

# **Special Symposium on Climate Change and Impact Assessment**

## **Climate Change Considerations in EIA**

**Asian Development Bank**

**Washington, 15 November 2010**

**ADB**

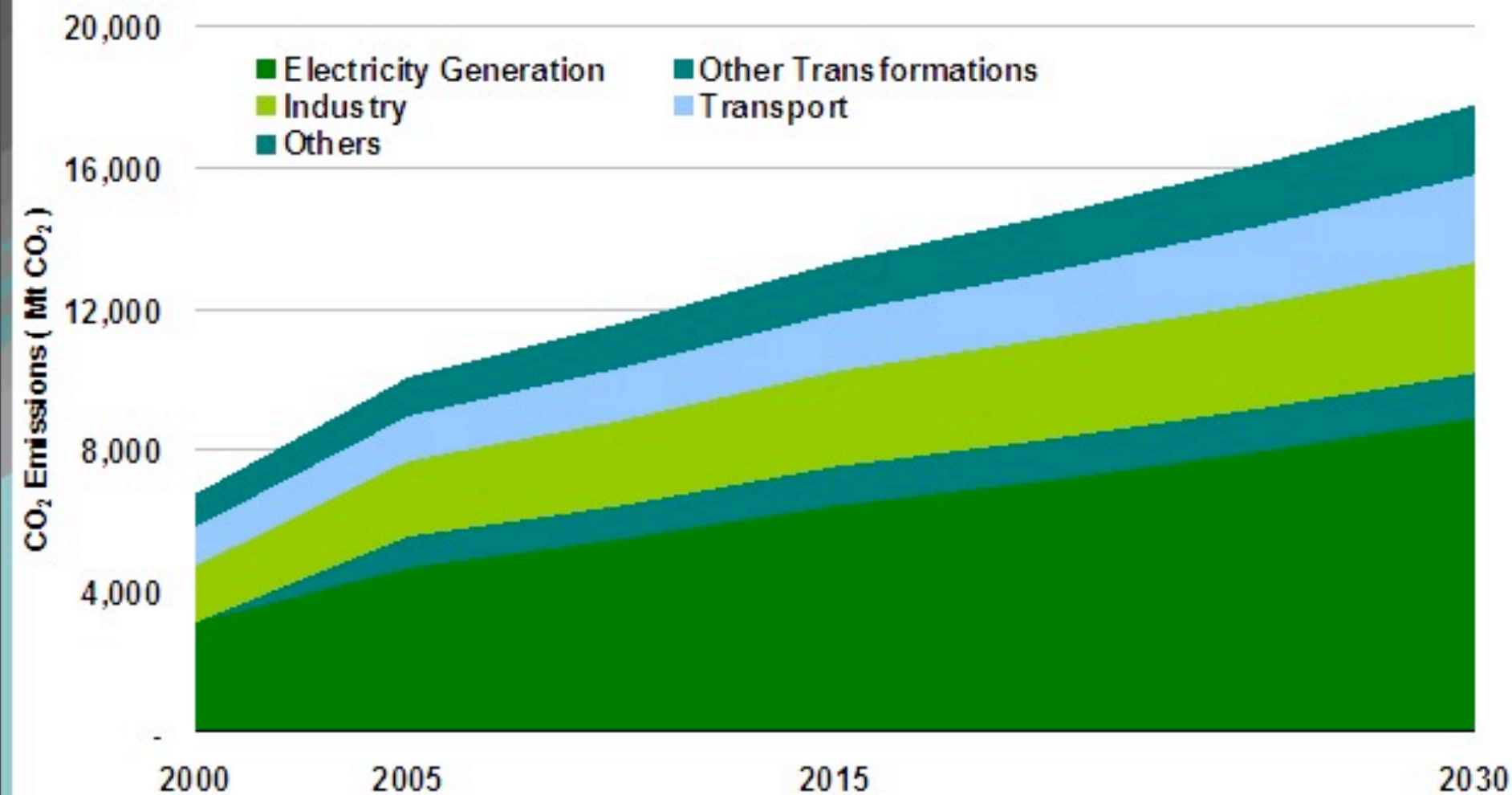
# Outline of Presentation

- ADB's Long Term Strategic Framework and Climate Change
- Climate Change in Safeguards and Current Practices in EIA
- Proposed Initiatives to Improve Climate Change Considerations in EIA

