



#CAIP2025

CLIMATE ADAPTATION INVESTMENT PLANNING FORUM 2025

# Session 6: Funding and financing for adaptation investments



## Himachal in peril: Climate change unleashes fury on Dev Bhoomi

Catastrophic floods and landslides now frequently devastate mountain slopes, washing away human habitations, orchards...

KULBHUSHAN UPMANYU | 16 HOURS AGO

## roads for Punjab floods, seeks report from NHAI

Says drainage of water from flooded fields blocked, seeks report from NHAI

TRIBUNE NEWS SERVICE | 1 HOUR AGO

## Principal Secy Kumar faces ire of farmers in Zira

Water Resources Principal Secretary Krishan Kumar was confronted by angry farmers in Ruknewala village due to a...

OUR CORRESPONDENT

## Leave home, residents of 21 Patiala villages told as Ghaggar swells



## Region's heaviest rainfall leaves Tricity afloat

133-mm rain batters P'kula; Chandigarh logs 91.4-mm, Mohali 73.5-mm

NITIN JAIN | 44 MINUTES AGO



## Parl panel blames elevated roads for Punjab floods, seeks report from NHAI

Says drainage of water from flooded fields blocked, seeks report from NHAI

## 6.a. Lightning Talks: Adaptation Finance Landscape

### MODERATOR



**Esmyra Javier**  
Senior Climate Change  
Specialist, ADB

### PANELISTS



**Vivian Wijaya**  
Senior Analyst,  
Climate Policy  
Initiative (CPI)



**Feng Hu**  
APAC Policy Advisor,  
United Nations  
Environment Programme  
Finance Initiative (UNEP FI)



**Yusuke Taishi**  
Adaptation Programming  
Lead and OIC Climate  
Change Adaptation,  
United Nations  
Development Programme  
(UNDP)



**John Ward**  
Managing Director,  
Pengwern Associates

#CAIPForum2025  
3-4 September 2025  
Manila, Philippines

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# State of Climate Finance Landscape – Tracking the Flow

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**Vivian Wijaya**  
Senior Analyst

September 2025



[climatepolicyinitiative.org](https://climatepolicyinitiative.org)



[Climate Policy Initiative](#)



[climate.policy](#)

