

# Low Emission Development Strategies (LEDS)

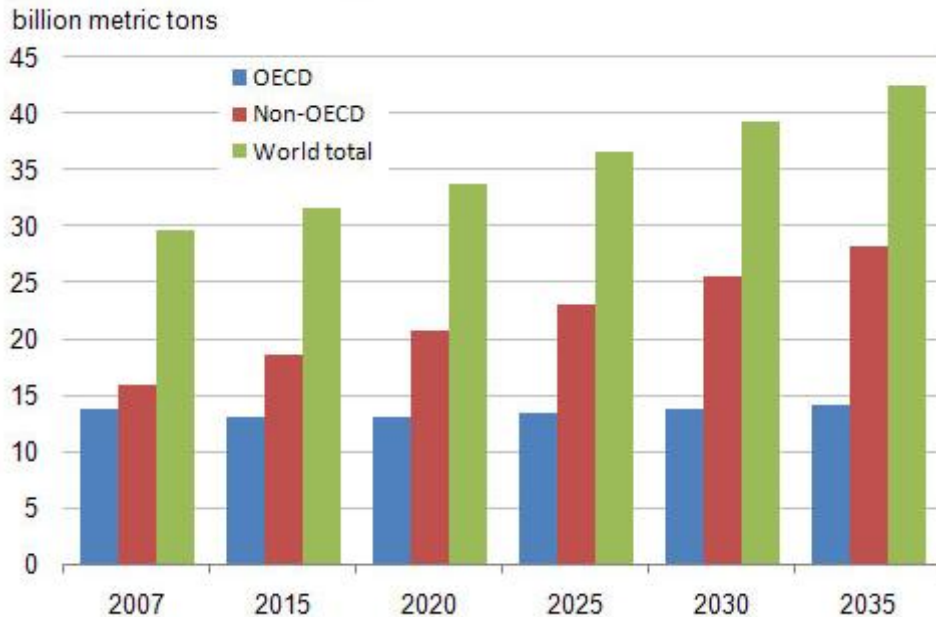
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Enhancing Capacity for  
Low Emission Development Strategies

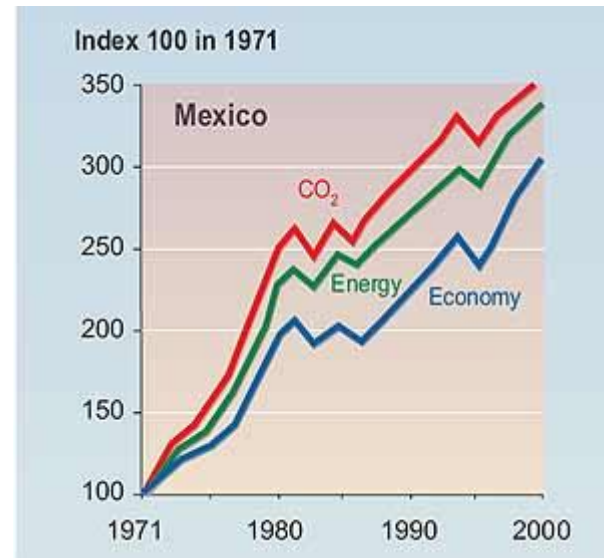


# Economic Growth is traditionally linked to Emissions Growth

## Non-OECD Emissions Rising



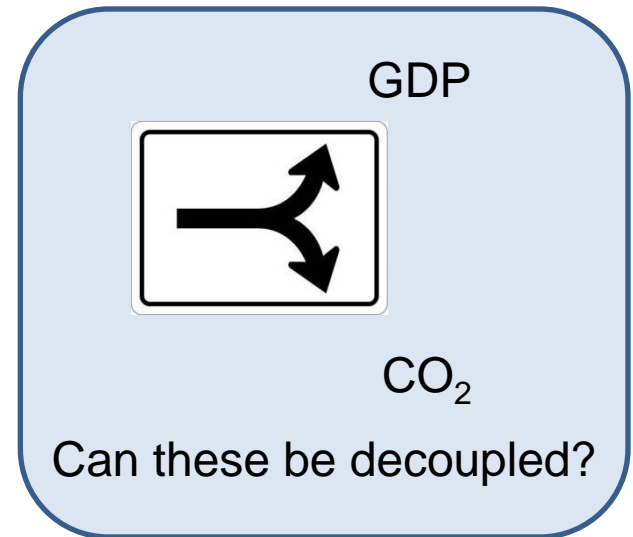
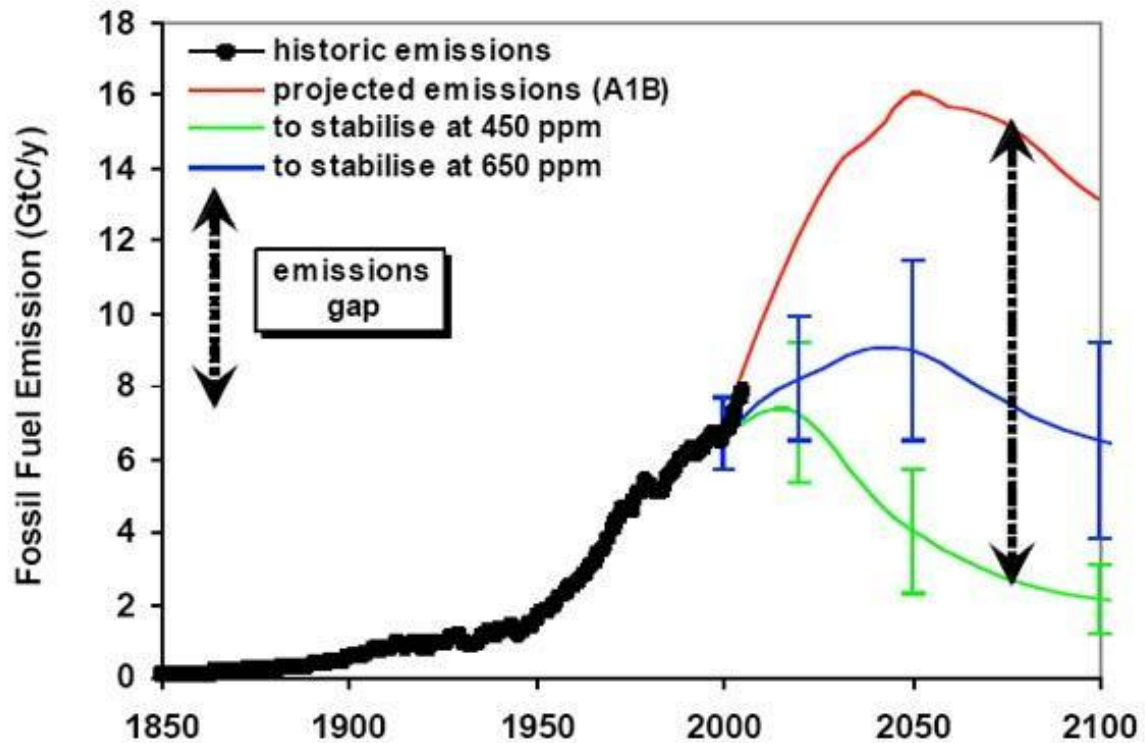
## Emissions Track Economic Growth



