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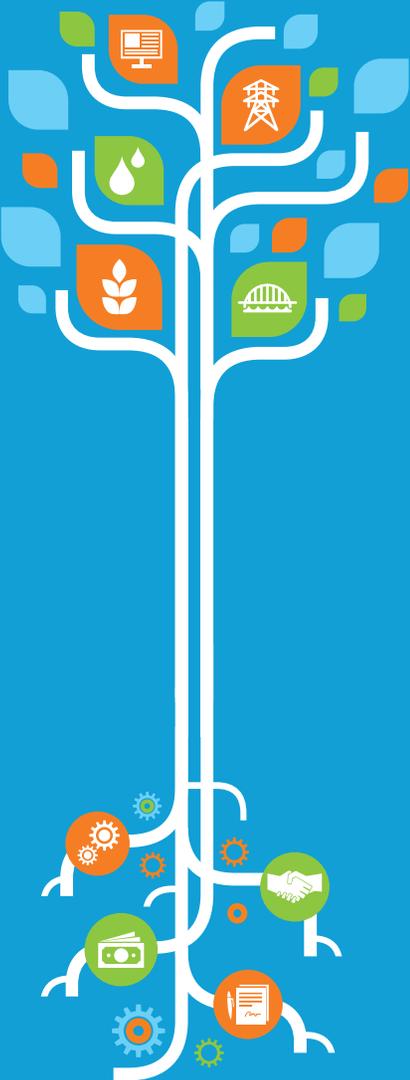


# Climate Response and Disaster Mitigation

22 March 2023

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Risk Management Division



A stylized white tree graphic on a blue background. The trunk and branches are white, with various icons in orange and green circles placed along them. The icons include a computer monitor, a power line tower, a water drop, a leaf, a bridge, a gear, a handshake, a stack of money, and a document with a pencil. The tree is positioned on the left side of the slide.

# Overview of the challenge and ADB's high-level response

# Climate Change and Disasters in Asia and the Pacific

Vulnerability and Climate Footprint	2015	2016	2017	2018	2019	2020	2021	2022	
<p>Impacts from Disasters in Asia and the Pacific (2015-2022)</p> <p> <b>814.8 million</b> People affected</p> <p> <b>40,415</b> Fatalities</p> <p> <b>418.5 billion</b> Direct physical loss</p>	<p><b>PHILIPPINES</b> Typhoon Chan-hom (Jul) <b>\$1.7 billion</b> (5 deaths)</p>	<p><b>PRC</b> Flood (Jun-Jul) <b>\$24.8 billion</b> (289 deaths; 60 million affected)</p>	<p><b>PRC</b> Flood (Jun-Jul) <b>\$6.6 billion</b> (78 deaths)</p>	<p><b>INDIA</b> Flood (Aug) <b>\$3.1 billion</b> (504 deaths)</p>	<p><b>INDIA</b> Flood (Jul-Sep) <b>\$10.6 billion</b> (1,900 deaths)</p>	<p><b>PRC</b> Flood (May-Jul) <b>\$17.8 billion</b> (280 deaths)</p>	<p><b>PRC</b> Flood (Cyclone Cempaka) (Jun-Aug) <b>\$16.5 billion</b> (352 deaths)</p>	<p><b>PRC</b> Drought (Jul-Aug) <b>\$5 billion</b> (6.1 million affected)</p>	
	<p><b>VIET NAM</b> Drought (Dec-Feb 2017) <b>\$7.7 billion</b> (1.8 million affected)</p>	<p><b>PRC</b> Typhoon Mujigae (Oct) <b>\$4.8 billion</b> (20 deaths; 78,300 affected)</p>	<p><b>PRC</b> Typhoon Hato (Aug) <b>\$3.9 billion</b> (8 deaths)</p>	<p><b>INDIA</b> Flood (May-Oct) <b>\$4.2 billion</b> (2,035 deaths; 1.3 million affected)</p>	<p><b>PRC</b> Tropical storm Rumbia (Aug) <b>\$5.8 billion</b> (53 deaths)</p>	<p><b>PRC</b> Cyclone Hanna (Jul-Sep) <b>\$10.6 billion</b> (72 deaths)</p>	<p><b>INDIA</b> Cyclone Amphan (May) <b>\$14.1 billion</b> (90 deaths)</p>	<p><b>INDIA</b> Floods and Landslides (June) <b>\$7.9 billion</b> (1,922 deaths)</p>	<p><b>INDIA</b> Flood (May-Oct) <b>\$4.2 billion</b> (2,035 deaths; 1.3 million affected)</p>
	<p><b>PRC</b> Typhoon Mujigae (Oct) <b>\$4.8 billion</b> (20 deaths; 78,300 affected)</p>	<p><b>SRI LANKA</b> Flood (May) <b>\$1.4 billion</b> (203 deaths)</p>	<p><b>INDONESIA</b> Flood (Dec) <b>\$1.3 billion</b> (66 deaths)</p>	<p><b>INDIA</b> Cyclone Vardah (Dec) <b>\$1.1 billion</b> (24 deaths)</p>	<p><b>THAILAND</b> Flood (Jan) <b>\$1.1 billion</b> (96 deaths)</p>	<p><b>PRC</b> Flood (May-Jul) <b>\$1.9 billion</b> (112 deaths)</p>	<p><b>INDONESIA</b> Flood (Dec) <b>\$1.3 billion</b> (66 deaths)</p>	<p><b>PAKISTAN</b> Flood (Aug-Sep) <b>\$1.6 billion</b> (410 deaths)</p>	<p><b>PAKISTAN</b> Flood (Jun-Sep) <b>\$15 billion</b> (1,739 deaths; 33 million affected)</p>
	<b>\$45.3 billion</b> Total losses	<b>\$58.3 billion</b> Total losses	<b>\$28.3 billion</b> Total losses	<b>\$24.3 billion</b> Total losses	<b>\$33.8 billion</b> Total losses	<b>\$60.3 billion</b> Total losses	<b>\$36.4 billion</b> Total losses	<b>\$29.4 billion</b> Total losses	

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)

Photos: CTTO



Operational Priority 3

**Tackling climate change, building climate and disaster resilience, and enhancing environmental sustainability**

- Integrated approach in CPS/ICPM
- Deploy approaches for capturing co-benefits with other OPs
- Promote innovative clean technology
- Expand private sector operations
- Build partnerships with think tanks, NGOs, academe, and private sector
- Access to finance: use of concessional finance in a targeted and catalytic way—maximizing delivery of outcome

**Targets: 75%** committed operations (3-year rolling average) and **\$80 billion** of own resources (2019-2030, cumulative) will support climate actions

Increased climate finance ambition to **\$100 billion** by 2030  
**Full Paris Alignment** by **Jul 2023** for sovereign operations and by **Jul 2025** for nonsovereign operations

**Strategic Operational Priorities**

**1 Mitigation of climate change increased**

**2 Climate and disaster resilience built**

**3 Environmental sustainability enhanced**

**Operational Approaches**

Clean and green energy  
Circular Economy Green  
Supply Chains



*Green business and jobs*

Quality Infrastructure  
Sustainable transport  
& urban development



*Clean air and water, waste management*

Natural capital asset  
management Climate-smart  
agri & sustainable land use



Climate and  
Disaster Resilience



*Physical (climate-proof), eco-based, financial,  
social and institutional*

Water-food-energy  
security nexus



Air and water  
Pollution management

Natural capital and healthy oceans

*Environmental Governance*

**Sub-pillars**

- Access to climate finance increased
- Capacity of developing member countries to implement climate actions enhanced
- Low-carbon infrastructure improved
- Renewable energy capacity increased
- Low-carbon development solutions implemented
- Integrated flood risk management measures supported
- Resilience building initiatives implemented
- Finance preparedness for post-disaster response enhanced
- Planning for climate change adaptation and disaster risk management improved
- Infrastructure assets made more resilient
- Pollution control infrastructure assets implemented
- Pollution control and resource efficiency solutions promoted and implemented
- Conservation, restoration and enhancement of terrestrial, coastal and marine areas implemented
- Solutions to conserve, restore, and/or enhance terrestrial, coastal, and marine areas promoted and implemented
- Water-food-energy security nexus addressed



