



Climate Change

Austria, 21 October 2020

Presented by:

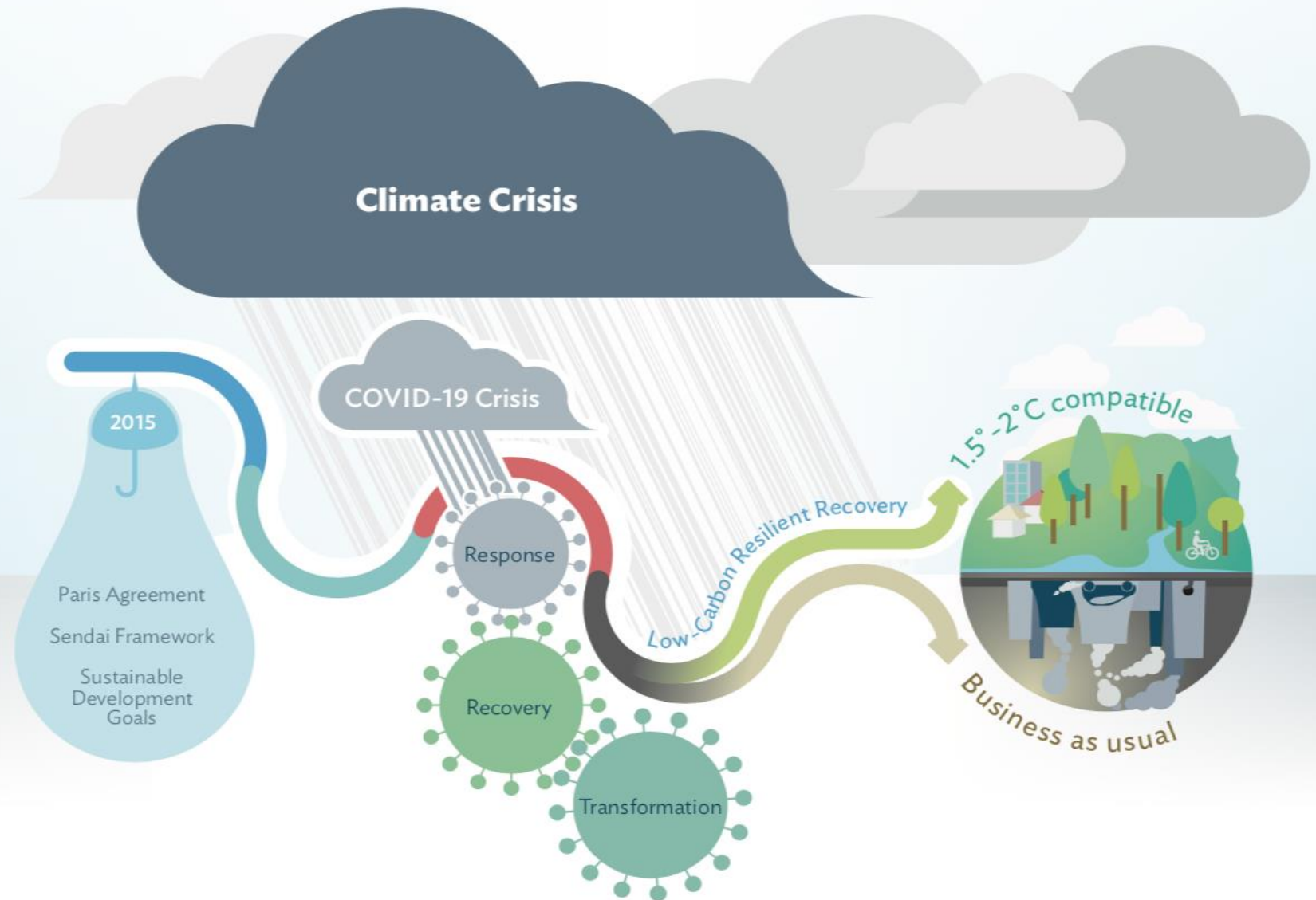
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COVID-19 RECOVERY

A Pathway to a Low-Carbon and Resilient Future



- Changes in climate will drive local and global risks – and these risks include pandemics like COVID-19.
 - We must think about the changing economics of the post COVID-19 world. Will this time be different (e.g. the 2008 financial crisis and response)?
 - We need to integrate risks and opportunities in a context where social norms are challenged, companies are challenged, and virtual dialogues (like today's) take center stage.
- The economics of a post COVID-19 world will require 1) a transformation of supply chains and 2) a massive reallocation of capital.
 - The world is at a turning point: opportunity to 1) push the climate agenda 2) do away with the jobs and infrastructure of yesterday by reducing further the dependence on fossil fuels.
 - The decisions taken in the coming months will have consequences for several generations to come, especially on vulnerable communities.
- Need to invest in energy efficient buildings, storage, transmission and distribution, climate resilient infrastructure, water management.
 - Need to de-risk these investments to make them bankable.

OUTLINE

Asia-Pacific Climate Change and Disaster Risk Management (DRM) Challenge

Priorities of ADB on Climate Change and Disaster Risk Management

Climate and DRM Finance

Innovative Projects and Initiatives

ADB

ADB

Asia-Pacific Climate Change and Disaster Risk Management Challenges



Climate Change and DRM Challenges

ASIA AND THE PACIFIC IS KEY

2017 CO₂ emissions:



43%

Asia and
the Pacific

57%

Rest of the
world



89%

People's Republic of China, India,
and Indonesia's share of Asia
and the Pacific's greenhouse
gas emissions by 2030



Developing Asia's share of world electricity demand will grow to*

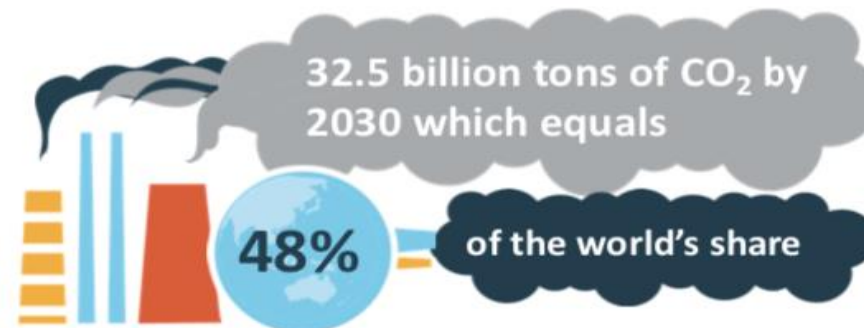


**43%
in 2030**

The PRC and India will
make up
64%
of Asia's power
consumption

*projection under New Policies scenario

Without radical changes, Asia and the Pacific will emit



Impacts from Disasters in Asia and the Pacific (1989–2018)



