

**Welcome**

# **CDM Opportunities in Pakistan and Market Strategy of Global Emissions Management Services**

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## **Importance of the Kyoto Protocol**

**The most important aspect of the Kyoto Protocol is its legally binding commitments for 39 developed countries to reduce their GHG emissions by an average of 5.2% relative to 1990 level. These emission reductions must be achieved by 2008-2012: the first commitment period.**

# **Kyoto Protocol and Emissions Reduction Mechanisms**

**The Kyoto Protocol allows Annex-B countries to meet emission reduction targets by three “Flexibility Mechanisms”.**

- 1. Emission Trading (Article 17).**
- 2. Joint Implementation (Article 6).**
- 3. Clean Development Mechanism (Article 12).**

## **Salient Features of CDM**

**The CDM projects to be implemented in non-Annex-B countries with financial assistance and technology transfer from Annex-B countries for the Certified Emission Reductions (CER) Credits.**

**CERs can fulfill reduction commitment of Annex-B countries.**

**As GHG mitigation costs differ significantly between regions, the impact on climate is independent of the geographical location of the emission or emission mitigation. This enables the achievement of emissions reduction at proportionately lower costs (per tonne of C-equivalent). Thus CDM aims to benefit both Annex-B and non-Annex-B parties.**

# CDM Project Investment and CER

CDM enables developing country entrepreneurs to get investment fund for doing projects, which reduce GHG. Two criteria are important for CDM projects.

- 1 The project must prove that the activity (GHG reduction) would not have occurred in the absence of the CDM project.
- 2 The project must promote sustainable development.

Companies of Annex-B countries participating in the CDM project will obtain the CERs to meet their domestic emission reduction targets in an economically efficient manner. However, companies from Annex-B countries that have no requirement to reduce GHG emissions may also choose to gain ownership of CERs through the CDM at a low price to sell in the international market at a future date.

## Trading of CER

CERs are marketable commodity that may be exchanged with other companies or governments. A company having CERs may also bank them to trade in future commitment periods after 2012. This is useful if the company does not require the credits in the current period and anticipates an increase in their market value.

## Distribution of CDM Project Activities by Scope

Sr. #	Sectoral Scope	Reg. Projects
1	Energy industries renewable - / non-renewable sources)	485
2	Waste handling and disposal	199
3	Agriculture	76
4	Fugitive emissions from fuels (solid, oil and gas)	71
5	Manufacturing industries	60
6	Fugitive emissions from halocarbons and sulphur hexafluoride	15
7	Energy Demand	13
8	Chemical Industry	11
9	Mining/Mineral Production	4
10	Transportation	1
11	Afforestation/Reforestation	1

Source: UNFCCC

# CDM Statistics

	<b>Annual Average CERs</b>	<b>Expected CERs until end of 2012</b>
<b>CDM project pipeline: &gt; 1600 of which:</b>	N/A	> 1,900,000,000
<b>716 are registered</b>	152,247,712	> 960,000,000
<b>62 are requesting registration</b>	12,579,888	> 60,000,000