# Scaling-Up Climate Action: Upstream, Midstream & Downstream

## UPSTREAM

- Rigorous diagnostics on climate change and disaster risk management
- Engaging DMCs to shape legal, regulatory and policy environment – **including business enabling environment**
- Country Partnership Strategy (CPS)
- Climate Change Policy Based Lending (PBL)

## MIDSTREAM

- Translating climate planning into national budget cycles and government national and development plans
  - NDC – nationally determined contribution
  - LTS - 2050 long-term low GHG emissions development strategies
  - NAP- National Adaptation Plan (NAP) Investment Plans
- Multi-hazard climate and disaster risk analysis
- Sector Plans
- Blended finance integrated into government and corporate planning

## DOWNSTREAM

- ADB's Indicative Country Pipeline
- ADB's private sector operations
- Projects designed to be climate smart and Paris aligned
- Country climate investment plans
- Technical Assistance - support to project development
- Blended finance instruments available to private sector



## ADB Workstreams (emerging) for Scaling up Climate Adaptation

1

Engage **upstream engagement** with countries and private sector on adaptation.

Key Initiatives: NAP Investment Planning and Climate Responsive Fiscal Planning

2

Scale-up financing for **investments that enable adaptation** (sovereign and non-sovereign).

Key Initiative: Asia Development Fund's Thematic Pool on CCA and DRR to provide grant financing for adaptation investments

3

Enhance **capacity, knowledge and partnerships** on adaptation.

Key Initiative: Community Resilience Partnership Program to scale up adaptation actions at the nexus of climate, poverty and gender

## ADB's Disaster and Emergency Assistance

### ADB's Role

- ADB focuses on risk reduction, preparedness, early recovery, and reconstruction in accordance with its development mandate
- ADB's mandate does not allow it to engage in peacemaking, peacekeeping or humanitarian relief
- ADB takes a development-oriented approach that complements humanitarian assistance and peace-building activities undertaken by others



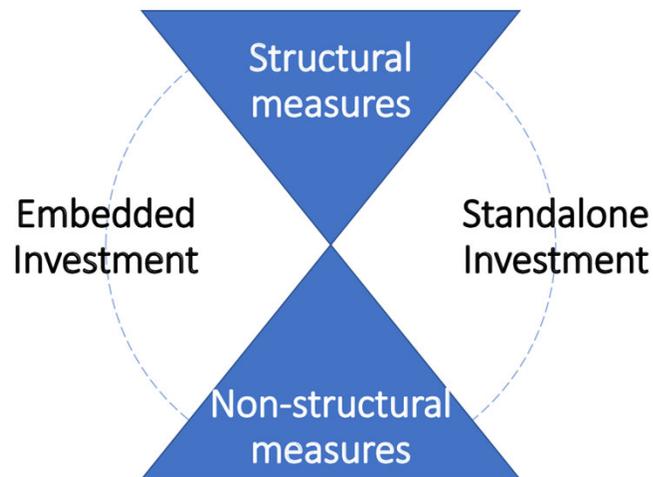
### ADB's Disaster and Emergency Assistance Policy 2021

Seeks to **enhance the efficiency and impact** of ADB's support to DMCs in strengthening resilience to disasters and emergencies, including the enhanced management of residual risk.

Based on **four principles**, collectively establishing a solid and systematic framework guiding ADB's disaster and emergency assistance:

- risk management begins with risk reduction;
- disaster and emergency risk management is an integral part of the development process;
- ADB's developing member countries have differentiated risk profiles and, thus, opportunities for enhanced resilience; and
- timely, carefully planned, and well-designed relief, early recovery, and reconstruction interventions and solutions reduce the near- and longer-term social, institutional, and economic impacts of disasters and emergencies and facilitate resilient recovery.

## Type of ADB's disaster risk management support



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### Investments in risk reduction and preparedness

- Disaster risk reduction and preparedness
- Communicable disease control

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### Post-disaster support

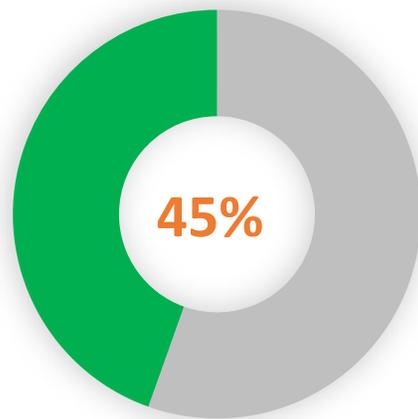
- Technical support for post-disaster needs assessments
- Fast-tracked early recovery
- Longer-term reconstruction

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### Knowledge and upstream development

- Capacity development
  - Upstream DRM enabling environment enhancement
  - Publications and knowledge dissemination
-

## ADB DRM Approvals, 2018-2022



In 2022,  
**45%** or **102** out of  
**229 ADB-financed projects,**  
 have DRM features

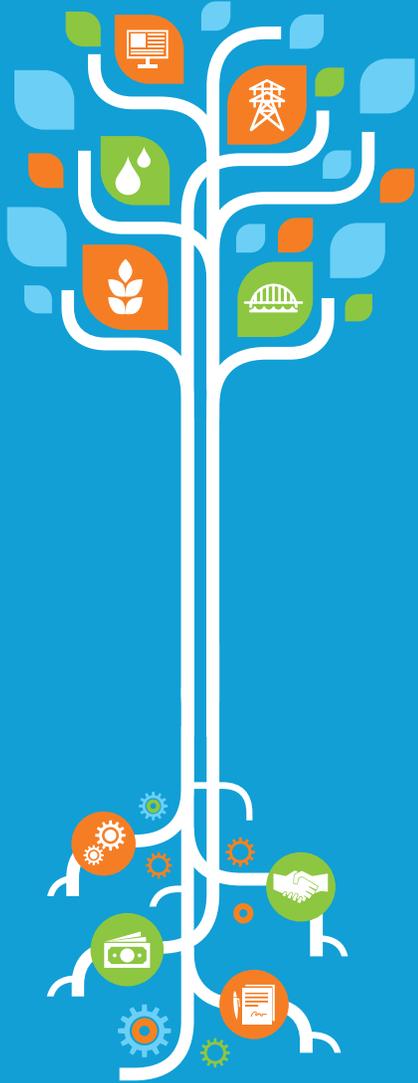
- 21
 standalone disaster risk reduction grants and loans,  
 totaling **\$1.16 billion**
- 470
 grants, loans, and technical assistance embedding disaster  
 risk management components or design aspects
- 19
 disaster risk financing grants and loans,  
 totaling **\$1.14 billion**
- 18
 post-disaster early recovery and reconstruction grants\*  
 and loans, totaling **\$1.30 billion**
- 12
 DRM technical assistance projects,  
 totaling **\$11.01 million**

\* Including grants under the Asia Pacific Disaster Response Fund.

Note: Figures are for disasters triggered by natural hazards (extreme weather and geophysical hazards) only and exclude cofinancing amounts. ADB financing includes ADF, COL, OCR, special funds, and TASF.



# Mobilizing finance



# ADB's Approach to Climate Finance Mobilization

## 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**
  - » Ireland Trust Fund for Building Climate Change and Disaster Resilience in Small Island Developing States

### Multilateral funds

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

## Maximizing market mechanisms

- **Upfront carbon finance**
  - » **Future Carbon Fund**
  - » **Japan Fund for the Joint Crediting Mechanism**
- **Article 6 Support Facility**
  - » Carbon Pricing / Carbon Markets
  - » Article 6 of the Paris Agreement
    - **Carbon Market Technical Support Facility**
    - » Joint Crediting Mechanism
    - » domestic emissions trading Systems
    - » Lifecycle Management of Fluorocarbons
- **Green, Blue and Climate Bonds**
- ASEAN Catalytic Green Finance Facility

## Catalyzing private capital

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

## Facilities for private sector

- Canadian Climate Fund for the Private Sector in Asia (I and II)
- Australian Climate Finance Partnership
- ADB Ventures Financing Partnership Facility

# Climate Finance: Deploying Concessional Resources from Multilateral Funds

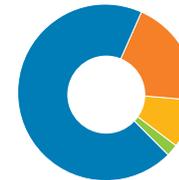


Established in **2008** and one of the first global efforts in setting up a dedicated climate finance vehicle.