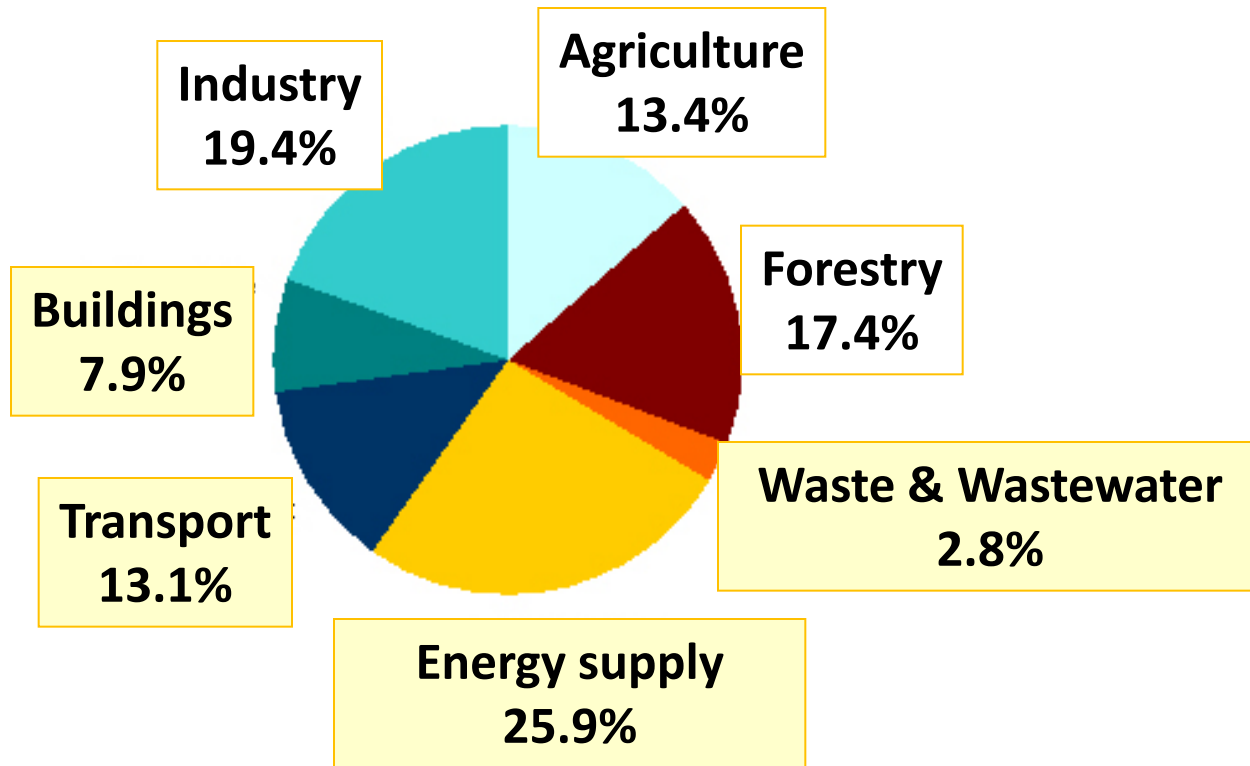
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# Can We Move Towards Low Emission Economic Growth?

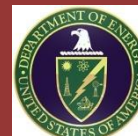


# Infrastructure Plays a Major Role in Emissions



## 2004 Global Emissions by Sector

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# Addressing Climate Change is Central to our Diplomatic and Development Objectives



“A low emission development strategy is indispensable for sustainable development”

- Copenhagen Accord,  
December 2009



“Climate change is one of the century’s greatest challenges; rising to this challenge is one of the President’s highest diplomatic and development priorities ... I encourage missions to support partner countries ... to develop **Low Emissions Development Strategies**.... We need to do more to ... work with partner countries to define their **adaptation** priorities, and address high priority needs.”

