

# An Overview of ADB's Climate Change Program

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# Presentation Outline

- Background/Key Messages
- ADB's Climate Change Program
- Partnerships for Climate Change Action
- Pushing the Frontier

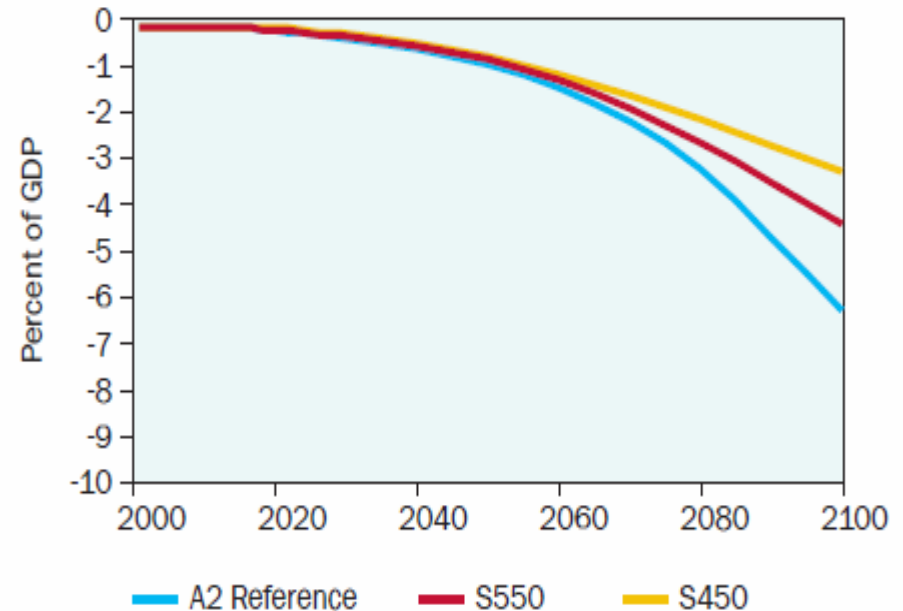
# Key Messages

- Addressing *climate change is critical to achieving poverty reduction*, MDGs and Strategy 2020 objectives
- ADB and partners are *responding to immediate climate change demands in the Asia and Pacific Region*
- *Funds have been efficiently and strategically allocated* to meet DMC needs
- *Development and climate change plans are being aligned* for continued action

# Economic Impacts in Asia

- Economic impacts in Asia will be significant – in **SE Asia** the **four major economies** stand to lose **6.7% of GDP annually** by 2100
- South, Southeast and East Asia could lose 15% of their land area
- Strong impact on Western Asia, yields of the predominant crops may fall by 15 – 35% once temperature rises by 3-4° C

Economic Impacts of Climate Change in Four Southeast Asian Countries



# ADB's Climate Change Program



# National Strategies to Address Climate Change

<b>CWRD</b>	<b>EARD</b>	<b>PARD</b>	<b>SARD</b>	<b>SERD</b>
<b>ARM**</b>	<b>PRC</b> 2007	<b>KIR*</b> 2007	<b>BAN</b> 2008	<b>CAM*</b> 2007
<b>AZE**</b>		<b>SAM*</b> 2005	<b>BHU*</b> 2006	<b>INO</b> 2007
<b>PAK</b> (in prep.)	<b>MON</b> 1999	<b>TUV*</b> 2007	<b>IND</b> 2008	<b>LAO</b> 2009
<b>KAZ**</b>		<b>VAN*</b> 2007	<b>MAL*</b> 2008	<b>PHI</b> 2008
<b>KYG*</b> (in prep.)		<b>Pacific Regional Framework</b>	<b>NEP*</b> 2009 (in prep.)	<b>THA</b> 2007
<b>TAJ</b> 2003		2005		<b>VIE</b> 2008