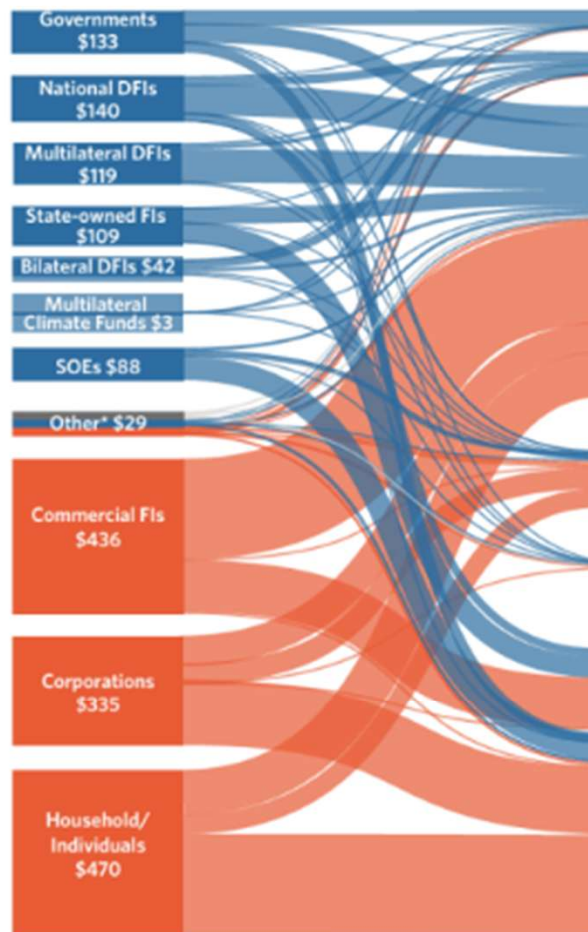
# LANDSCAPE OF CLIMATE FINANCE IN 2023

Values are in USD billion



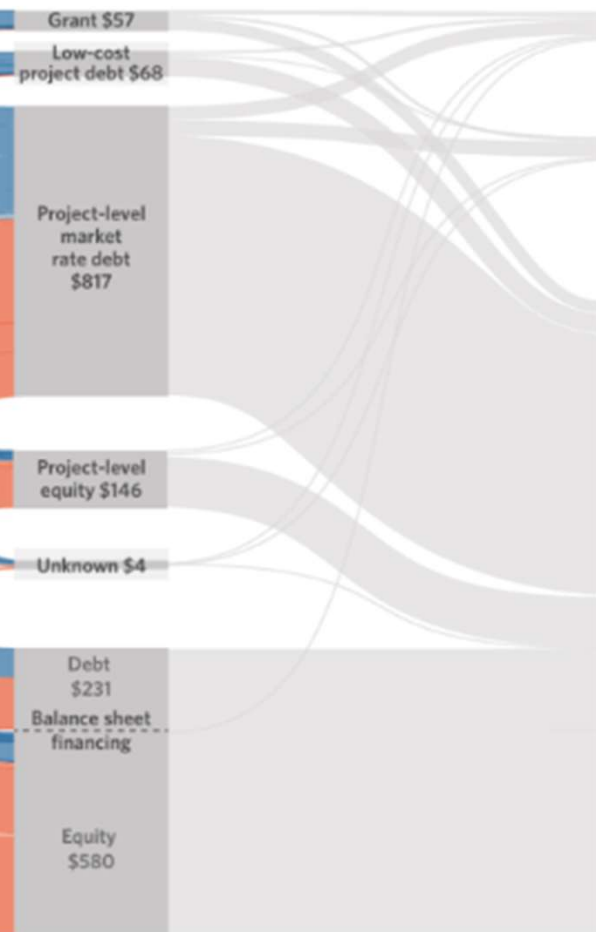
## SOURCES AND INTERMEDIARIES

Which types of organizations are sources or intermediaries of capital for climate finance?



## INSTRUMENTS

What mix of financial instruments is used?



## USES

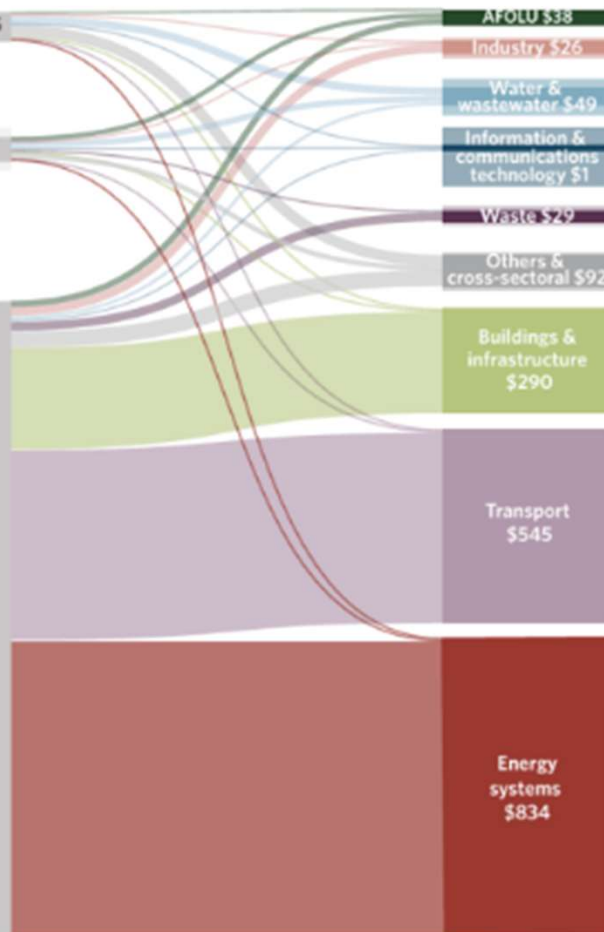
What types of activities are financed?



**1.9** TRILLION USD IN 2023

## SECTORS


What is the finance used for?