Source: UNFCCC

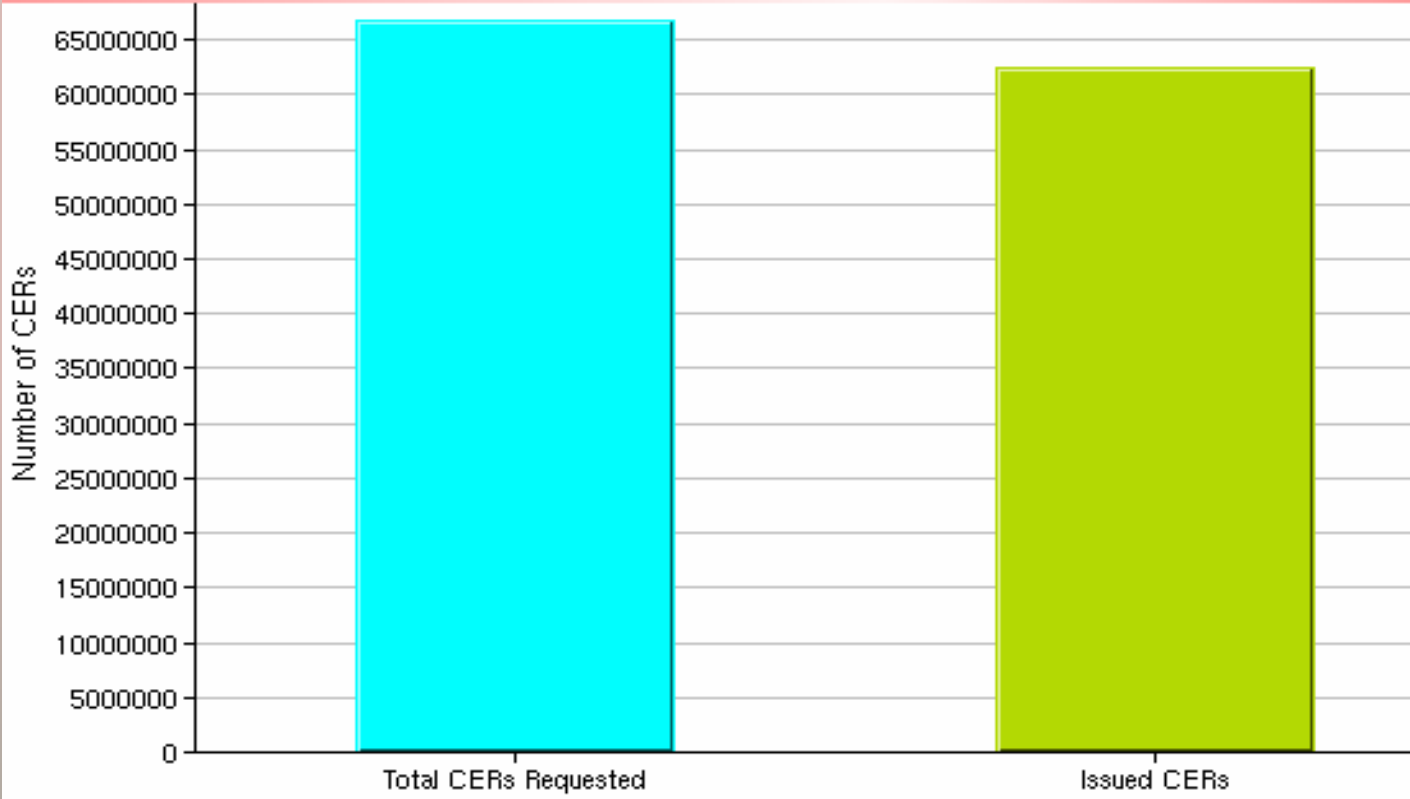
\*Assumption: All activities deliver simultaneously their expected annual average emission reductions

\*\* Assumption: No renewal of crediting periods

# CDM Statistics

Total Number of CERs Requested	66,817,036
Number of CERs Issued	62,366,140

Number of CERs requested and issued.



