE MARKETS**

**CHALLENGES/NEEDS**

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<td>Mobilize public and private capital. Create initial market liquidity:</td>
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- Create initial demand for transfers of assets/Outcomes |
- Generate supply of Mitigation and Adaptation Outcomes |
| Develop concepts and methodologies around: |
- Asset creation and exchange |
- Market regulation and institutional frameworks |
- Financial products |
- Market solutions for adaption |
| - Build countries’ readiness and infrastructure to generate and transfer climate assets |
- Support low-carbon development policies and instruments |
- Strengthen and harmonize clients’ NDCs |
| - Understand stakeholders’ expectations |
- Foster partnerships/alliances between key/interested stakeholders |
- Build consensus and awareness on key market design elements |
CONTEXT AND OPPORTUNITY
POSITIVE MOMENTUM... BUT CHALLENGES REMAIN

The Paris Agreement came into force earlier than expected, with 142 countries having ratified it to date and 190 NDCs submitted

However...

Aim to keep warming below 1.5°C above pre-industrial levels, but submitted NDCs are projected to limit warming only to ~2.8°C above pre-industrial levels*

Financing for low-carbon infrastructure remains short of the needs —limiting to 2°C by 2100 will require ~$3.5 trillion/yr** in energy investments until 2050

As of January 2017, 570 GW of coal is in the pre-construction phase — if completed, these plants would lock-in carbon emissions for 50+ years

* Climate Action Tracker

** International Energy Agency
PARIS — OPPORTUNITY FOR CLIMATE MARKETS

Increasingly ambitious goals for mitigation action under NDCs converge with national development priorities

Additional financing is needed for NDC implementation

Markets are an effective means to deploy and mobilize finance and help countries increase their ambition
MARKETS — KEY TO ADDRESS CLIMATE CHALLENGES

COST SAVINGS: market efficiencies reduce costs of low carbon growth

- International cooperation through carbon markets can reduce the global cost of implementing NDCs by USD115b by 2030 and USD1.9 trillion by 2050 (WBG “State and Trends of Carbon Pricing 2016; TIAM-Gratham)

RESOURCE MOBILIZATION: crowd-in public and private capital

- $1 invested on emission reductions under the Clean Development Mechanism (CDM) benefited $4.60 in underlying low carbon investment (WBG “State and Trends of the Carbon Market 2010” report)

POLITICAL ALIGNMENT: 100 countries, 58% of global GHG emissions, included proposals for markets and carbon pricing initiatives in NDCs
WHAT DO WE MEAN BY “CLIMATE MARKETS”?

- Systems of exchange for climate assets
- Assets to cover mitigation and/or adaptation
  - Mitigation outcomes (MOs) – could include both direct (e.g. tCO2e) and indirect metrics (e.g. renewable energy installed capacity in GW)
  - Adaptation outcomes – climate markets should aim eventually to quantify these outcomes to increase delivery efficiency
- Connecting domestic and/or international markets

Many individual components of markets provide stand-alone benefits (e.g., MRV systems, policy support, etc.), making the pursuit of climate markets a ‘no regrets’ approach
WHAT DO WE MEAN BY “CLIMATE MARKETS”? 

Supply

Assets
Mitigation/Adaptation Outcomes
Aligned methodologies (e.g., IFI GHG methodologies)

Demand

Increasing NDCs’ Ambition
Policy & Regulation
Enforcement of national goals within industries/sectors
Finance
Buyers
Bonds & guarantees
Trust funds

Infrastructure
NDC accounting
Trading & Settlement
Platforms, registries, regulatory framework for transfers

... and, what is needed ...
WHERE DO MARKETS FIT UNDER PARIS?

Under Paris, Article 6 is the opening for developing markets – however, agreement on guidance and rules is still under negotiation by Parties.

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<th>Art 6.2</th>
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<td>Using <em>cooperative approaches</em> to enhance mitigation ambition under NDCs</td>
<td>Under the authority and <em>supervision of the COP</em></td>
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| Governance | Introduces “mitigation outcomes” (MOs) which can be produced from any mechanism/procedure/protocol | “a mechanism to contribute to the mitigation of GHG and support sustainable development” |

Parties can use carbon pricing instruments domestically today (and many are: Chile, China, India, Mexico, and South Africa among others). Domestic markets instruments should be the basis to create demand for a market that will grow over time to include international linkages – bottom-up markets appear to be the most promising approach under the Paris Agreement paradigm.
WHERE DO MARKETS FIT UNDER PARIS?

- Climate market transactions don’t necessarily need to fall under Article 6 (no matter the progress or outcomes of negotiations…)
- Markets will be based on mitigation actions, hence it will be important that any transfer of Outcomes be accounted for in countries’ NDCs
ROLE OF THE WORLD BANK GROUP
PARTNER IN DEVELOPMENT

- The WBG is a demand-driven institution
  - 100 countries (over 70 developing countries) accounting for 58 percent of global GHG emissions included proposals for markets and carbon pricing initiatives in their NDCs

- The WBG is a thought leader on climate markets
  - The WBG has pioneered climate assets and related financial instruments
  - The WBG crowds-in private sector finance through capital markets
WBG CREDENTIALS ON CREATING MARKETS

The WBG played a key leadership role in the development of market mechanisms under the Kyoto Protocol:

**CREATION OF THE WORLD’S FIRST CARBON FUND IN 2000 – THE PROTOTYPE CARBON FUND (PCF)**
- **TOTAL CAPITALIZATION:** $2.8 BILLION / PRIVATE CAPITAL: 56%
- **INVESTMENT LEVERAGE:** 1:4 TO 1:10 (SOURCE: WB AND UNFCCC)
- **CARBON CREDITS DELIVERED:** >200 MILLION TCO2e REDUCED
- **PROPORTION OF TOTAL GLOBAL CERs:** 12% (158 PROJECTS IN 45 COUNTRIES)
- **80% OF CDM PROJECTS USED AT LEAST ONE WBG-DEVELOPED METHODOLOGY**

**IN-HOUSE EXPERTISE DEVELOPED:**
- Technical, methodology development
- Portfolio development
- Risk management
- Resource mobilization (public/private)
- Fiduciary management
- Client network
$8.3B provides 72 countries with resources to manage climate change challenges and reduce GHG emissions
- Focus on energy, climate resilience, transport and forestry sectors
- Expected to attract $58B of co-financing
- Public finance leverages private climate investments

Green building certification system for emerging markets created by IFC
- Fast and inexpensive certification
- Provides measurable standards for builders to optimize their designs, leading to more investment-worthy and marketable products

IBRD & IFC issue debt securities to raise capital specifically to support climate-related or environmental projects
- IBRD has issued $9.1 billion (as of June 2016) and IFC has issued $5.6 billion (as of Sept. 2016) in green bonds
- Standardized financial instruments help investors to understand and access well-vetted climate investments

Brings together a suite of WBG services under a single engagement aimed at creating viable markets for solar power in each client country
- Provides standardized processes and templates for tendering, legal and project documents. Offers financing, insurance, risk management, and credit enhancement