5.2 billion
People affected
by disasters



1 million
Disaster fatalities



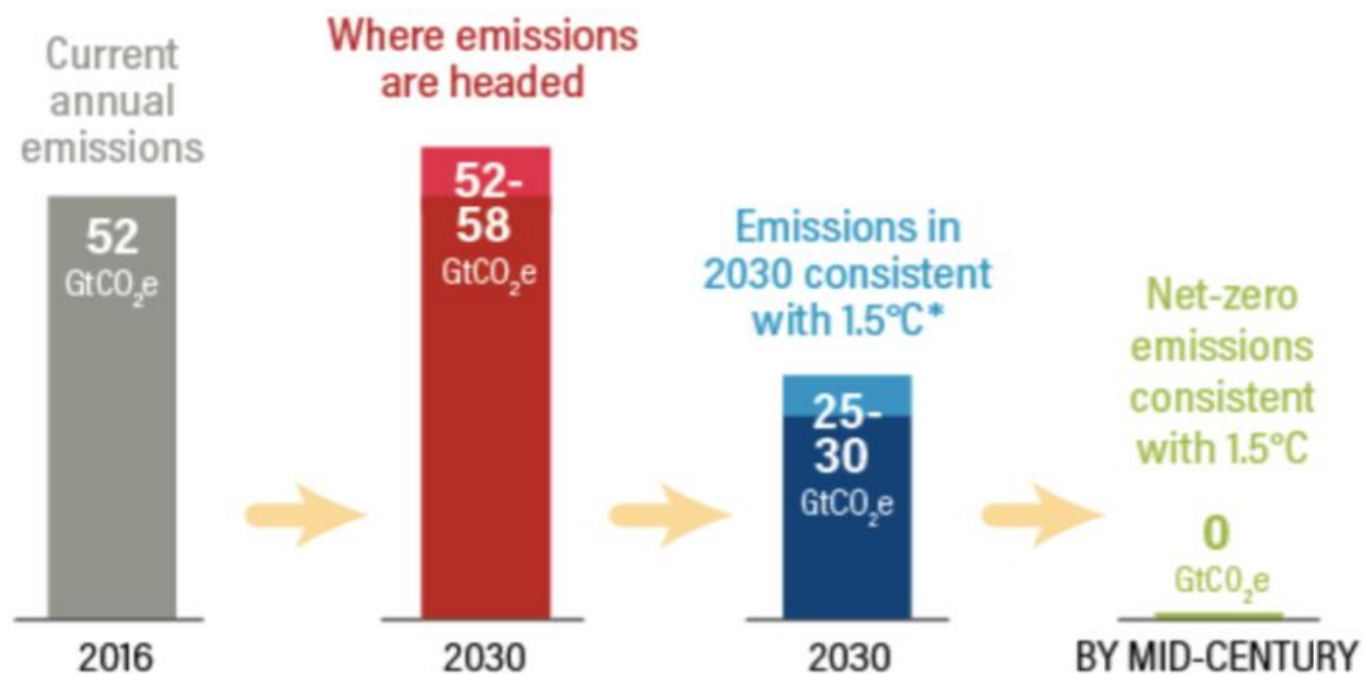
843.6 billion
Total direct physical loss

Damages from Recent Disasters in Asia and the Pacific¹

Note: 1. The amounts refer to the monetary amount of damage to property, crops and livestock at the year of the event. (Center for Research on the Epidemiology of Disasters)

The Alarming Gap

The World is **not** on Track to Limit Temperature Rise to 1.5°C



Notes: *on average, no or low overshoot.