<http://cdm.unfccc.int> (c) 29.06.2007 08:18

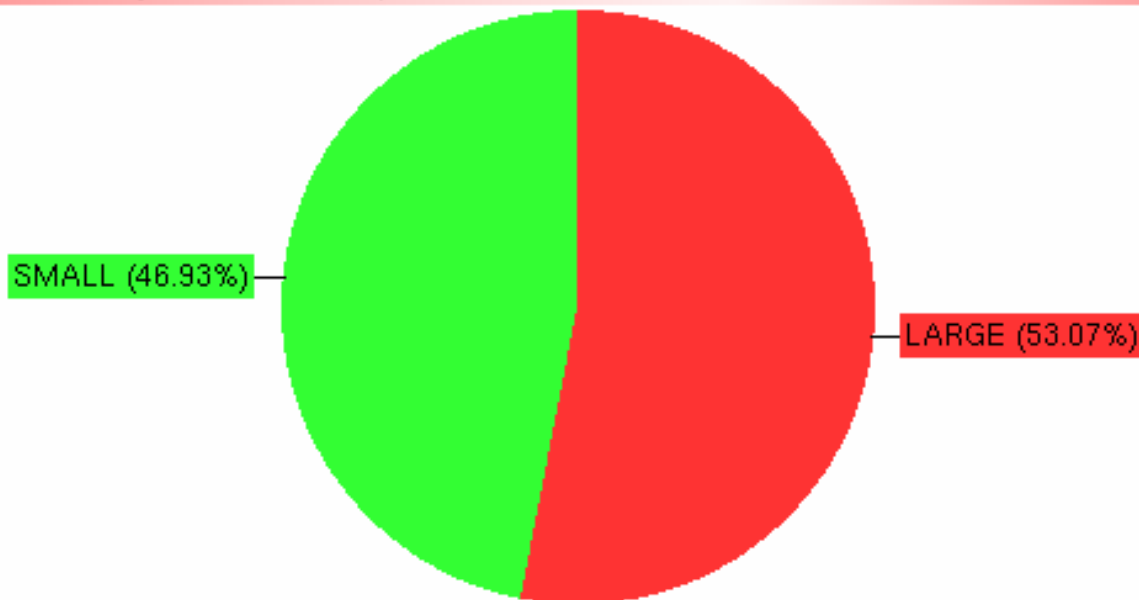
Source: UNFCCC

# CDM Statistics

## Registered Project Activities by Scale

Number of Large Scale Registered Projects	380
Number of Small Scale Registered Projects	336

Registered projects activities by scale. Total 716



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Source: UNFCCC

## Average Annual CERs/Reductions and Number of CDM Projects by Top 15 of Non Annex-B Countries

Country	Average Annual CERs/Reductions from Registered Projects	No of Projects
<b>China</b>	<b>65,036,178</b>	<b>90</b>
India	23,011,151	251
<b>Brazil</b>	<b>16,889,654</b>	<b>103</b>
Republic of Korea	13,918,434	14
Mexico	6,169,467	86
Argentina	3,845,872	9
Chile	3,034,361	17
Qatar	2,499,649	1
South Africa	2,088,041	10
Malaysia	1,856,430	16
Egypt	1,685,393	3
Indonesia	1,680,523	9
Nigeria	1,496,934	1
<b>Pakistan</b>	<b>1,050,000</b>	<b>1</b>
Peru	747,724	5

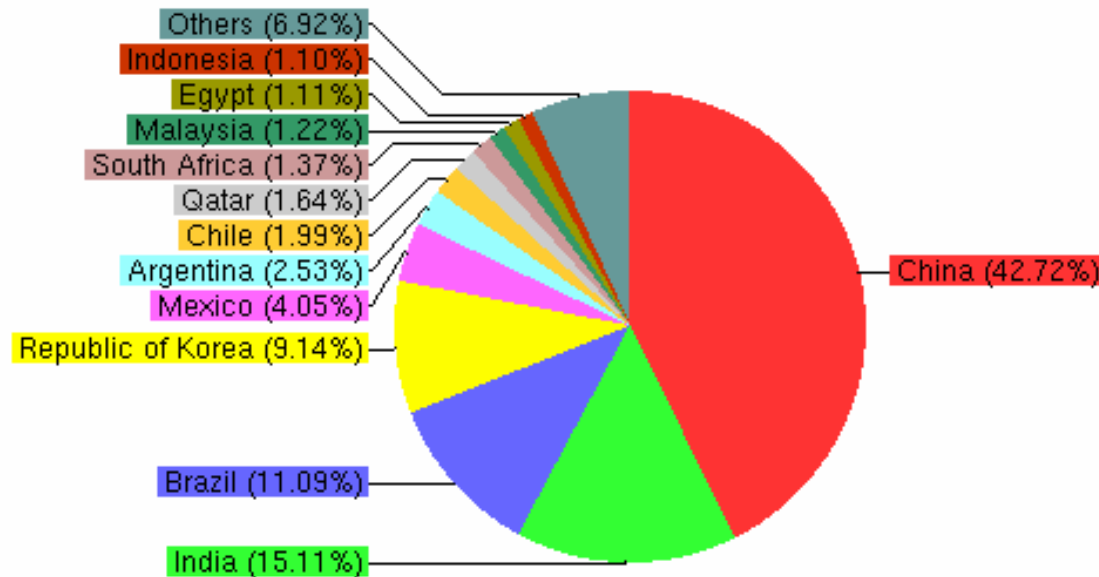
**Source: UNFCCC**

**Global Emissions Management Services**

# CDM Statistics

## Average Annual CERs/Reductions and Number of CDM Projects by Top 15 of Non Annex-B Countries

Expected average annual CERs from registered projects by host party. Total: 152,247,712



<http://cdm.unfccc.int> (c) 28.06.2007 16:56

Source: UNFCCC

# CDM Statistics

## Registered Projects by A-B and NA-B Investor Parties

Sr. no	Country	No. of Projects
1	United Kingdom and Northern Ireland	228
2	Netherlands	84
3	Japan	69
4	Switzerland	36
5	Sweden	25
6	Spain	24
7	Italy	22
8	Germany	15
9	Canada	14
10	Austria	13
11	France	12
12	Finland	11
13	Denmark	5
14	Luxembourg	1
15	Brazil	1

Source: UNFCCC

# CDM Activities in Pakistan

**11 January, 2005**

Pakistan deposited its instrument of accession to the Kyoto Protocol. Ministry of Environment assigned the task to work as Designated National Authority(DNA).

