

Awareness Creation Seminar on CDM and Carbon Finance

26th August 2010

Organized by

Climate Change Secretariat, Ministry of Environment
Japan International Cooperation Agency (JICA)

History of CDM and What will happen after 2012 (post-Kyoto)

-Outcome of the Copenhagen Climate Change
Conference 2009-

“Awareness Creation Seminar and
Workshop on CDM and Carbon Finance”

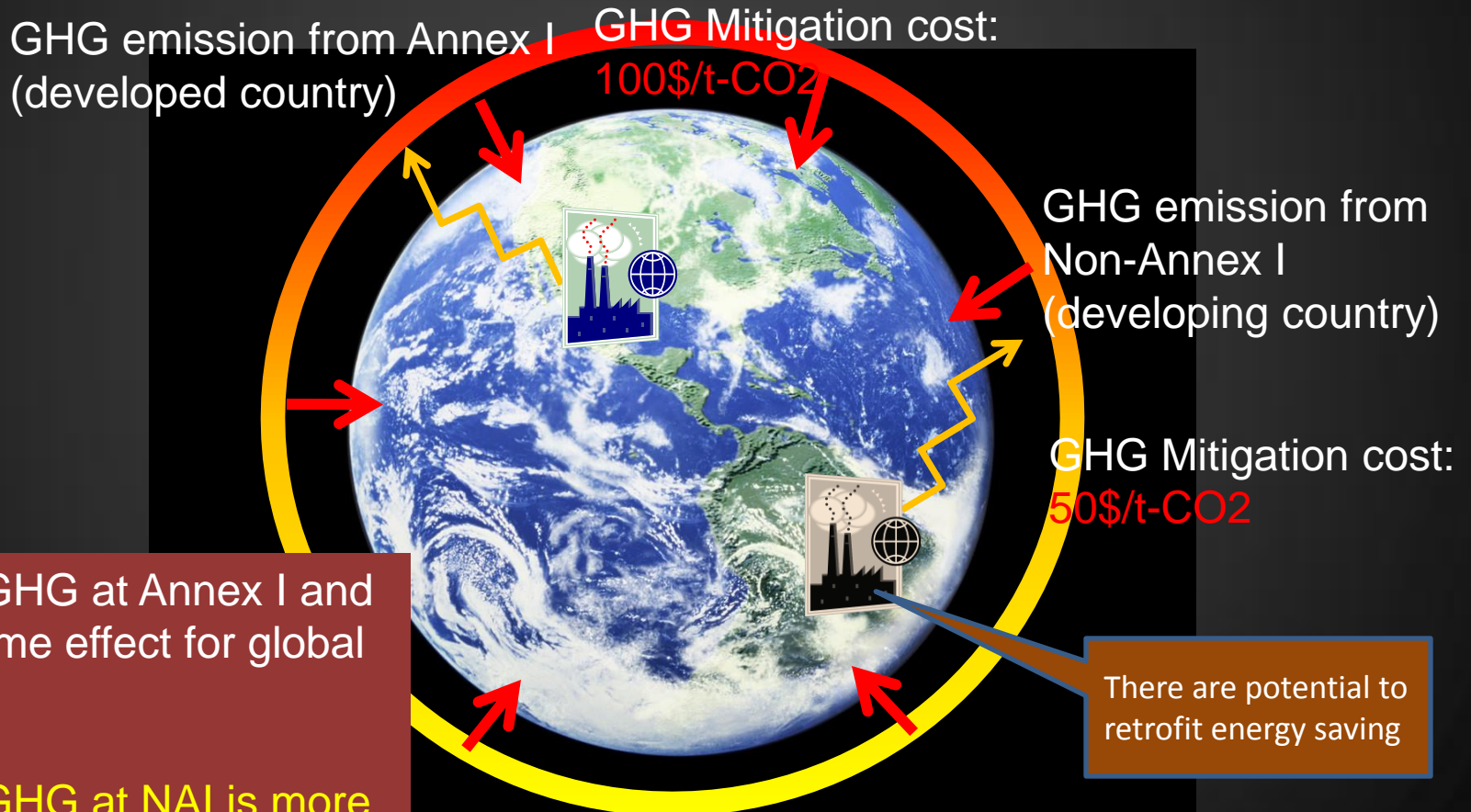
26 August 2010, Hotel Taj Samudra

Satoshi Iemoto
JICA Experts

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- Brief review on CDM / Institutional Background
- Current trends of CDM
- History of Climate Change Negotiation
- Discussion of CDM issues at COP/MOP (CMP)
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 - Analysis of outcomes
- Current movements (after CMP5)

