

# Climate Warehouse

Cristián Mosella | 4 July, 2019

# Overview


# Positive momentum for climate action, but challenges remain

**Bottom-up Approach**



The Paris Agreement introduced a bottom-up approach to address climate change through individual country commitments

**Below 2°C Goal**



Pledges made under NDCs only cover about 1/3<sup>rd</sup> of the emission reductions needed to be on a least-cost pathway to stay below 2°C

**High Financing Needs**



Achieving NDC goals will require massive international and national sources of climate finance

**Need for Leverage**

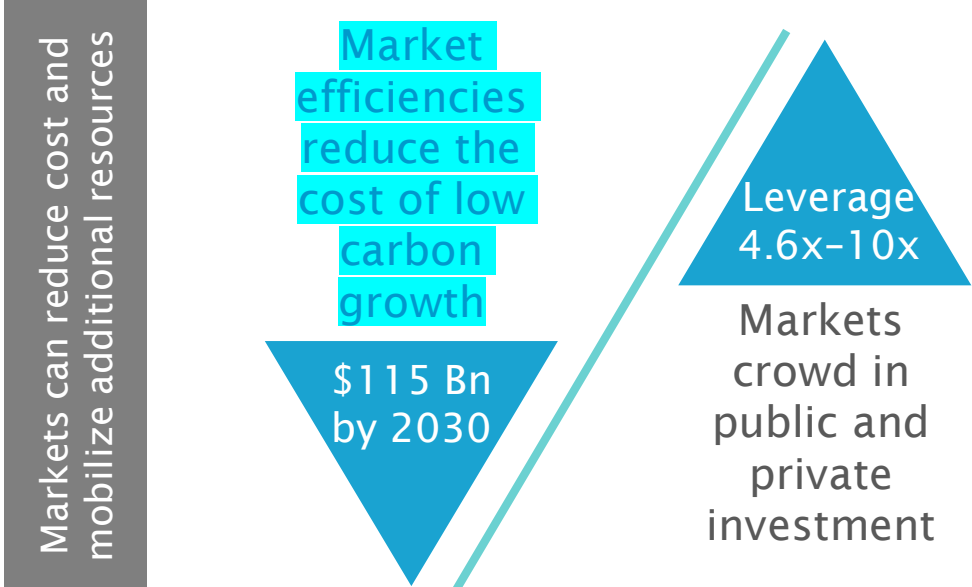


Public finance is limited and needs to be leveraged intelligently to attract private capital

# Carbon pricing and international carbon markets create an opportunity to accelerate decarbonization in Chile

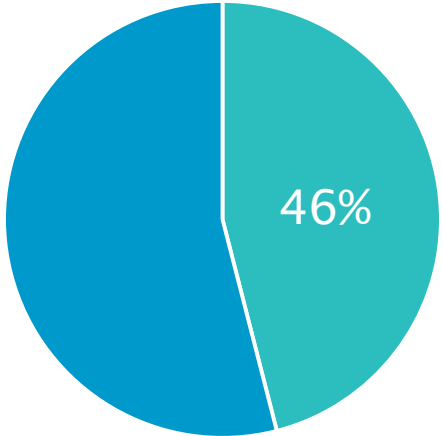
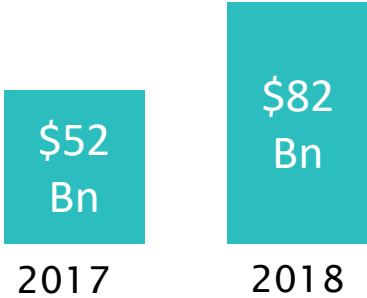
- **Carbon pricing**
  - 2018 saw continued progress on carbon pricing initiatives at the subnational, national, and regional levels
  - With increasing global ambition to tackle climate change, a diverse set of countries and sub-national jurisdictions are interested in planning and implementing carbon pricing policies such as carbon taxes and emissions trading systems
- **New generation of carbon markets**
  - Post-Kyoto Protocol era: growing application of pricing mechanisms, especially markets, in multiple contexts to address mitigation of emissions
  - The new generation of climate markets is likely to develop as a network of decentralized markets, linking at regional, national and sub-national levels
  - Article 6 of the Paris Agreement recognizes that parties may engage in cooperative approaches, including the use of internationally transferred mitigation outcomes (“ITMOs”) towards their NDCs
  - Climate markets create the opportunity incentivize coal phase out and increase renewable energy capacity through linking renewable energy certificates and markets

# Climate markets can address these challenges



- Carbon markets can reduce global NDC implementation costs by US\$115 billion by 2030 and US\$1.9 trillion by 2050.
- Markets also increase resource mobilization: \$1 invested in emission reductions under CDM led to \$4.60 to \$10 in underlying low carbon investment.

The annual value of carbon pricing initiatives at regional, national, and subnational levels rose to \$82 billion.