**PUBLIC** **PRIVATE**

\*Other\* public sources include export credit agencies and unknown public funds  
 \*Other\* private sources include institutional investors funds, philanthropies, and unknown

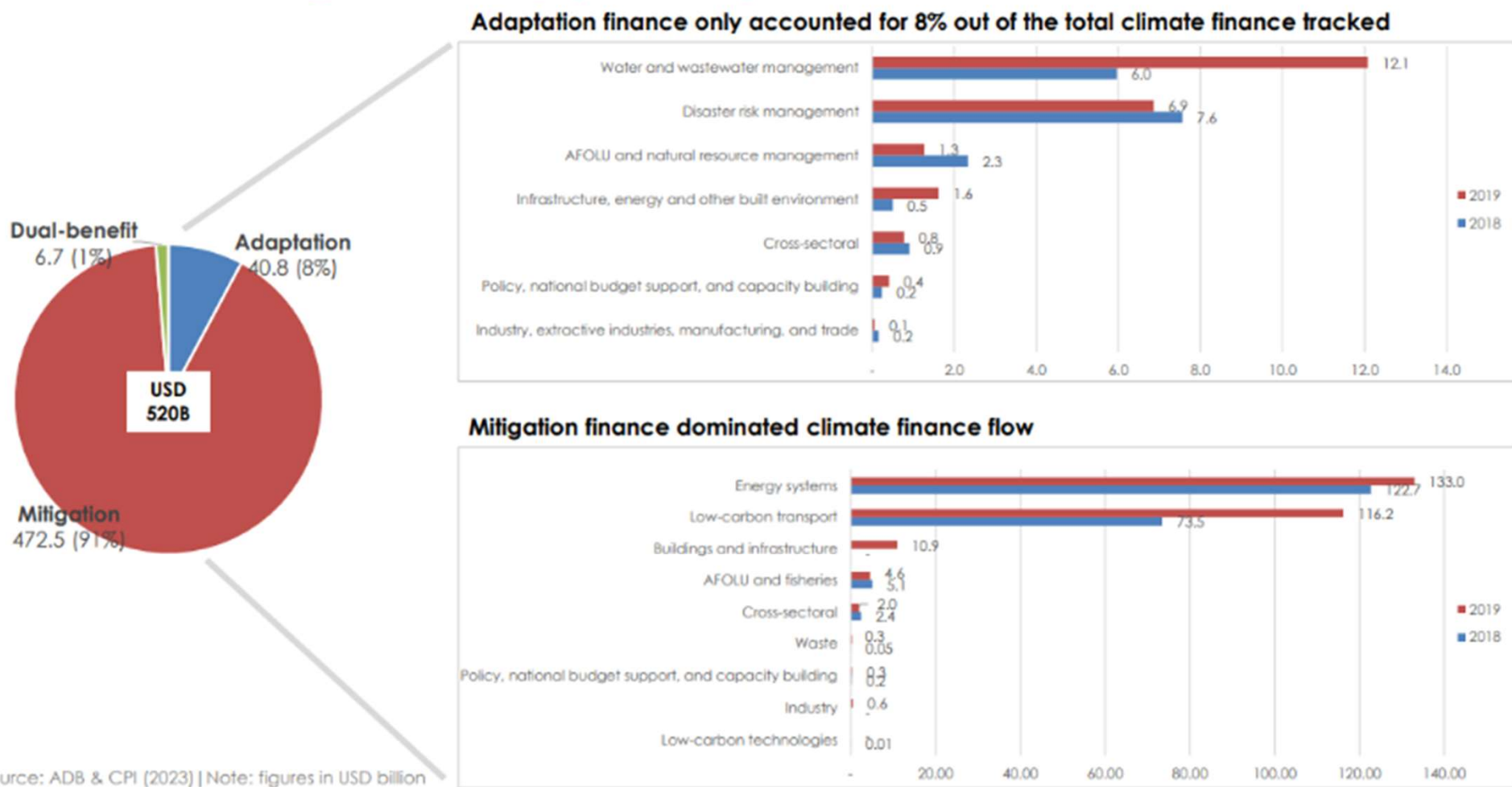
\*AFOLU\* stands for agriculture, forestry, other land use, and fisheries.



