

# **Clean Development Mechanism (CDM) - Basics**

# Why Climate is Changing

Rapid increase in energy demand (Industrialization)



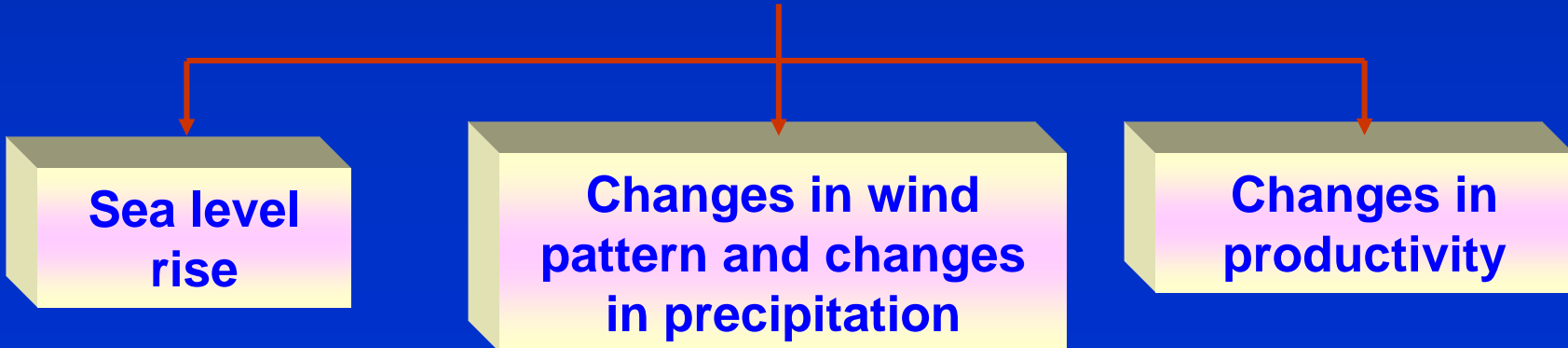
High dependency on crude oil & fossil fuels



Increased CO<sub>2</sub> and other GHG emissions



Global Warming due to increased Concentration of GHG

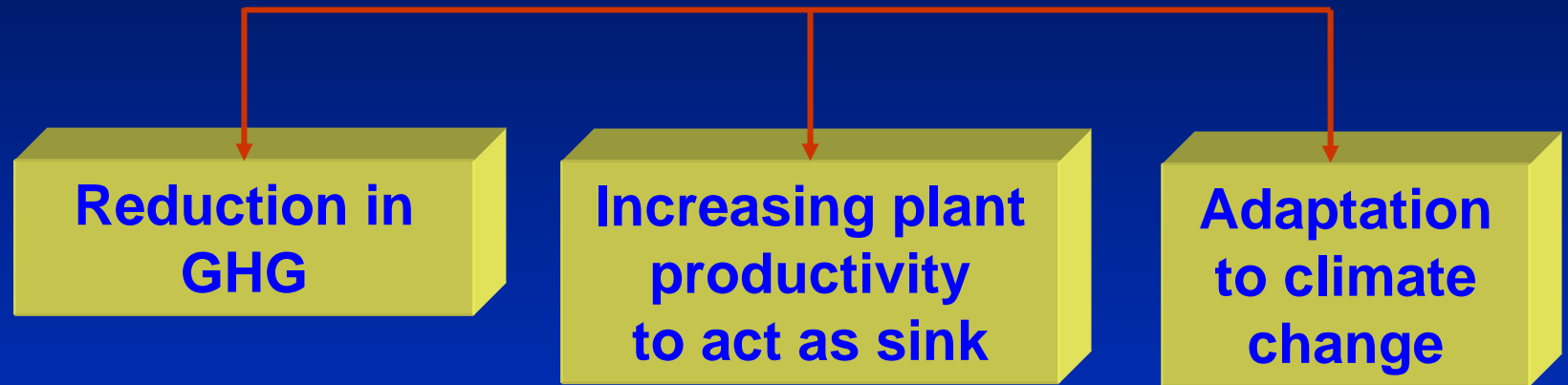


Sea level rise

Changes in wind pattern and changes in precipitation

Changes in productivity

# Possible Remedial Measures



# United Nations Framework Convention on Climate Change (UNFCCC)

- 165 nations signed the 1992 United Nations Framework Convention on Climate Change (UN-FCCC) at Rio de Janeiro
- The Convention divides countries into two main groups Annex I (developed) & non-Annex I (developing)

# UNFCCC

- Annex I (Developed Countries) agreed to reduce their GHGs by 5.2 % below 1990 levels in 1st commitment period 2008 – 2012
- Convention hinges on three principles:
  - Common but differentiated responsibility
  - Precautionary approach
  - Sustainable Economic Growth and Development

# UNFCCC

- The Kyoto Protocol was adopted in Kyoto, Japan, on 11 December 1997 and entered into force on 16 February 2005.
- Kyoto Protocol defines how to bring down emissions during COP 3 in 1997
- 184 Parties of the Convention have ratified its Protocol to date.