\*NAPAs, National Adaptation Programmes of Action

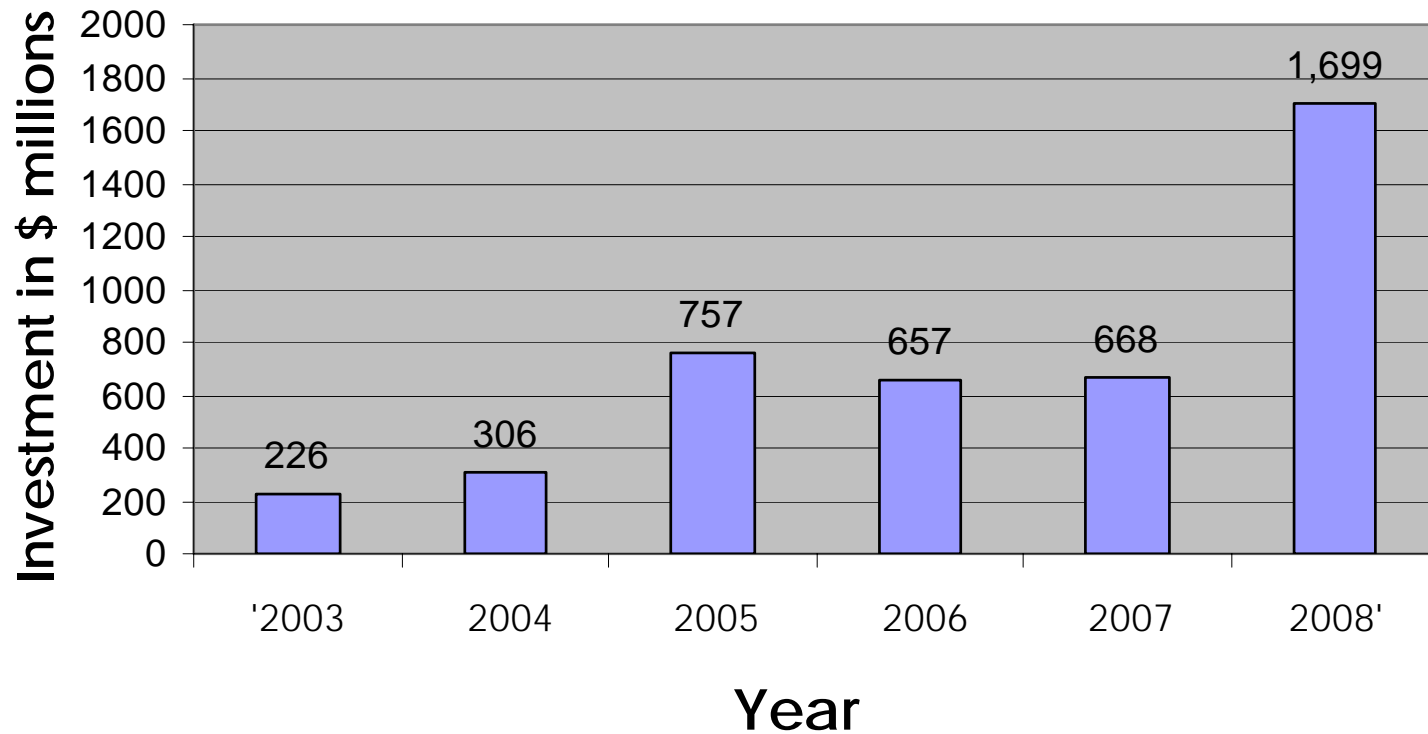
\*\*GHG Abatement Strategy as part of Energy Sector Planning

# ADB'S Climate Change Program

Financing	Tools	Mobilize Concessional Resources	Catalyze Private Capital	Maximize Market Mechanisms
		Advance Energy Efficiency and Low-Carbon Energy Sources		
		Enable Sustainable Transport Policy and Application of Efficient Systems		
Mitigation	Core Elements	Promote Improved Urban Sanitation and Reduction of Fugitive Methane Emissions		
		Promote Sustainable Land Use and Forest Management		
		Incorporate Vulnerability Risks into National Development Strategies		
Adaptation	Core Elements	Increase Climate Resilience of Vulnerable Sectors		
		"Climate Proof" Projects		
		Address Social Dimensions		