# Vulnerability of Asia-Pacific to Climate Change

- **Reduction on GDP and living standards**  
India and Southeast Asia could lose on average 2-3% and as much as 9-13% (95 percentile) of GDP by 2100
- **Changes in rainfall patterns, melting glaciers and loss of mountain snow**  
Increased risk of floods and intense bursts. Special impact on large parts of the Indian sub-continent and over quarter of a billion people in China
- **Increase in sea levels**  
South and East Asia could lose 15% of their land area. Small island states in the Indian and Pacific Oceans are acutely threatened
- **Declines in crop yields and impact on agriculture**  
Strong impact on Western Asia, where yields of the predominant crops may fall by 15 – 35% once temperatures reach 3-4 °C

# Asia and Pacific CO<sub>2</sub> Emissions



CO<sub>2</sub> emissions to grow at 2.3% per year through 2030 - slightly slower pace than the projected energy demand growth.

Source: Asia Pacific Energy Research Centre.

# ADB's Long-term Strategic Framework: "Strategy 2020"

- **Inclusive Economic Growth**

Climate change is expected to disproportionately affect the poor

- **Regional Integration**

Climate change impacts can trigger/amplify tension among neighbors

- **Environmentally sustainable growth**

- Environment including climate change: one of five core areas of operations
- Aims to scale up support for projects that address climate change

# Climate Change “Priorities for Action”

## Modalities

Finance

Knowledge

Partnership

Scaling-up Clean Energy

Encouraging Sustainable Transport and Urban Development

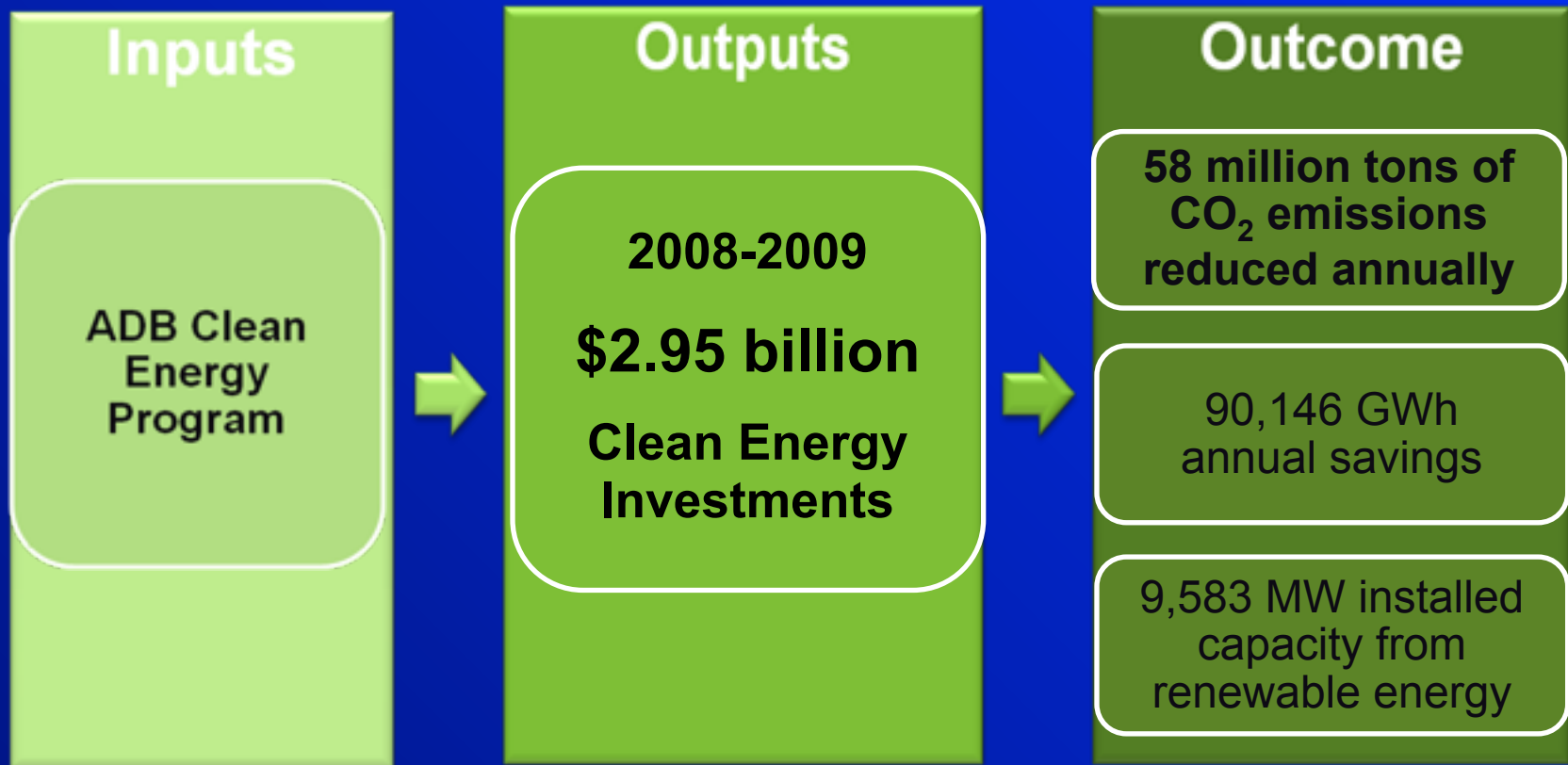
Managing Land Use and Forests for Carbon Sequestration