- Administrator Shah, Letter to  
Mission Directors, May 2010

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# Why Should Developing Countries Care?

- Grow secure, sustainable and prosperous futures for their citizens
- Anticipate and respond to climate change and reduce vulnerability
- Benefit from the new global low carbon economy, through job creation and economic growth
- Receive financing in the future from global climate change assistance funding
- Catalyze private sector investment

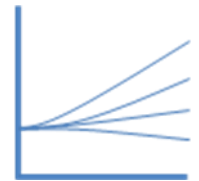
# LEDS Components

A LEDS outlines:



A. National development goals and objectives

B. National Greenhouse Gas Inventory \* and Economic Data



C. Long-term Business as Usual (BAU) Economic and Emissions Pathway\*

D. Alternative Pathway of Low-Emission Scenarios\*



E. Prioritized Actions and Implementation Plans

F. Implementation Financing Plans



## B. Greenhouse Gas (GHG) Inventories

“You can’t manage what you can’t measure...”

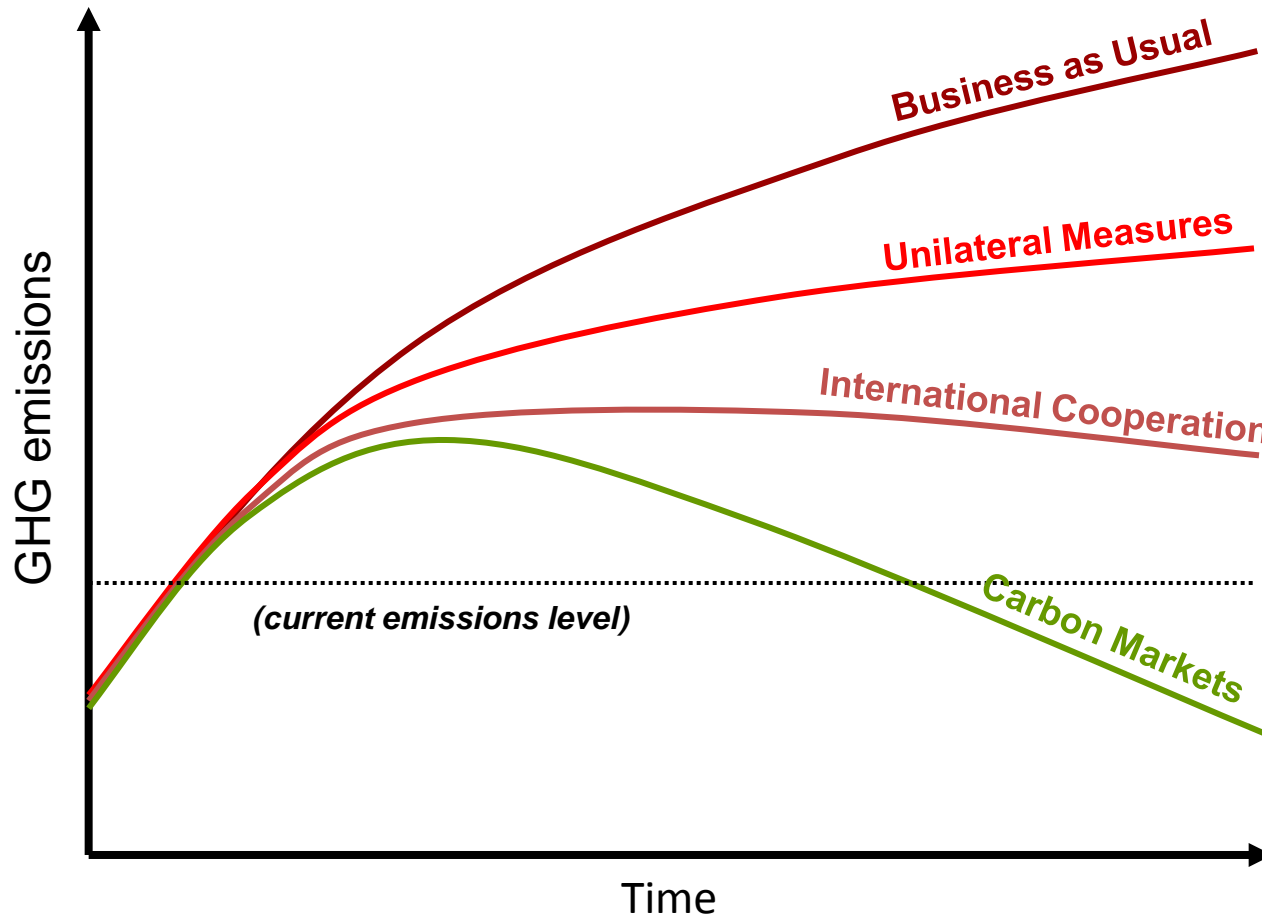
- A national level estimate of emissions and sinks
- Internationally agreed upon methodologies for reporting
- Based on economic activity data and emissions coefficients
- Comprehensive: energy; industrial processes and product use; agriculture, forestry and land use and waste

### Example: India’s 1994 GHG inventory

<u>Sources of emissions</u>	<u>CO<sub>2</sub>e (Gg)</u>	<u>%</u>
Energy and transformation industries	355,037	28.9
Fossil fuel combustion in industry	150,674	12.3
Rice cultivation	85,890	7.0
Transport	80,286	6.5
Emission from soils	45,260	3.7
Iron and steel production	44,445	3.6
Energy use in residential sector	43,918	3.6
Cement production	30,767	2.5
Manure management	20,176	1.6
Ammonia production	14,395	1.2
Land use, land-use change and forestry	14,292	1.2