# Promoting Low-Carbon Growth

## Clean Energy Investment 2003-08





# Mainstreaming Adaptation

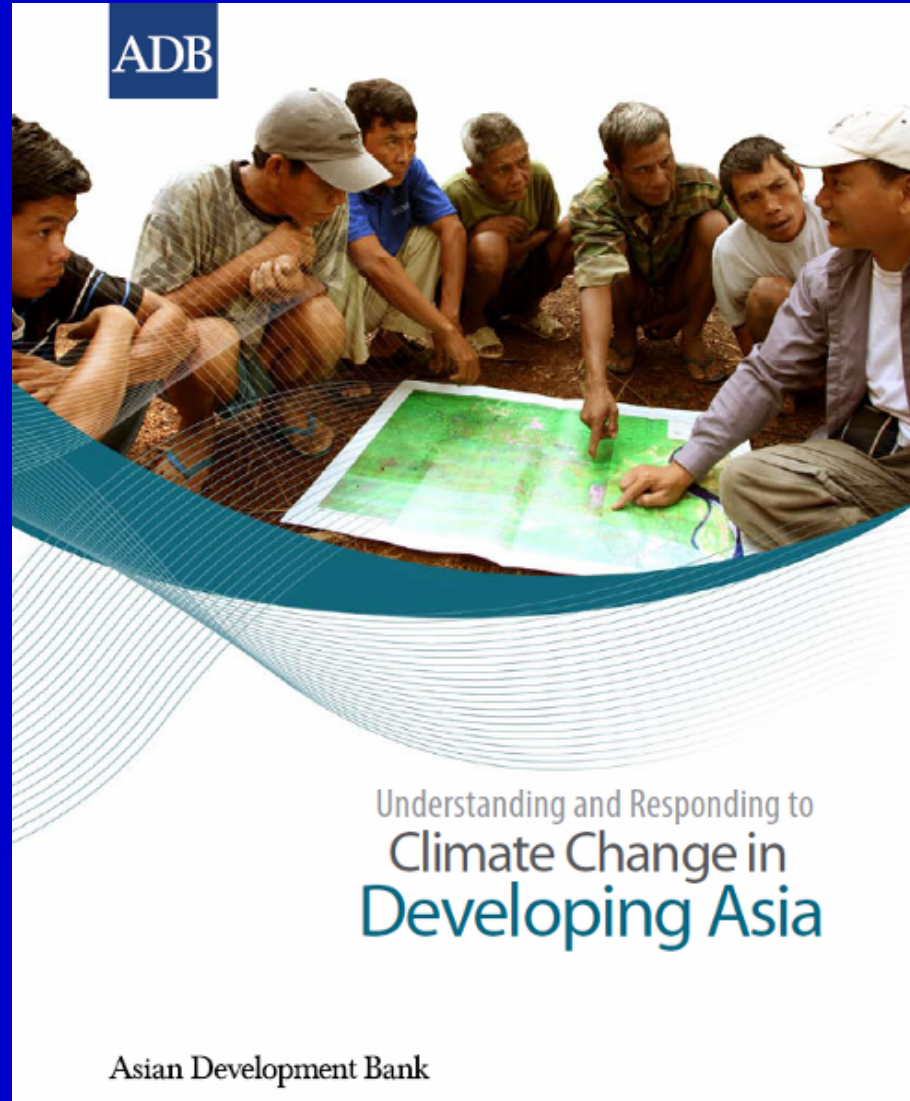
- **Development Planning**
  - Bangladesh
  - Lao PDR
  - Nepal
  - Palau
- **ADB Operations**
  - Project interventions (Solomon Islands, Timor-Leste, Viet Nam)
  - Portfolio at Risk Assessment
  - Climate Impact & Adaptation Screening Tool



Building resilient roads in Solomon Islands

# Region-wide Responses

- Assessing ADB strengths to meet country priorities
- Programming ADB responses in each region for 2009–2015



# Focus of ADB Climate Investment

RD	Priorities	Projects
CWRD	<ul style="list-style-type: none"> <li>■ Efficient Water &amp; Energy Management</li> <li>■ Agriculture Adaptation</li> </ul>	Central Asian Countries Initiative for Land Management
EARD	<ul style="list-style-type: none"> <li>■ Renewable Energy Development</li> <li>■ Energy Efficiency (coal and urban)</li> <li>■ Agriculture Adaptation</li> </ul>	<ul style="list-style-type: none"> <li>■ Tianjin: Integrated Gasification Combined Cycle*</li> <li>■ Zhangbei Wind Power</li> <li>■ Ulaanbaatar Building EE Retrofit*</li> </ul>
PARD	<ul style="list-style-type: none"> <li>■ Adaptation of infrastructure</li> <li>■ Coastal Protection/Disaster Risk Management</li> </ul>	<ul style="list-style-type: none"> <li>■ Coral Triangle Initiative</li> <li>■ CC Adaptation Program for the Pacific</li> </ul>
SARD	<ul style="list-style-type: none"> <li>■ Clean Energy Development</li> <li>■ Adaptation in Agriculture &amp; Water</li> <li>■ Protection of Coasts</li> </ul>	<ul style="list-style-type: none"> <li>■ TATA Wind Power*</li> <li>■ Bangladesh Capacity Building to Address CC</li> <li>■ Nepal Impacts Adapt.</li> </ul>
SERD	<ul style="list-style-type: none"> <li>■ Land-use and Forest Mgmt.</li> <li>■ Coastal Protection/Disaster Risk Management</li> <li>■ Clean Energy Development</li> </ul>	<ul style="list-style-type: none"> <li>■ Viet Nam Biogas*</li> <li>■ GMS Biodiversity Corridors Initiative</li> </ul>