Promoting Climate-resilient Development

Strengthening Policies, Governance and Capacity

Priorities

# Clean Energy Program: Achieving Tangible Results





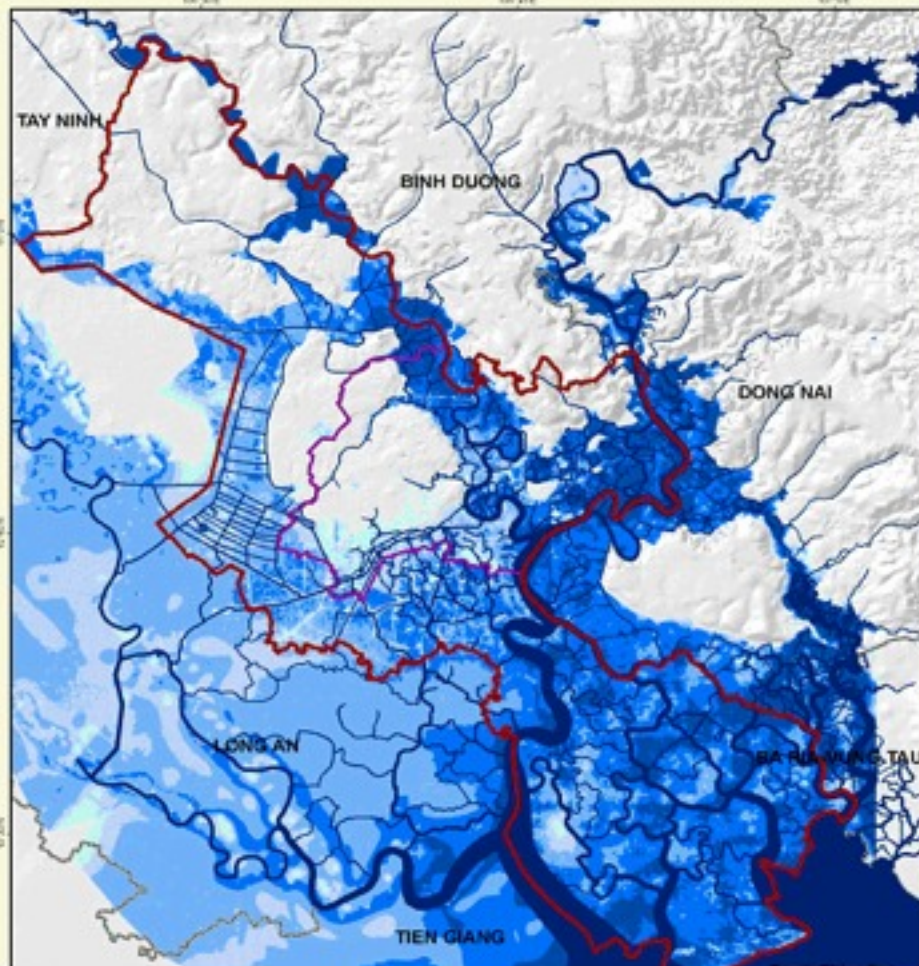
# **Climate Change Considerations in Safeguard Policy and Current Practices in EIA**