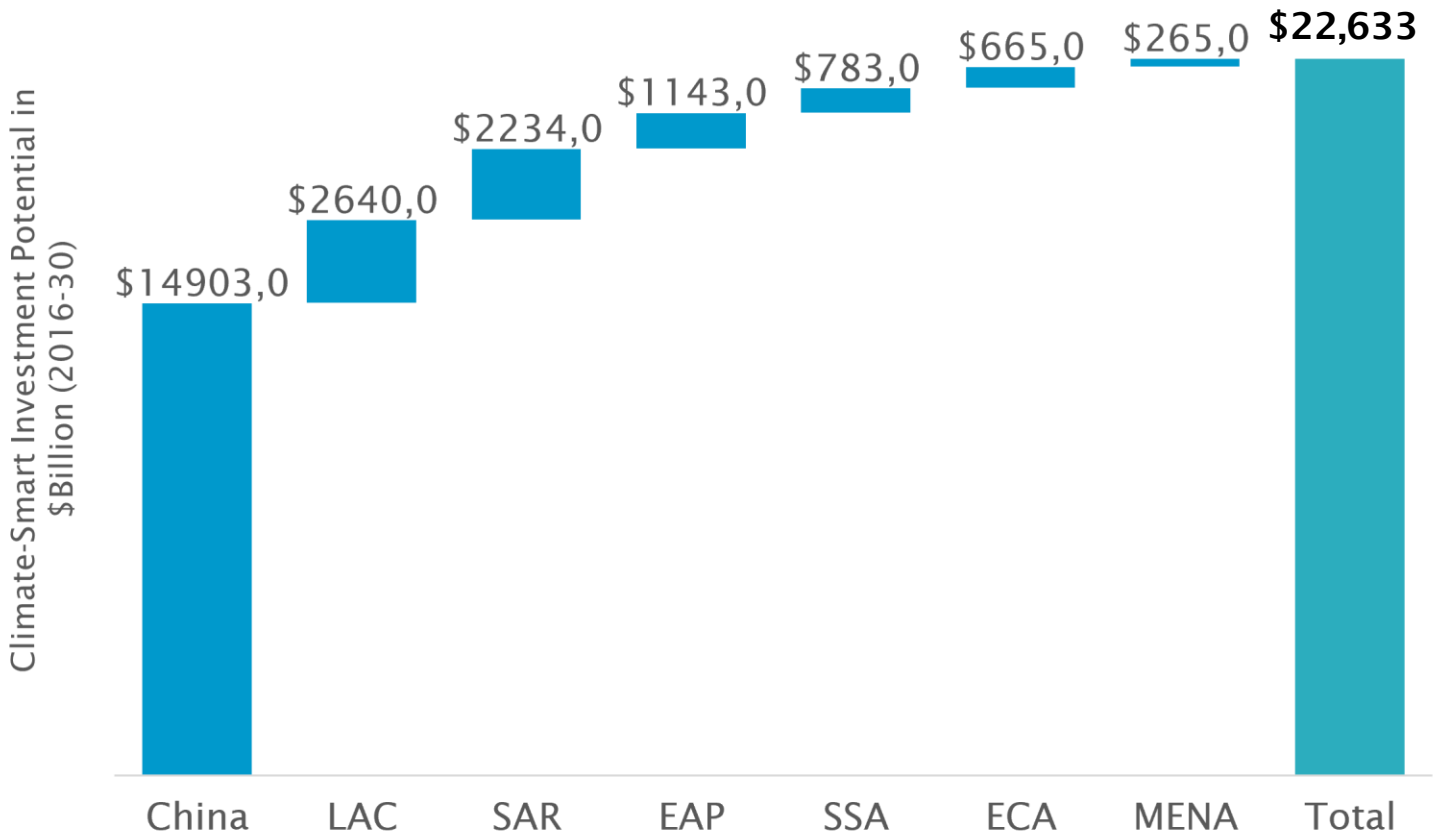


Prices range from \$1 - \$139/tCO<sub>2</sub>e  
46% of the emissions covered are priced <\$10/tCO<sub>2</sub>e

Domestic effort is already driving action

# Global climate smart investment potential is estimated at **US\$23 trillion**

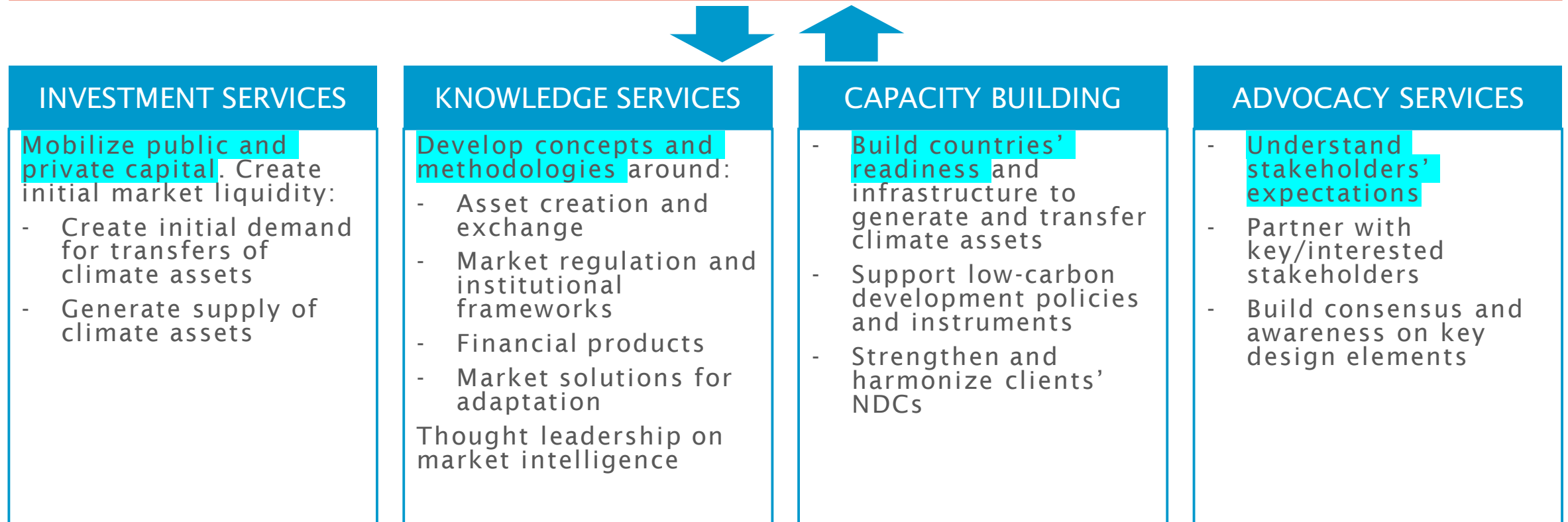
Climate change commitments in emerging markets indicate climate-smart investment potential of \$23 trillion. The Paris Agreement provides a market signal for such investment.