# C. Business as Usual (BAU) & D. Low Emission Pathways

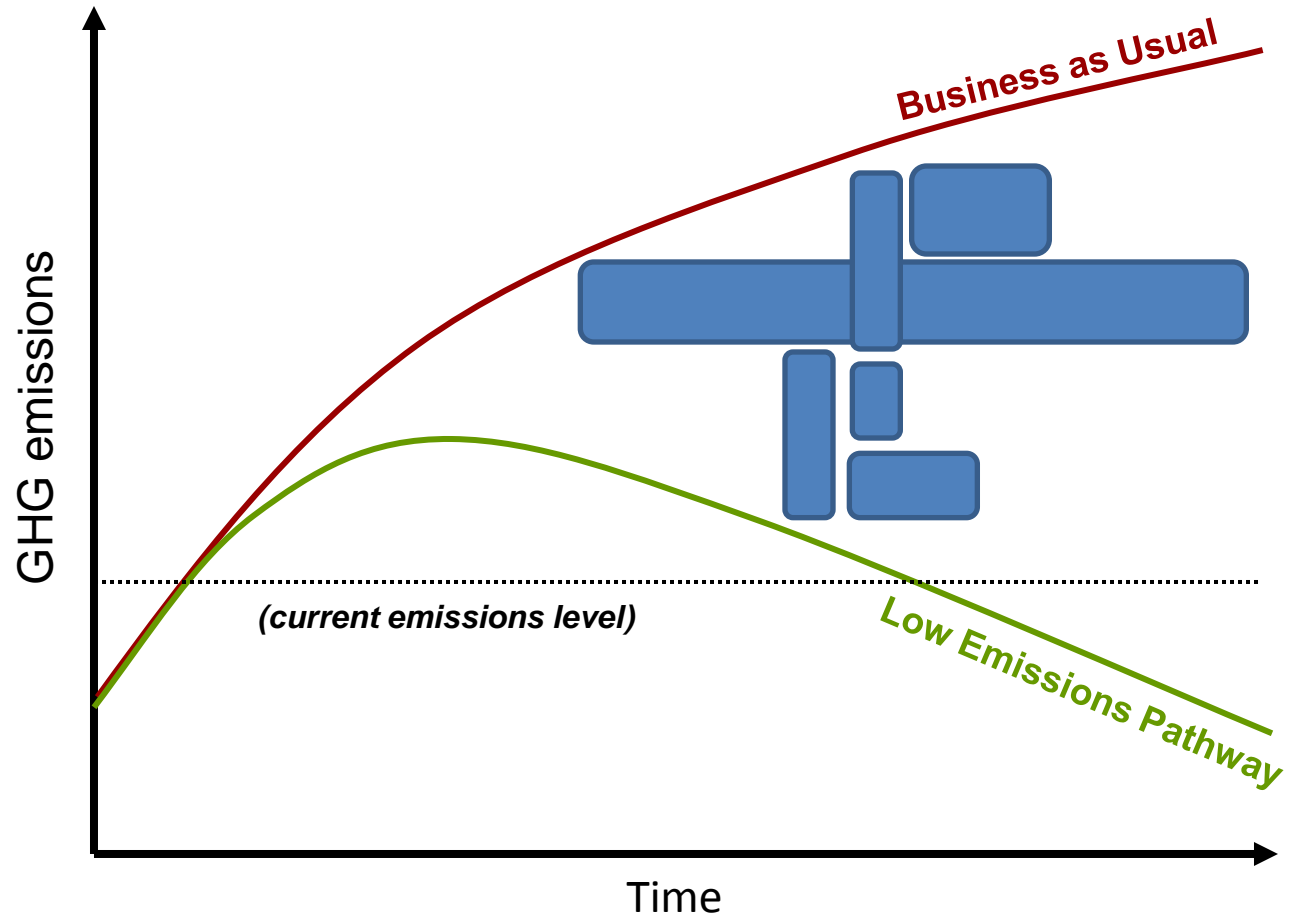


# Nationally Appropriate Mitigation Actions (NAMAs)

Bali Road Map 2007

Concrete actions and project activities

Dependent on measurable, reportable and verifiable technology, finance and capacity building support provided by developed countries