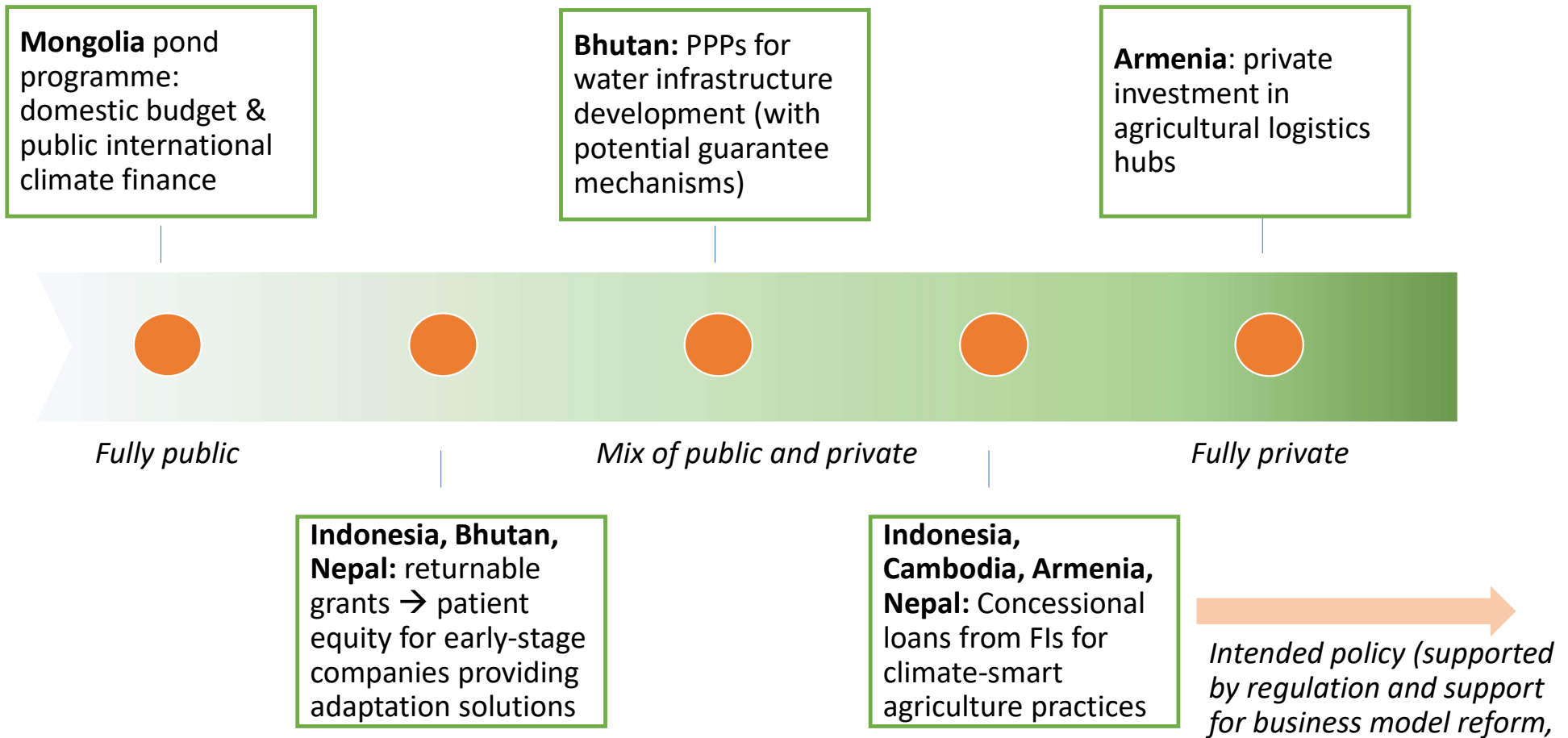
# APAC Region Snapshot

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## Asia Pacific Zoom-in: The majority of climate finance went to mitigation sectors, leaving the wider gap for adaptation finance



## The CAIP program has identified a range of financing models from across the public-private spectrum (illustrative selection only)



