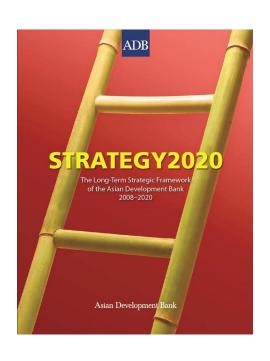
### ADB's Climate Change Financing Program

UNFCCC First Meeting of Experts on Long-term Finance Makati City, Philippines 16 July 2013

Michael Rattinger
Climate Change Specialist
Climate Change Program Coordination Unit
Regional and Sustainable Development Department



# 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**

Finance	Knowledge	<b>Partnerships</b>	
Scaling-up Clean Energy			
Encouraging Sustainable	e Transport and Urba	an Development	
Managing Land Use and	Forests for Carbon	Sequestration	
managing Lana 030 and		ocquestration	
Promoting Climate-resilient Development			
Strengthening Police	cies, Governance an	d Capacity	

# Price Tag of Climate Mitigation and Adaptation in Developing Countries

\$140-\$175 billion

 Annual mitigation costs in developing countries by 2030

(Source: IBRD/WB's World Development Report 2010)

\$40 billion

 Annual adaptation costs in developing countries in Asia and the Pacific until 2050

Source: IBRD/WB's Economics of Adaptation to Climate Change (Synthesis Report) 2010



## ADB's Contribution to Climate Finance, 2011

#### **Global Climate Finance**

Sources and Intermediaries	Mitigation (\$ Billion)	Adaptation (\$ Billion)	Total (\$ Billion)
Private <sup>1</sup>	250.3 - 285.5	not estimated	250.3 - 285.5
Public <sup>2</sup>	80.4 - 83.7	12.3 – 15.7	92.7 - 99.4
Multilateral Finance Institutions	18.3	2.9	21.2
Climate Funds	1.1	0.4	1.5
Others	61 - 64.3	8.9 - 12.3	69.9 - 76.6
Total	330.7 – 369.3	12.3 – 15.7	343.0 – 385.0

<sup>&</sup>lt;sup>1</sup> Private actors include project developers, corporate actors, household, institutional investors, commercial financial institutions, venture capital, private equity and infrastructure funds

#### ADB Climate Finance based on Joint MDB Approach

Area	ADB Resources \$ million	External Resources \$ million	Total \$ million
Mitigation	2,196	224	2,420
Adaptation	585	172	757
Total	2,781	396	3,177

ADB 2012 climate finance: \$3.3 billion--\$2.4 b mitigation, \$0.9 b adaptation



<sup>&</sup>lt;sup>2</sup> Other public sources include government budgets, national finance institutions, and bilateral finance institutions

#### **Mobilizing Climate Financing**

### Deploying concessional resources

- Internal funds: Clean Energy Financing Partnership Facility (CEFPF), Climate Change Fund (CCF), others with bilaterals
- External funds: Climate Investment Funds (CIFs), Global Environment Facility (GEF), looking ahead to the Green Climate Fund (GCF)

### Maximizing market mechanisms

- Carbon Market
   Program: Technical
   Support Facility and upfront carbon finance
   — Asia Pacific Carbon
   Fund & Future Carbon
   Fund
- New market mechanisms: domestic emissions trading

### Catalyzing private investment

- 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*	Pledged (\$ million)	ADB-Administered (\$ million)
Mitigation	10,002	1,234
Climate Investment Funds (CIF)-Clean Technology Fund (CTF)	4,980	1,125
CIF-Scaling-Up Renewable Energy Program for Low Income Countries (SREP)	410	35
CIF-Forest Investment Program (FIP)	639	31
GEF Trust Fund - Climate Change Focal Area and Sustainable Forest Management/REDD+	3,973	43
Adaptation	2,351	271
CIF-Pilot Program for Climate Resilience (PPCR)	1,200	264
GEF-Special Pilot on Adaptation (SPA) (2006-2010)	50	4
GEF-Least Developed Countries Fund (LDCF)	537	0
GEF-Special Climate Change Fund (SCCF)	241	4
Kyoto Protocol Adaptation Fund (AF)	323	0
Total	12,353	1,505

<sup>\*</sup> Not a comprehensive list. Does not include other funds such as the Forest Carbon Partnership Facility (\$435 million) and the UN REDD Programme (\$119 million)