**August, 2005**

A CDM Cell was established to support the DNA in the Ministry of Environment.

**February, 2006**

Approval of National CDM Operational Strategy.

**27<sup>TH</sup> April, 2006**

Approval of First CDM project by DNA, large N<sub>2</sub>O reduction from nitric acid production (investor: Mitsubishi,Japan) estimating 1 million CERs annually.

**November, 2006**

First CDM Project was register with UNFCCC.

# CURRENT CDM PROJECT PORTFOLIO

## REGISTERED PROJECTS (1)

**Name of Project:** N<sub>2</sub>O reduction from nitric acid production

**Type of Project:** Large

**Company:** Pak-Arab Fertilizer Ltd.

**Location:** Multan (Punjab)

**Total cost :** USD 15 million,

**Estimated Emission Reduction:** one million Tons of CO<sub>2</sub>e/ Year

**Sector:** Fertilizer

**PDD and Validation Cost:** Mitsubishi Corporation, Japan

**Financing:** Mitsubishi Corporation, Japan

**Operational:** January 2007.

# Potential Sectors for CDM Projects in Pakistan

- **Energy**
- **Waste Management**
- **Industrial Processes**
- **Transportation**
- **Land Use and Forestry**
- **Agriculture and Livestock Practices**

# **CURRENT ISSUES IN CARBON MARKET DEVELOPMENT**

**Financial Barriers to Introduce CDM Projects**

**High Current Interest Rate of Commercial Banks**

**Lack of Awareness amongst the Financial, Private and Public Sector about CDM Opportunities**

**Lack of Information about Incentives of the CERs to Local Private Investor**

**Pakistan's Ratification of Kyoto Protocol being Late Entrant so most of Investment fly to China, India and Brazil etc**

**Lack of Private Initiatives to Invite the International Investors and Donors for the CDM Projects**

**Lack of CDM Experts and Project Developers**

# Global Emissions Management Services

## Emerging Leaders in CDM with Excellence

- ❖ **Global Emissions Management Services (GEMS)** prepares all the carbon documentation under the Clean Development Mechanism (CDM) of the Kyoto Protocol.
- ❖ **GEMS** provides professional assessment as CDM project developer, marketing of emission reduction credits and technology transfer expert.
- ❖ Our highly skilled officials evaluate the prospects of CDM project idea with the cooperation of international partners.
- ❖ **GEMS** offers most effective and efficient solutions for legal, financial and technical concerns of CDM.
- ❖ Our CDM capacity building initiative is a proactive approach to participate as equal and reliable partner in CDM.

# Structure of Global Emissions Management Services

## **Four Directorates**

1. HRD/Capacity Building
2. Projects Advisory and Development
3. Projects Finance
4. Technology Transfer

# Our Services

## GHG Solutions

- ❖ Ensuring investment friendly environment for the CDM Projects by technical, financial and legal safeguards.
- ❖ Increasing the number of carbon mitigation projects under the CDM process to achieve sustainable development.
- ❖ Upstream support in project preparation by.
  - Identifying industries and areas for CDM Projects.
  - Project Idea Note writing for diversified projects under CDM.
  - Project Design Document Completion.
  - Carbon credit valuation and documentation preparation for credits.
  - Obtaining project approvals from the Government of Pakistan.
  - Facilitating project validation and registration with UNFCCC.
  - Assessment and guidance on project financing.
- ❖ Downstream support in project execution and commercialization.
  - Commissioning, monitoring and verification.
  - Certification and issuance of credits to investors and project developers.
- ❖ Capacity Building of public and private sector for CDM projects.

# Mission Statement

## Our Vision

Sustainable Development by CDM for Clean Environment

## Our Mission

Professionalism in Climate Policies

## Our Strategy

Passionate for Climate Friendly Investment by CDM Projects.

## Our Commitment

Determined to Develop a competent, Interdisciplinary and international workforce.

## Our Objectives

To Enhance Awareness of Stakeholders Regarding CDM  
To Promote Economic Opportunities in Potential CDM Sectors.  
To Identify Potential CDM Projects for Immediate Execution and to Lead for Future CDM Projects.

