

# Overview: Survey of energy-sector mitigation programs in Asia

*Anmol Vanamali,*  
*Director, CCAP Center for*  
*Clean Air Policy (CCAP)*

\*\*\*\*\*

MAIN-Asia Regional Academy

October 12, 2011

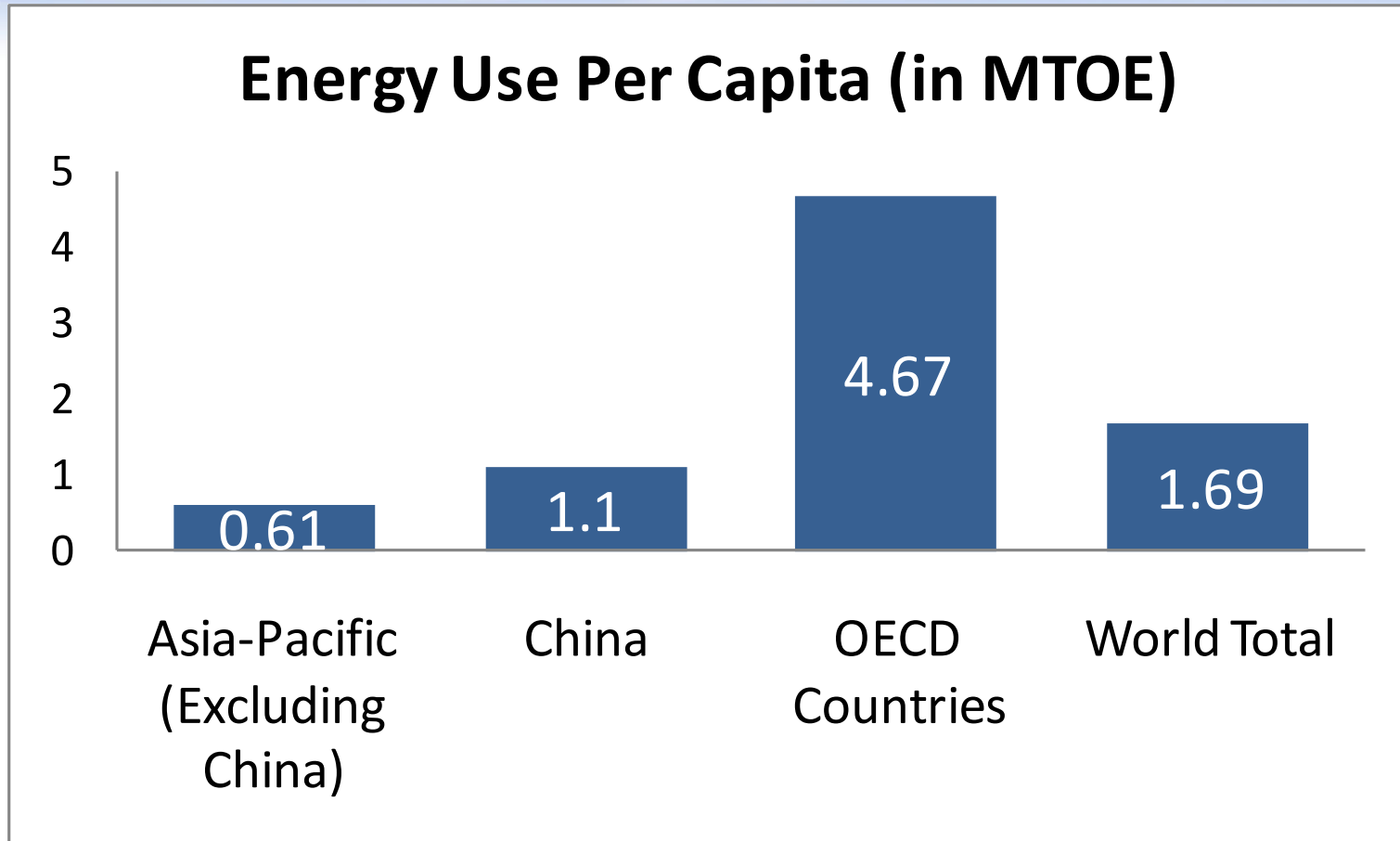
Phuket, Thailand



**Center for  
Clean Air Policy**

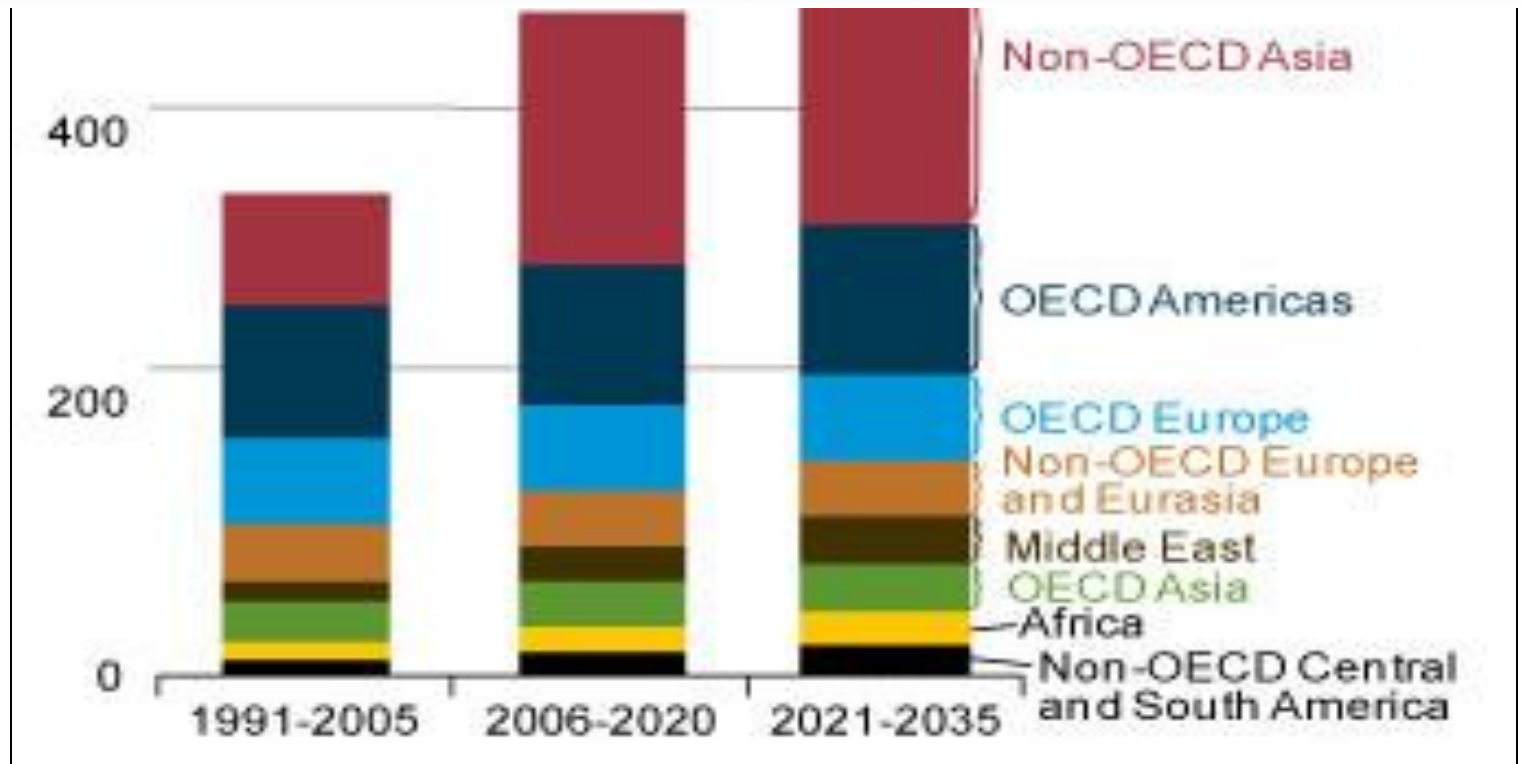
Dialogue. Insight. Solutions.