## For ADB-administered Projects

**69%**  
Total CTF net commitment  
**\$968.9 million**



**31%**  
Total SCF net commitment  
**\$435.9 million**

**20%** SCF PPCR  
**9%** SCF SREP  
**2%** SCF FIP

**86%**  
Total public sector projects  
**\$1.2 billion**



**14%**  
Total private sector projects  
**\$200.8 million**

CTF= Clean Technology Fund, SCF= Strategic Climate Fund, FIP= Forest Investment Program, PPCR= Pilot Program for Climate Resilience, SREP= Scaling Up Renewable Energy in Low Income Countries Program



GREEN CLIMATE FUND

Established in **2010** to channel climate finance, with pledges of **\$10.3 billion** from **49 national and sub-national governments**

ADB's total GCF Funding to date: **\$947.4 million**

## Green Climate Fund (GCF)

has so far committed **\$11.3 billion** to



# Finance Sector - Innovative and Transformative Climate Finance Initiatives

## Green Financing

- **Green Banks**
  - Capitalizing public or nonprofit financial institutions purpose-built to develop, facilitate, and scale up investment in greenhouse-gas-reducing projects

## Agriculture Supply and Value Chain Financing

- **Financing of sustainable high-value crop, reforestation and seaweed in Southeast Asia**
  - Tailoring financial services to develop a sustainable product supply and food value chain combined with carbon credit and insurance solutions

## Disaster Risk Financing

- **Disaster and Climate Risk Transfer Facility in the CAREC region**
  - Establishing earthquake, flood and infectious disease risk financing framework to enhance physical and financial resilience

## Green Housing Financing

- **Green loans for heating and cooling systems, solar panels, insulation and energy efficiency in Uzbekistan**
  - Combined with Financial Risk Management Products such as Energy Efficiency and Savings Insurance

## Blue Financing

- **SME BlueImpact Asia, a blended finance platform for blue SMEs across Asia**
  - Developing bankable, scalable and replicable small scale blue economy businesses leveraging catalytic funding to attract private sector financing

## Resilient Infrastructure Financing

- **Hindu Kush Himalaya Climate Risk-Informed Investments**
  - Leveraging the insurance industry for risk advisory, de-risking and co-financing services ensuring sustainable infrastructure against glacier melting

# ADB's Private Sector Operations investing in a low carbon future



Ambition to massively scale up climate finance  
 \$12b of ADB's own resources, and \$18-30b of private sector finance mobilized

Through loans and other debt instruments, equity investments, guarantees, loan syndication and technical assistance

- Climate finance for infrastructure**
  - Wind, solar, water, waste, agriculture
- Climate finance for financial intermediaries**
  - Climate bonds, green housing, renewable energy portfolios
- Climate funds providing concessional finance**
  - To address market failures



**GHG emissions reduced**  
37.6 million tCO<sub>2</sub>e/year

**Power delivered**  
57,887 GWh/year

**Generation capacity**  
18,900 MW

**Households with access to power**  
46,426

**Houses built**  
319,905

**Wastewater treated**  
513,070 m<sup>3</sup>/year

**Households with access to water**  
888,607

**Potable water produced**  
484.3 million m<sup>3</sup>/year

**Climate Bonds** INITIATIVE

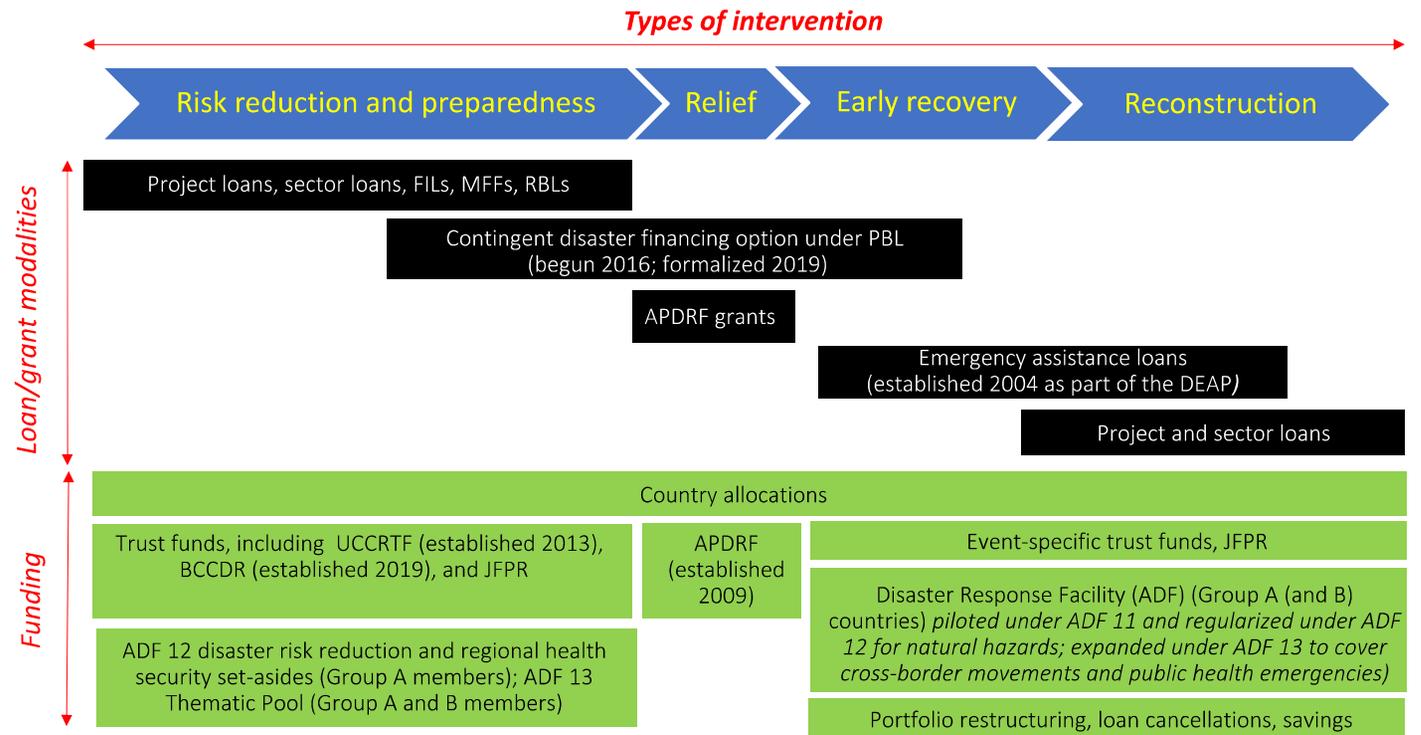
First Climate Bond Initiative  
 Certified bonds and loans  
 in Asia-Pacific, Philippines,  
 Thailand and Vietnam

**ADB Ventures**

Invests in seed and early stages of a companies developing innovative climate solutions, and partner with them across rounds