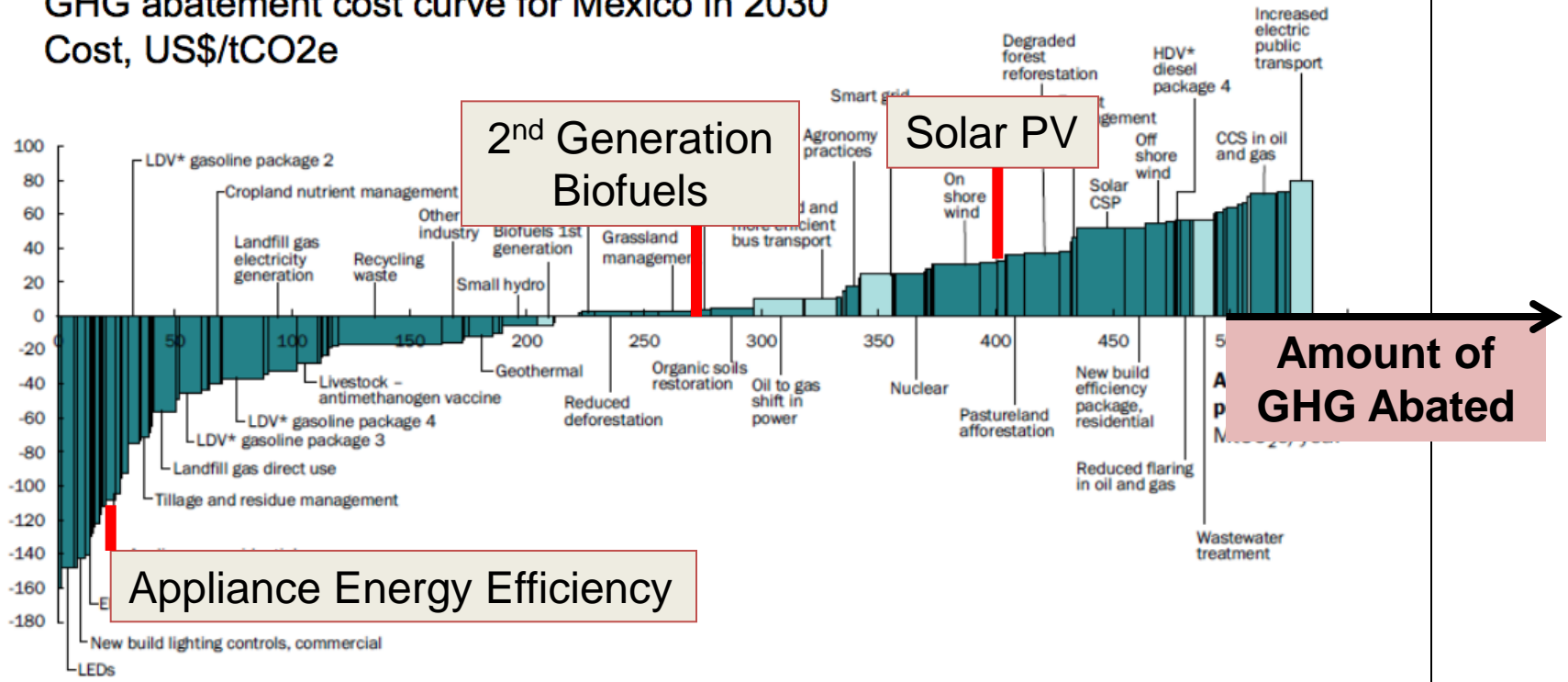
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# Cost Benefit Analysis of Policy Options

GHG abatement cost curve for Mexico in 2030  
Cost, US\$/tCO<sub>2</sub>e

+  
C  
O  
S  
T  
-



Appliance Energy Efficiency

2<sup>nd</sup> Generation Biofuels

Solar PV

Amount of GHG Abated

\* LDVs = light duty vehicles; HDVs = heavy duty vehicles

Note: The cost estimate for the light-colored bars is approximate

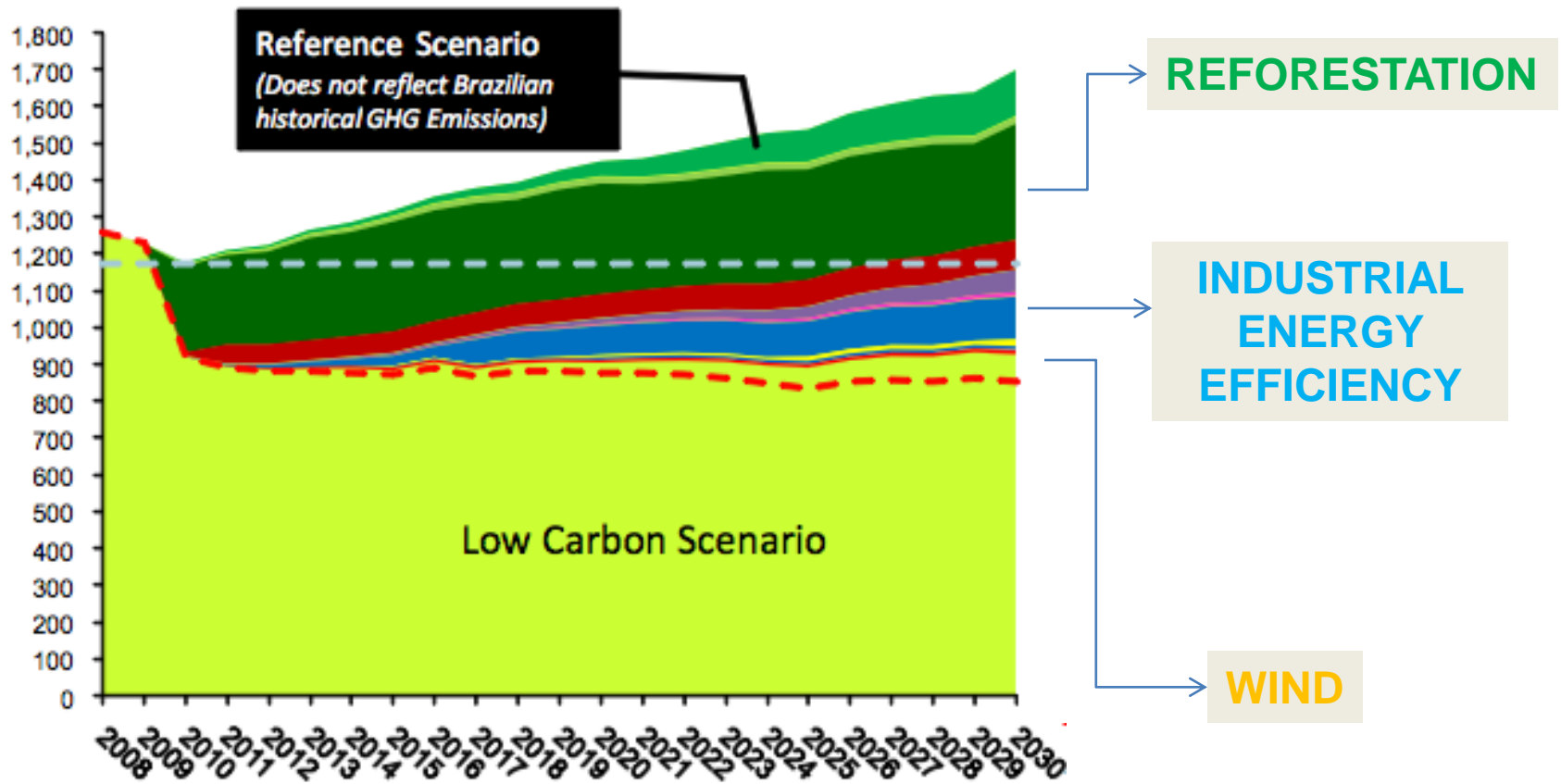
Source: McKinsey GHG abatement cost curve v2.0; McKinsey analysis

