

Training Workshop on Corruption Risks and Anti-Corruption Strategies in Climate Financing

Session 2: Trends and patterns in climate finance

25 May 2015
ADB Headquarters

Outline

Climate Finance

ADB and Climate Finance

ADB and the Green Climate Fund

Climate Finance

Climate finance?

Definition of climate finance (OECD, 2011):

- Capital flows that target low-carbon or climate resilient development – **Greenhouse gas mitigation or adaptation to climate change are explicitly stated objectives or outcomes of investment**

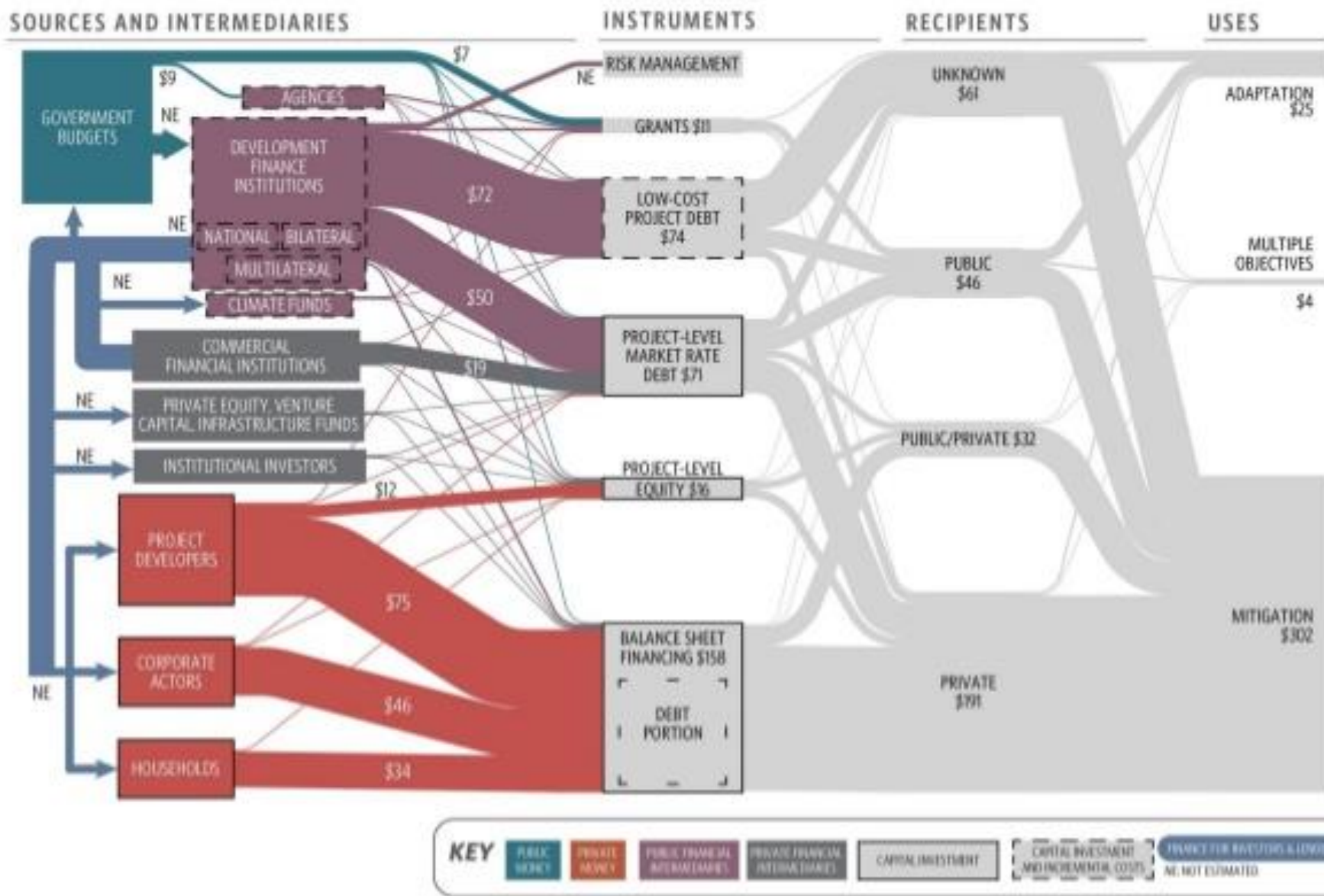
A mosaic of climate finance flows

- **Purpose?** Mitigation, adaptation, or both?
- **By Whom?** Public, private, or public-private?
- **How?** National or international?
Bilateral or
multilateral channels?
- **Type of sources?** Carbon markets, tax
revenues, capital
markets...?
- **To finance what?** Incremental costs,
investment capital...?
- **By what modes?** Grants, concessional loans,
co-financing...?