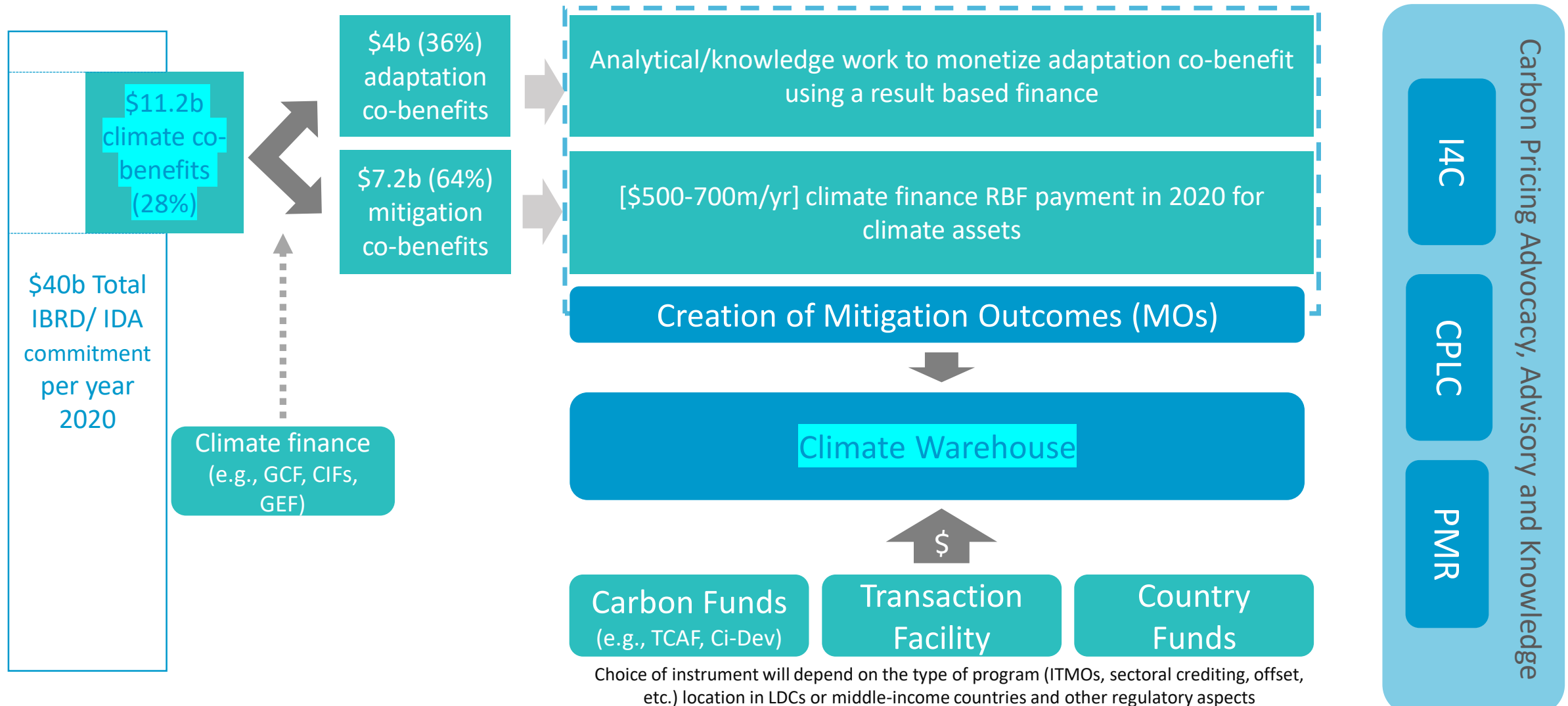
LAC: Latin America Caribbean; SAR: South Asia Region; EAP: East Asia Pacific; ; SSA: Sub-Saharan Africa; ECA: Europe and Central Asia; MENA: Middle East and North Africa