Source: McKinsey, Centro Mario Molina: "Low Carbon Growth: a Potential Path for Mexico"

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# Example Study: Brazil Emissions Reductions Pathways



Source: Brazil Low Carbon Case Study, World Bank, May 2010

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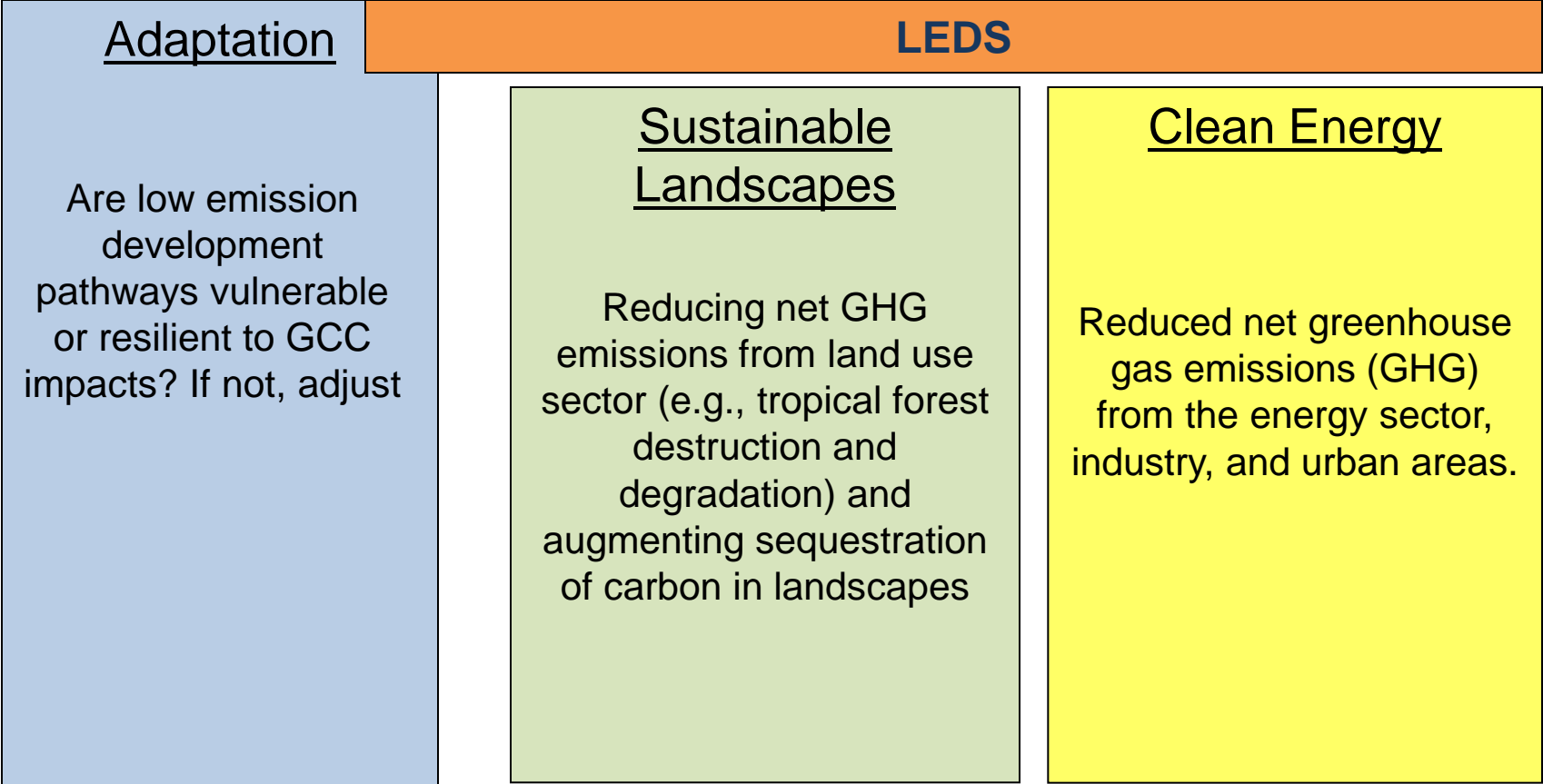
## Enhancing Capacity for Low Emission Development Strategies (EC-LEDS)