LANDSCAPE OF CLIMATE FINANCE 2014 USD 331 BN TOTAL

Landscape of Climate Finance 2014 illustrates climate finance flows along their life cycle for the latest year available, mostly 2013



Price Tag of Climate Mitigation and Adaptation in Developing Countries

**\$140-
\$175
billion**

- **Annual mitigation costs in developing countries between 2010-2030** (Source: IBRD/WB's World Development Report 2010)

**\$70-
\$100
billion**

- **Annual adaptation costs for developing countries by 2050** (Source: World Bank, 2010/ UNEP Adaptation Gap Report : 2-3x these estimates)

Climate finance sources

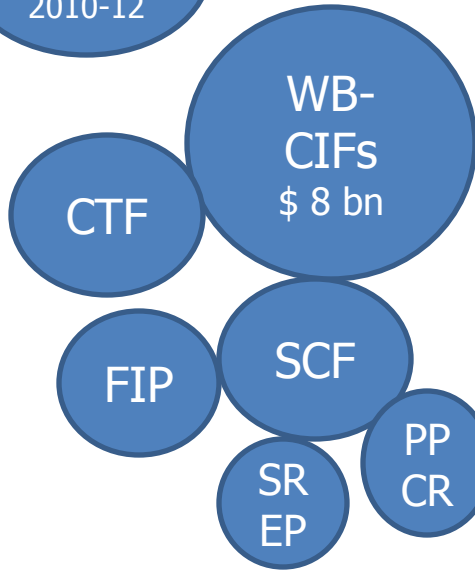
2020 est, \$ bn	Low Carbon Price (\$15)	Medium Carbon Price (\$25)	High Carbon Price (\$50)
AAU/ETS auctions	2-8	8-38	14-70
Offset levies (carbon market tax)	0-1	1-5	3-15
Levies on international transport	3-8	6-11	11-25
Carbon tax	Approx. 10 for every \$1/t of CO ₂ e		
Wire charges	5 for \$.0004/kWh or \$ 1/t CO ₂ e		
Removal of fossil fuel subsidies	3-6		
Financial transaction tax	2-27		
IFIs	For 10 in capital replenishment approx 30-40		
Carbon market offsets	8-12	38-50	150
Public-private leverage	200 for medium carbon price		

Evolution of the Climate Finance Architecture

Green Climate Fund
\$ 10.2 bn pledged

UNFCCC Objective:
\$100 bn per year by 2020

FSF
\$ 30bn
2010-12
Fast Start Finance



AF Adaptation Fund

AF
\$ 448 mn

CDM and carbon markets
\$ 2 /176 bn

National Funds

- Bangladesh Climate Change Resilience Fund
- Indonesia Climate Change Trust Fund
- Brazil Amazon Fund

CDM: Clean Development Mechanism

SCCF
\$ 348 mn

LDCF
\$ 915 mn

GEF Trust Fund
6.1 bn for CC
(GEF 1-6)

GEF: Global Environment Facility
SCCF: Special Climate Change Fund
LDCF: LDC Fund

CIF: Climate Investment Funds
CTF: Clean Technology Fund
SCF: Strategic Climate Fund
FIP: Forest Investment Programme
SREP: Scaling up RE Programme
PPCR: Pilot Programme on Climate Resilience

Bilateral Initiatives

Forestry
(Norway, Australia)
Others UK, Germany

Multilateral Initiatives

UN REDD
ADB- FCF, APCF
WB FCPF
AfDB Congo Basin Forest Fund

Climate Finance in Asia and the Pacific

Climate Finance Regional Briefing: Asia and Pacific

Source: ODI (2014)