## 6.b. Fireside Chat 1: Leveraging Public Investment in Adaptation

### MODERATOR



**John Ward**  
Managing Director,  
Pengwern Associates

### PANELISTS



**Nadeem Memon**  
Joint Secretary, Ministry  
of Finance, Pakistan



**Chitembo Kawimbe  
Chunga**, Lead, Climate  
Investment Funds (CIF)



**Gerry Pramudya Sulaiman**  
State Financial Analyst,  
Directorate of Multilateral  
Cooperation and Sustainable  
Finance, Ministry of Finance,  
Indonesia



**Cigdem Akin**  
Director, Public Sector  
Management and  
Governance Sector  
Office, ADB

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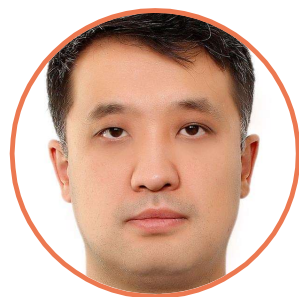
## 6.c. Fireside Chat 2: Leveraging Private Investment in Adaptation

### MODERATOR



**Nanki Kaur**  
Senior Climate  
Change Specialist,  
ADB

### PANELISTS



**Chinguun Batkhuyag**  
Chief Compliance Officer,  
Gobi Cashmere



**Noah  
Wescombe**  
Senior Specialist,  
Cadlas



**Dave Sivaprasad**  
Boston Consulting



**Tashmeem Muntazir  
Chowdhury**  
Head of ESG and  
Sustainable Finance,  
Sustainable Finance  
Department, BRAC Bank

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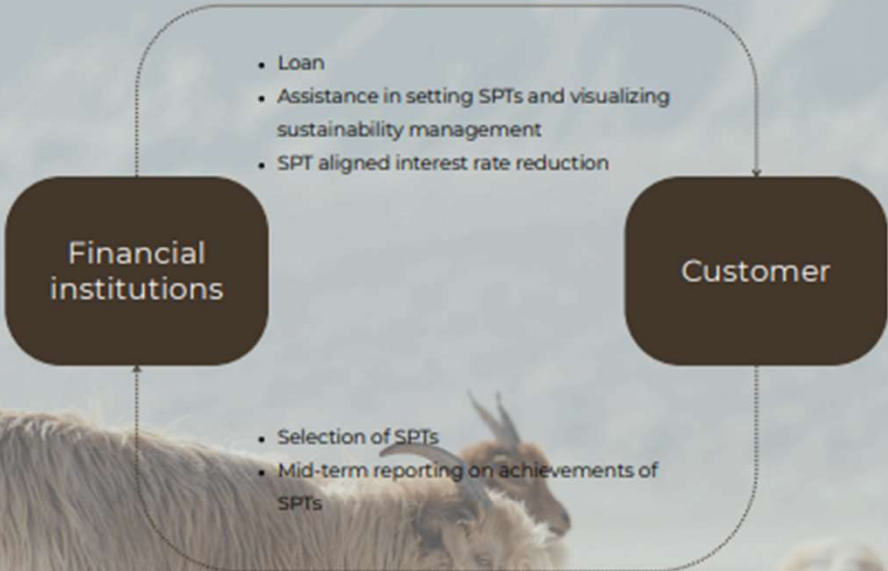
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## What is Sustainability Linked Loan?

## Sustainability performance targets set by ADB

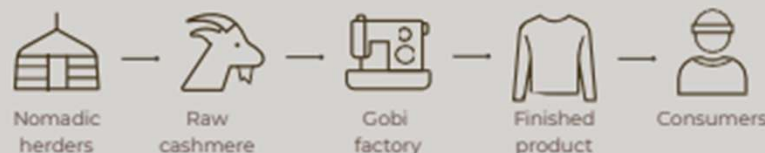


- Increase procurement of raw cashmere directly from herders
- Reduce energy consumption per unit of product
- Reduce water consumption per unit of product
- Pasture management training to herders



## A climate resilient value chain

A climate-resilient value chain is a system that anticipates risks, uses natural resources responsibly, ensures the sustainable livelihoods of herders, and enables the continuous operation of businesses.