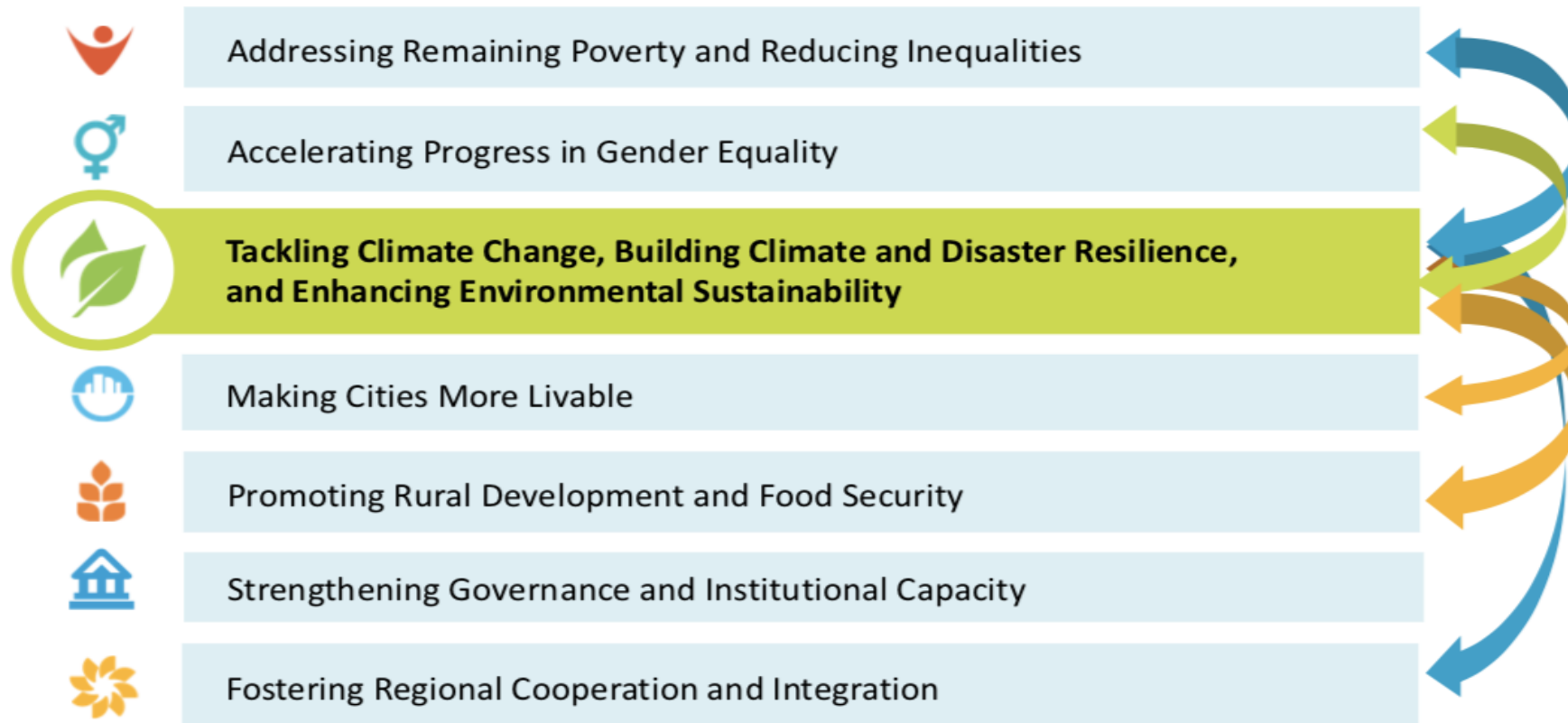
ADB

ADB

Priorities of ADB on Climate Change and Disaster Risk Management



Seven Operational Priorities



Target 75% of ADB's of the number of committed operations
(on a 3-year rolling average) will support climate mitigation and adaptation by 2030



Target Climate finance from ADB's own resources reach \$80 billion (2019-2030)

ADB's Climate Finance Target by 2020



Target under the Corporate Results Framework:

ADB-assisted projects that support climate mitigation and/or adaptation: **45% for ADB, 35% for ADF**

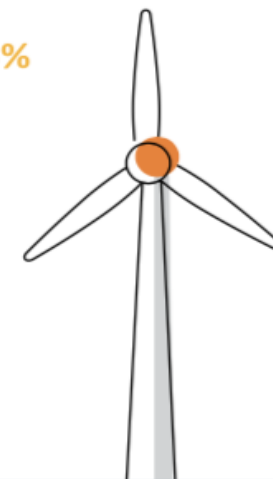


Funding for tackling climate change will rise to **around 30%** of its overall financing



ADB will double its annual climate financing to

\$6
billion



OUT OF THE \$6 BILLION

\$4
billion

will be dedicated to **mitigation** through scaling up support for renewable energy, energy efficiency, sustainable transport, and building smart cities.

\$2
billion

will be **adaptation** through more resilient infrastructure, climate-smart agriculture, and better preparation for climate-related disasters.





Clean Energy

- Expand **demand side** energy efficiency projects (e.g. electrical lighting), requiring new business models
- Increase **cross sectoral projects** (finance, urban, transport, water, agriculture etc.) requiring new financing instruments; integrated approach, e.g. **low carbon cities**



Sustainable urban development

- Promote an integrated approach to address climate risks.
- Knowledge exchange on climate mitigation and adaptation measures.
- Build capacities of cities to utilize climate finance to achieve local environmental improvement objectives.
- Link nationally determined contribution frameworks to city-level greenhouse gas accounting.



Sustainable transport

- Focus on low carbon transport modes (public transport, railways, e-vehicles)
- Ensure climate resilience in project design (additional drainage, raised road levels, storm surge protection)
- Achieving ADB climate change targets in transport sector support