Figure 2: Approved and disbursed funding across themes

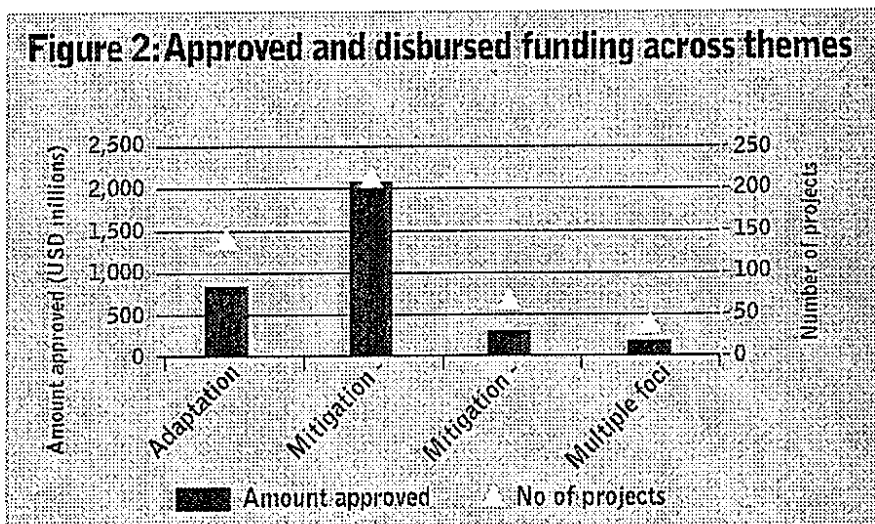
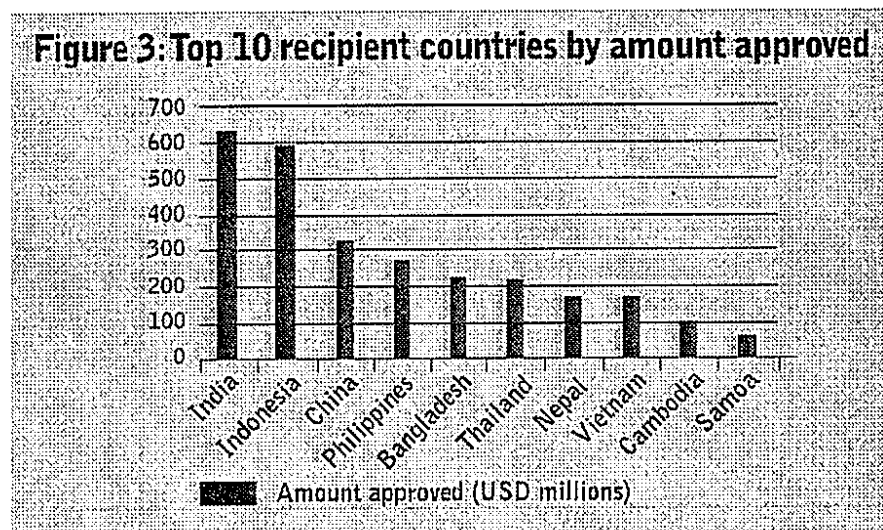


Figure 3: Top 10 recipient countries by amount approved



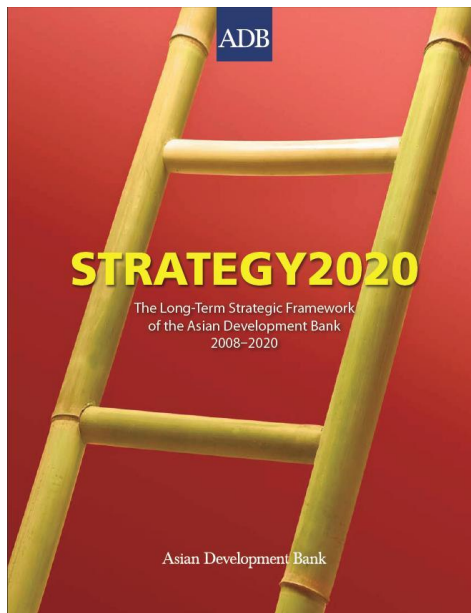
Since 2003, \$3.35 billion of climate finance has flowed from dedicated climate funds. Of this, \$816 million has been for adaptation.

5 countries have received 82% of financing for mitigation: PRC, India, Indonesia, the Philippines, and Thailand

The most vulnerable countries (mostly in the Pacific) have received only 4.6% of total funding.