Enhancing Capacity for Low Emission Development Strategies (EC-LEDS) is a U.S. whole-of-government initiative to support developing countries' efforts to pursue *long-term, transformative development, realize priority development goals, and accelerate sustainable, climate-resilient economic growth while slowing emissions growth.*

- The Enhancing Capacity for LEDS initiative is an important component of the U.S. fast start financing commitment to mobilize international funds approaching \$30 billion by 2012
- EC-LEDS is the only OMB High Priority Performance Goal for Global Climate Change for USAID/State, with a goal of 20 countries by 2013
- Will help focus donor funding, and in particular USAID climate change funding, on priority actions that coincide with long-term climate-resilient development
- LEDS are partner country driven and owned. Support for creating and implementing a LEDS will be tailored to each country's unique capacity, technical, analytical, and policy needs

# LEDS is a Strategic Framework for Mitigation

Development Objective: Low emission, climate-resilient development



# Examples of LEDS Support: Energy and Transport Sectors

## Supporting Activities

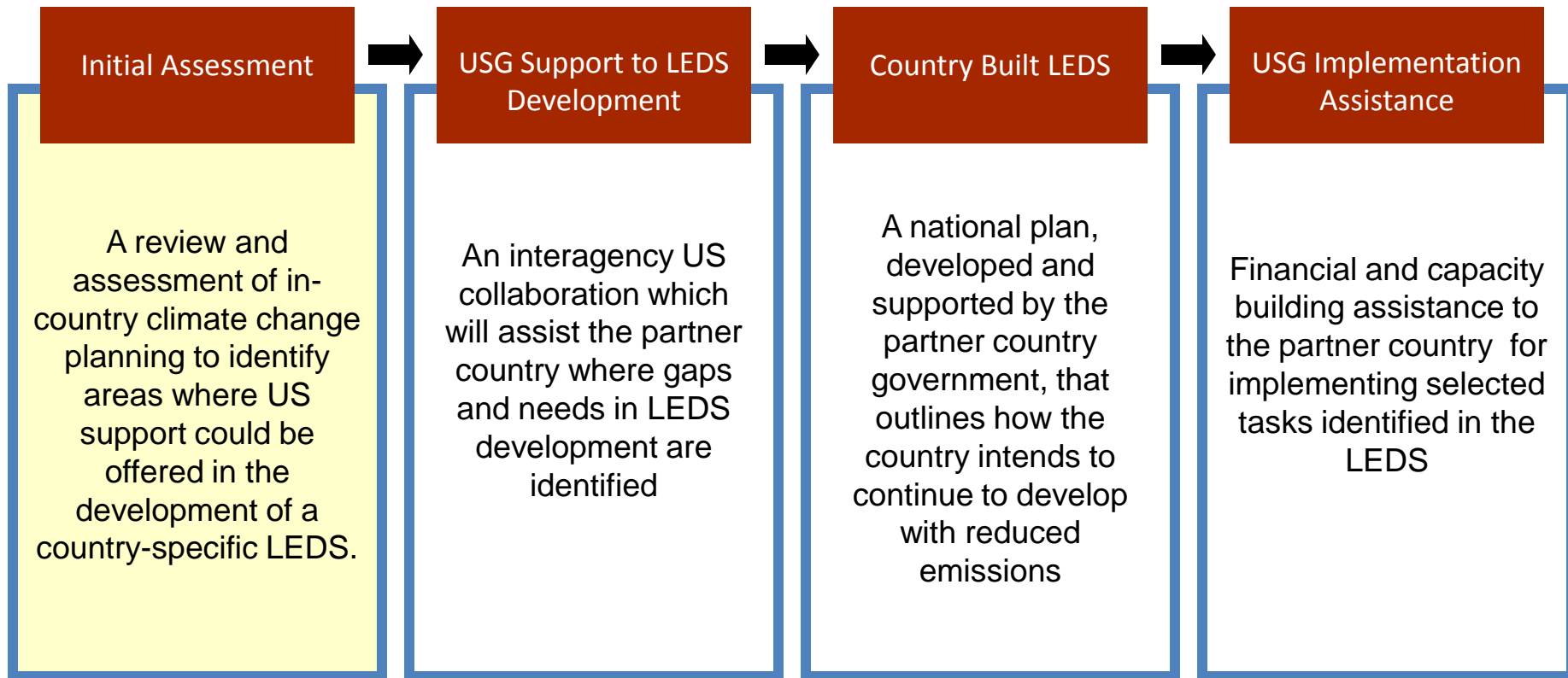
- Technical assistance in developing BAU scenario and in using a variety of economic models
- Technical assistance in conducting new resource assessments (gas, coal bed methane, solar, wind, biomass, geothermal)
- Work with technical counterparts to identify the legal, regulatory, policy, and institutional barriers to energy efficiency programs

## Implementing Activities

- Clean energy project development and transaction support
- Support energy utility implementation of clean energy and improved grid management
- Provide training to Urban Development Agency in urban planning and infrastructure design.

