SESSION 3:

Climate Change Adaptation and Mitigation



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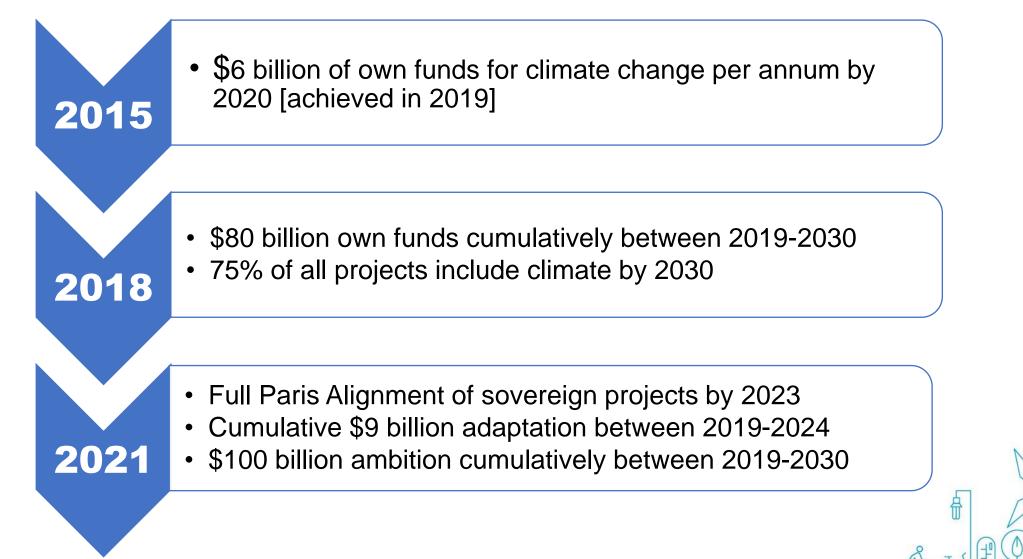




Climate Change Mitigation and Adaptation

Nathan Rive, Senior Climate Change Specialist, ADB

ASIA'S CLIMATE BANK: PROGRESSIVE AMBITION TO SUPPORT CLIMATE ADAPTATION AND MITIGATION



CLIMATE CHANGE ADAPTATION

"TYPE 1" PROJECT: ENSURING RESILIENCE OF PROJECT ASSETS

- Climate-proofing a development project
- Examples:
 - Increase size of culverts and drainage
 - Heat-resistant materials
 - Increase freeboard
- Range of climate finance: 3-20%

"TYPE 2" PROJECT: SUPPORTING RESILIENCE OF WIDER SECTOR AND COMMUNITIES

- Predicated largely on addressing climate needs
- Up to 100% of climate finance
- Examples:
 - Early warning systems, disaster risk financing
 - Advanced crop methods and technologies
 - Addressing new risks: health, education, urban heat islands, gender impacts



KEY PRINCIPLES FOR "TYPE 2" ADAPTATION PROJECTS

- 1. Informed by national adaptation priorities and Nationally Determined Contribution
- 2. Robust climate risk assessment to inform scoping and design
- 3. Transformational adaptation outputs not just climate proofing
- 4. Adopt metrics to track outcome and impact of adaptation
- 5. Estimate climate adaptation finance based on joint MDB methodology

CLIMATE CHANGE MITIGATION

SUPPORTING NATIONALLY DETERMINED CONTRIBUTIONS

- Efficient and effective reductions of greenhouse gas emissions (GHGs)
- Newer or advanced technologies
- Establish robust monitoring and measurement of project emissions (Scope 1-3)
- Private sector engagement
- Revenue opportunities from the carbon market

EXAMPLES

- Uzbekistan Sherabad Solar Power Project (non-sovereign)
- **Pakistan** Karachi Bus Rail Transit Project
- Philippines South Commuter Railway Project
- Maldives Greater Male Waste-to-Energy Project
- Mongolia Improving Access to Health Services for Disadvantaged Groups Investment Program

ALIGNING INVESTMENTS WITH THE PARIS AGREEMENT

PARIS AGREEMENT (ARTICLE 2)

Mitigation: Holding global warming to <u>1.5 to 2°C above pre industrial levels</u>

Adaptation: Increasing the ability to <u>adapt</u> to the adverse impacts of climate change and <u>foster climate</u> <u>resilience</u> and <u>low GHG emissions development</u>

ALL PROJECTS MUST CONFIRM ALIGNMENT BEFORE APPROVAL

- ➤ Is the operation/economic activity <u>inconsistent</u> with NDC/strategy?
- > Is it inconsistent with global sector-specific pathway?
- > Does the activity prevent future opportunities?
- > Is it economically <u>unviable</u> in a future low-carbon economy?



SUPPORTING CLIMATE WITH CONCESSIONAL FINANCE

ADB FUNDS

- Expanded headroom for \$100 billion climate finance ambition to 2030 of own funds
- 30+ trust funds and sector funds to support technical assistance and grant components
 - Climate Change Fund
 - Asia Pacific Climate Finance Fund
 - Japan Fund for the Joint Crediting Mechanism
 - Water Resilience Trust Fund
- Asian Development Fund Adaptation and Disaster Risk Reduction Thematic Pool

GREEN CLIMATE FUND

- ADB has secured \$396 million in grants and \$671 in loans from GCF in 13 projects and programs
- Loan and grant available plus project preparation and readiness funds
- High transaction cost recommended to go for larger scale and regional programs
- Central and West Asia
 - Tajikistan: Water Resources Management in Pyanj River Basin Project (Additional Financing)
 - Pakistan: Karachi Bus Rapid Transit Project
 - Regional: Community Resilience Partnership Program (CRPP) including Pakistan
- Proposed E-Mobility Program including Armenia, Georgia, Kazakhstan, Kyrgyz Republic, Uzbekistan