ADB and Climate Finance

ADB's Long-term Strategic Framework (2008-2020)



- Inclusive Economic Growth
- Regional Integration
- Environmentally sustainable growth
 - Environment including **climate change**: one of the five core areas of operations

ADB Climate Change Strategic Priorities

Modalities

Priorities

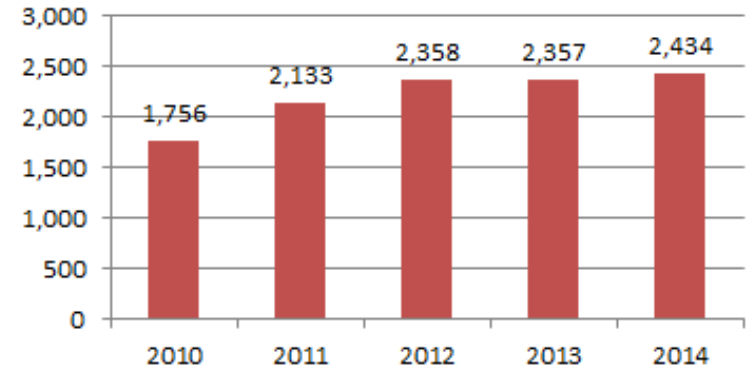
Finance	Knowledge	Partnerships
Scaling-up Clean Energy		
Encouraging Sustainable Transport and Urban Development		
Managing Land Use and Forests for Carbon Sequestration		
Promoting Climate-resilient Development		
Strengthening Policies, Governance and Capacity		

Mitigation Initiatives

Clean Energy

- \$2 billion target 2013 onwards
- Asia Solar Energy Initiative: 3,000 MW new capacity by 2015
- Quantum Leap in Wind: 1 GW by 2016
- Energy Efficiency Accelerator Program
- Energy for All Partnership: access for 100 million poor by 2015

ADB Clean Energy Investments
(in \$ millions)



Sustainable Transport & Urban Development

- Sustainable Transport Initiative
- Urban Operation Plan: Green, Smart, Inclusive, Competitive Cities
- Cities Development Initiative for Asia

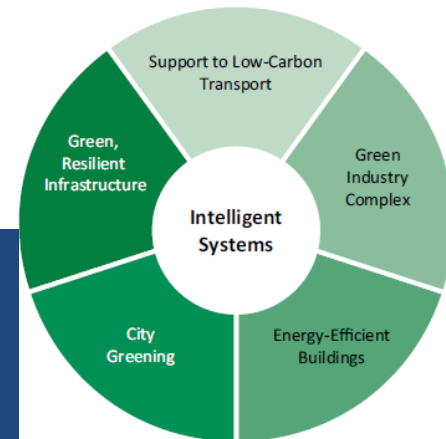
Land Use and Forest Management

- Piloting REDD+/Forest Investment Program: Indonesia, Lao PDR

Avoid unnecessary vehicle kilometers

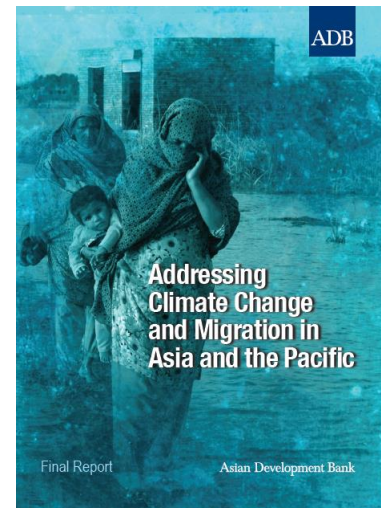
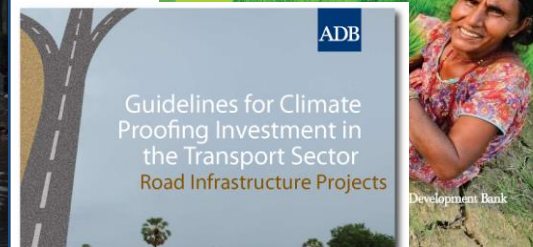
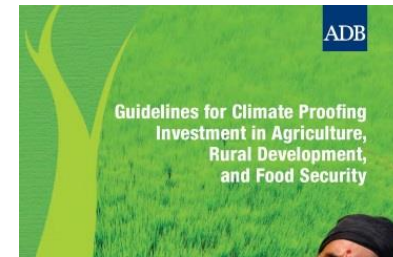
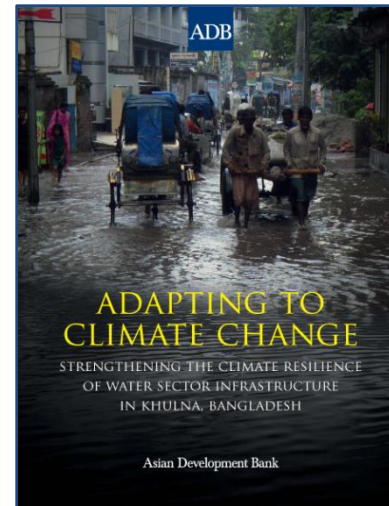
Shift to the lowest-emitting modes