# Energy sector in Asia, currently



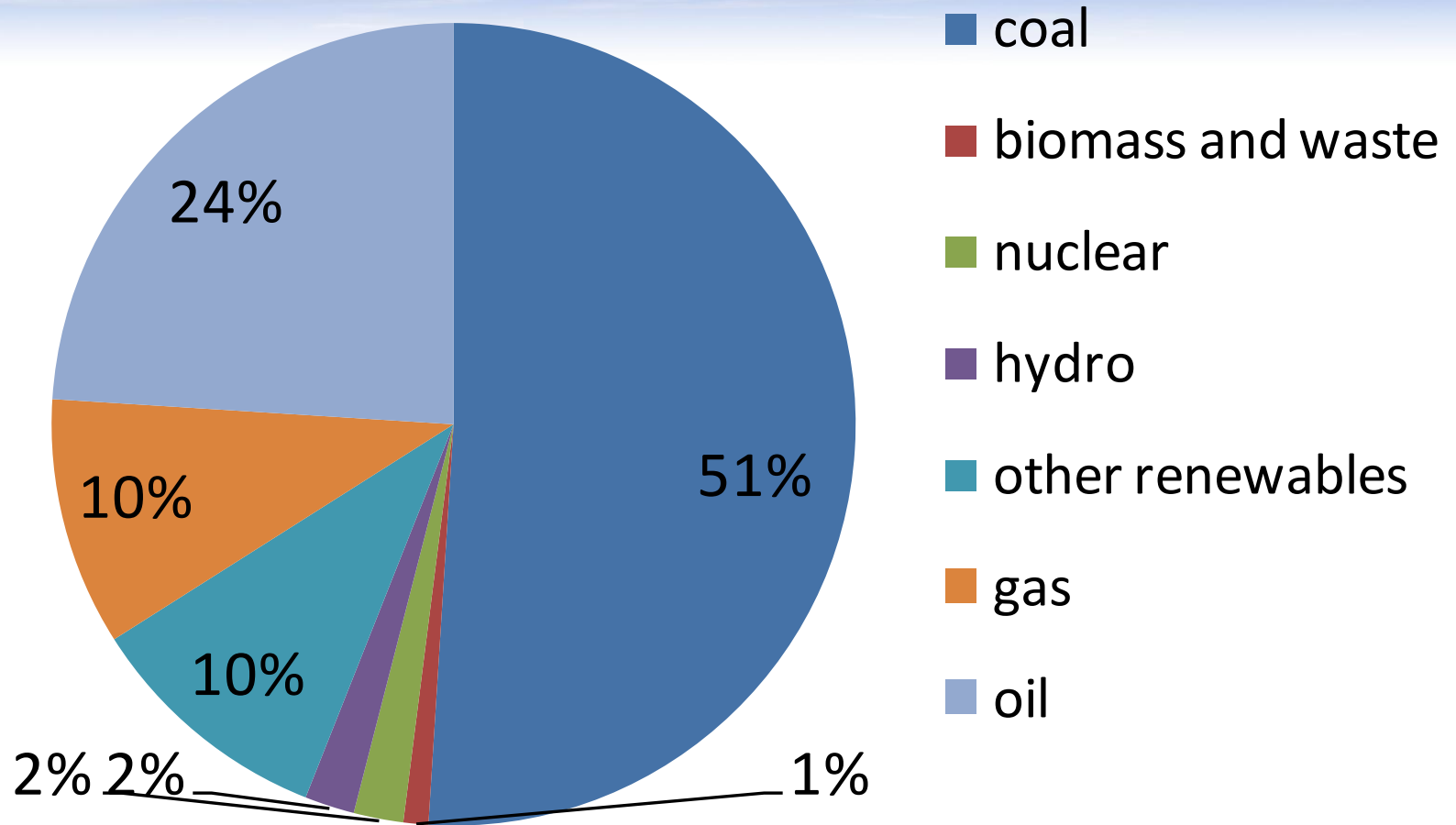
Source: WORLD ENERGY OUTLOOK