# Where are we now?

Initial Partner Countries: Bangladesh, Colombia, Gabon, Mexico, and Viet Nam





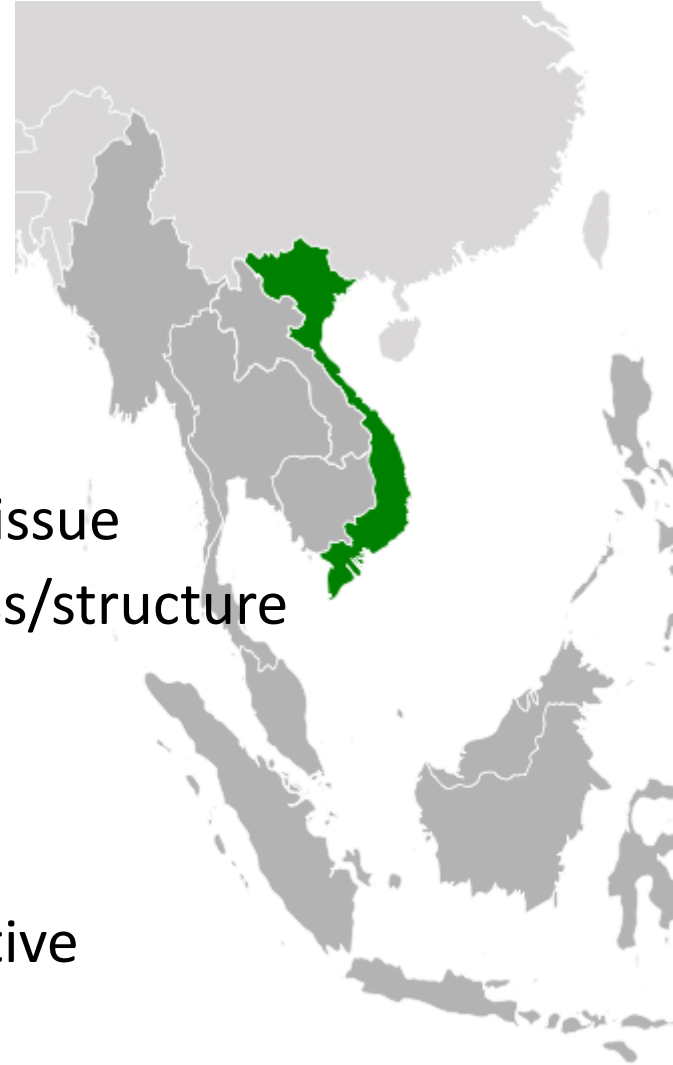
# Initial Lessons Learned – Viet Nam EC-LEDS

## Opportunities

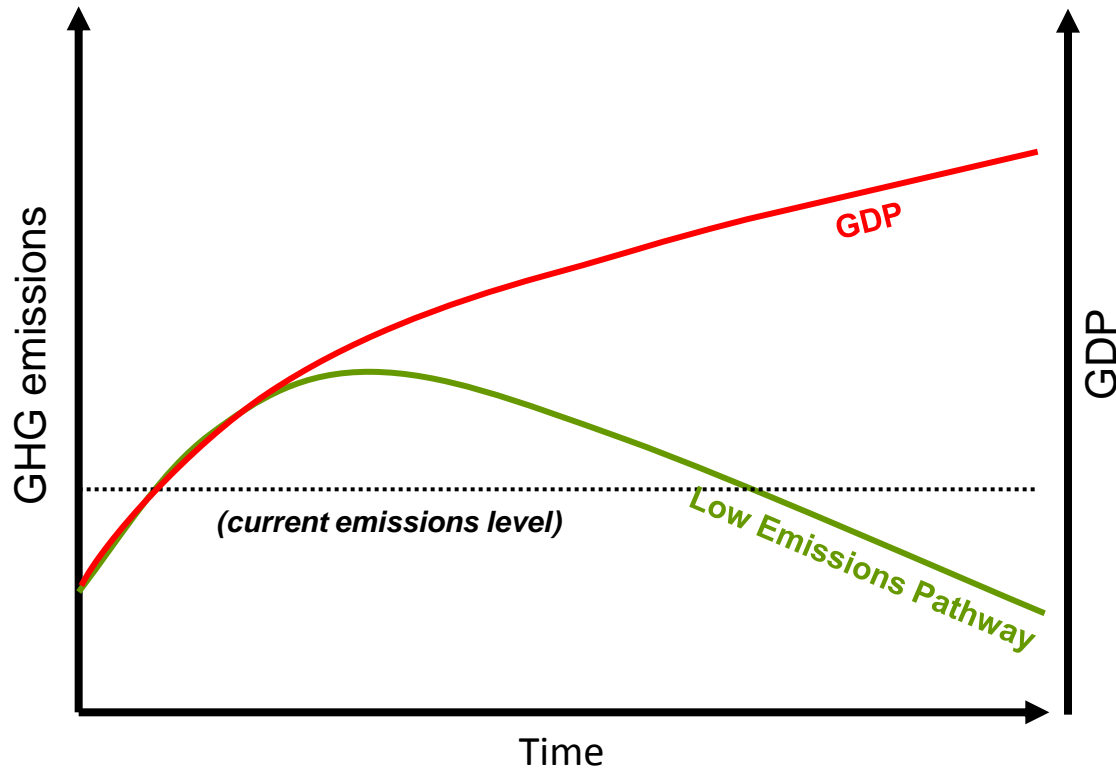
- Government eager to engage US
- Well established donor community
- High level awareness of climate change issue
- Existing Climate Change planning process/structure

## Challenges

- Limited absorptive capacity
- Crowded donor space, need to be selective
- Opaque decision making structure
- Lack of clarity on ministerial roles
- Contradictory development and environmental goals



# ... And where we want to be



## Questions?