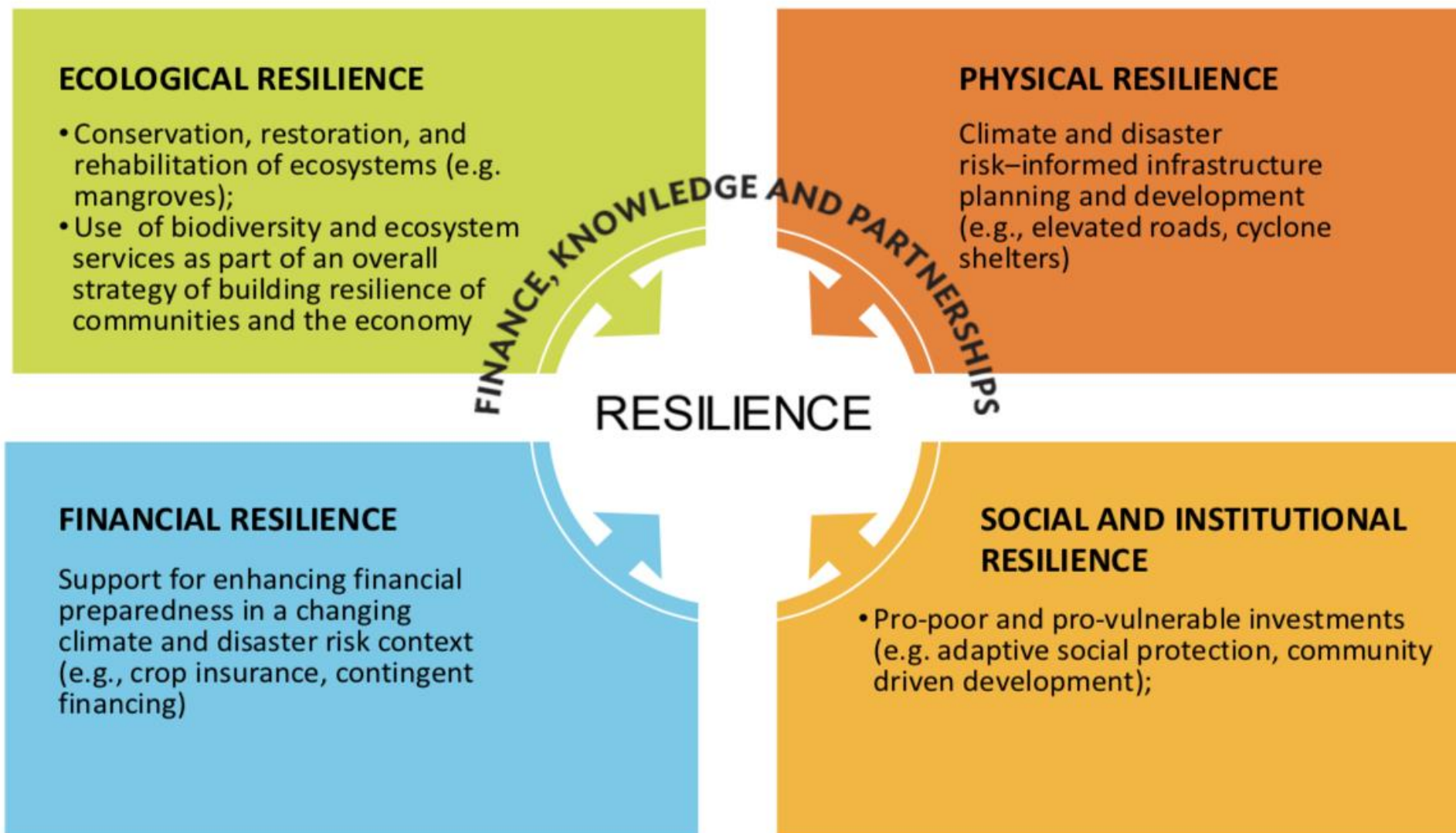


Climate-smart agriculture

- Explore new approaches, innovative ideas, and partnerships to ensure ADB investments are climate-smart by 2030
- Identify adaptation and mitigation measures to integrate in project pipelines
- Prepare guidance notes to track climate finance investments



Comprehensive Approach to Climate and Disaster Resilience



ADB

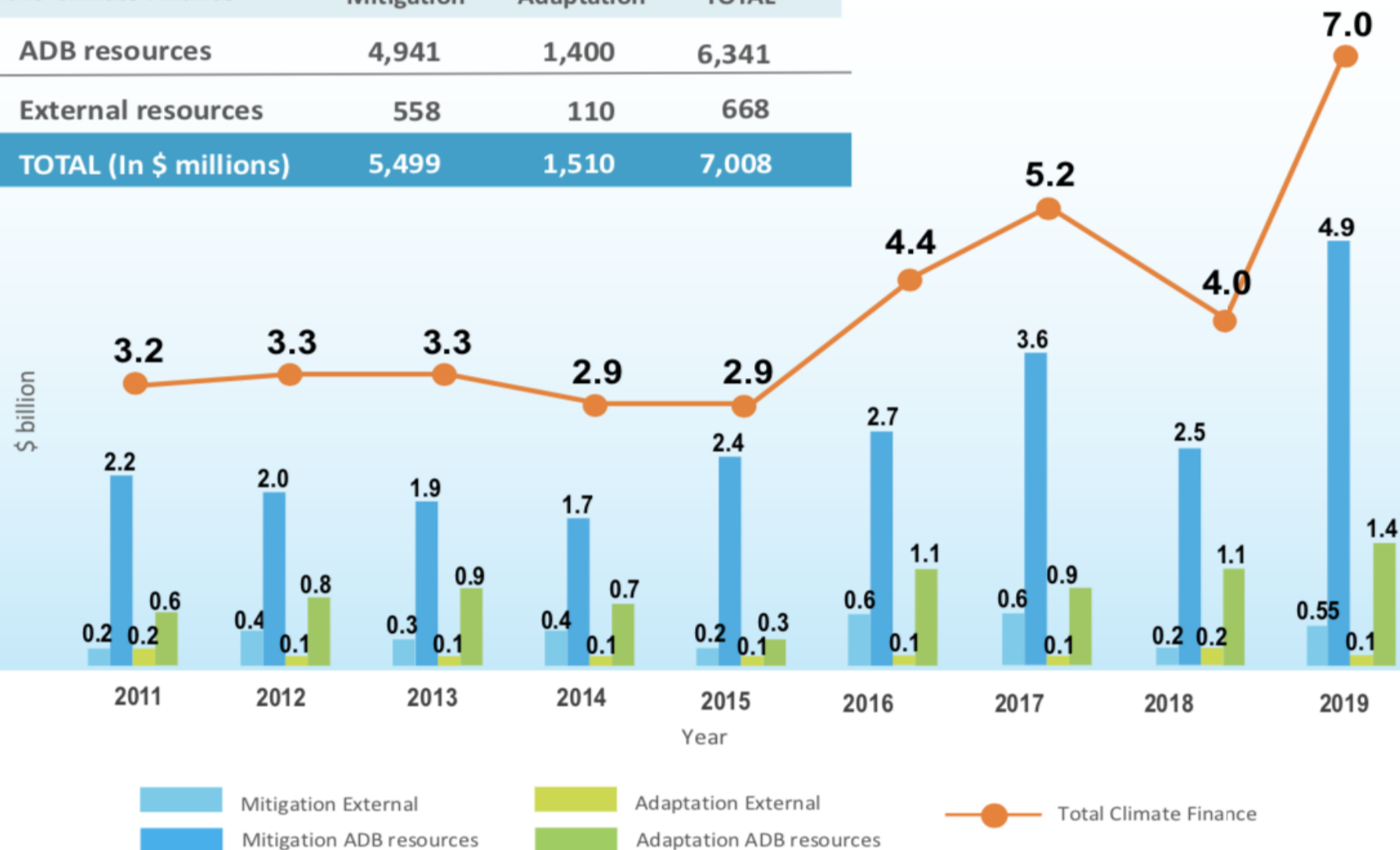
ADB

Climate and Disaster Risk Management Finance



ADB Climate Finance Approvals

2019 Climate Finance	Mitigation	Adaptation	TOTAL
ADB resources	4,941	1,400	6,341
External resources	558	110	668
TOTAL (In \$ millions)	5,499	1,510	7,008



Deploying concessional resources

Internally managed resources (ADB donor trust funds and special funds)

- Climate Change Fund (CCF)
- Clean Energy Financing Partnership Facility (CEFPF)
- Urban Climate Change Resilience Trust Fund (UCCRTF)
- Asia-Pacific Climate Finance Fund (ACliFF)
- High Level Technology Fund (HLTF)
- Others with bilaterals

Multilateral funds

- Climate Investment Funds (CIF)
- Global Environment Facility (GEF)
- Green Climate Fund (GCF)