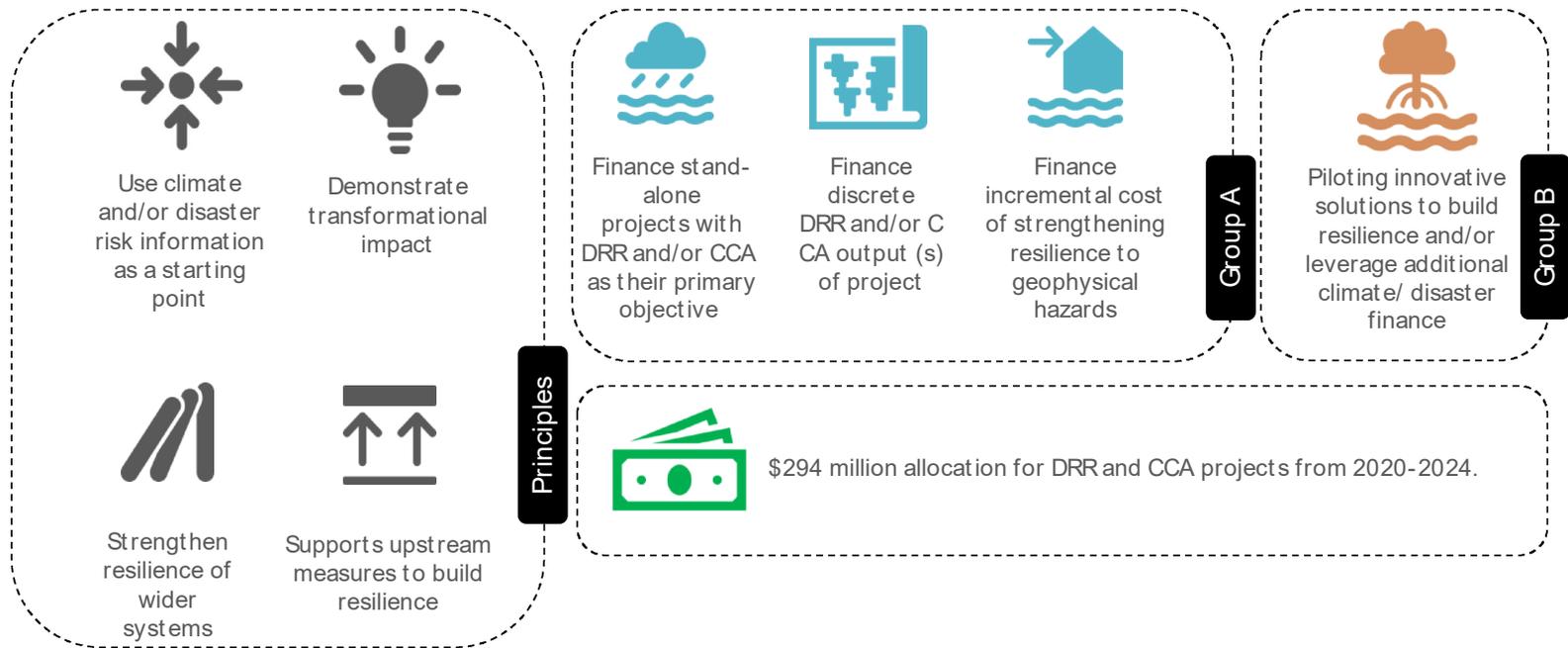
# ADB loan/grant modalities and funding for disaster and emergency risk management



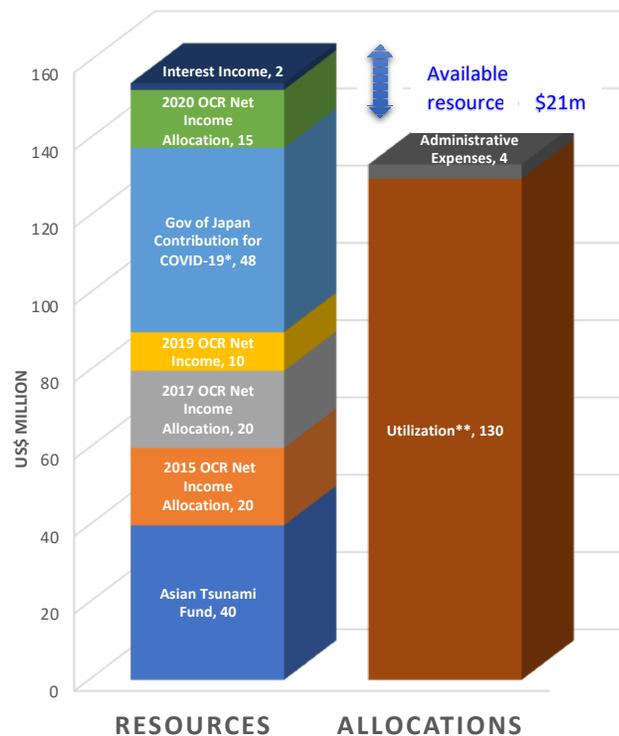
ADF – Asian Development Fund; APDRF – Asia Pacific Disaster Response Fund; BCCDR – Ireland Trust Fund for Building Climate Change and Disaster Resilience in Small Island Developing States; COL – concessional ordinary capital resources lending; FIL – financial intermediation loan; JFPR – Japan Fund for Prosperity and Resilience; MFF – multitranches financing facility; PBL – policy-based loan; RBL – results-based loan; UCCRTF – Urban Climate Change Resilience Trust Fund.



## ADF Thematic Pool: Disaster Risk Reduction and Climate Adaptation



## Asia Pacific Disaster Response Fund



\* Net of the unutilized \$27 million no longer available from the original \$75 million contribution. The contribution was made available for a two-year period up to 17 May 2022.

\*\* Net of cancellations/unutilized funds from closed grants.

### First Window

- Established in 2009, provides quick-disbursing grants of up to \$3 million to assist any DMC in meeting immediate expenses to restore life-saving services to affected populations in response disasters and health emergencies
- 79 APDRF grants totaling \$131.7 million provided covering in 34 countries

### Second Window

- Approved in October 2021, one direct charge of up to \$150,000 to finance consultant inputs for preparation of post-disaster needs assessment, recovery planning and projects
- Two allocations to date

## Emergency Assistance Loans



Family beside a damaged house near Naglebhare, Nepal. Photo by ADB.

- Introduced in 2004 as ADB's primary instrument for post-disaster support
- 49 EALs providing \$7.9 billion in assistance to 22 events
- Helps rebuild high-priority physical assets and restore economic, social and governance activities after disasters and emergencies
  - Disasters triggered by natural hazards, health emergencies and pandemics, food insecurity, technological and industrial accidents, and post-conflict situations
- Supports early recovery and reconstruction activities, emphasizes build back better, climate change and gender dimensions
  - Implementation of up to 4 years for disasters triggered by natural hazards, and up to 5 years for post-conflict situations

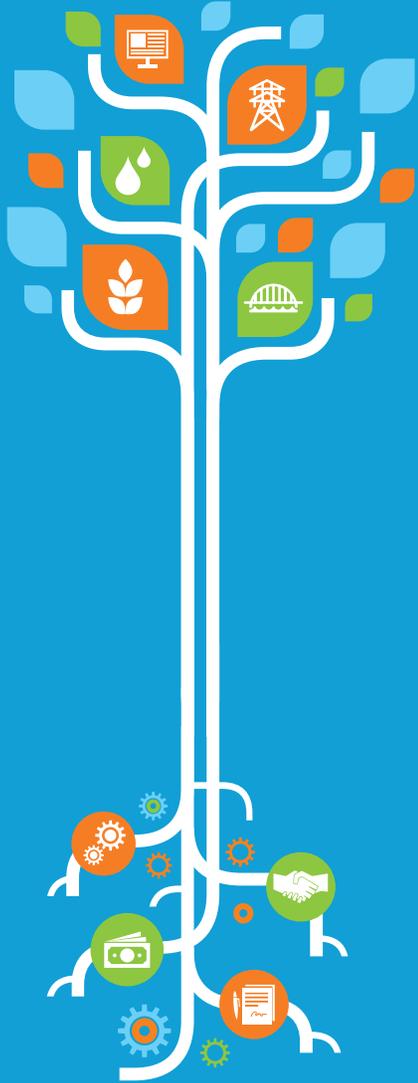
## Expanded Disaster and Pandemic Response Facility (DRF+) under ADF 13



Hundreds of people waiting to be tested for the COVID-19 in Jakarta, Indonesia. Photo by Afriadi Hikmal/ Asian Development Bank