# The World Bank's vision is to enhance global ambition through climate markets

Mobilize capital for resilient & low carbon growth by connecting climate markets

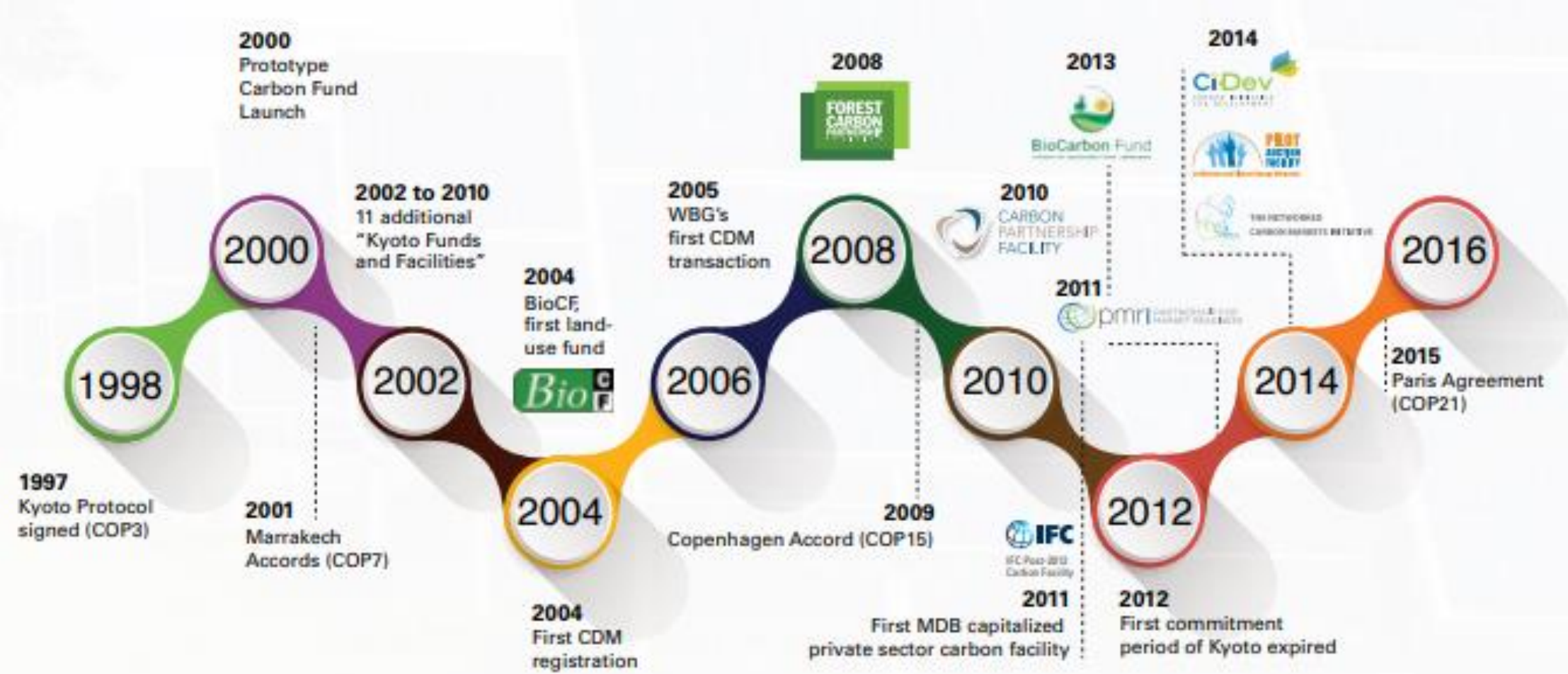


# The World Bank's vision is to enhance global ambition through climate markets





# Evolution of Carbon Market Programs at the World Bank



# Climate Warehouse

# Infrastructure for recording, transferring, and using MOs

## Database

- Show information about mitigation activities from WB/MDBs
- Not linked to registries (manual update)
- Possibility to link to other pipeline databases

## Registry

- Registers verified emission reductions and issued MOs that are developed from operations/activities
- Independent assessment protocol based on MAAP will characterize the MDBs' MOs entering the warehouse
- Allows for transfer of assets within account holders