### Gobi JSC

Sustainable cashmere - Trilateral Project

#### Capacity building for herders

- Climate change and adaptation
- Human rights and gender concepts
- Animal breeding and selection
- Good practices for sustainable raw material sourcing

#### Assistance to herders



Offering hay and feed assistance to herders



Sterilization and disinfection of livestock and animal fences



Providing high-quality breeding bucks



Direct cashmere purchase from herders



Supplying raw material bags



Quality assessment of raw cashmere

### ADB - Technical Assistance

Piloting Climate-resilient Solutions to Pasture Degradation with Nomadic herders

#### Main information

**\$1 million:** Financing under technical assistance

**2025 - 2029:** Implementation period

**2 sites:** Bayankhongor province, Khuvsgul province

**6+** Herder groups implementing the project

#### Outputs:

##### Output 1:

Pilot 3 **pasture management** solutions in **Bayankhongor** to identify 1 recommendation.

##### Output 2:

Pilot 3 **pasture management** solutions in **Khuvsgul** to identify 1 recommendation.

##### Output 3:

200 herders in Mongolia trained in **functional financial literacy and gender equality**.

##### Output 4:

200 herders in Mongolia trained in **pasture management and ecology**.

##### Output 5:

Provide herders with **weather forecasts and pasture** data to enhance climate resilience.



# Leveraging Private Investment in Adaptation

Emerging models for private-public financing

SEP 2025

# Six archetypes demonstrate potential roles that private sector players can play in adaptation

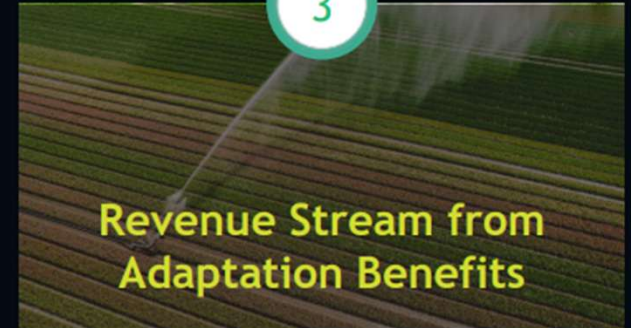
1



2



3



4



5



6



# Six archetypes demonstrate potential roles that private sector players can play in adaptation

Archetype	Description	Commercial Model / Value Realization
1 Joint Protection for Own Operations	Co-invest in adaptation measures with public actors to protect own physical assets, facilities, and workforce from climate risks	Avoided direct losses due to climate hazards, reduced operation disruption, lower insurance premiums, improved business continuity
2 Joint Investment in Supply Chain Resilience	Partner with public or private actors to invest in infrastructure or services that secure upstream or downstream supply chain resilience	Reduced disruptions from production and delivery, reduced sourcing costs and supply chain volatility
3 Revenue Stream from Adaptation Benefits	Invest in or deliver adaptation infrastructure or services where the adaptation benefit has a paying customer, e.g., climate-resilient water systems	Revenue from direct payments for use (e.g., payment for ecosystem services, user fees), or service-based risk-sharing (e.g., insurance premiums)
4 Monetization of Co-benefits	Generate and monetizes environmental or social co-benefits, e.g., blue carbon credits, sustainable agriculture products, biodiversity services	Return through sales of verified carbon credits or sustainable products (e.g., seaweed, regenerative crops)
5 Asset Value Uplift from Adaptation	Invest in adaptation that improves surrounding assets or ecosystems, increasing the value of owned or adjacent assets	Asset value gain through land value/ property appreciation, higher rental or lease income, or enhanced asset performance over time
6 Collaboration for Diffused Economic Benefits	Invest in building broader society resilience that protects or enhances society continuity, market stability and license to operate in vulnerable regions	Still relatively nascent, potential through potentially through Adaptation Benefit Mechanism (ABM) to generate Certified Adaptation Benefits (CABs) to reflect the impact

Source: BCG analysis

Private sector has increasingly recognized the needs and opportunities in the adaptation market...