- Eligible events
  - Disasters triggered by natural hazards
  - Cross-border flows of displaced persons triggered by conflicts and related humanitarian events
  - Health emergencies, including pandemics and epidemics
- Eligible countries
  - Grants to Group A countries eligible to receive them
  - Grants to all Group A countries in the event of disasters exceeding 10% of GDP
  - Grants to Group A and B countries receiving significant cross-border inflows of displaced persons
- Financing envelope for DRF+ under ADF13
  - 8% of ADF grants (\$250 million) for the ADF period
  - \$56.7 millionZ committed as of end 2022 (including for APVAX)

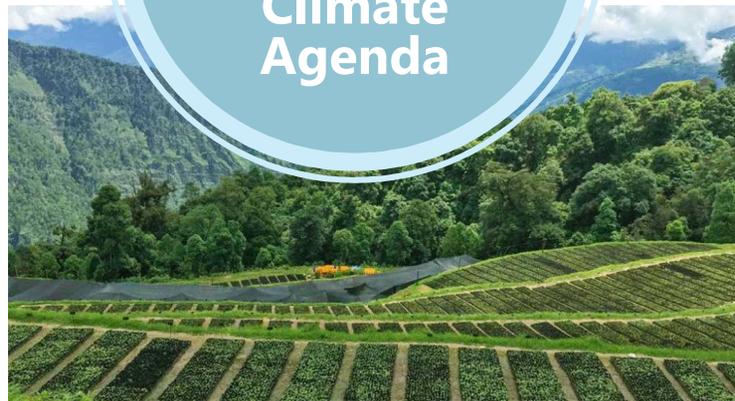
# Sectors and project samples



# Sectors and Themes



Sectors & Themes delivering ADB's Climate Agenda



**BAN: Urban Project 2022**  
Adaptation project under development to respond to priorities of National Delta Plan 2100 by focusing on infrastructure, livelihoods and institutional strengthening for climate resilience in 22 coastal towns.



# Cambodia: Sustainable Coastal and Marine Fisheries Project



## Innovative Project Design

### TOTAL FINANCING : \$93.0 million

- **\$41.0 million** COL
- **\$22.0 million** ADF grant
- **\$10.0 million** ASEAN Infrastructure Fund (ASEAN Catalytic Green Finance Facility)
- **\$20.0 million** Agence Française de Développement

DATE APPROVED: 7 December 2022

TOTAL CLIMATE FINANCE: \$57.3 million

TOTAL ADAPTATION FINANCE: \$57.3 million

### Collaboration between:

- Southeast Asia Department
- European Union's Cambodia Programme for Sustainable and Inclusive Growth in the Fisheries Sector: Capture component

## CONTEXT

The project is ADB's first significant investment in marine fisheries and represents an important milestone for ADB's Action Plan for Healthy Oceans and Sustainable Blue Economies. The project will increase climate resilience and sustainability of coastal and marine fisheries in Cambodia to reverse the sharp decline in fisheries, promote sustainable mariculture, and enhance fish landing sites to improve seafood safety. The project will promote private sector development by enabling coastal communities and small businesses to diversify their livelihoods, adopt sustainable practices, and scale up into viable enterprises. It will support women's economic empowerment by scaling up women's engagement in small and medium-sized enterprises (SMEs).

## DESCRIPTION

The project will have three outputs:

- adaptive coastal and marine fisheries enhanced – application of digital surveillance technology for cost-effective fisheries monitoring and surveillance and deploying structures to strengthen the resilience of fish habitats and stock;
- climate-resilient coastal infrastructure developed – includes construction of (a) gender inclusive fish landing sites, (b) office space to support recently acquired vessel monitoring system technology, community fisheries infrastructures, and procurement of government boat jetties. This output supports nature-based infrastructure solutions for coastal erosion, climate risk reduction, and fishery productivity through a mangrove management program; and
- sustainable and inclusive marine businesses incubated and commercialized - focus will be on supporting the deployment of sustainable and climate-resilient business models. Subject to agreed eligibility criteria, seed grants will be provided to successful business plans, including those supporting post-harvest upgrades, to achieve Good Manufacturing Practice and Good Hygiene Practice standards. This output will also support women's entry to business

## UNIQUE FEATURE

- leveraging ADB's growing experience in addressing ocean health issues through the Action Plan for Healthy Oceans and Sustainable Blue Economies;
- enhancing regional cooperation on ocean health in the Gulf of Thailand;
- scaling up innovative approaches to coastal management (e.g., deploying fish productivity enhancing devices and establishing a coastal and marine fisheries information management system, including an early warning system for bio-toxicity)
- 100% contributing to ADB's \$14 billion Food Security target.

# Tonga: Integrated Urban Resilience Project



## Innovative Project Design

### TOTAL FINANCING: \$18.27 million

- \$ 18.27 million ADF

DATE APPROVED 28 August 2019

Grant 0651: Integrated Urban Resilience Sector Project

### TOTAL CLIMATE FINANCE \$8.69 million

**TOTAL ADAPTATION FINANCE**  
\$8.689 million

### TOTAL MITIGATION FINANCE

- N/A

### Collaboration between:

- N/A

## CONTEXT

The project will provide high priority urban infrastructure identified in the Tonga National Infrastructure Investment Plan (TNIIP), expanding on infrastructure development being undertaken in Nuku'alofa through the previous Nuku'alofa Urban Development Sector Project (NUDSP), enhancing the delivery of public urban services, and building climate change and disaster resilience.

## DESCRIPTION

The project will: (i) rehabilitate and provide new flood management and drainage infrastructure at seven flood-prone locations throughout Nuku'alofa; (ii) rehabilitate and upgrade of Nuku'alofa's piped water distribution network; (iii) upgrade the Tapuhia landfill septage and leachate wastewater treatment plant and construct a new sanitary landfill cell, (iv) address long-term resilience and sea-level rise through the preparation of a climate- and disaster-resilient urban development strategy and investment plan for the greater Nuku'alofa area to guide further government urban planning and investments. Additionally, the project will implement a community-based disaster risk management program.

## UNIQUE FEATURES

- (i) The climate- and disaster-resilient urban development strategy and investment plan is the second phase of the proposed Tonga Climate Adaptation Pathway. It builds off of the ongoing Multi-Hazard Disaster Risk Assessment to create a roadmap for a climate-resilient Tonga.

# PRC: Jiangxi Pingxiang Integrated Rural-Urban Infrastructure Development Project



## Innovative Project Design

### TOTAL FINANCING: \$361.24 million

- \$ 150 million OCR
- \$ 211.24 million Government

DATE APPROVED 21 September 2015

Grant: n/a

### TOTAL CLIMATE FINANCE \$6.3 million

**TOTAL ADAPTATION FINANCE**  
\$6.3 million

### TOTAL MITIGATION FINANCE

- N/A

### Collaboration between:

- East Asia Department

## CONTEXT

The sponge city concept takes into consideration increased climate variability which leads to extreme flooding and longer dry periods and extreme heat over the year. Stormwater, which may otherwise flood and affect people and urban areas and their assets, is slowed down, and detained to remove its potentially destructive force. Rainwater is filtered and released slowly using green systems, just like a sponge does, and/or stored and reused after storms when less water is available, for landscape irrigation, street cleaning, or other urban uses. ADB projects focus on nature-based solutions. Sponge cities ideally integrate green and gray infrastructure systems to optimize benefits.

## DESCRIPTION

The overall objective of sponge cities is to improve the management of the urban water cycle especially through decentralized management of rainwater and stormwater. It also contributes to improved overall water resource management of a city by addressing flooding, water scarcity and pollution.

## UNIQUE FEATURES

- Preserve large trees along the road and plant more trees along bank riparian tree belt; replant shoreline aquatic plants; preserve existing forested areas; preserve high quality wetland
- Preserve wetland and forest areas and create a series of wetland islands; use natural topography to provide flood protection to reduce the construction cost; restore riparian forest; elevate road on north side; protect the big trees

# PRC: Jiangxi Pingxiang Integrated Rural-Urban Infrastructure Development Project



ADB Management and staff. It may be shared outside ADB with appropriate permission.