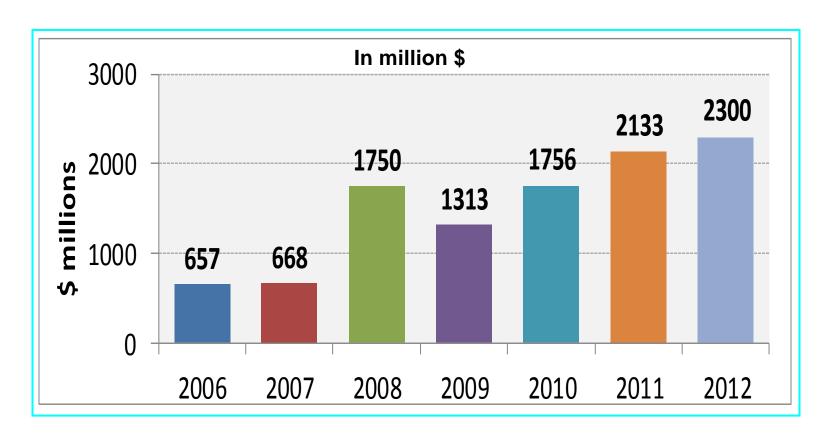


#### Deploying Concessional Resources: Internal Funds

Fund	Commitments/Remittances (\$ million)
Clean Energy Financing Partnership Facility	113.1
ADB Climate Change Fund	49.3
Clean Energy	29.5
REDD and Land Use	5.8
Adaptation	13.9

These funds are on top of traditional ADB resources sources such as OCR and ADF. The list does not include carbon funds, and funds that are broader in scope but support climate actions as well such as the Water Financing Partnership Facility, Urban Financing Partnership Facility

#### **ADB's Clean Energy-related Investments**

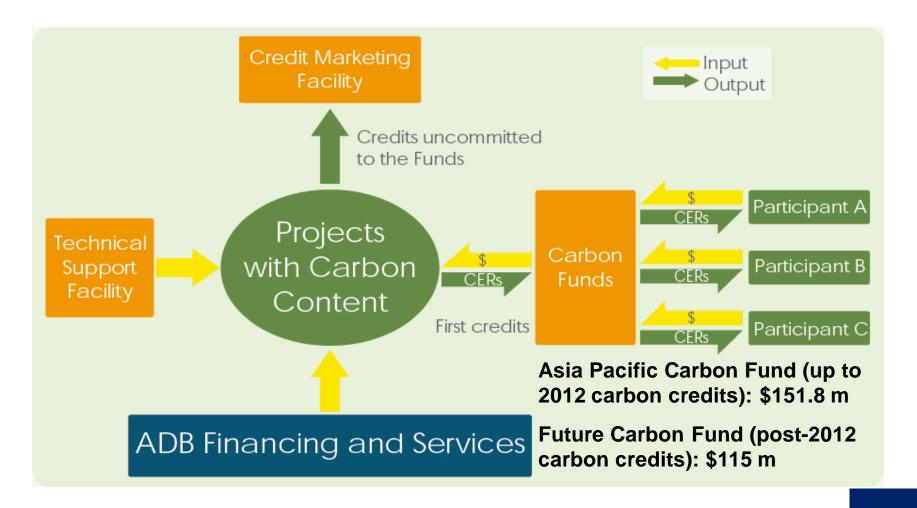


2008-2012 annual target: \$1 billion

2013 onwards: \$2 billion



#### Maximizing Market Mechanisms: Carbon Market Program



**Turning Cash Flow into Financing** 



## Carbon Market Program Project Example: TATA Khandke 50.4 MW Wind Farm in India

- 50.4 MW (63x800kW) wind power facility located in the state of Maharashtra
- Financed by ADB under Private Sector Operations' 2007 "India: Tata Power Wind Energy Financing Facility"
- Commissioned on December 2007 and registered as CDM project on 01 June 2010
- 86,957 CERs, under first monitoring period from 1 June 2010 to 31 May 2011 issued in January 2012



- ADB Carbon Market Program support
  - Technical Support Facility Assistance in PDD preparation and validation
  - ✓ Asia Pacific Carbon Fund Purchase of pre-2012 CERs Upfront payment of \$2 million disbursed in January 2011
  - ✓ Future Carbon Fund Purchase of up to 500,000 post-2012 CERs



#### **Public-Private Partnerships**

 ADB works with client developing member countries across the spectrum of PPP development – from advocacy & capacity development to project finance