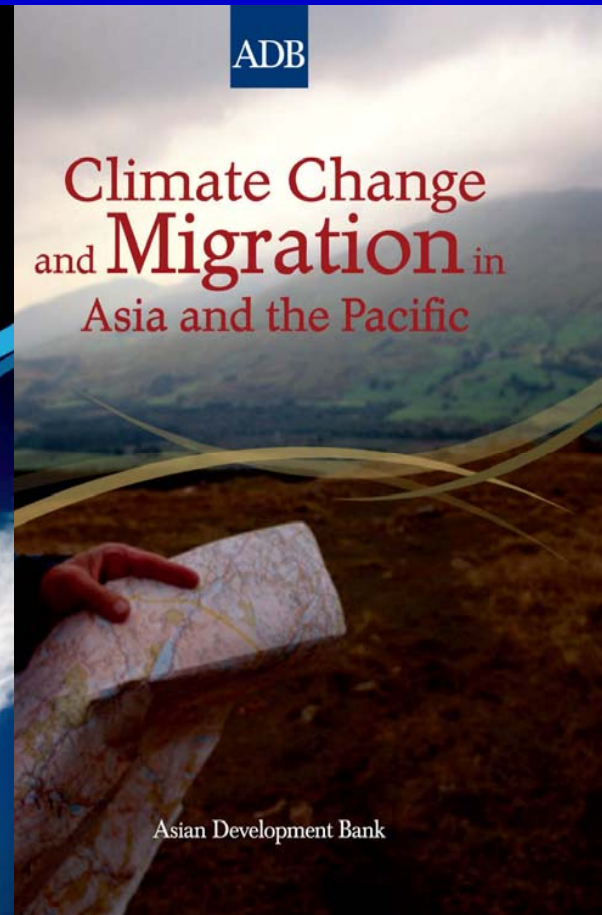
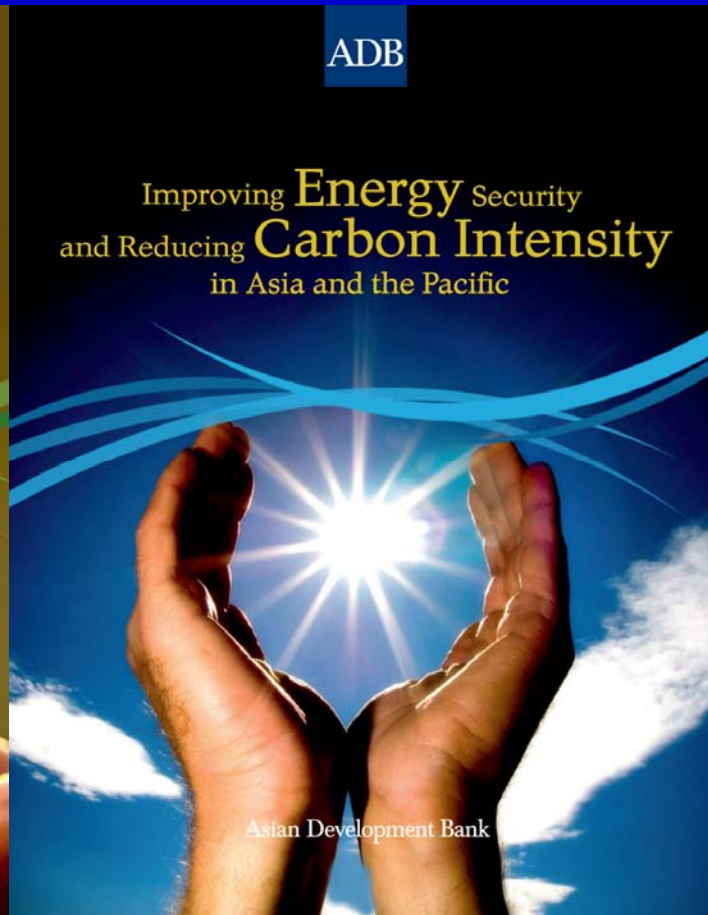
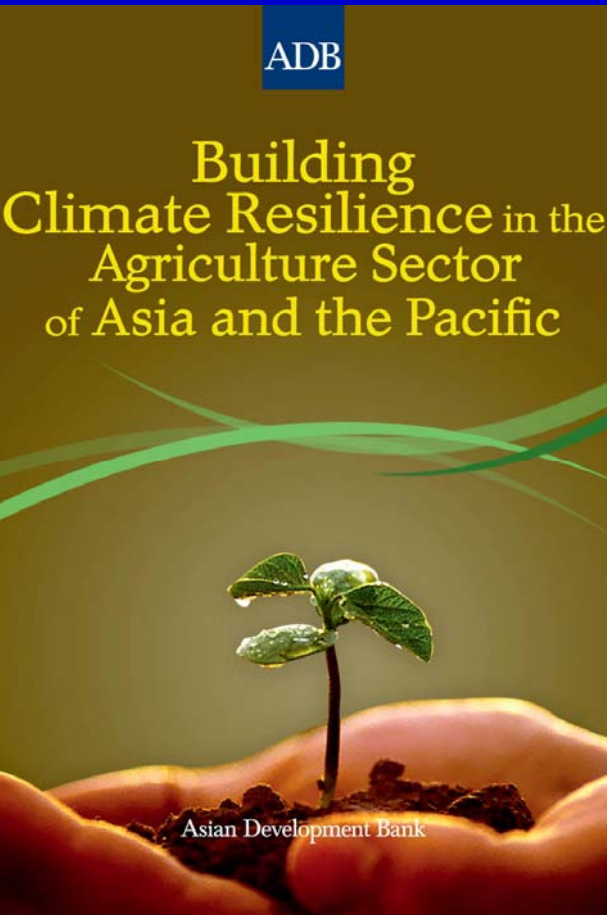
\* Project developed with support from carbon market