# Developing Asia and the World



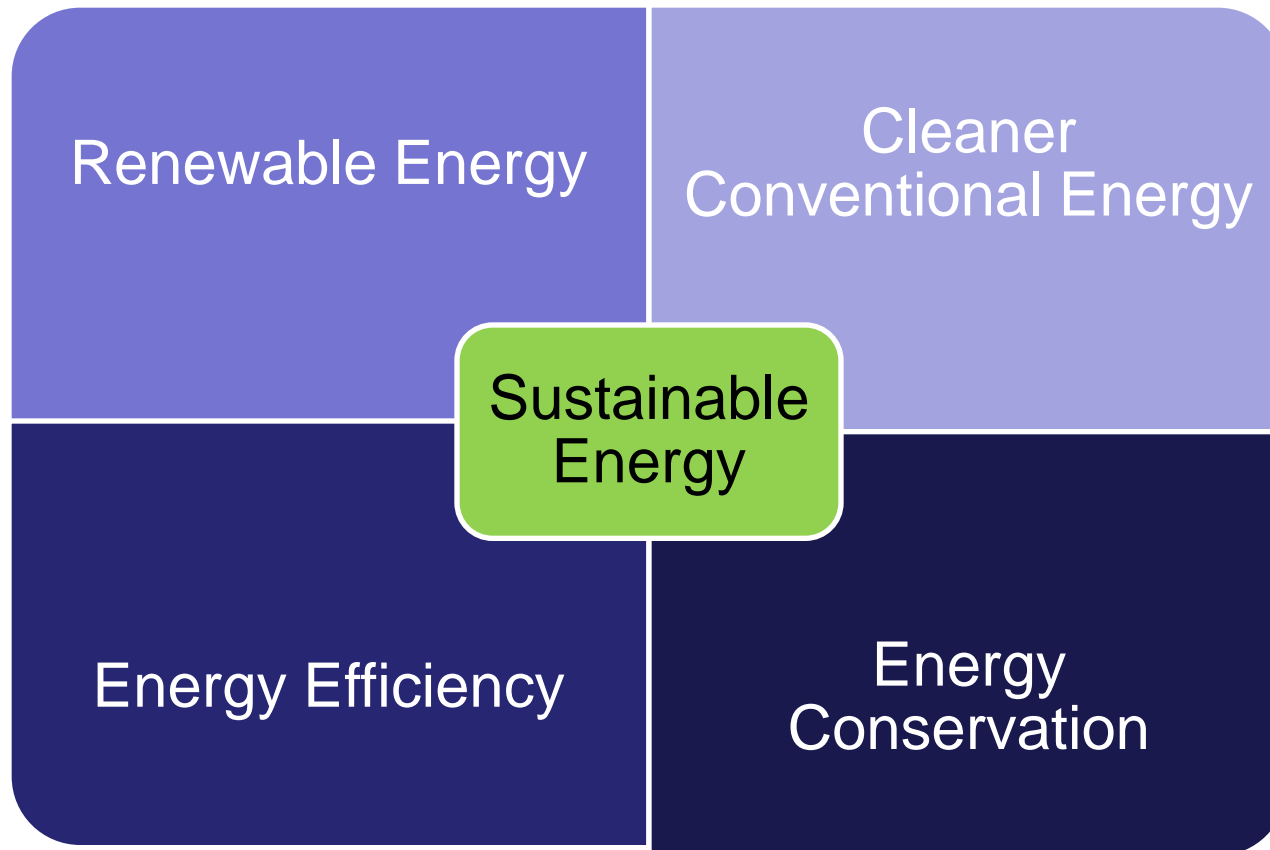
Cumulative carbon dioxide emissions by region (BnMtCO<sub>2</sub>e)