Improve vehicle/fuel technology towards cleaner and more efficient options



Adaptation Initiatives

- **Mainstreaming climate resilience in core development planning**
 - Pilot Program on Climate Resilience for Bangladesh, Cambodia, Nepal, Papua New Guinea, Samoa, Tajikistan and the Pacific
- **Climate proofing vulnerable projects:** roads and bridges, ports, water supply and drainage
- **Knowledge support:** regional climate projections consortium data facility , guidance and tools
- **Addressing social dimensions :** migration, gender, health impacts
- **Greater emphasis on integration of adaptation and disaster risk management**



Strategic priorities: 2020

ADB's Strategy 2020 remains valid and relevant in its broad strategic directions: MTR

Environment and climate change one of the ten strategic priorities

- Continue \$2 billion **clean energy** investments, emphasis on **energy efficiency**, continue **sustainable energy for all**, **sustainable urban development**
- Increase assistance for **sustainable transport** (e.g. urban mass transport, railways);
- Scale up support for **climate adaptation** esp. in low income countries and vulnerable sectors
- Strengthen **integrated disaster risk management**
- Promote **natural resources management**
- Strengthen **policies and capacity**
- Facilitate **access to climate finance**



Mainstreaming Climate Change: Recent Initiatives

- **Targets under the Corporate Results Framework :**
 - **ADB-assisted projects that support environmental sustainability: 50% for ADB; 40% for ADF by 2016**
 - **ADB-assisted projects that support climate mitigation and/or adaptation: 45% for ADB, 35% for ADF by 2016**
- **Quality at entry assessments of country partnership strategies**
- **Revised project classification system: records (i) level of climate risks; (ii) emission reduction/avoidance; (iii) climate mitigation and adaptation finance**
- **Climate risk screening for all projects; climate risk management framework formalized**

ADB Approaches to Climate Finance Mobilization

Deploying concessional resources

Internally-managed funds

- Clean Energy Financing Partnership Facility (CEFPF)
- Climate Change Fund (CCF)
- Others with bilaterals

Externally-managed funds

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

Maximizing market mechanisms

- **Carbon finance**
 - ✓ Asia Pacific Carbon Fund (closed in 2014)
 - ✓ Future Carbon Fund
- **Carbon Market Technical Support Facility**
 - ✓ CDM support
 - ✓ domestic emissions trading
- Supporting **other market mechanisms**
 - ✓ Japan Fund for the Joint Crediting Mechanism
 - ✓ 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

Deploying Concessional Resources: Multilateral Climate Funds

Fund	Date Established	Total Global Fund Size (\$ million)	Allocated to ADB (\$ million)
A. Climate Investment Funds		8,081	1,683
Clean Technology Fund (CTF)	2008	5,300	1,288
Scaling-Up Renewable Energy Program for Low Income Countries (SREP)	2008	796	78
Forest Investment Program (FIP)	2008	785	31
Pilot Program for Climate Resilience (PPCR)	2008	1,200	286
B. Global Environment Facility (GEF)	1991	7,390	119.5
B.1 GEF Trust Fund	1991	6,127	95.0
B.2 GEF-Least Developed Countries Fund (LDCF)	2002	915	13.9
B.3 GEF-Special Climate Change Fund (SCCF)	2005	348	10.6
C. Kyoto Protocol Adaptation Fund (AF)	2009	351	0
Total		15,822	1,802.5