# Flexibility Mechanisms

## Project Based Mechanisms

Clean  
Development  
Mechanism  
(CDM)

Between  
developing and  
developed  
countries

Joint  
Implementation  
(JI)

Between  
developed  
countries

International  
Emission Trading

- (IET)

Between  
developed  
countries

# CDM Concept

Industrialized Country  
(Annex 1)

Developing Country  
(non-Annex 1)

Carbon Credits

(=GHG Emission rights)

**Entity A**

✓GHG Emissions

**Entity B**

✓Project Activity

✓Emission Reduction

**Finance**

**Technology**

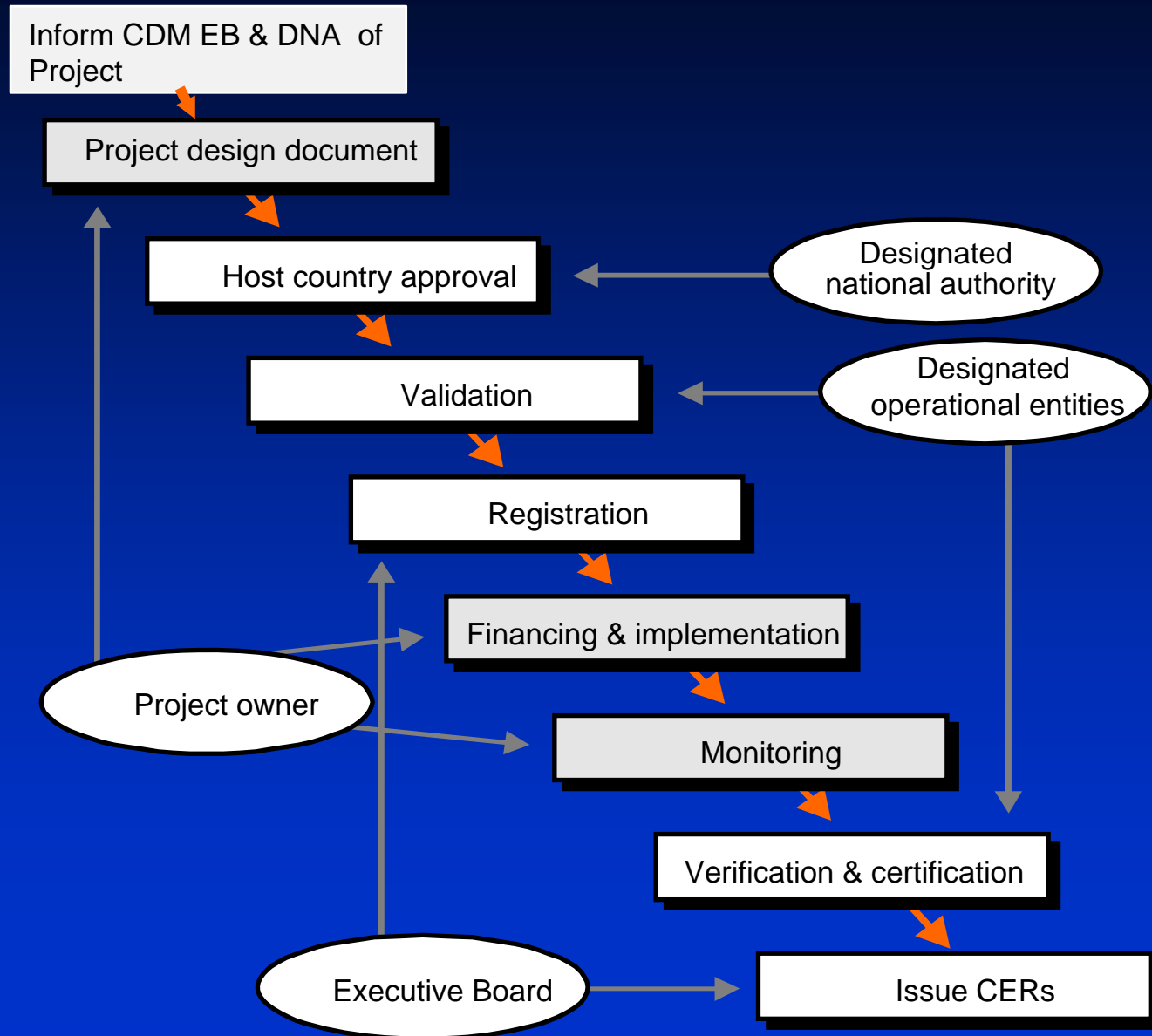
**(Capacity Building)**



# Institutional Framework for CDM

- Developing country- Project Developer
- Annex-1 country- Buyer, Investor