## Meta-Registry

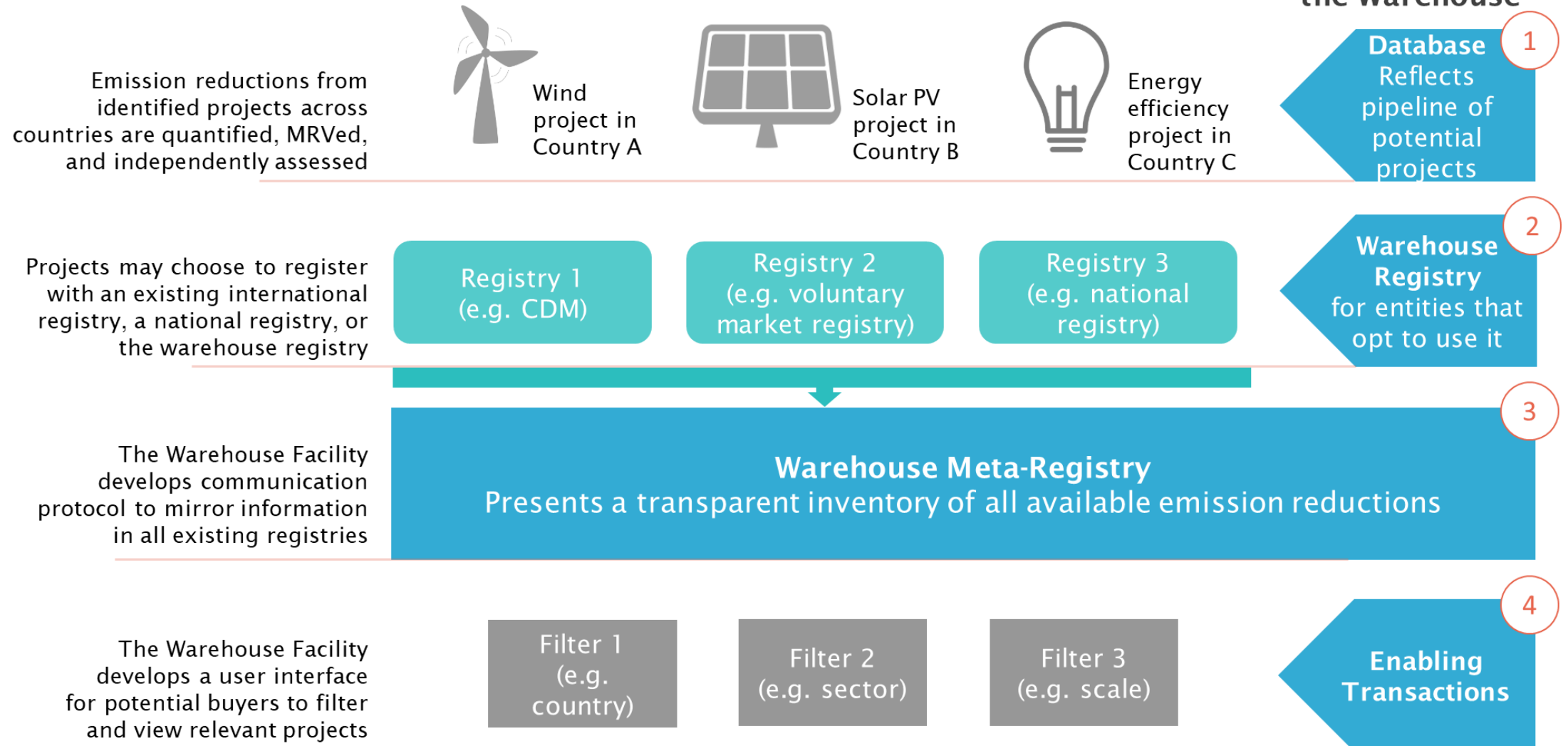
- Links sub-accounts to the global architecture for recording and tracking MOs (i.e., other registry systems) and reflects those MOs in a single, easy-to-use interface
- Links to national registries with common features (MOs generated with sufficient safeguards, environmental integrity, etc.)

## Transactions / Exchange

- Allows for transfer of MOs among market participants, using existing registries / exchanges or a new distributed ledger system (blockchain technology)
- Not only mirrors other registries, but can facilitate transactions
- Aim to address accounting, corresponding adjustment issues