Deploying Concessional Resources: Internally-Managed Funds

Fund	Date Established	Fund Size \$ million
ADB Climate Change Fund (ADB net income)	May-08	59.1
Clean Energy		34.0
REDD and Land Use		6.8
Adaptation		18.0
Climate finance readiness		0.3
Clean Energy Financing Partnership Facility		292.5
Clean Energy Fund (multi-donor)	Apr-07	81.7
Asian Clean Energy Fund (Japan)	Jan-08	57.1
Carbon Capture and Storage Fund (Global CCS Institute and UK)	Jul-09	72.2
Canadian Climate Fund for the Private Sector in Asia	Apr-13	81.5
Urban Climate Change Resilience Trust Fund	Nov-13	140.7
Asia Pacific Disaster Response Fund (ADB, from Asian Tsunami Fund)	2009	40.0
Japan Fund for the Joint Crediting Mechanism	2014	16.6
Integrated Disaster Risk Management Fund (Canada)	Feb-13	9.7
Carbon Finance (multi-donor)		
Asia-Pacific Carbon Fund (up to 2012)	Nov-06	151.8
Future Carbon Fund (post-2012)	Jul-08	115.0
Total		831.5

Joint MDB Adaptation Finance Tracking Approach

- The MDB approach for **adaptation** is based on the following principles
 1. It is **purpose, context and activity based**. A project must fulfill three design process criteria for finance to be reported. It must:
 - Include a **statement of purpose or intent** to address or improve climate resilience in order to differentiate between adaptation to current and future climate change and good development;
 - Set out a **context of climate vulnerability** (climate data, exposure and sensitivity), considering both the impacts from climate change, as well as climate variability related risks;
 - **Link project activities to the context of climate vulnerability** (e.g., socio-economic conditions and geographical location), reflecting only direct contributions to climate resilience.

Joint MDB Adaptation Finance Tracking Approach

2. It follows a conservative approach:
 - To incentivize good adaptation projects to speed up transition to resilient communities and systems;
 - Activities that do not explicitly meet all the above criteria are not included in reporting.
3. Project activities should:
 - Address current drivers of vulnerability, especially in poorest countries or communities when specifically designed in response to climate risks;
 - Build resilience to current and future climate risks;
 - Incorporate climate risks into investments, especially for infrastructure with a long lifespan;
 - Incorporate management of climate risk into plans, institutions and policies.

Joint MDB Mitigation Finance Tracking Approach

- The MDB approach for **mitigation** is based on the following principles
 1. It is **activity-based**, namely, it focuses on the type of activity to be executed, and not on its purpose, the origin of the financial resources, or its actual results.
 2. Mitigation activities considered in this joint approach are **assumed to lead to emission reductions**, based on past experience and/or technical analysis.
 3. Some activities provide both mitigation and adaptation co-benefits. As a result, the financing for adaptation and mitigation should not be added together to **prevent double counting**.

ADB Climate Finance, 2011-2014

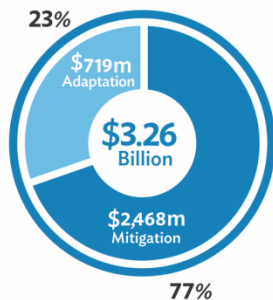
Year	Mitigation			Adaptation			Total		
	ADB Resources	External	Subtotal	ADB Resources	External	Subtotal	ADB Resources	External	Total
2011	2,158	137	2,295	455	103	558	2,613	240	2,853
2012	2,001	386	2,387	821	75	896	2,822	461	3,284
2013	1,948	333	2,281	880	108	988	2,828	441	3,268
2014	1,711	426	2,137	665	54	719	2,376	480	2,856

Finance++: Leveraging external finance from public and private sources

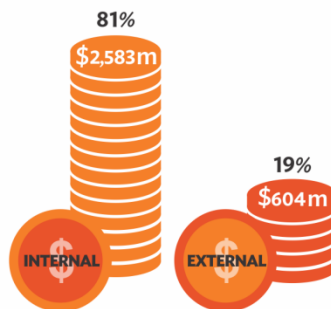
In 2014, 17% of ADB's climate finance came from external resources; about 75% of total finance for mitigation, 25% for adaptation