- Approval of project – Designated National Authority
- An institution which verifies the essential prerequisites for CDM projects- Designated Operational Entity (DOE)
- An Institution which verifies the emission reduction- Designated Operational Entity (DOE)
- An institution which issue CERs- CDM Executive Board (CDM EB)

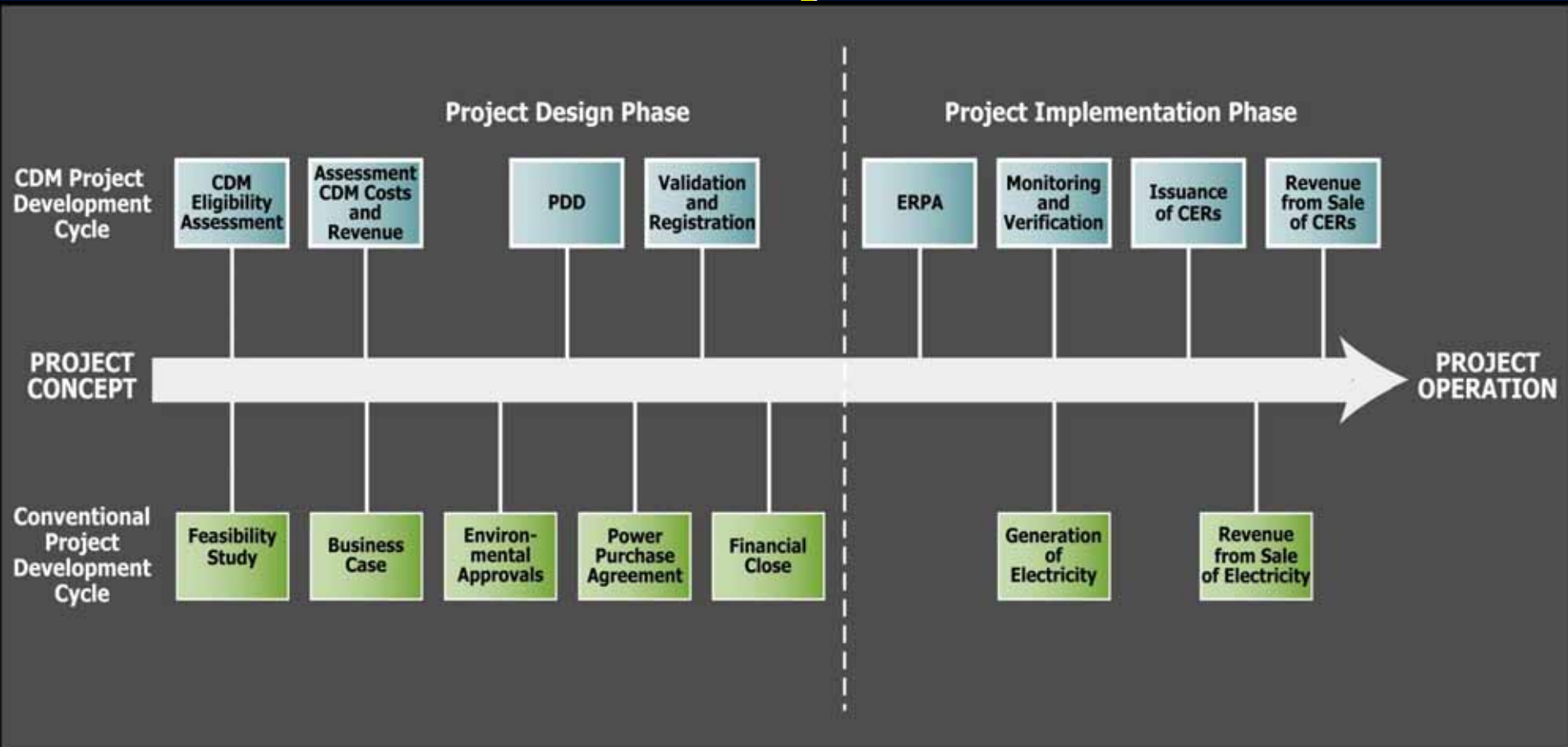
# CDM Project Cycle



# Prerequisites for a project to be considered under CDM

- Contributes to the sustainable development of the host country
- Results in GHG emission reductions that would not have happened otherwise
- Generates real, measurable and long-term climate change mitigation benefits
- Approved by parties (host and purchasing) involved