### Three ways for private sector to get involved in climate adaptation & resilience



**Protect** their own assets and operations through climate-resilient design & infrastructure



Covered in WEF-BCG White Paper in 2024

<https://www.weforum.org/publications/the-cost-of-inaction-a-ceo-guide-to-navigating-climate-risk/>



**Grow** offerings in adaptation and resilience solutions



Covered in Temasek-BCG Report in 2025

<https://www.bcg.com/publications/2025/investment-opportunities-in-climate-a-and-r>



**Participate** in public-led initiatives in climate adaptation & resilience infrastructure

Focus of this report

# Participate model is essential in adaptation given multiple mutual interests to deliver, the size of projects and actionable structure for scale

Non-exhaustive



## Mutual Interest to Deliver

- Public and private sector share the exposure to physical climate risk, which creates a strong rationale for joint investment and coordinated delivery
- Adaptation delivers multiple benefits, which are not exclusive to one single player



## Potential Large Project Size

- Many adaptation solutions, e.g., flood control or coastal defenses, are too large or complex for public or private actors to handle alone
- These systems are foundational for entire economic zones, but far exceed public budgets



## Practical Structure for Action

- The Participate model enables co-investment, shared concessions, or outcome-based payments to align interests and funding
- It allows private actors to contribute where they benefit, either directly (e.g., risk reduction) or indirectly (e.g., asset value uplift)

Participate model is not just a funding strategy, but **an efficient model to scale impact** by aligning mandates, mobilizing capital, and delivering resilient systems that benefit both business and society

# Opportunity for Private Sectors: \$300-500 Bn required annually in adaptation infrastructures for public-private collaboration

Non-exhaustive



**\$300 -  
500**  
Billion/y

Projected annual adaptation investment through public-private collaboration by 2050

## Key Areas of Focus



**Drought and water scarcity solutions**, driven by water diversification, aquifer recharge, and irrigation upgrades, would require \$140-170 Bn annual investment



**Coastal and riverine flood protection**, including levees, nature-based solutions, and floodplain restoration, would require \$120-140 Bn annual investment



**Extreme wind resilience solutions**, covering infrastructure reinforcement, urban design upgrades, and emergency systems, would require \$60-90 Bn annual investment globally

# Six archetypes demonstrate potential roles that private sector players can play in adaptation

1



2



3



4



5



6



# Six archetypes demonstrate potential roles that private sector players can play in adaptation

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Source: BCG analysis

One Archetype might not bring enough commercial viability in adaptation projects...

... It is critical for multiple archetypes work in parallel while designing adaptation solutions

Non-exhaustive



**Fragmented value across stakeholders:**

Adaptation benefits are often distributed across public, private, and community actors and no single archetype captures the full value created, limiting financial return for any one investor



**Capture full value across stakeholders:**

Different actors benefit from different aspects of adaptation. Stacking archetypes enables shared investment by aligning incentives and roles across sectors



**Not enough commercial value to pass investment thresholds:**

One archetype might generate returns too low or too slow to meet internal hurdle rates, especially for institutional or infrastructure investors



**Improve financial viability through multiple value streams:**

Blending revenue models and value creation methods, e.g., operation protection, user fees, carbon credits, or asset uplift, creates a stronger, more investable business case

# Deep Dive: Clarify the revenue model for adaptation projects

Non-exhaustive



## Find value from adaptation benefits

- Design adaptation solutions/ projects where there could be clear buyers for the adaptation benefits, e.g., local utilities, critical value chains
- Explore creative ways to monetize the benefits and quantify the impact, e.g., performance-based payments tied to resilience measurements



## Explore the market of co-benefits

- Seek partnerships or off-takers for the potential co-benefits from adaptation outcomes, e.g., carbon credits, sustainable agriculture products
- Bundle other infrastructure projects with synergies to adaptation, e.g., toll roads built on coastal defense, tunnel from stormwater discharge



## Evaluate potential value uplift

- Evaluate the possibility of surrounding value uplift, e.g., asset value creation from land reclamation, real estate value appreciation from river/ wetland restoration
- Integrate adaptation benefits in urban development and look for potential development opportunities from private sectors

The core idea is to **rethink how adaptation value is captured and translated into investable returns**, to enhance the commercial viability