# PRC: Jilin Yanji Low-Carbon Climate-Resilient Healthy City Project



## Innovative Project Design

### TOTAL FINANCING: \$259.79 million

- \$ 130 million OCR
- \$ 129.79 million Government

DATE APPROVED 4 December 2019

Grant: n/a

### TOTAL CLIMATE FINANCE \$105.64 million

TOTAL ADAPTATION FINANCE  
\$67.75 million

TOTAL MITIGATION FINANCE  
\$37.89 million

### Collaboration between:

- East Asia Department

## CONTEXT

The project will support the first bus rapid transit (BRT) corridor in the northeast of the PRC and transform Yanji's urban geography. This will reinforce the east-west linear city arrangement through connecting key areas following principles of transit-oriented development with higher density mixed-use and pedestrian-friendly center areas around the BRT stations. It will integrate nonmotorized transport (NMT) lanes and facilities along the corridor, and a series of small roads and river greenways will be provided to ensure safe and pleasant pedestrian and bicycle access to the BRT stations while promoting low-carbon urban mobility and physical activities that enhance public health. The project-supported greenways are designed as "sponge city" green infrastructure, enhancing climate resilience and urban livability.

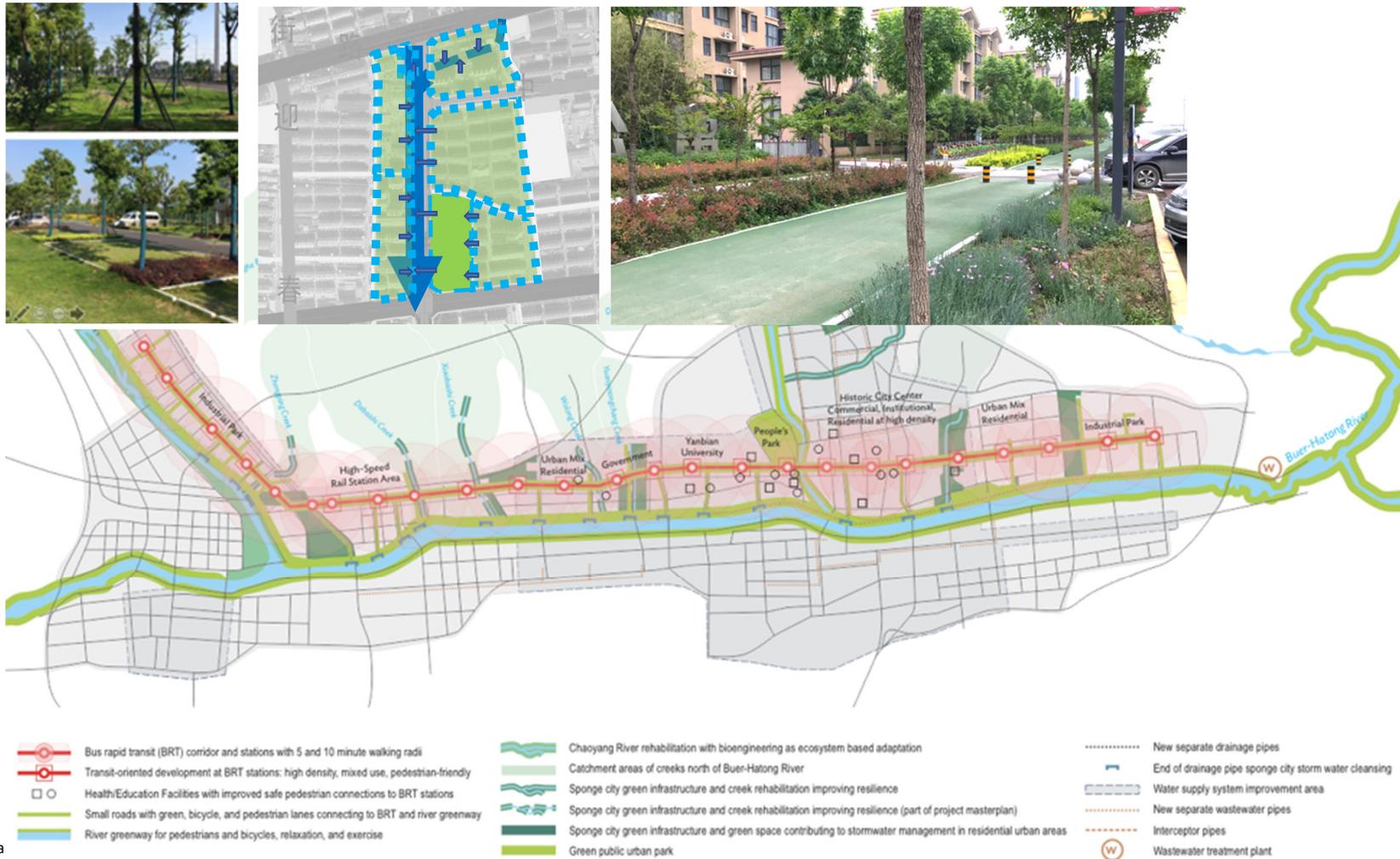
## DESCRIPTION

The project will improve the water supply and wastewater management systems to ensure safe and climate-resilient access to water supply and improved water quality.

## UNIQUE FEATURES

- First bus rapid transit (BRT) line in the city Connects major urban functions and areas following "compact city" and "transit-oriented development" (TOD) principles
- Improved bicycle and pedestrian networks and create new small streets and green links
- Linear green parks as green infrastructure
- Improved water supply and wastewater management.
- Improved health outcomes, environment and healthy lifestyles and safe links to schools and hospitals. Health impact assessment and healthy and age-friendly city masterplan during implementation.
- Sponge City green infrastructure Masterplan
- Advanced tools integrating planning & design
- Smart water supply system

# PRC: Jilin Yanji Low-Carbon Climate-Resilient Healthy City Project



# Uzbekistan: National Road Development Project



## Innovative Project Design

**TOTAL FINANCING: \$ 336.93 million**  
 \$ 273.85 million OCR  
 \$ 63.08 million Government of Uzbekistan

DATE APPROVED: 22 Feb 2022

TA 6908-UZB: Preparing and Implementing Gender-Inclusive Projects in Central and West Asia Subproject 7: Promoting Growth of Women's Enterprises in the Surkhandarya Region  
 \$150,000 TASF

**TOTAL CLIMATE FINANCE:**  
 \$ 17.76 million

**TOTAL ADAPTATION FINANCE**  
 \$ 16.99 million

**TOTAL MITIGATION FINANCE**  
 \$ 0.77 million

**Central and West Asia Department**

## CONTEXT

The Project will upgrade 106.4 kilometers (km) of the existing two-lane road from Denov to Darband and about 87 km of the Guzar–Bukhara–Nukus– Beyneu (A380) highway. It will contribute to (i) Uzbekistan's economic growth and the development of critical CAREC corridors through improved regional connectivity, (ii) enhanced climate resilience and sustainability of roads, (iii) growth inclusiveness through increased access to social and economic opportunities, and (iv) improved road transport efficiency and road safety.

## DESCRIPTION

The Project will have three outputs: (i) widening and improvement of a two-lane road in Surkhandarya in the extreme southeast of Uzbekistan, which connects Denau, about 40 kilometers (km) from the Tajikistan border, and Derbent, on the M39 trunk road, about 120 km north of Termez, the regional capital; (ii) reconstruction of the Uzbekistan sections of the CAREC Corridor 2 with total length of 87 km on the A373 and A373/4R112 highways in the Fergana region and A380 highway in the Bukhara region, and (iii) supply and installation of two fully-automated weigh-in-motion (WIM) systems.

## UNIQUE FEATURE

- (i) climate resilient design, materials, and sustainable bioengineering to withstand temperature increase, flooding, and erosion and protect the landscape
- (ii) will help develop the capacity of the Committee for Roads to advance effective overloading control and traffic management information systems.