# CDM & Conventional Project Development



# Benefits of CDM

- Additional revenue stream through carbon credits
- Opportunity to achieve improved energy efficiency
- Energy Security from renewable Energy
- Improved environmental quality
- Access to climate-friendly technology
- Investment in priority sectors
- Reduced dependence on imported fuel
- Encourages private sector involvement in global GHG reductions
- Stimulates technology transfer and capacity building

# CDM Statistics

(Source UNFCCC website 22<sup>nd</sup> February 2012)

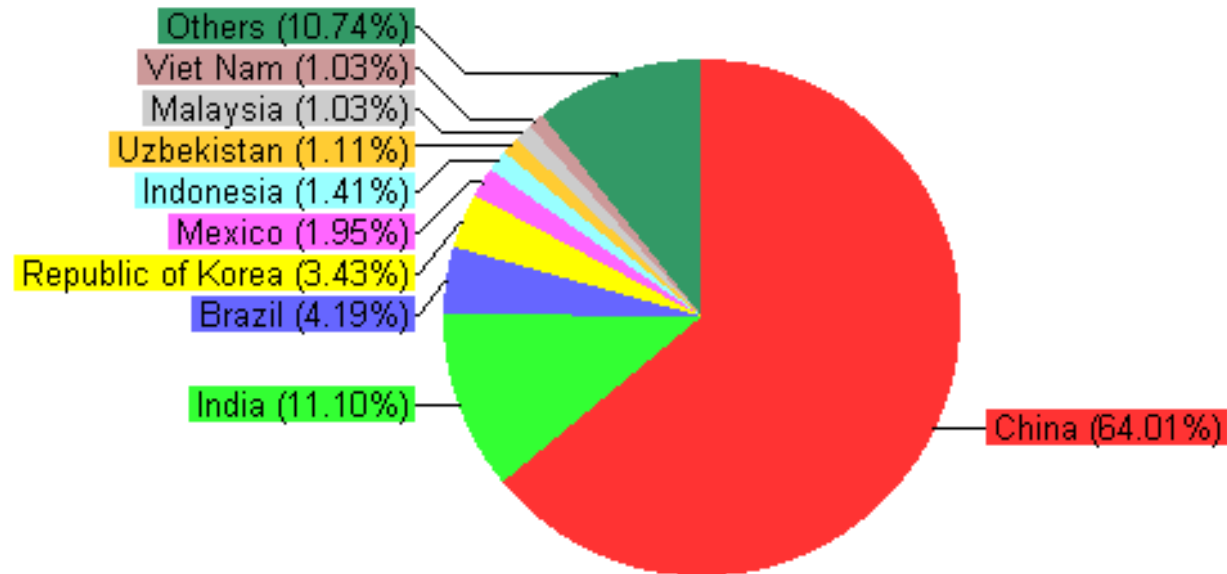
	Annual Average CERs <sub>1</sub>	Expected CERs until end of 2012 <sup>2</sup>
CDM project pipeline: > 5600 of which:	N/A	> 2,700,000,000
3845 are registered	566,573,359	> 2,120,000,000
82 are requesting registration	12,368,317	> 10,000,000