# Partnerships for Climate Change Action

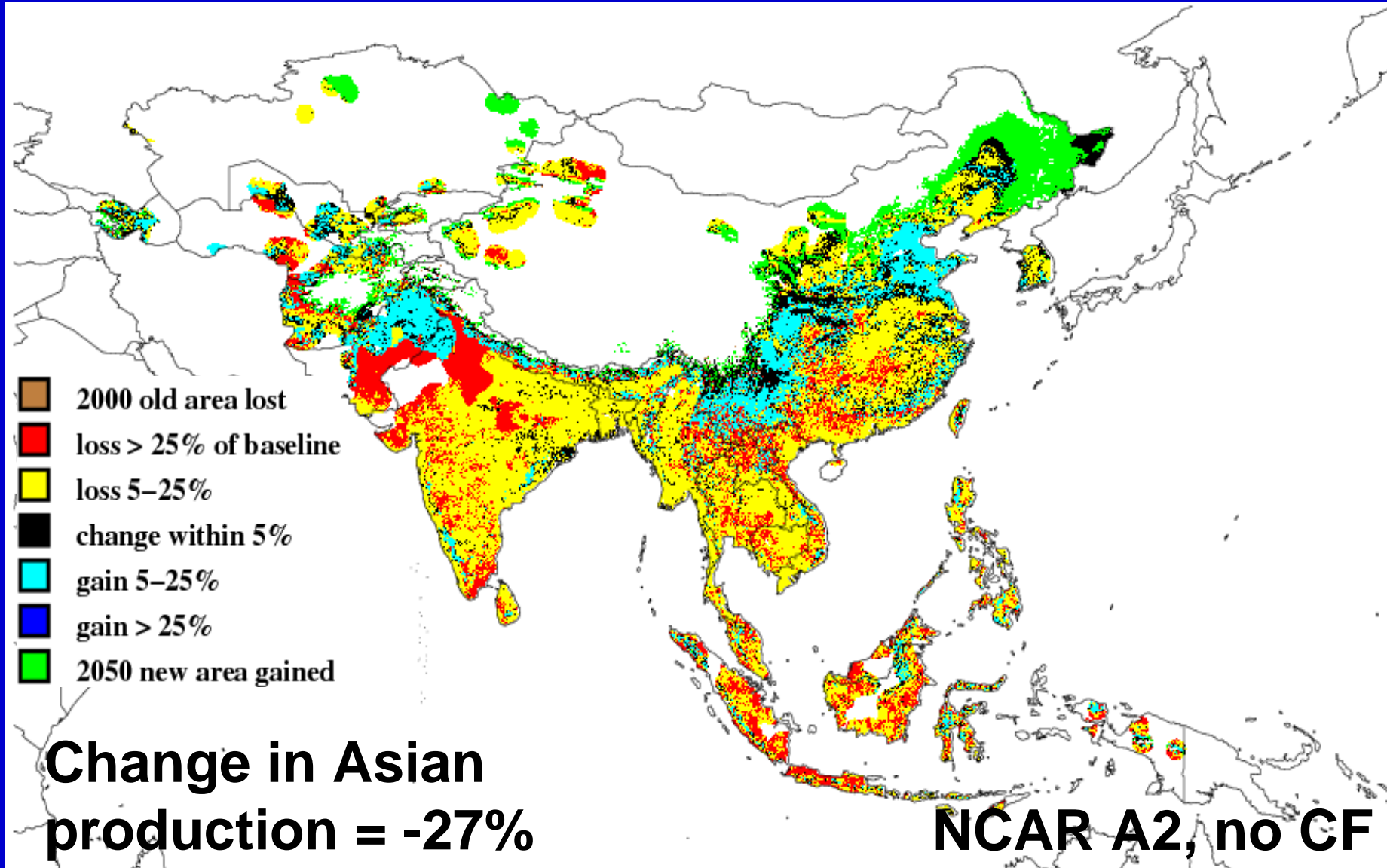




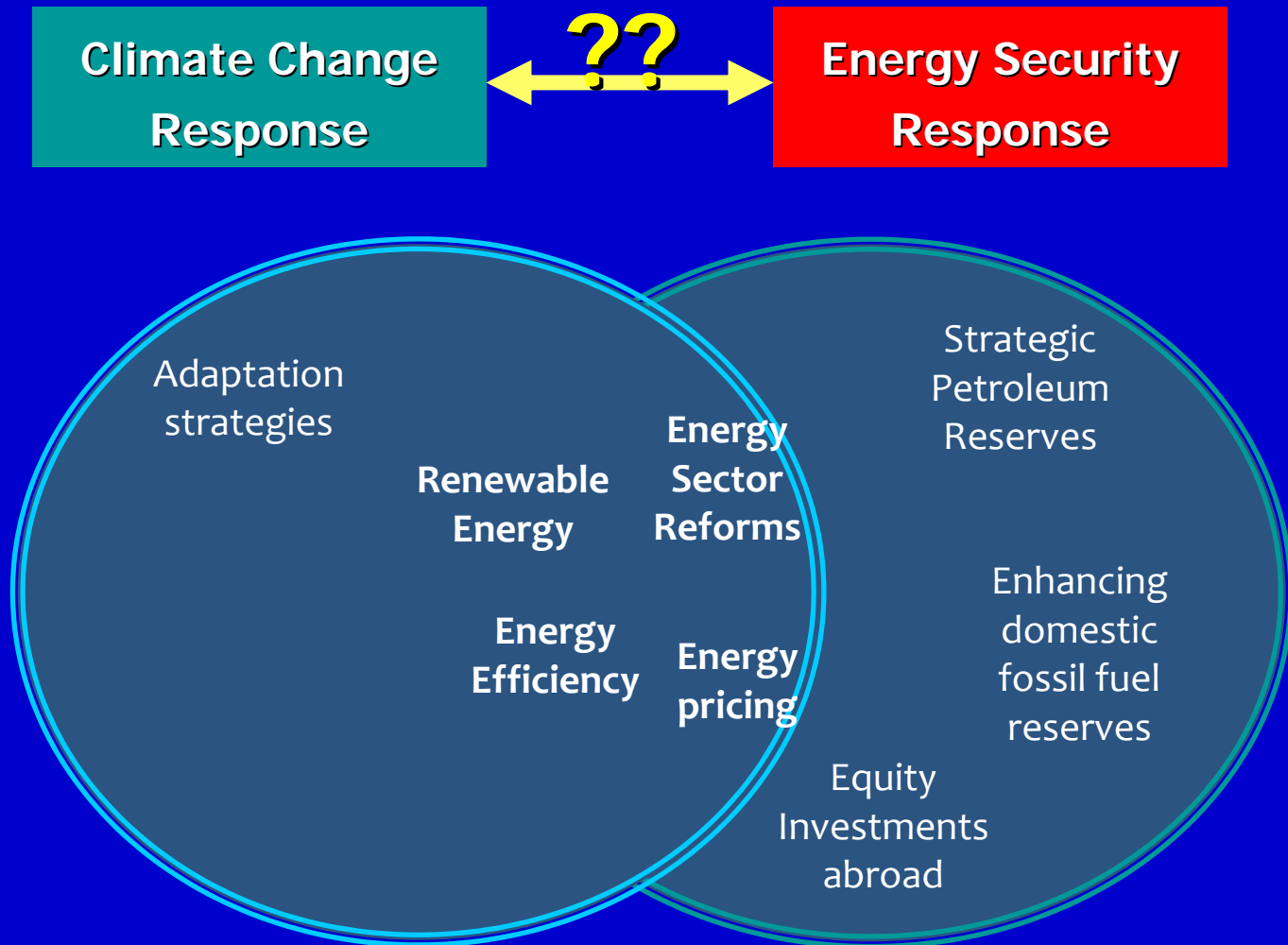
# Knowledge Partners



# Climate induced percentage change in production in 2050: Irrigated Rice



# Potential for Policy Convergence





# Mainland Asia Hot Spots

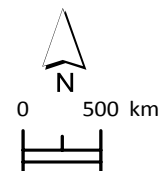


## Additional Data Sources:

Global Rural-Urban Mapping Project, Center for International Earth Science Information Network (CIESIN), Columbia University; International Food Policy Research Institute (IPFRI); The World Bank; Centro Internacional de Agricultura Tropical (CIAT) 2005; USGS EROS Data Centre; ArcWorld, ArcWorld Supplement

## Major Cities Impact areas

- Countries
- Coastal Flooding
- Cyclones / Typhoons
- Riparian Flooding
- Water Stress