Maximizing market mechanisms

- **Upfront carbon finance**
 - Asia Pacific Carbon Fund
 - Future Carbon Fund
- **Carbon Market Technical Support Facility**
 - Clean Development Mechanism support
 - domestic emissions trading
- **Japan Fund for the Joint Crediting Mechanism**
- **Green and Climate Bonds**
- Supporting **other market mechanisms** (e.g. renewable energy credits; feed-in tariffs)

Catalyzing private capital

- **Direct project finance** (lending, guarantees, syndications), and equity investment
- **Public private partnerships: (PPPs)** working with client DMCs across stages of PPPs

Established in

2010

to channel climate
finance, with pledges of

\$10.3 billion from 43 state governments*

Green Climate Fund

has so far committed

\$5.6 billion to

124
projects
globally

ADB Project	Total Project Cost (in \$ million)	Type and Approval Date	Total GFC Funding (in \$ million)
Fiji Urban Water Supply and Wastewater Management Project	100 (Tranche 1)	Adaptation November 2015	31 (grant)
Pacific Islands Renewable Energy Investment Program	sum of subprojects	Mitigation November 2016	5 (grant)
Cook Islands Renewable Energy Subproject	14		12 (grant)
Nauru: Sustainable and Climate-Resilient Connectivity Project (formerly Port Development Project)	65	Mitigation and adaptation October 2017	27 (grant)
Tajikistan: Institutional Development of the State Agency for Hydrometeorology	11	Adaptation February 2018	5 (grant)
Cambodia: Climate-Friendly Agribusiness Value Chains Sector Project	140	Mitigation and adaptation February 2018	10 (loan) 30 (grant)
Mongolia: Ulaanbaatar Green Affordable Housing and Resilient Urban Renewal Project (AHURP)	544	Mitigation and adaptation February 2018	95 (loan) 50 (grant)
Kiribati South Tarawa Water Supply Project	58	Mitigation and adaptation October 2018	29 (grant)
Tonga Renewable Energy Project (TREP) under the Pacific Islands Renewable Energy Investment Program	53	Mitigation October 2018	30 (grant)
Pakistan Green Bus Rapid Transit	585	Mitigation October 2018	21 (grant), 29 (loan)
Shandong Green Development Fund	1200	Mitigation and Adaptation November 2019	100 (loan)
Approved Total			473

*First replenishment received \$9.8 billion in pledges from 28 governments including two additional EU member states with pledges during the Replenishment Pledging Conference held in Paris on 24-25 October 2019.

Ireland Trust Fund for Building Climate Change and Disaster Resilience in Small Island Developing States (SIDS)

- established by ADB and the Government of Ireland in May 2019
- committing to an initial 6-year program of funding of **€12 million (\$13.5 million)** for the period 2019 to 2024.
- primarily supports technical assistance and capacity development in the SIDS, through activities such as financing climate-proof infrastructure, helping countries plan for and respond to climate change, and leveraging global climate resources for mitigation and adaptation efforts
- aims to increase the preparedness and resilience of SIDS to disasters caused by natural hazards and to the impact of climate change; expected outcome of the fund is an increased number of investments in climate change and disaster resilience

Three proposals currently under consideration:

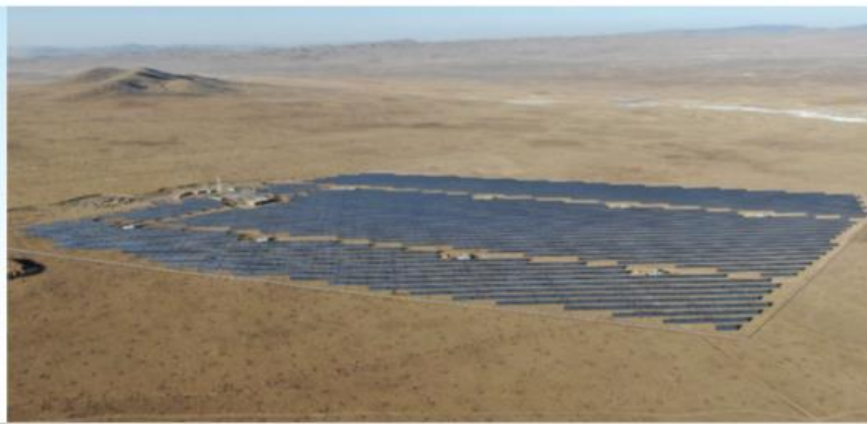
- i. Regional Technical Assistance (TA): Pacific Disaster Resilience Program (8 countries)
- ii. Tonga - Support to the Tonga Climate Change Trust Fund (CCTF) for community adaptation projects
- iii. Vanuatu, Port Vila - Community Action Plans for Strengthening Urban Resilience



- A multi-donor trust fund approved on 28 April 2017 with up to US\$30 million contribution from Germany. The maximum amount of aggregate contributions is envisaged to not exceed \$200 million.
- ADB has initial contribution of US\$1 million towards an accompanying Technical Assistance to support the operationalization of ACliFF.
- ACliFF will support the assessment, development and provision of **financial risk management products** that can help unlock financing for climate investments in clean technologies and practices, which are necessary for climate change mitigation and adaptation; and improve resilience of the poor and vulnerable to the impacts of climate change.
- Total contributions received: **\$11.39 million** as of September 2019



- established in April 2017 with a **CAD \$200 million contribution (US\$149.5 as of September)**
- designed to support greater **private sector participation** in climate change mitigation and adaptation in low and lower middle income countries and upper middle-income small island developing states in Asia and the Pacific.
- will seek to **promote gender equality and the empowerment of women** and girls in projects supported by the fund.
- will aim to play a key role in helping the private sector **overcome development risks** (including market risks, technology risks, financing risks, regulatory and other risks) by offering financing on **concessional terms** and conditions to projects that would not proceed solely on a commercial basis.