# Region's Projected Fuel Mix, 2030



Source: IEA

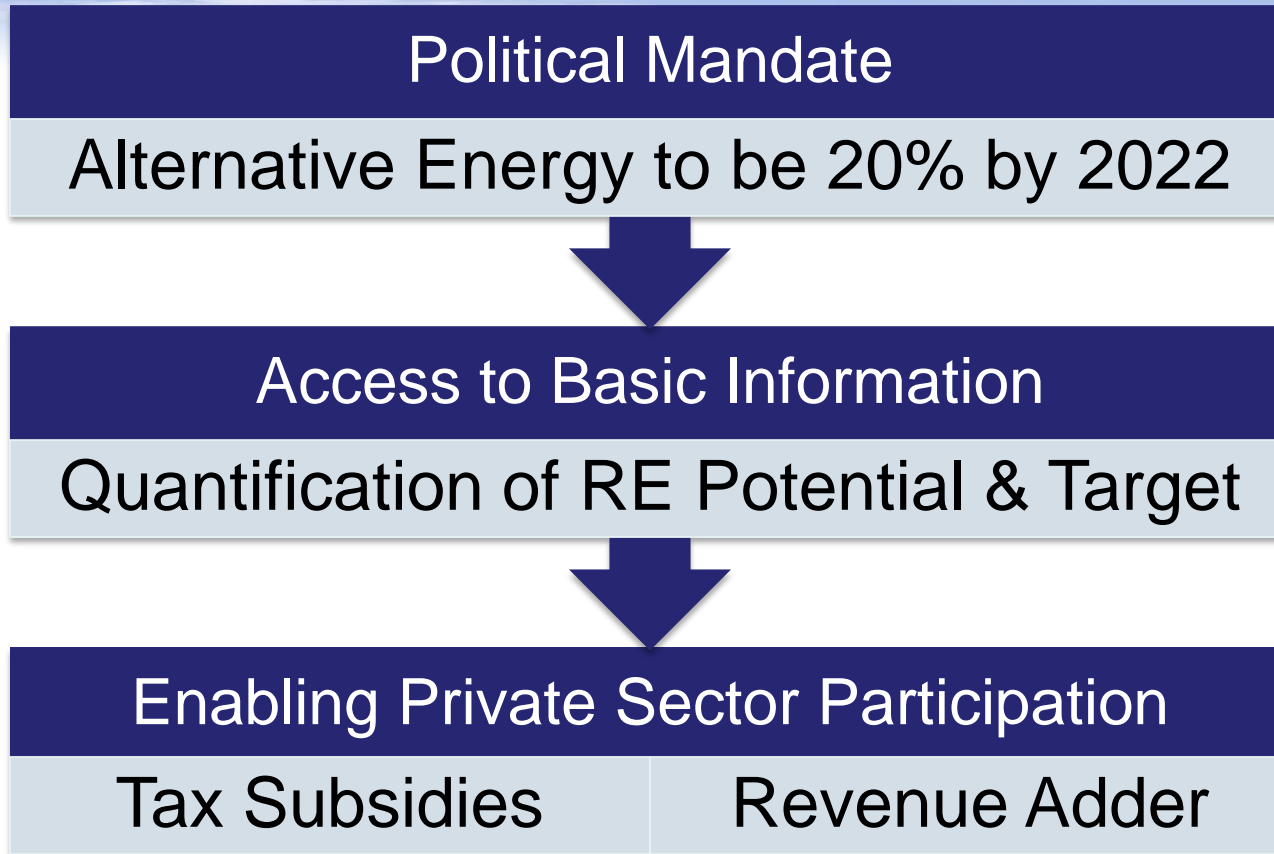
# Sustainable Energy Quadrangle



# Survey of existing policies in RE

	Indonesia	Philippines	Thailand	China	India	South Korea
Feed in Tariffs	X	X	X	X	X	
Capital subsidies		X	X	X	X	X
Sales tax, energy tax	X	X	X	X	X	X
Net metering		X	X			
Public investments or financing		X	X	X	X	X
RPS		X		X	X	X
Tradable REC's		X			X	

# Renewable Energy - Thailand



- How can this become more ambitious?
- How can this be framed under the existing NAMA discussions?