## Assumptions:

1. All activities deliver simultaneously their expected annual average ERs
2. No renewal of crediting periods

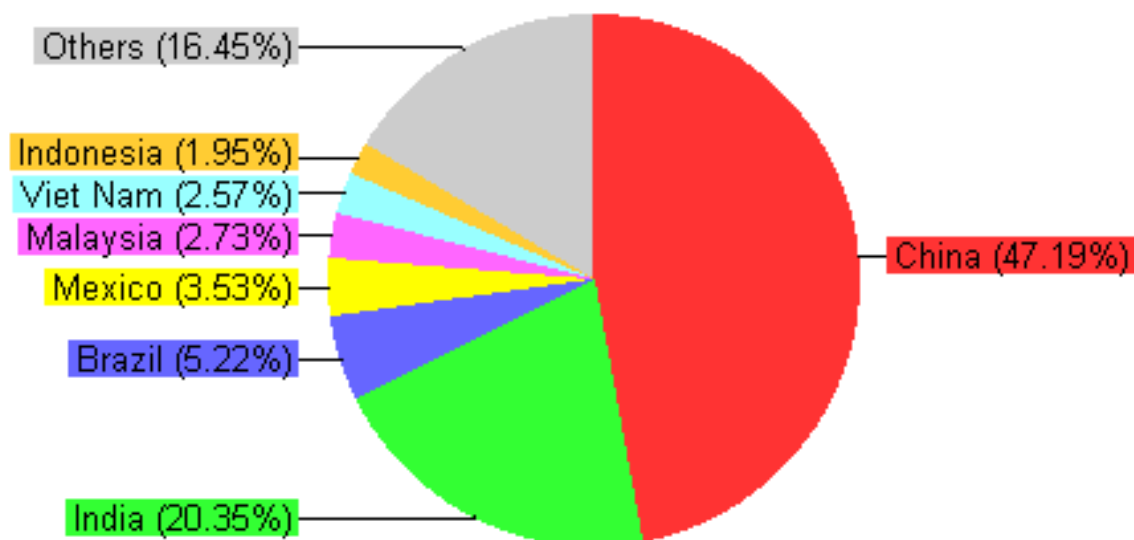
# CDM Statistics

Expected average annual CERs from registered projects by host party. Total: 567,448,921



# CDM Statistics

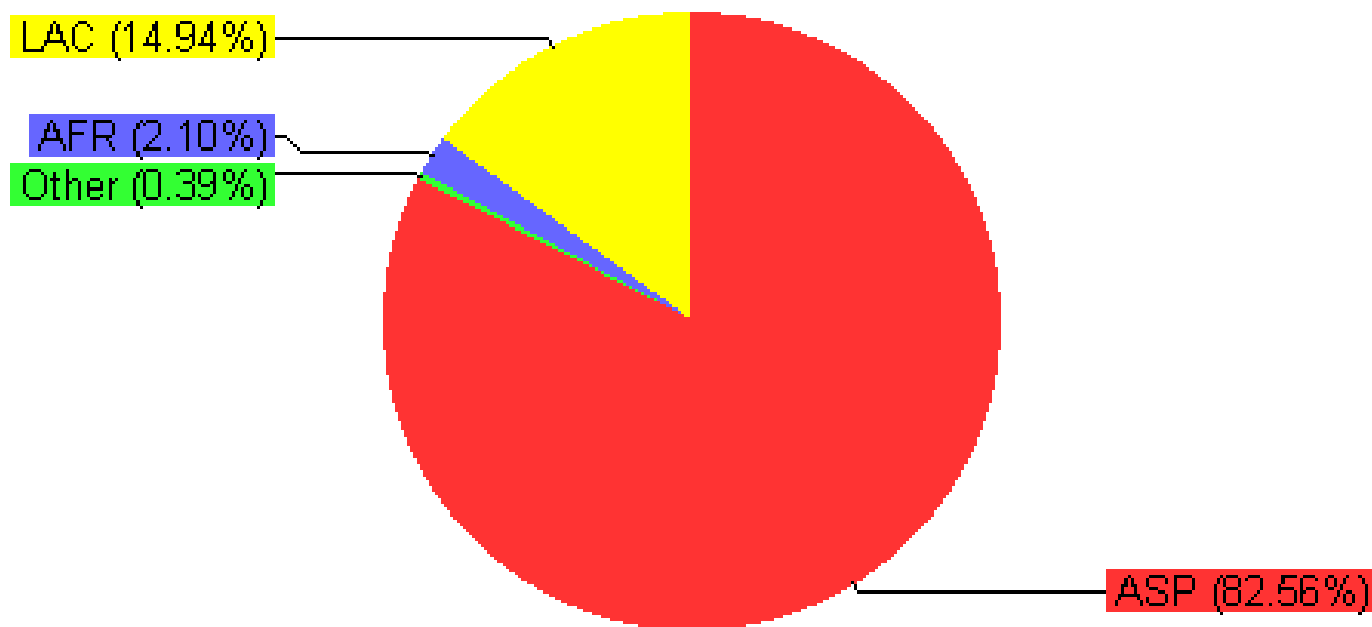
Registered project activities by host party. Total: 3,848





# CDM Statistics

Registered projects by region. Total 3848



**THANK YOU**