Sernsang Khushig Khundii Solar Project

provided a technical assistance grant to offset first mover costs and to catalyze the financing of ADB's first private sector solar power project in Mongolia



Innovative Projects and Initiatives



Cambodia: National Solar Park Project



Innovative Project Design

TOTAL FINANCING: \$21.65 million

- \$ 7.64 million COL/ADF
- \$ 11 million
Strategic Climate Fund (loan)
- \$ 3 million
Strategic Climate Fund (grant)

DATE APPROVED 23 May 2019

TA 9736-CAM: Capacity Development
in the Electric Utility Industry
\$500,000 Republic of Korea e-Asia and
Knowledge Partnership Fund (grant)

TOTAL CLIMATE FINANCE \$21.64 million

TOTAL ADAPTATION FINANCE
\$1.17 million

TOTAL MITIGATION FINANCE
\$6.47 million (COL/ADF)
\$14 million (Strategic Climate Fund)

Collaboration between:

- Southeast Asia Department
- Office of Public-Private Partnership
- Private Sector Operations Department

CONTEXT

Project will support the expanded deployment of solar photovoltaic power plants in Cambodia and address the country's need to (i) expand low-cost power generation; (ii) diversify the power generation mix with an increase in the percentage of clean energy, in line with its greenhouse gas emission reduction targets; and (iii) expand the use of competitive tenders and other global best practices in the energy sector.

DESCRIPTION

The project will have two outputs: (i) a 100 MW solar power park in Kampong Chhnang Province and a transmission interconnection system to grid substation 6 (GS6) near the Phnom Penh demand center to supply power to the national grid.; and (ii) strengthened capacity of Electricite du Cambodge (EDC) in solar power plant construction and operation, project design and supervision, grid integration, and competitive procurement. EDC with ADB's support has tendered out the first 60 MW of generating capacity at the solar park to the private sector (independent power producer).

UNIQUE FEATURES

- (i) first large-scale solar park in Southeast Asia
- (ii) exhibits **ONE ADB** approach (OPPP, SERD and PSOD working together) in providing end-to end support to the country
- (iii) obtained the lowest solar procurement price in the ASEAN in 2019 at 3.88 cents/kilo watt-hour for the electricity



Technical Support Facility

Commenced in 2006
Implemented through a series of 5 Technical Assistance projects

TA 6363: Preparing Clean Energy Projects Eligible for the Clean Development Mechanism

TA 6438: Implementation of the Technical Support Facility under the Carbon Market Initiative

TA 8223: Supporting the Use of Carbon Financing to Promote Green Growth in Asia and the Pacific

TA 8654: Supporting the Use of Carbon Financing from New Carbon Market Mechanisms to Promote Green Growth in Asia and the Pacific

TA 9062: Supporting Low-Carbon Development in Asia and the Pacific through Carbon Markets

Asia Pacific Carbon Fund

\$151.8 million Trust Fund to purchase pre-2013 CERs

Commenced in 2007

Fund Participants include seven European Governments

Supported **71 CDM projects in 9 DMCs**

Contracted **15.63 million CERs**

Provided carbon finance to **1.9 GW renewable energy projects**

All contracted CERs received and distributed to Fund Participants

Fund closed in 2014

Future Carbon Fund

\$115 million Trust Fund to purchase post-2012 CERs

Commenced in 2009

Fund Participants include four Governments and two private sector entities from Europe and Asia

Contracted **10.45 million CERs** with an investment of **\$59.5 million**

Supporting **36 CDM projects in 12 DMCs**

Disbursed **\$49.15 million** as of 30 June 2020

Providing carbon finance support to **1.2 GW renewable energy projects**

Fund will close in 2021

Japan Fund for the Joint Crediting Mechanism

\$79.29 million by MOEJ

Commenced in June 2014

JFJCM provides financial incentives for adopting advanced low-carbon technologies in ADB-financed projects

Supports mitigation through the Joint Crediting Mechanism, the first bilateral offset mechanism established by Japan

Grant to sovereign projects (max. \$10 million)

Interest subsidy to non-sovereign projects (max. \$10 million)

\$41.48 million committed to six approved projects in **Maldives, Cambodia, Bangladesh and Mongolia**



MO = mitigation outcome

Article 6 Support Facility

INTRODUCTION

Provides **technical, capacity building, and policy development support** to ADB's developing member countries to **enhance their preparedness to participate in new carbon markets**

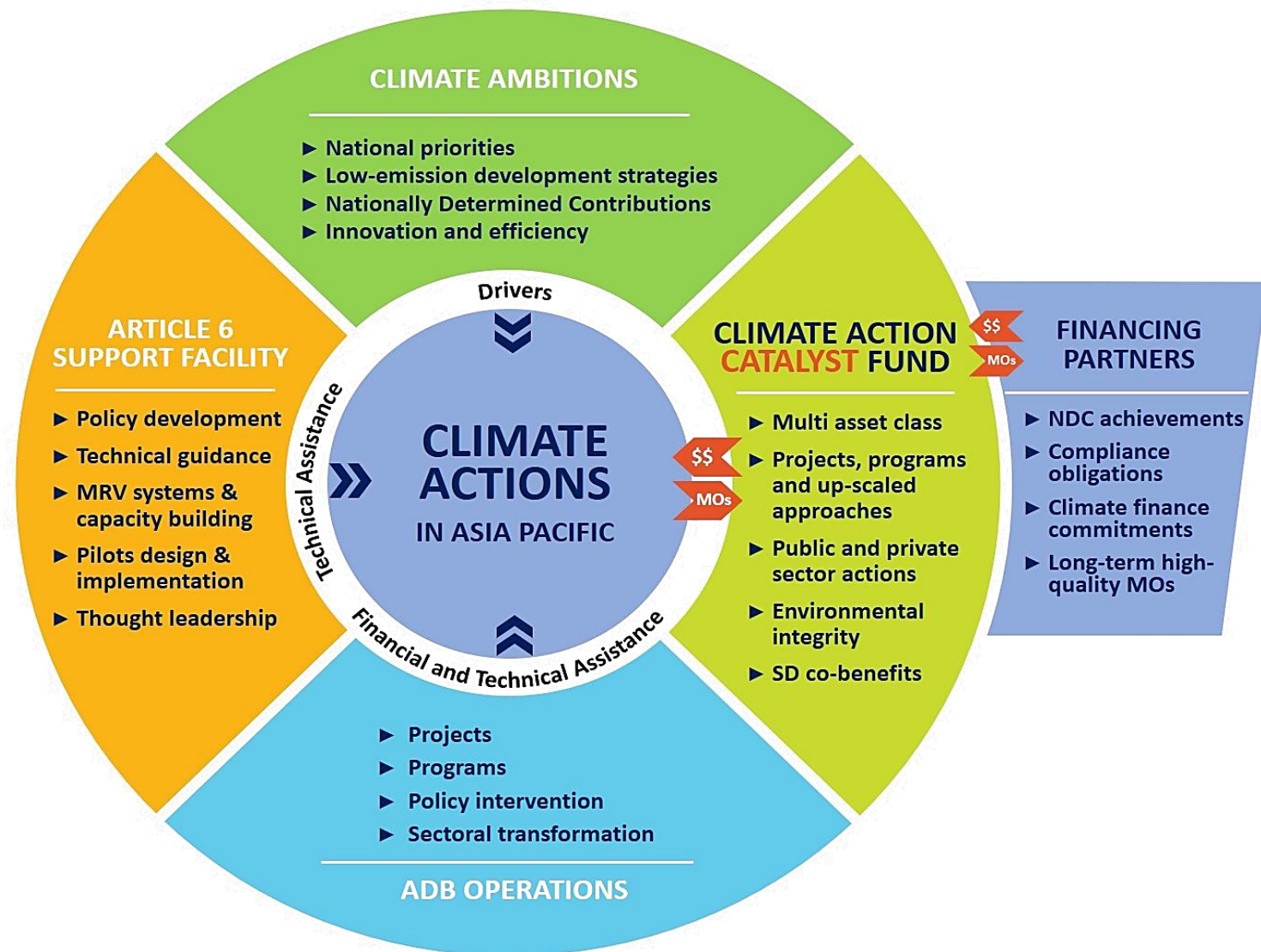
envisaged under the framework of Article 6 of the Paris Agreement.