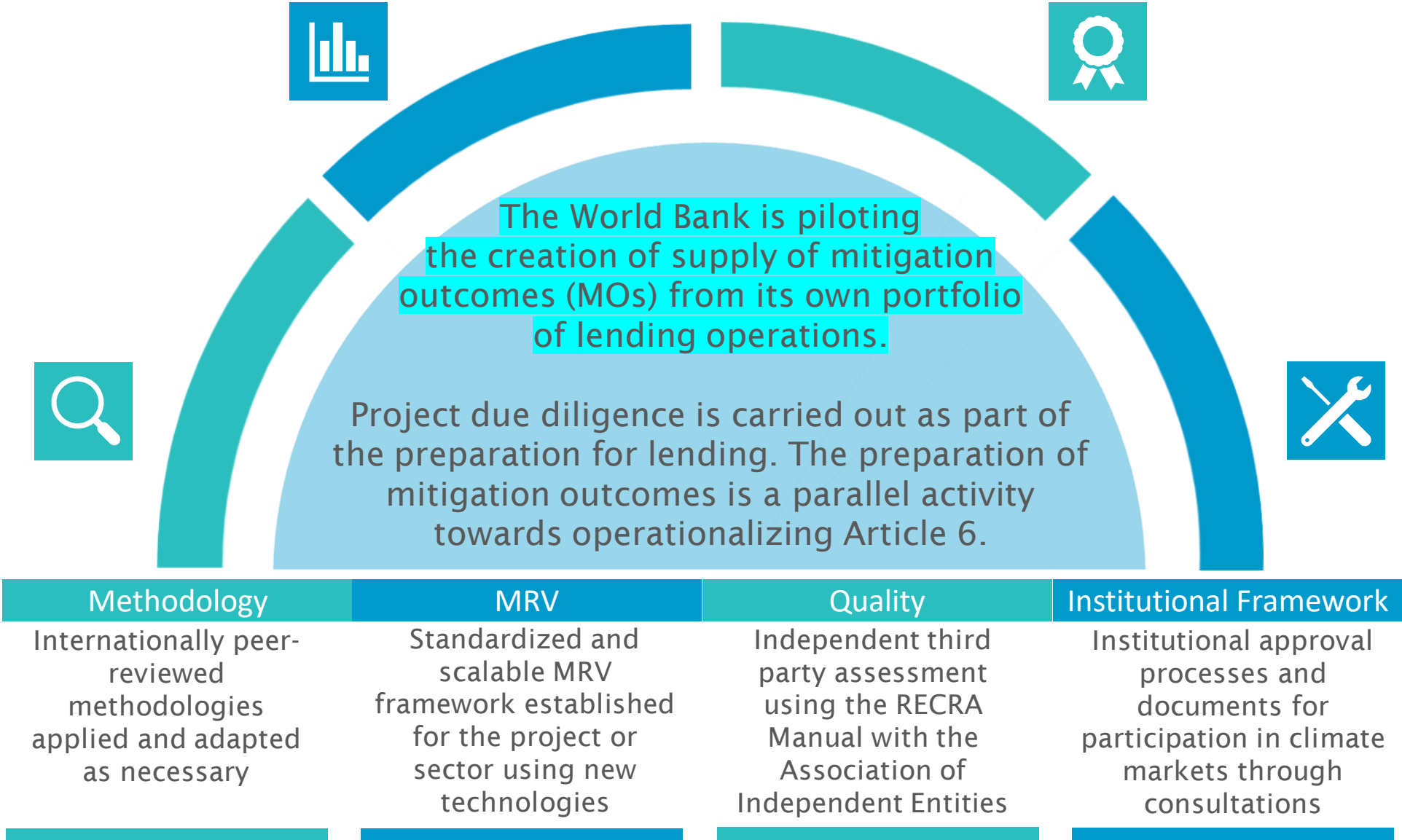
# The Climate Warehouse in context

## Functions of the Warehouse



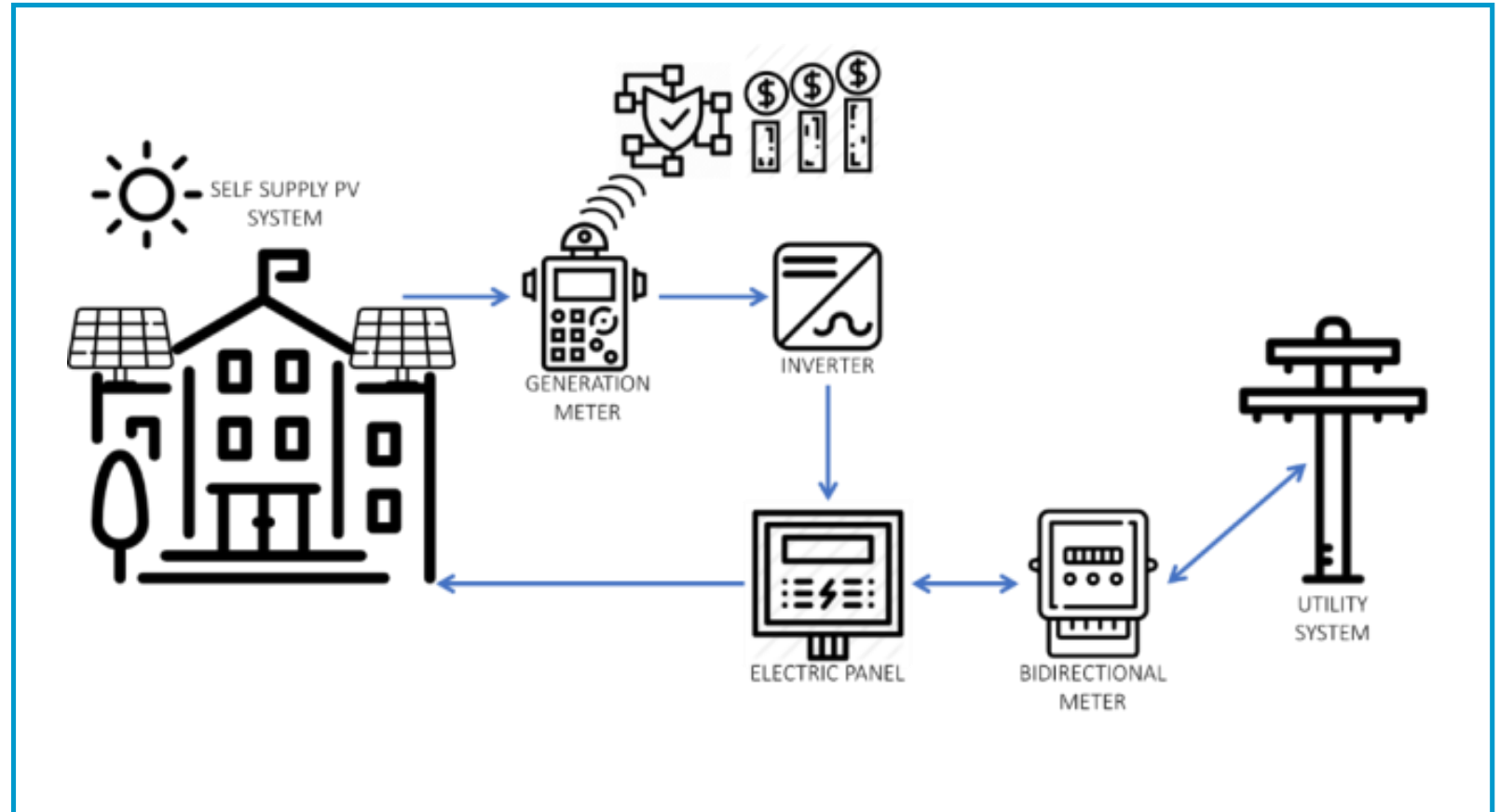
# Creating and Trading MOs

# Process for piloting MOs

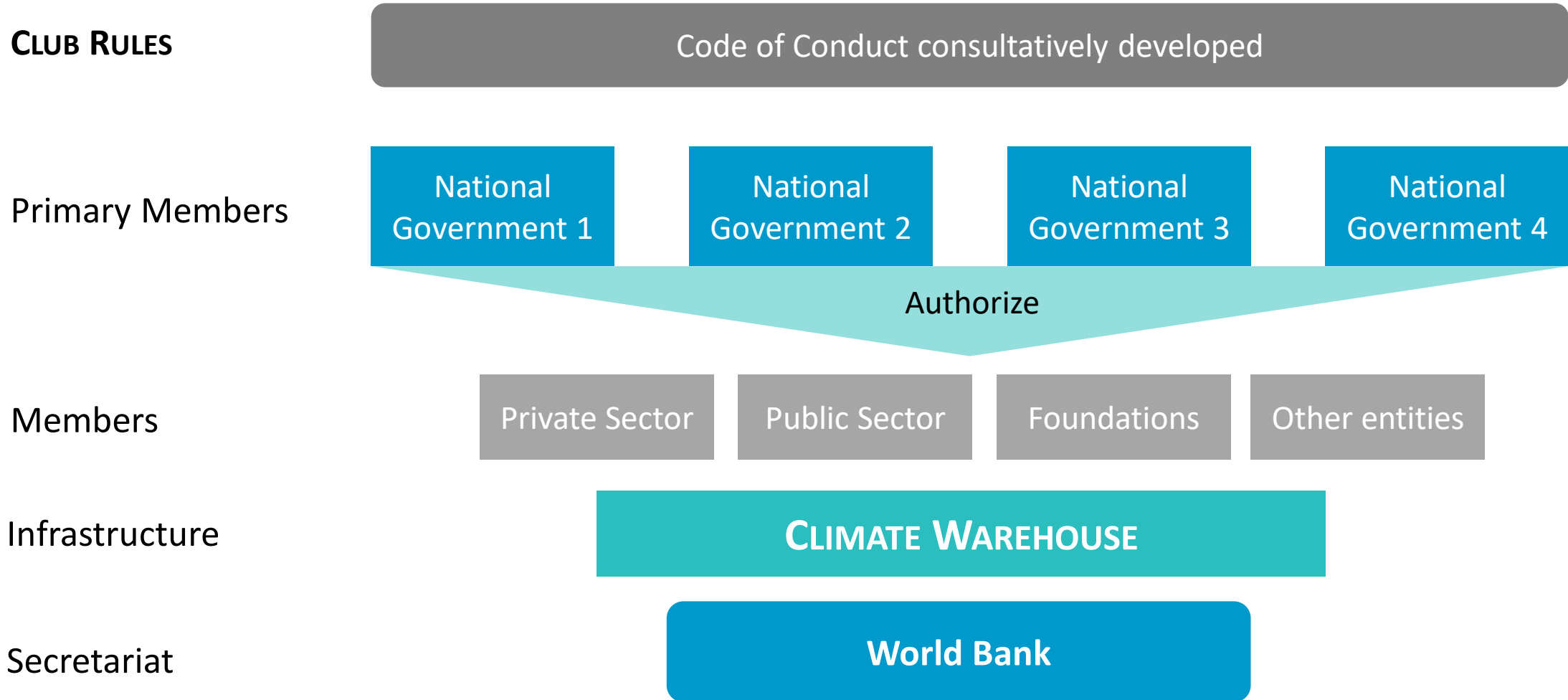


# Chile: energy sector opportunities

- Renewable energy
- Energy efficiency
- E-mobility
- Decarbonization



# Climate market partnership (club)





# Key Risks

- **Sovereign regulatory compliance risk** related to corresponding adjustment and regulatory uncertainty of eligibility of assets for domestic compliance



Corresponding  
adjustment



Eligibility of  
assets for  
domestic  
compliance

# Risks mitigation instruments

- **Governance Framework:** Climate Club to be used as a concept to organize pilot transactions.
  - A “CLIMATE CLUB” would consist of a group of national governments voluntarily agreeing to follow a certain set of rules to jointly operationalize climate markets under Article 6.2
  - A code of conduct for self-governance to be developed through a consultative process to minimize regulatory risks related to corresponding adjustment, avoidance of double counting, and quality of MOs
  - The CLIMATE CLUB would provide the infrastructure for Club members to conduct transactions in line with the code of conduct
- **Other mechanisms:** Design financial instruments and products to mitigate risks to catalyze private sector action
  - Mitigation Outcome option contract template developed for managing price risk and uncertainties related to eligibility of assets for domestic compliance. Could be applicable in a range of pre-compliance markets (for e.g. International Offsets for the Korean ETS, CORSIA, etc.).