# Climate Change and Disaster Risk Management Technical Assistance Portfolio

TAAs	APPROVAL – CLOSING DATES	MISSION LEADER	KEY ACTIVITIES
<b>TA 9395: Support for Implementation of the Asia-Pacific Climate Finance Fund</b> <a href="https://www.adb.org/projects/51163-001/main">https://www.adb.org/projects/51163-001/main</a>	29 SEP 2017 – 30 JUNE 2024	Josh Ling	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.
<b>TA 9414: Supporting Adaptation Decision Making for Climate Resilient Investments</b> <a href="https://www.adb.org/projects/50121-001/main">https://www.adb.org/projects/50121-001/main</a>	02 NOV 2017 – 31 AUG 2024	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.
<b>TA 9414: Supporting Adaptation Decision Making for Climate Resilient Investments</b> <a href="https://www.adb.org/projects/50121-001/main">https://www.adb.org/projects/50121-001/main</a>	02 NOV 2017 – 31 AUG 2024	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.
<b>TA 9695: Establishing a Support Facility for Article 6 of the Paris Agreement</b> <a href="https://www.adb.org/projects/50404-001/main">https://www.adb.org/projects/50404-001/main</a>	07 DEC 2018 – 31 DEC 2023	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.
<b>TA 6730: Promoting Life Cycle Management of Fluorocarbons</b> <a href="https://www.adb.org/projects/54386-001/main">https://www.adb.org/projects/54386-001/main</a>	06 MAY 2021 – 30 APR 2024	Virender Duggal	The TA will support participating DMCs to promote the life cycle management of fluorocarbons through technical and capacity building support.

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# Climate Change and Disaster Risk Management Technical Assistance Portfolio

TA's	APPROVAL – CLOSING DATES	MISSION LEADER	KEY ACTIVITIES
<b>TA 9716: Supporting Ambitious Climate Action through Implementation of Developing Member Countries’ Nationally Determined Contributions (Subproject 1)</b> <a href="https://www.adb.org/projects/52004-002/main">https://www.adb.org/projects/52004-002/main</a>	01 MAR 2019 – 31 DEC 2024	Kate Hughes /Samet Bulut	Subproject 1 will have the following outcome: capacities of selected DMCs to implement NDCs enhanced.
<b>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)</b> <a href="https://www.adb.org/projects/52004-005/main">https://www.adb.org/projects/52004-005/main</a>	19 MAR 2019 – 31 DEC 2023	Esmyra Javier	Subproject 3 will support establishment of mechanisms to measure, monitor, and report on commitments made under the Paris Agreement.
<b>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)</b> <a href="https://www.adb.org/projects/52004-004/main">https://www.adb.org/projects/52004-004/main</a>	29 MAY 2019 – 30 NOV 2023	Kate Hughes	Subproject 2 will support enhancement of financial mechanisms for developing climate actions of DMCs.
<b>TA 6933: Supporting the Implementation of ADB’s Climate Change Operational Framework 2017-2030 -Subproject 4: Identifying Climate Adaptation Investment Priorities (52004-006: <a href="#">Identifying Climate Adaptation Investment Priorities</a> (Subproject 4)   <a href="#">Asian Development Bank (adb.org)</a>)</b>	27 JULY 2022-31 DEC 2024	Arghya Sinha Roy	Subproject 4 will enhance the capacity of selected DMCs for identifying climate adaptation investment priorities.

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# Climate Change and Disaster Risk Management Technical Assistance Portfolio

TA's	APPROVAL – CLOSING DATES	MISSION LEADER	KEY ACTIVITIES
<b>TA 10049-REG: Enabling a Just Transition to Low-Carbon and Climate-Resilient Economies and Societies in Asia and the Pacific</b> <a href="https://www.adb.org/projects/56227-001/main"> (https://www.adb.org/projects/56227-001/main )</a>	14 DEC 2022 – 31 DEC 2025	Kate Hughes	The KSTA will initiate activities under the Just Transition Support Platform to enhance the enabling environment for a just transition of ADB’s DMCs to low-carbon and climate-resilient economies and societies.
<b>TA 10039-REG: Operationalizing Paris Alignment in the Country Programming Processes</b> <a href="https://www.adb.org/projects/56226-001/main"> (https://www.adb.org/projects/56226-001/main)</a>	12 DEC 2022 – 31 DEC 2025	Christian Ellermann	The KSTA will support the capacity of DMCs to deliver on the goals of the Paris Agreement, particularly strengthening the integration of country long-term climate objectives in ADB country dialogues and country programming strategies.
<b>TA 10048-REG :Adaptation Metrics to Scale Up and Align Investment with Climate-Resilient Development</b> <a href="https://www.adb.org/projects/55117-001/main"> (https://www.adb.org/projects/55117-001/main )</a>	14 DEC 2022 – 31 DEC 2025	Nanki Kaur	The KSTA will improve the capacity of the public and private sector in developing member countries (DMCs) to apply adaptation metrics in developing adaptation plans and linking these to public and private sources of finance. The TA will deliver two outputs to improve the capacity of public and private sector actors to apply adaptation metrics to support investment planning, namely: (i) evidence base on adaptation metrics expanded, and (ii) tools to apply adaptation metrics developed.
<b>TA 6629-REG: Improved Decision-Making for Climate Resilient Development in Asia and the Pacific</b> <a href="https://www.adb.org/projects/54412-001/main"> (https://www.adb.org/projects/54412-001/main)</a>	03 DEC 2020 – 31 DEC 2024	Nanki Kaur	The KSTA will support selected DMCs (Armenia, Indonesia, and Mongolia) to strengthen (i) country systems for climate risk-informed fiscal decision making; and (ii) knowledge on climate risk-informed decision-making.

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# Climate Change and Disaster Risk Management Technical Assistance Portfolio

TAs	APPROVAL – CLOSING DATES	MISSION LEADER	KEY ACTIVITIES
<b>TA 6853-REG: Strengthening Cooperation on Disaster Risk Management within the Association of Southeast Asian Nations</b> <a href="https://www.adb.org/projects/55162-001/main">https://www.adb.org/projects/55162-001/main</a>	06 DEC 2021 – 30 NOV 2023	Steven Goldfinch	The KSTA will support the ASEAN Secretariat and member states implement the ASEAN Agreement on Disaster Management and Emergency Response (AADMER) Work Programme 2021-2025 by supporting increased cooperation and enhancing capacity on disaster risk management (DRM).
<b>TA 9944-REG: Understanding Disaster Displacement in Asia and the Pacific</b> <a href="https://www.adb.org/projects/53124-001/main">https://www.adb.org/projects/53124-001/main</a>	04 FEB 2020 – 30 JUN 2024	Steven Goldfinch	The knowledge and support TA aims to support DMCs prepare and respond to disasters through an enhanced understanding of disaster displacement.
<b>TA 9955-REG: Building Disaster-Resilient Infrastructure through Enhanced Knowledge</b> <a href="https://www.adb.org/projects/52251-001/main">https://www.adb.org/projects/52251-001/main</a>	09 MAR 2020 – 31 AUG 2024	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.
<b>TA 6539-REG: Investing in Climate Change Adaptation through Agroecological Landscape Restoration: A Nature-Based Solution for Climate Resilience</b> <a href="https://www.adb.org/projects/53348-001/main">https://www.adb.org/projects/53348-001/main</a>	14 JUL 20 – 30 JUN 2023	Sugar Gonzales	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.