ADB Total Climate Finance (2014) = US\$3.187Billion

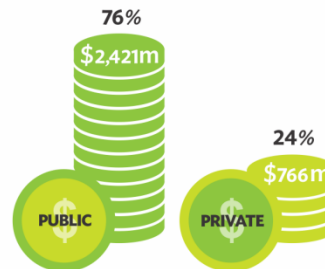
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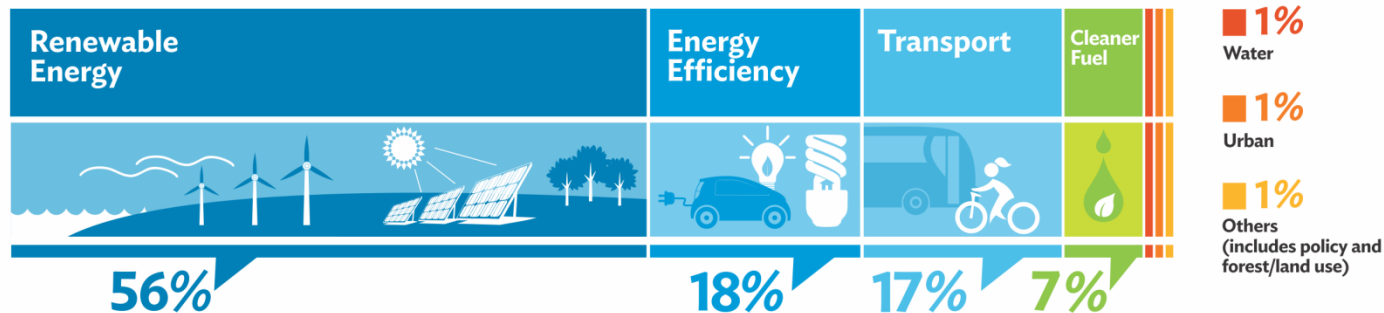
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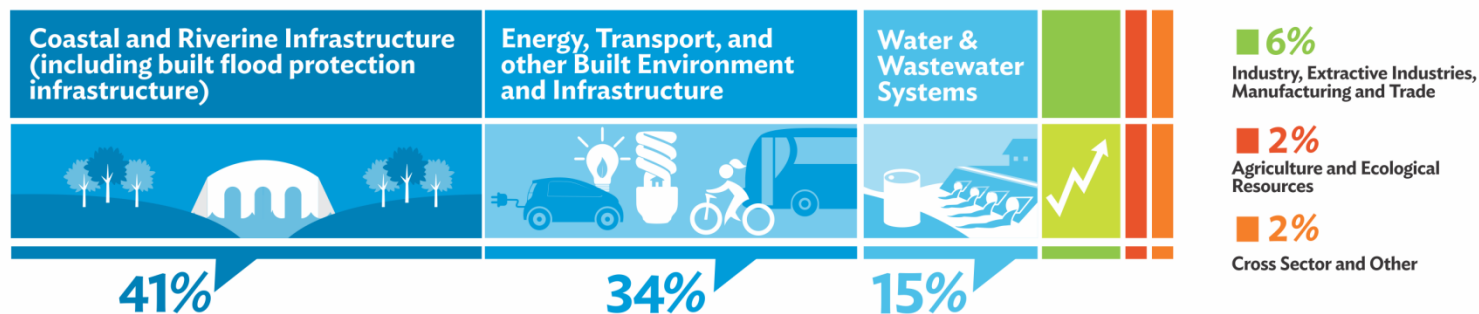
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MITIGATION