# Enabling Environment

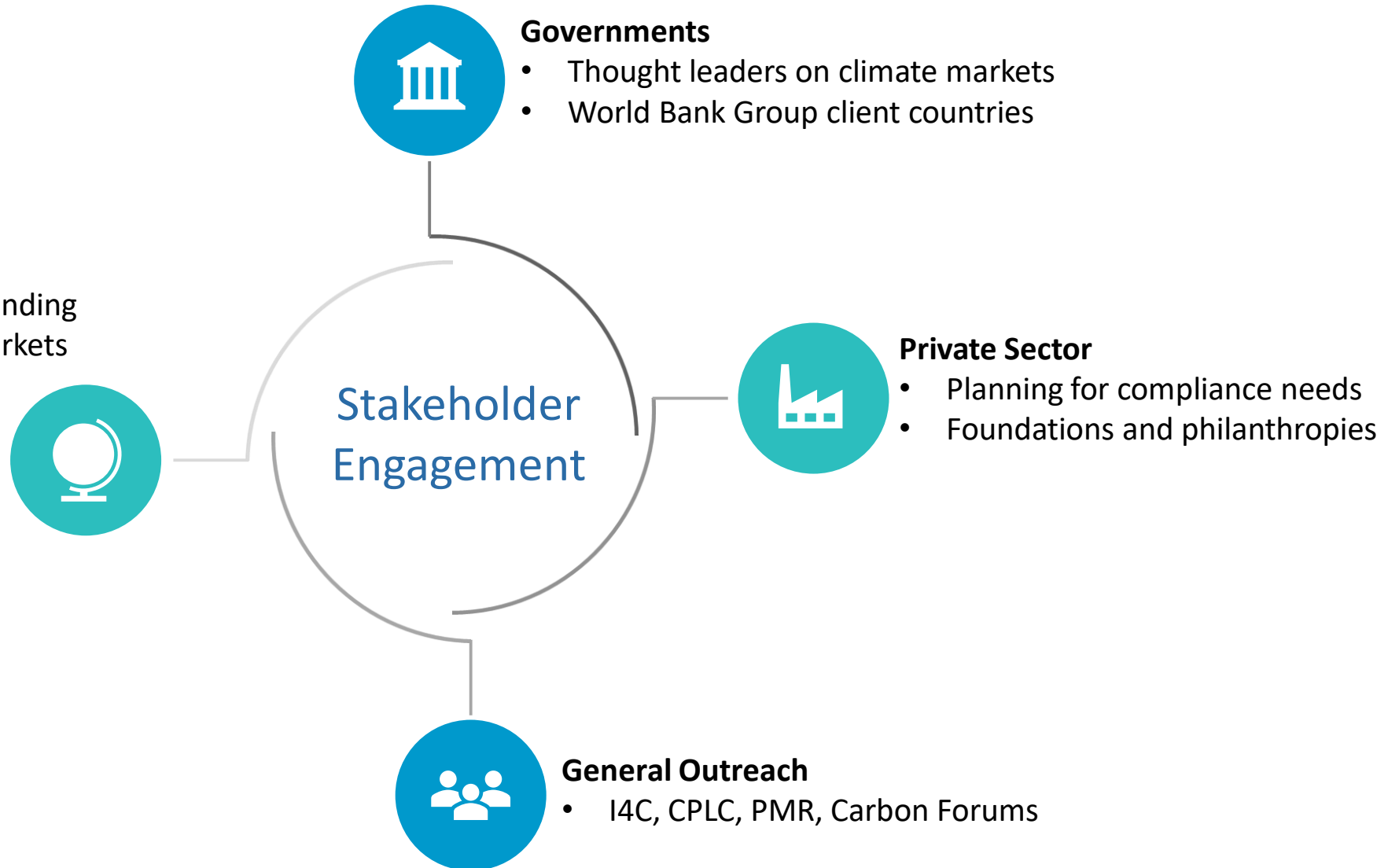
# Tools and knowledge products

- **MAAP 2.0 – International Transfer Readiness assessment module**
  - Framework for **assessment of countries' readiness under Article 6** (alignment with NDCs, transparency, environmental integrity, and avoidance of double-counting)
  - Piloted for 10 countries: Uganda, Ghana, Nigeria, Kenya, Turkey, Switzerland, Chile, Bangladesh, Spain, Mexico. Tool updated based on pilots; to be applied to Netherlands, India, Bhutan.
- **Independent Assessment Manual and Code of Conduct developed**
  - **Improve the quality and consistency of independent assessments** with Designated Operational Entities and Independent Entities Association (DIA)
  - Piloting initiated; to be launched at I4C for stakeholder consultation
- **NDC Completeness Analysis**
  - Developed **framework for assessing completeness of country NDCs** based on Annex I of Article 4
  - Collaborating with Climate Transparency to include the analysis for piloting through the Brown to Green 2019's Country Profiles.
- **Options paper:** Continued support for development of options for modalities and procedures for Article 6; effort to identify key issues through deep-dives to be resolved at CoP25

# Stakeholder engagement

## MDBs

- Areas of common understanding
- Joint piloting of climate markets



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