## North-Eastern Asia



May 2009



# ADB Climate Change Funds: Catalyzing Action

Clean Energy Financing Partnership Facility (2008)	Climate Change Fund (2009)
\$18.6 million	\$40 million
19 Clean Energy Projects	42 Projects <ul style="list-style-type: none"><li>■ 18 Clean Energy</li><li>■ 20 Adaptation</li><li>■ 4 Land use/REDD</li></ul>

\*Climate Change Funds enabled the number of clean energy activities to double

# Climate Change Projects

**REG:** Clean Energy and Access Improvement

**PRC:** Capacity Building for Implementation of Efficiency Power Plant

**VIE:** Renewable Energy Development and Network Expansion and Rehabilitation for Remote Communes Sector Project

**SRI:** Clean Energy and Access Improvement Project

**PRC:** Utilization of Foreign Capital to Promote Energy Conservation and Energy Efficient Power Generation Scheduling

**Regional:** Expanding the Implementation of the Energy Efficiency Initiative in DMCs

**BAN:** Strengthening Resilience of Water Sector in Khulna

**NEP:** Community-based Vulnerability Assessment, Risk Mapping & Adaptation Planning

**REG:** Addressing Climate Change-Induced Migration in Asia & Pacific

**PRC:** Study on Public Expenditure in Agricultural Production

**INO:** Climate Change Adaptation in the 6 Ci's River Basin Territory

**PARD:** Strengthening the Capacity of Pacific Developing Member Countries (PDMCs) to Respond to Climate Change

**REG:** Preparing the Central Asia South Asia Regional Electricity Market Project

# Leveraging Climate Funds

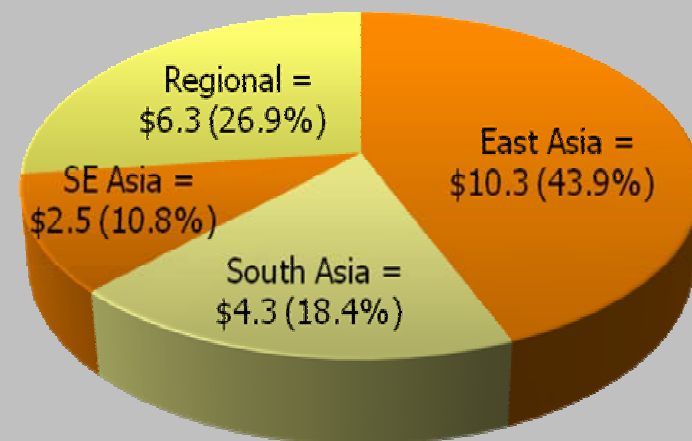
## Clean Energy Finance Leveraged in 2008



## Clean Energy CCF Allocations by Region

**As of May 2009**

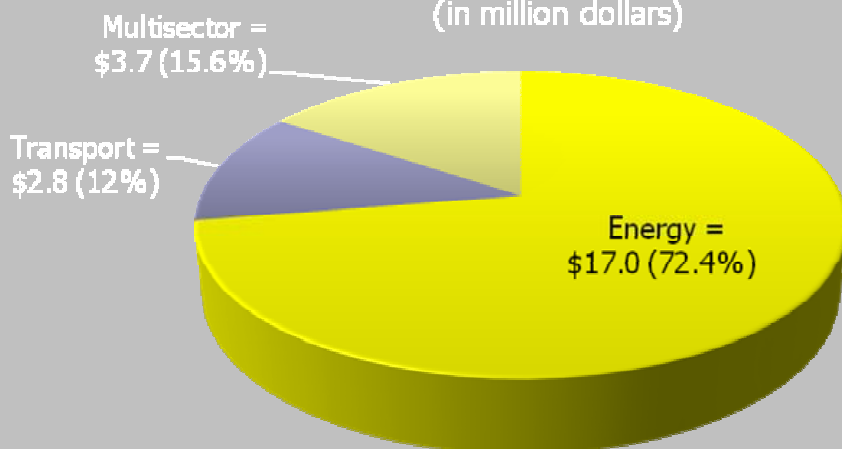
(in million dollars)



## Clean Energy CCF Allocations by Sector

**As of May 2009**

(in million dollars)



# Pushing the Frontier



# Transition toward Low-Carbon Growth: Planned Actions

- Energy sector:
  - \$2 billion target
  - Energy for All
  - Technology Transfer & Diffusion
- Sustainable Transport Initiative
- Land and Forest Management/REDD



# Building Climate Resilient Economies

- Integrating climate considerations in development planning
- Insurance and Climate Risk
- Water Security
- Food Security
- Disaster Risk Management