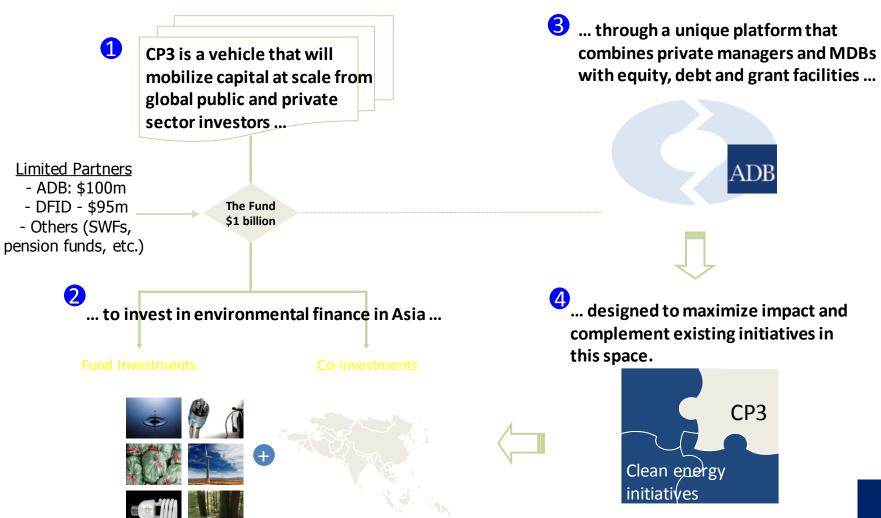
to project finance			
	Pillar 2		Pillar 4
	Enabling Environment		Project Finance
<ul> <li>Create awareness</li> <li>Invoke leadership</li> <li>Identify PPP potential in sector planning and the private sector development agenda</li> <li>Develop capacity of Government staff</li> <li>Enhance external knowledge management links</li> </ul>	Develop policy, legal, regulatory and institutional framework to facilitate, guide and manage the development of PPPs (country and sector specific)	<ul> <li>Development of pathfinder projects</li> <li>Support (including advisory support) throughout the process up to contract award/financial close including expert support, toolkits, funding costs of transaction advisors, procurement support.</li> </ul>	<ul> <li>Credit enhancement products e.g. equity, long term debt, refinancing subordinate debt, cofinancing, guarantees, etc.</li> <li>Credit guarantee facilities</li> <li>Public sector support through schemes such as viability gap funding, etc.</li> </ul>

# **Emerging ADB Private Sector Climate Finance Experience**

- CP3: Mobilizing equity capital at scale
- India Solar Guarantee Facility: \$150m guarantees;
   \$10m UK grant buys down fees, leverages commercial debt, builds bank capacity on solar
- Thailand Solar PV output: 1st large-scale PV farm, \$2m grant from ADB's Clean Energy funds finances contingencies; reduces project costs and debt servicing
- Bangladesh Industrial Energy Efficiency: \$30m credit line plus technical assistance to domestic private banks support introduction of energy saving technologies in the brick kiln and other targeted industries.



#### **CP3: Mobilizing Equity Capital at Scale**





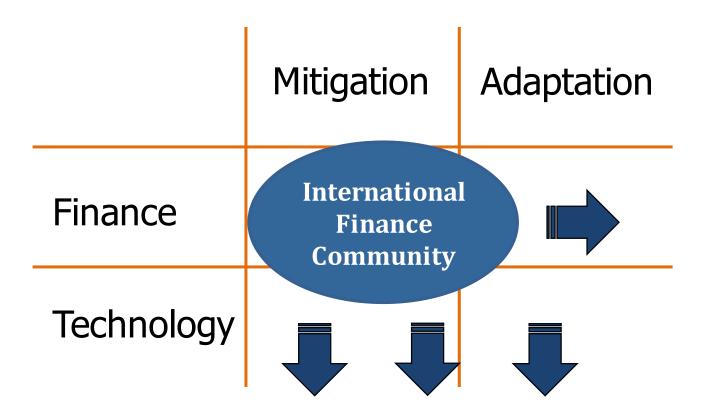
#### Leveraging Private Capital for Technology Innovation and Diffusion

- Asia Climate Change & Clean Energy Venture Capital Initiative
  - Equity infusion of \$20 million each in 2 selected venture capital funds
  - Technical assistance (TA) to provide advisory services on climate technology to VC funds

 Low-Carbon Technology Marketplace for commercial buyers and sellers of low carbon technologies



#### **Pushing the Innovation Frontier**





#### Other Initiatives/Facilities

- Cities Development Initiative for Asia: bridges gap between development plans & financing of infrastructure investments of Asia's medium-sized cities, including PPPs
- ASEAN Infrastructure Fund: about \$3.6 billion of total lending commitment until 2025 for infrastructure development. Assuming 70% cofinancing by ADB and the AIF contributing around 30%, this can lead to a total commitment of more than \$12 billion.
- Philippine Investment Alliance for Infrastructure (PINAI) Fund: \$625 million private equity (PE) fund established to provide equity and equity-linked financing for a diversified portfolio of core infrastructure projects in the Philippines



#### **Looking Ahead**

- Mobilize and leverage climate change financing, build climate finance readiness
- Crowding in private sector
- Continue to support enabling policies and regulations
- Develop a pipeline of programs and projects



### Thank You