# **Our Team**

**Board of  
Directors**

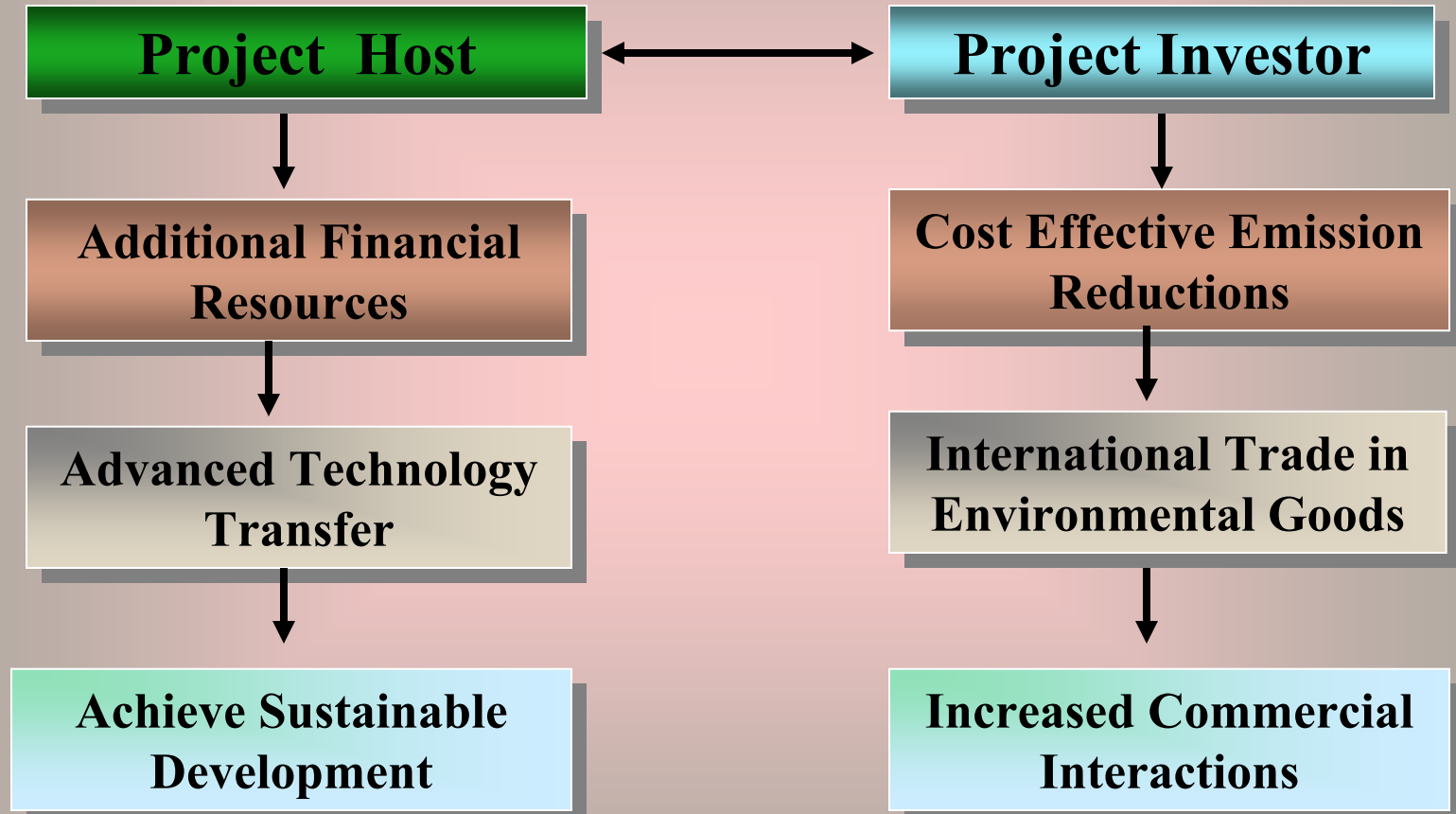
**Board of  
Executives**

**International  
Consultants**

**National  
Consultants**

**Global Emissions Management Services**

# Mutual Benefits by CDM Projects



# Working with International Partners

Agreements with  
International Partners

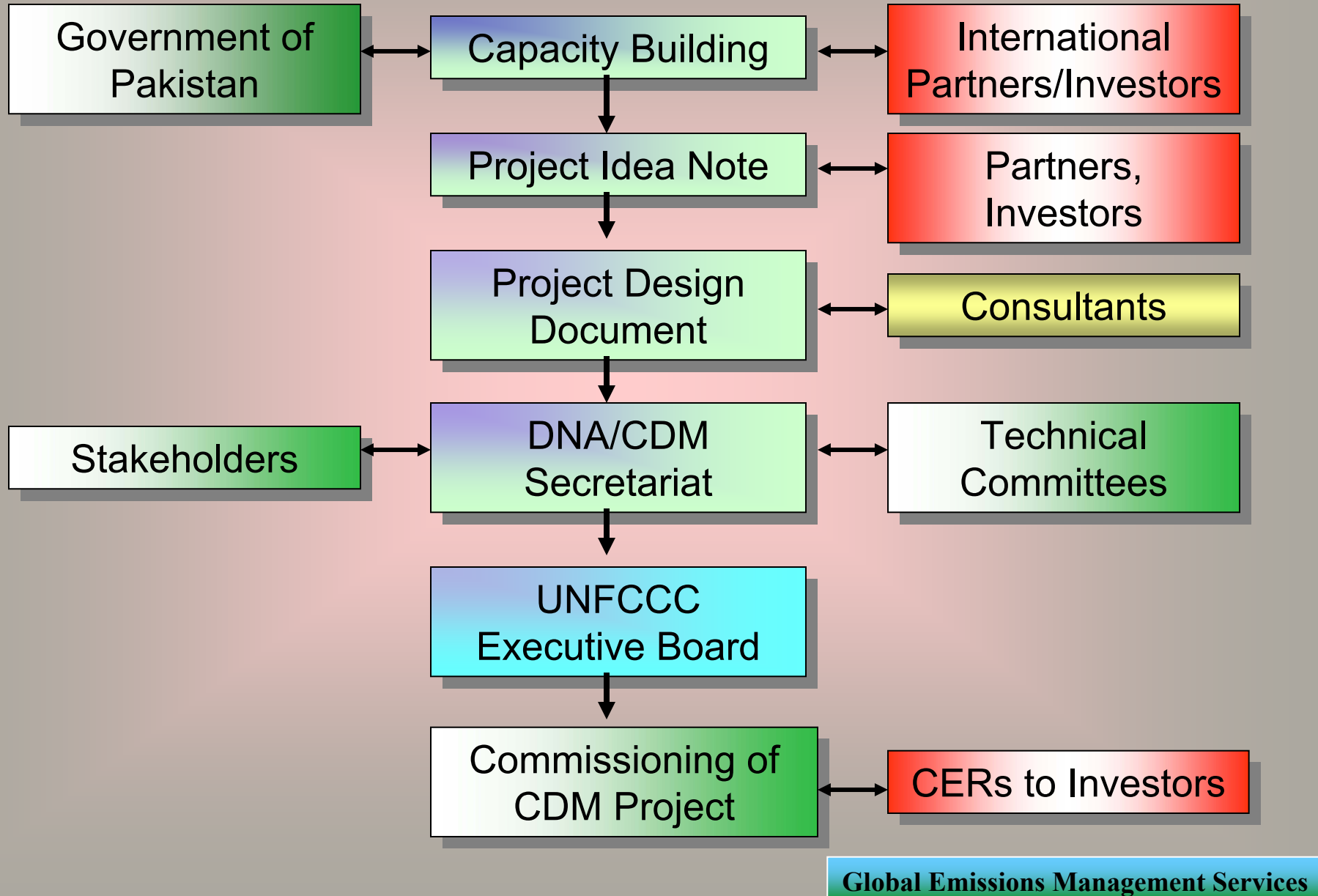
Capacity Building

Project Development

Project Assessment

Project Promotion

# Future Strategy to Execute CDM Project



# Mechanism for the Sustainability of CDM Projects

National Projects

Provincial Projects

Municipality/District  
Projects

Tehsil/Town  
Projects

Union Councils  
Village Projects

Global Emissions Management Services

# Cooperation Seek Initiative Program for CDM Projects

## National Cooperation Initiative

Private Sector

Public Sector

Financial Institutions

Academia

## International Cooperation Initiative

Private Investors

Carbon Facilities

Donors Institutions

UNFCC/UNDP

*Global Carbon Trade Services*

**Global Emissions Management Services**

Welcome  
for  
Cooperation