- ❖ Continuation of ADB's engagement with carbon markets
- ❖ Began operations on 1 January 2019
- ❖ Initial Tenure: 2019 to 2021 (under extension)
- ❖ Current Budget: US\$5 million
- ❖ Funded by ADB, Govt of Germany, and Govt of Sweden
- ❖ Open to all DMCs in the Asia and Pacific region
- ❖ Currently supporting 7 developing member countries

Bhutan, Indonesia, Mongolia, Pakistan, Philippines, Thailand and Viet Nam (at different stages of progress)

Different needs of DMCs, ranging from support to develop national policy/legal framework and MRV for Article 6 implementation to basic capacity-building and pilots

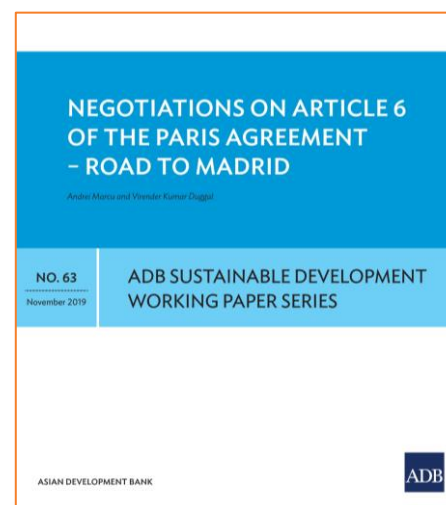
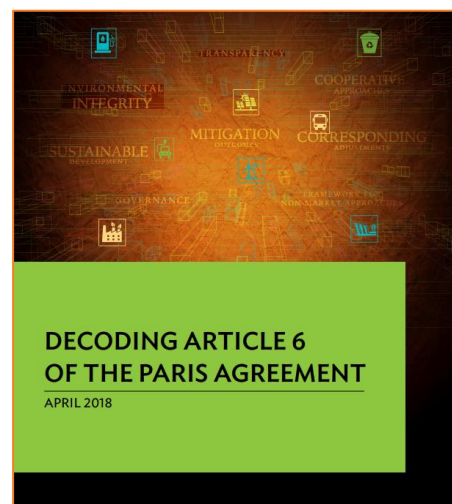
Climate Action Catalyst Fund



MO = mitigation outcome, MRV = monitoring, reporting, and verification, NDC = nationally determined contribution

Carbon Market Program

Thought leadership



Climate Change and Disaster Risk Management Technical Assistance Portfolio

TAs	APPROVAL – CLOSING DATES	MISSION LEADER	KEY ACTIVITIES
TA 9191: Building Climate Change Resilience in Asia's Critical Infrastructure (https://www.adb.org/projects/49158-001/main)	30 SEP 2016 – 31 DEC 2020	Arghya Sinha Roy	This proposed TA aims to increase knowledge, promote innovation and good practice, and identify priorities for scaling up climate resilient investments in the Asia and Pacific region.
TA 9395: Support for Implementation of the Asia-Pacific Climate Finance Fund (https://www.adb.org/projects/51163-001/main)	29 SEP 2017 – 28 SEP 2022	Charlotte Benson	ACliFF will support the assessment, development and provision of financial risk management products that can help unlock financing for climate investments and improve resilience to the impacts of climate change.
TA 9414: Supporting Adaptation Decision Making for Climate Resilient Investments (https://www.adb.org/projects/50121-001/main)	02 NOV 2017 – 31 DEC 2021	Arghya Sinha Roy	The TA aims to improve the understanding by DMCs on how to make effective use of climate information and services to facilitate planning and decision-making under climate uncertainty.
TA 9513: Advancing Inclusive and Resilient Urban Development Targeted at the Urban Poor (https://www.adb.org/projects/51325-001/main)	06 APR 2018 – 31 DEC 2021	Arghya Sinha Roy	The proposed knowledge and support TA will support selected DMCs of the ADB Bangladesh, Indonesia, and the Philippines to strengthen its capacity to design and implement investment projects that strengthen resilience of the urban poor, thereby advancing inclusive urban development.
TA 9695: Establishing a Support Facility for Article 6 of the Paris Agreement (https://www.adb.org/projects/50404-001/main)	07 DEC 2018 – 31 DEC 2021	Virender Duggal	The Support Facility will provide capacity building and technical support to DMCs to help them to identify, develop and test mitigation actions under the framework of Article 6 of the Paris Agreement.