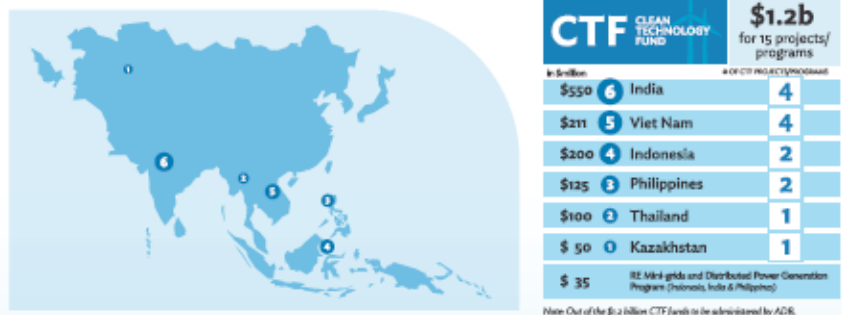
ADAPTATION



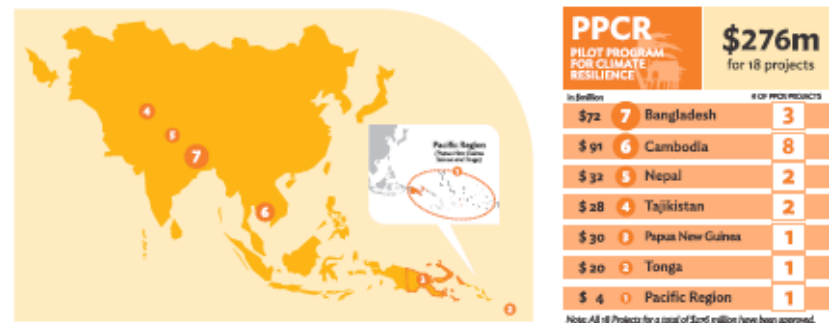
Climate Investment Fund Programs

ADB is utilizing over \$1.5 billion in concessional resources from the CIFs across the public and private sectors for mitigation, adaptation and forestry

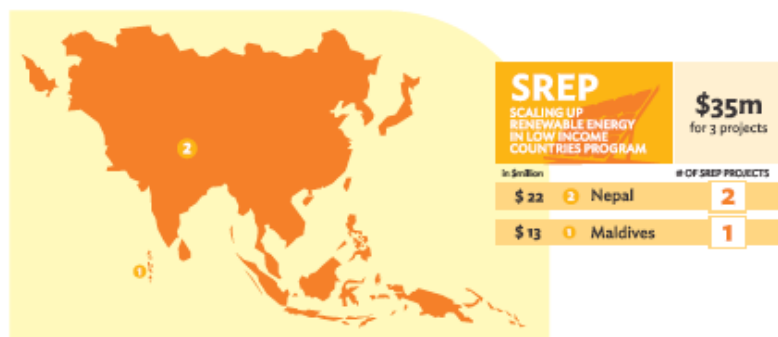
Clean Technology Fund



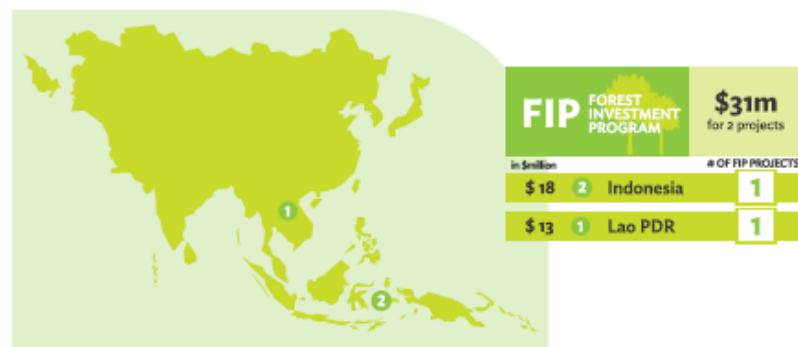
Pilot Program for Climate Resilience



Scaling-up Renewable Energy



Forest Investment Program



ADB and the Green Climate Fund

Green Climate Fund (GCF)

- **An operating entity of the Financial Mechanism of UNFCCC**
- **Established in 2010 to channel climate finance to developing countries**
- **Initial pledges close to \$10.2 billion from 33 countries (to date)**
- **Has recently obtained commitment authority (more than 50% of pledges converted), total contribution agreements: \$5.47 billion**

ADB's Accreditation to GCF

- **GCF operation exclusively through the accredited implementing entities**
- **First seven entities, including ADB, accredited at the 9th GCF Board meeting (24-26 March, 2015)**
- **ADB first MDB accredited to the GCF**
- **ADB accredited for large size, all fiduciary functions and highest ESS category; legal arrangements between GCF and ADB to be negotiated**
- **GCF expected to endorse its first batch of projects in October 2015**

Thank You

For more information contact

Climate Change Coordination and Disaster Risk Management Unit
Regional and Sustainable Development Department
Asian Development Bank

www.adb.org/climate-change