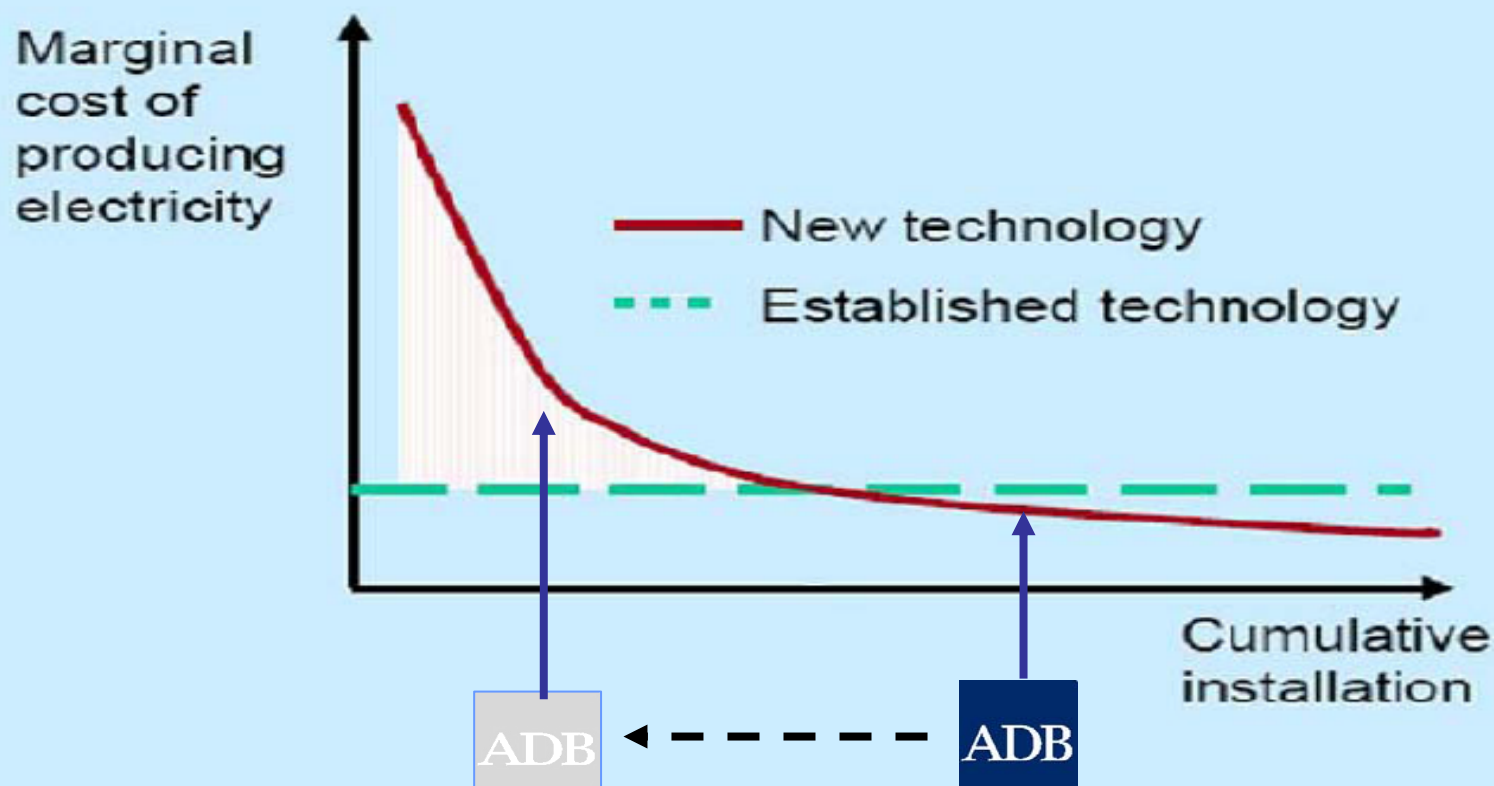


# Emerging Environmental and Social Areas of Support

- **Biodiversity conservation** – climate change greatest threat; focus of October 2010 COP, Aichi-Nagoya, Japan
- **Land degradation** – adaptation now central to combating drought and desertification; mitigation, soil carbon sequestration
- **Deforestation** – carbon market financing offers last best chance to save rainforests
- **Urban co-benefits** – linking local air and water quality improvement to reduced GHG emissions
- **Social dimensions** - anticipating & responding to emerging risks:
  - Migration
  - Gender
  - Governance
  - Health



# The obvious ... the not so obvious



But can we help here?

We finance here



# Business Unusual

- ADB has been and will continue to be a catalyst for climate-friendly development
- Demand from DMC partners is growing to support climate change responses
- ADB is experienced and well positioned to handle new climate change funds