Climate Change and Disaster Risk Management Technical Assistance Portfolio



TAAs	APPROVAL – CLOSING DATES	MISSION LEADER	KEY ACTIVITIES
TA 9716: Supporting Ambitious Climate Action through Implementation of Developing Member Countries' Nationally Determined Contributions (Subproject 1) (https://www.adb.org/projects/52004-002/main)	01 MAR 2019 – 30 NOV 2023	Malte Maass	The TA subproject 1 will have the following outcome: capacities of selected DMCs to implement NDCs enhanced.
TA 9720: Supporting the Implementation of ADB's Climate Change Operational Framework 2017–2030 - Establishing Mechanisms to Measure, Monitor, and Report on Commitments made under the Paris Agreement (Subproject 3) (https://www.adb.org/projects/52004-005/main)	19 MAR 2019 – 28 FEB 2021	Esmyra Javier	KSTA Cluster Subproject 3 will support establishment of mechanisms to measure, monitor, and report on commitments made under the Paris Agreement.
TA 9728: Scoping of Community Resilience Partnership Program (https://www.adb.org/projects/53142-001/main)	23 APR 2019 – 30 SEP 2020	Arghya Sinha Roy	The implementation of CRPP will support DMCs in achieving their commitments to global agreements: the 2030 Agenda for Sustainable Development, the Paris Agreement of Climate Change, and the Sendai Framework for Disaster Risk Reduction.
TA 9728: Scoping of Community Resilience Partnership Program (Supplementary)	24 MAR 20 – 30 SEP 2020		
TA 9744: Supporting the Implementation of ADB's Climate Change Operational Framework 2017 2030 - Enhancing Financial Mechanisms to Develop Climate Actions of Developing Member Countries (Subproject 2) (https://www.adb.org/projects/52004-004/main)	29 MAY 2019 – 31 MAR 2022	Frederic Asseline	Subproject 2 will support enhancement of financial mechanisms for developing climate actions of DMCs.





Climate Change and Disaster Risk Management Technical Assistance Portfolio



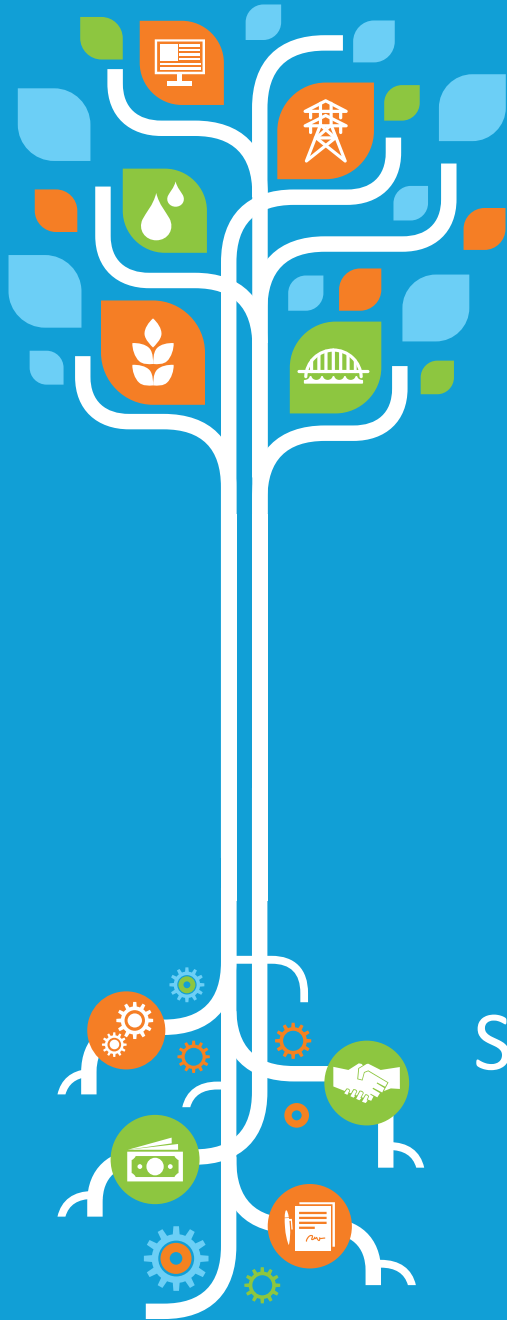
TAs	APPROVAL – CLOSING DATES	MISSION LEADER	KEY ACTIVITIES
TA 9748: Establishing a Platform for Climate-Resilient and Low-Carbon Urban Development (https://www.adb.org/projects/52304-001/main)	17 JUN 2019 – 31 DEC 2022	Frederic Asseline	The Platform aims to establish a collaborative process among key stakeholders at ADB and the DMCs, which will result in the production of a knowledge base on climate-informed urban development.
TA 9822: Integrated Disaster Risk Management Fund: Sharing Lessons, Achievements, and Best Practices (https://www.adb.org/projects/53350-001/main)	11 OCT 2019 – 30 NOV 2020	Steven Goldfinch	Given the broad scope of projects, activities, and knowledge generated across the seven DMCs, including the support for ASEAN, the TA will facilitate the identification and consolidation of lessons, achievements, and best practices to contribute to a potential scaling-up of sustainable investments.
TA 9944: Understanding Disaster Displacement in Asia and the Pacific (https://www.adb.org/projects/53124-001/main)	04 FEB 2020 – 31 DEC 2022	Steven Goldfinch	The knowledge and support TA aims to support DMCs prepare and respond to disasters through an enhanced understanding of disaster displacement.
TA 9955: Building Disaster-Resilient Infrastructure through Enhanced Knowledge (https://www.adb.org/projects/52251-001/main)	09 MAR 2020 – 28 FEB 2022	Steven Goldfinch	The TA aims to strengthen action-oriented DRM knowledge for disaster-resilient infrastructure in DMCs through the (i) development of upstream disaster-resilient infrastructure know-how, (ii) review of existing infrastructure investment design processes at the preparatory phase in selected DMCs, and (iii) capacity building of selected DMCs to incorporate disaster-resilient measures in post-disaster reconstruction processes, documented for the benefit of all DMCs.
TA 6539: Investing in Climate Change Adaptation through Agroecological Landscape Restoration: A Nature-Based Solution for Climate Resilience (https://www.adb.org/projects/53348-001/main)	06 JUL 20 – 30 JUN 2023	Yosuke Fukushima	The knowledge and support TA will support selected DMCs of the ADB in (i) elaborating, evaluating, and promoting innovative ways to scale up climate change adaptation interventions through agroecological landscape restoration; and (ii) strengthening the capacity of communities to restore and manage their climate-resilient landscapes for food and nutrition security.



For further information:

<https://www.adb.org/themes/climate-change-disaster-risk-management/main>

<https://www.adb.org/climate-change-financing>



THANK YOU!

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