# Climate Change Adaptation Measures in Environmental Assessment

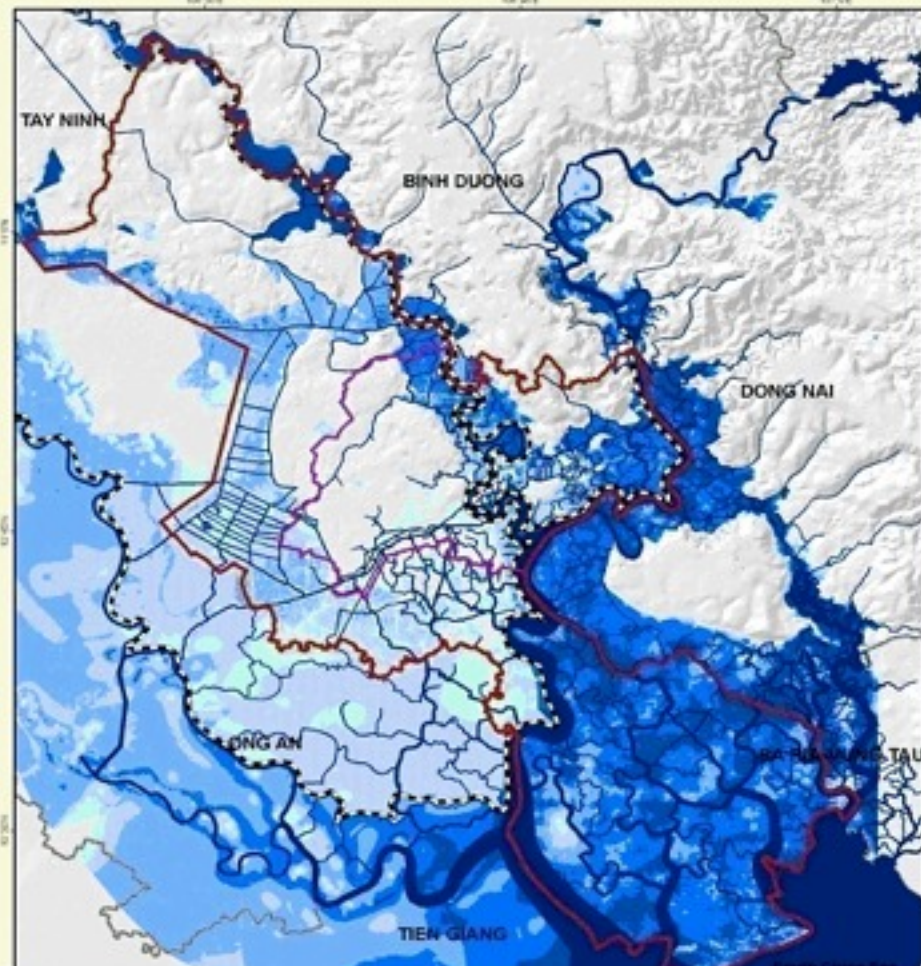
- ADB SPS encourages increasing use of Strategic Environmental Assessment
- Climate change impacts on projects are considered through early scoping – the Rapid Environmental Assessment Checklists are being revised to include Climate Change vulnerabilities
- Climate change adaptation is increasingly reflected in climate resilient project designs

# Climate Change Up Streaming

## Climate Change & Ho Chi Minh 2050 Flooding (high emissions scenario)



Without Dyke



With Dyke

# Vulnerability Assessment of the Water Sector in Khulna to Climate Change

- Up stream shift of water intake points by 4 km
- Adoption a number of 'no regret' options to improve CC resilience of water supply system
  - Water demand management
  - Reduction of non-revenue water and
  - Improved SWM in Khulna

# Climate Change Mitigation Measures in Environmental Assessment

- The primary instrument for mitigation is designing the project along the path of low carbon growth
- At project level the environment safeguards require accounting and monitoring of project specific GHG emissions for large projects (GHG Emissions > 100K ton CO<sub>2</sub>-eq)

# Planned Initiatives



# Addressing Uncertainties in CC Models and Downscaling

- Prediction of Climate Change Scenarios at the local level is major challenge in EIA
- ADB has used both statistical and dynamic down scaling in the past
- ADB Plans to undertake specific studies to generate climate change scenarios for vulnerable Developing Member Countries in the region

# Up Streaming Climate Change Considerations in EIA

- ADB has considered Climate Change in SEA as well as in project level EIA
- ADB is actively engaging developing member countries to share good practices and exchange of knowledge in SEA and support twinning arrangements among countries
- Increasing emphasis on SEA in country partnership strategies in identifying programs and projects

# Use of Adaptive Project Design Address Variations in Climate Change Predictions

- One time design intervention may not be sufficient to achieve climate resilience for projects
- Need to adopt flexibility in project designs to respond to variation in climate change impacts

**Thank you**