# Energy Efficiency

Stationary Uses

Non-  
stationary  
Uses

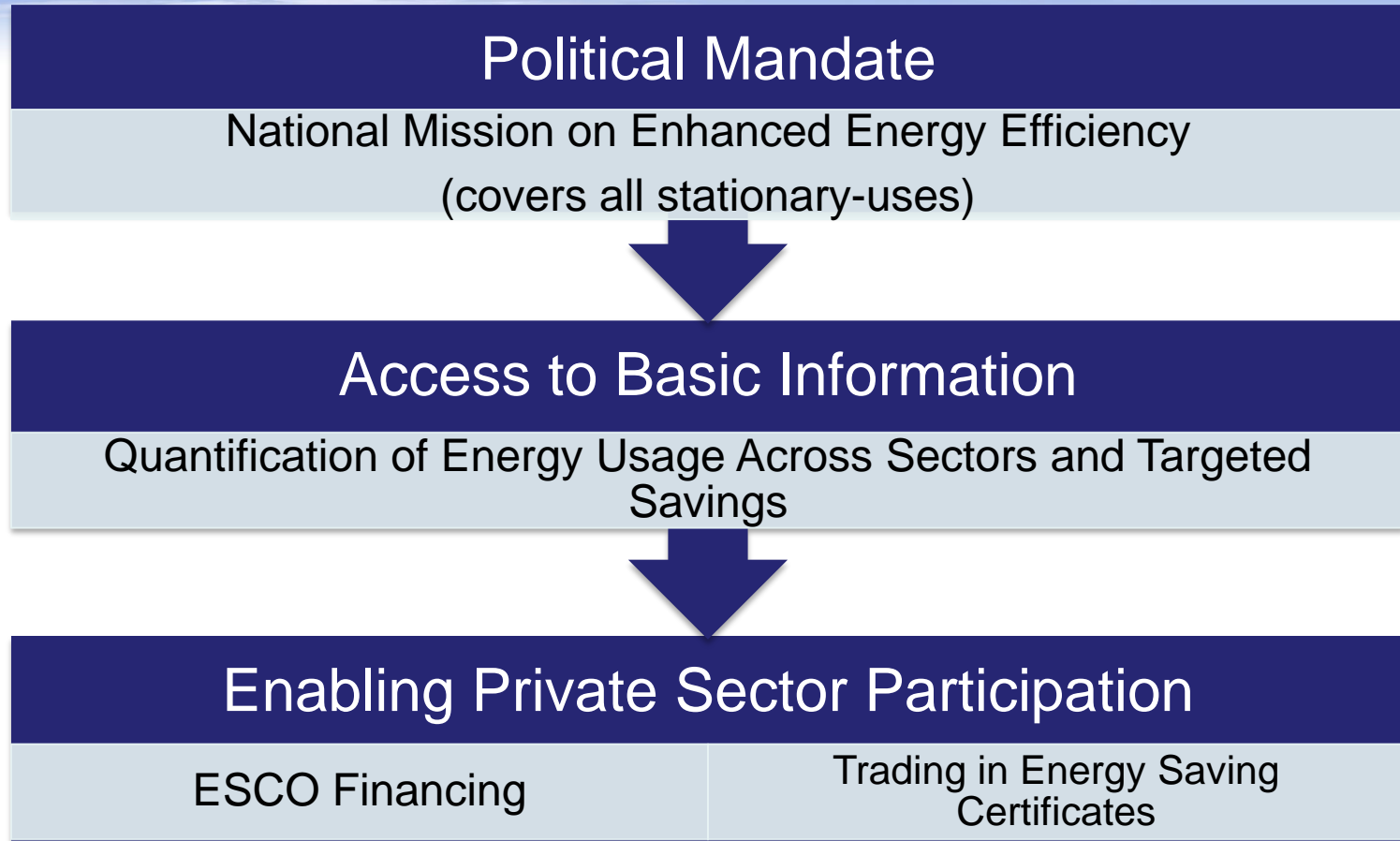
Residential  
&  
Commercial

Industrial

Transport &  
Planning



# Energy Efficiency - India



- Are there institutions that track energy use across sectors?
- How is this information being used?

# Cleaner Conventional Fuel - Examples

## China

- Planned R&D in clean coal technology commercialization
- Demonstration projects related to CCS
- Tax benefits for clean coal technology
- Promotion of Integrated Gasification Combined Cycle plans in place of sub-critical plants

## Indonesia

- National Coal Policy calls for greater use of upgraded brown coal, setting up pilot plants for high efficiency coal power from 2010-2020 and creation of clean coal technology center
- Integral part of National Electricity Plan is moving from oil-based and sub-critical coal plants to super-critical plants

Q. Is there any discussion on including clean coal projects as eligible NAMAs? Either in UNFCCC or in FSF?



Thank You!

Anmol Vanamali  
Director, Center for Clean Air Policy  
[avanamali@ccap.org](mailto:avanamali@ccap.org)