# Climate Change and Disaster Risk Management Technical Assistance Portfolio

TAAs	APPROVAL – CLOSING DATES	MISSION LEADER	KEY ACTIVITIES
<p><b>TA 6561-REG: Strengthening the Enabling Environment for Disaster Risk Financing (Phase 2)</b>  <a href="https://www.adb.org/projects/48259-002/main">https://www.adb.org/projects/48259-002/main</a></p>	09 SEP 2020 – 31 DEC 2023	Arup Chatterjee / Charlotte Benson	The TA will develop (i) a diagnostics methodology to assess the current DRF landscape and enabling environment in ADB's DMCs, and (ii) a toolkit of actions to strengthen the enabling environment for DRF, supporting the establishment of comprehensive DRF strategies linked to solvent risk transfer markets.
<p><b>TA 6627-REG: Building Institutional Capacity - Delivering Climate Solutions under Operational Priority 3 of Strategy 2030</b>  <a href="https://www.adb.org/projects/54176-001/main">https://www.adb.org/projects/54176-001/main</a></p>	03 DEC 2020 – 30 JUNE 2024	Esmyra Javier / Kate Hughes	The regional TA will build institutional capacity through technical support and policy advice to DMCs to: (i) develop long-term low-greenhouse gas (GHG) emission and resilient development strategies; (ii) mobilize, track and report on climate finance; (iii) enhance management of climate and disaster risks; and (iv) ensure national strategies and policies are aligned with the goals of the Paris Agreement on climate change.



# Climate Change and Disaster Risk Management Consultant Openings

PROJECT / TA	OPENINGS	BRIEF DESCRIPTION OF THE ROLE
<b>TA 10049-REG: Enabling a Just Transition to Low- Carbon and Climate- Resilient Economies and Societies in Asia and the Pacific</b>	Senior Just Transition Specialist/Team Leader	The team leader will support the project officer in leading the coordination and engagement with relevant ministries and governments and stakeholders (e.g., civil society) in the development of institutional and policy frameworks on just transition, and render analytical and technical expertise. Further, the team leader will lead the development of country analysis, capacity building programs, multistakeholder engagements and consensus building, knowledge products; and the development of guidance and approaches and integration of just transition in ADB operations, projects, and programs.
	Social Protection (Labor) Specialist(s)	The specialist(s) will support the identification and analysis of key transition issues and policies, and support the development of relevant policy measures, projects, and programs for ensuring social protection and quality jobs, for those affected, particularly for women, workers and vulnerable groups, in close consultation with peak labor federations and other civil society groups.
	Education/Skills Development Specialist(s)	The specialist(s) will support the identification and analysis of key transition issues and policies, and support the development of relevant policy measures, projects, and programs for technical education and skills development.
	Gender Specialist(s)	The specialist will be responsible for ensuring strong integration of gender mainstreaming across all areas of support under the TA and providing specific advice on gender related issues. This will include providing technical inputs and guidance to ensure country analysis, just transition roadmaps, policy recommendations incorporate gender considerations; and capacity building programs, multistakeholder consultations/dialogues including with civil society, and workshops undertaken, and the mechanisms, projects and programs developed are gender inclusive

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# Climate Change and Disaster Risk Management Consultant Openings

PROJECT / TA	OPENINGS	BRIEF DESCRIPTION OF THE ROLE
<b>TA 10049-REG: Enabling a Just Transition to Low- Carbon and Climate- Resilient Economies and Societies in Asia and the Pacific</b>	Energy Specialist(s)	The specialist(s) will support the identification and analysis of energy transition issues and policies, and the development of clean energy policy measures, projects, and programs to enable the just energy transition of the DMCs.
	Sector Specialists	The specialist(s) will provide technical inputs and guidance in the development and conduct of country analysis, capacity development programs, consultations/dialogues including multistakeholder engagements and consensus building, knowledge products, and project concept papers. The specialist(s) will support the identification and analysis of key sectoral issues and policies, and the development of sectoral policy measures, projects, and programs to enable the just transition of the developing member countries.
	Finance Sector Specialist(s)	The specialist(s) will be responsible for the assessment of suitable finance mechanisms to support the implementation of just transition, including exploring on existing financing approaches/approaches/mechanisms. Moreover, the specialist(s) will also support the development project proposals for possible access of these finance mechanisms.
	Participatory and Stakeholder Engagement Specialist	The specialist will provide technical inputs and advise on stakeholder engagement and optimal practices in participatory policy/project design approaches and multistakeholder consultations for both policy development and project/program design. The specialist will also support DMCs to design and implement the multistakeholder engagements and consensus building planned under the TA, and in the development of guidance notes.

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# Climate Change and Disaster Risk Management Consultant Openings

PROJECT / TA	OPENINGS	BRIEF DESCRIPTION OF THE ROLE
<p><b>TA 10048-REG: Adaptation Metrics to Scale Up and Align Investment with Climate- Resilient Development</b></p>	<p>Resilience Metrics</p>	<p>The consulting firm will support the delivery of the following outputs and undertake the following approaches, as appropriate, to produce the corresponding deliverables:</p> <ol style="list-style-type: none"> <li>i. Expanded evidence base on adaptation metrics. This output will support two activities to expand the evidence base on adaptation metrics:               <ul style="list-style-type: none"> <li>• Collate and analyze information on public and private sector adaptation targets, actions, impact indicators and investment monitoring and evaluation systems in DMCs; and</li> <li>• Prepare and disseminate policy briefs on public and private sector adaptation metrics</li> </ul> </li> <li>ii. Tools to apply adaptation metrics developed. This output will support Bangladesh, Pakistan, and the Philippines to design and apply adaptation metrics in investment planning. The following activities will be carried out to develop tools:               <ul style="list-style-type: none"> <li>• Codesign tools to apply adaptation metrics in investment planning. This activity will build on the evidence products. It will facilitate learning and design dialogues to enable public and private sector entities to design adaptation metrics for climate fiscal frameworks and climate resilience principles and improve adaptation investment planning in the agriculture sector.</li> <li>• Develop toolkit. This activity will draw on the policy briefs and codesign process to develop a toolkit on applying adaptation metrics in investment planning.</li> <li>• Organize trainings to improve the capacity of public and private sector entities to apply adaptation metrics in investment planning.</li> </ul> </li> </ol>

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# Climate Change and Disaster Risk Management Consultant Openings

PROJECT / TA	OPENINGS	BRIEF DESCRIPTION OF THE ROLE
<b>TA 10039-REG: Operationalizing Paris Alignment in the Country Programming Processes</b>	Senior Paris Agreement Alignment Specialist	Support the preparation of investment plans, as well as pre-concepts for priority public, private and/or public-private projects, ensuring their alignment with the goals of the Paris Agreement as per the joint MDB Paris Agreement Alignment Framework and applicable ADB guidance.
	Paris Agreement Alignment Analyst & Coordinator Specialist	In-country experts who will facilitate the relations with counterpart agencies in developing member countries supporting ADB's Paris Agreement upstream engagement efforts and prepare any necessary inputs for country programming discussions.



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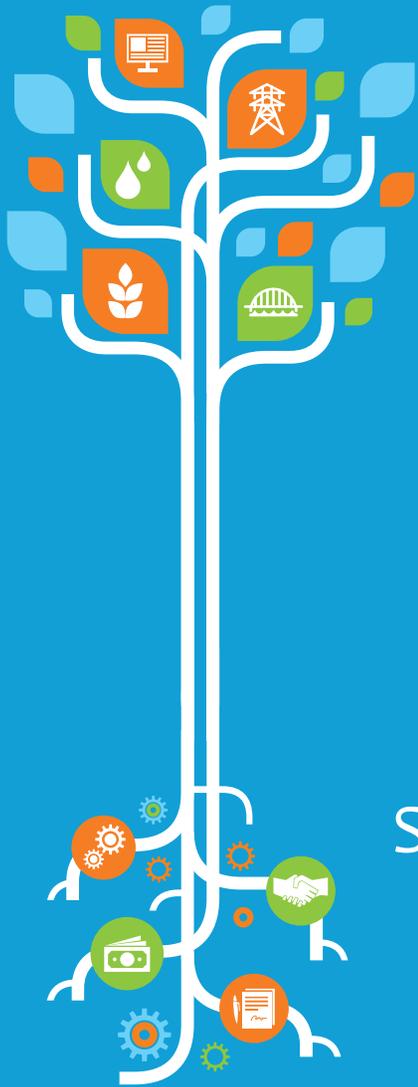
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For further information:

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

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





BUSINESS  
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# THANK YOU!

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