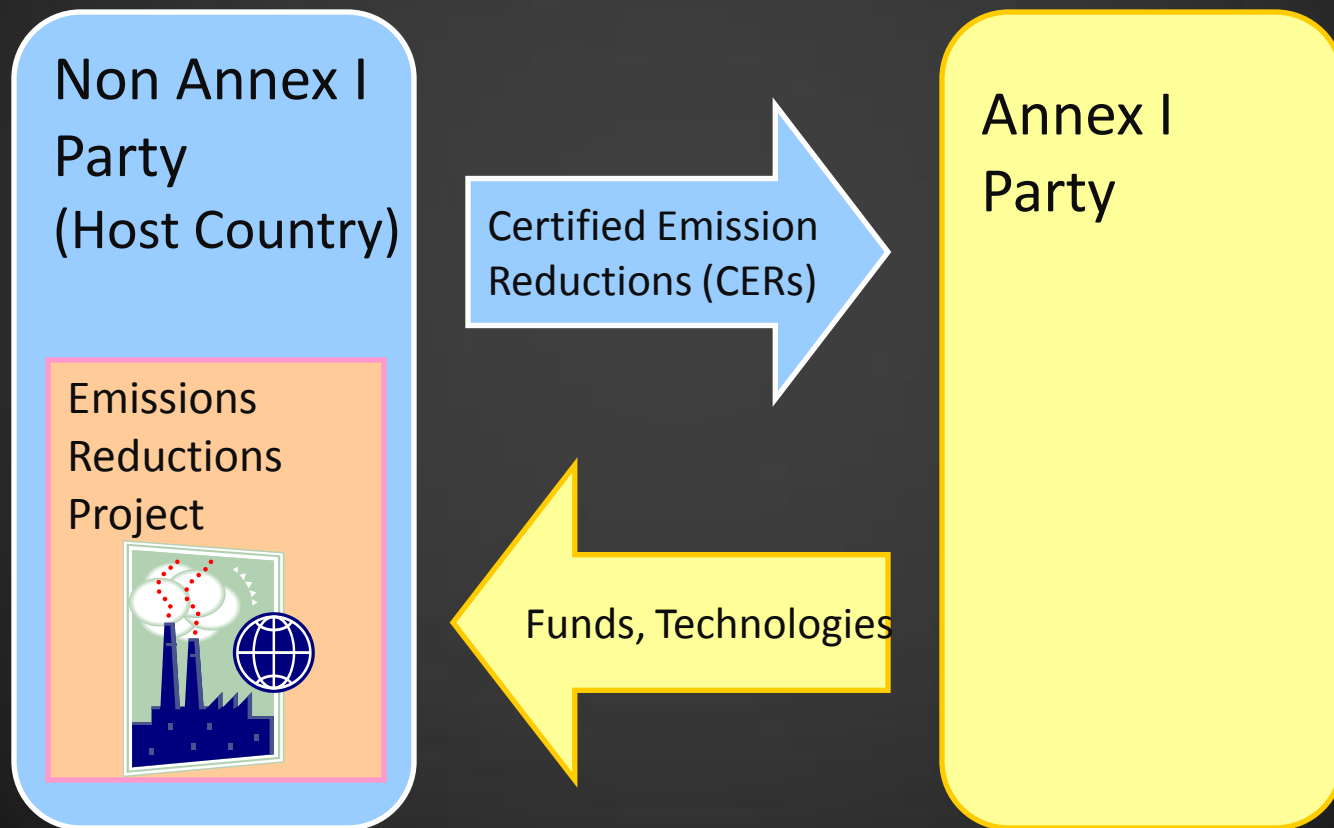
Concept of Emission Trade (CDM)



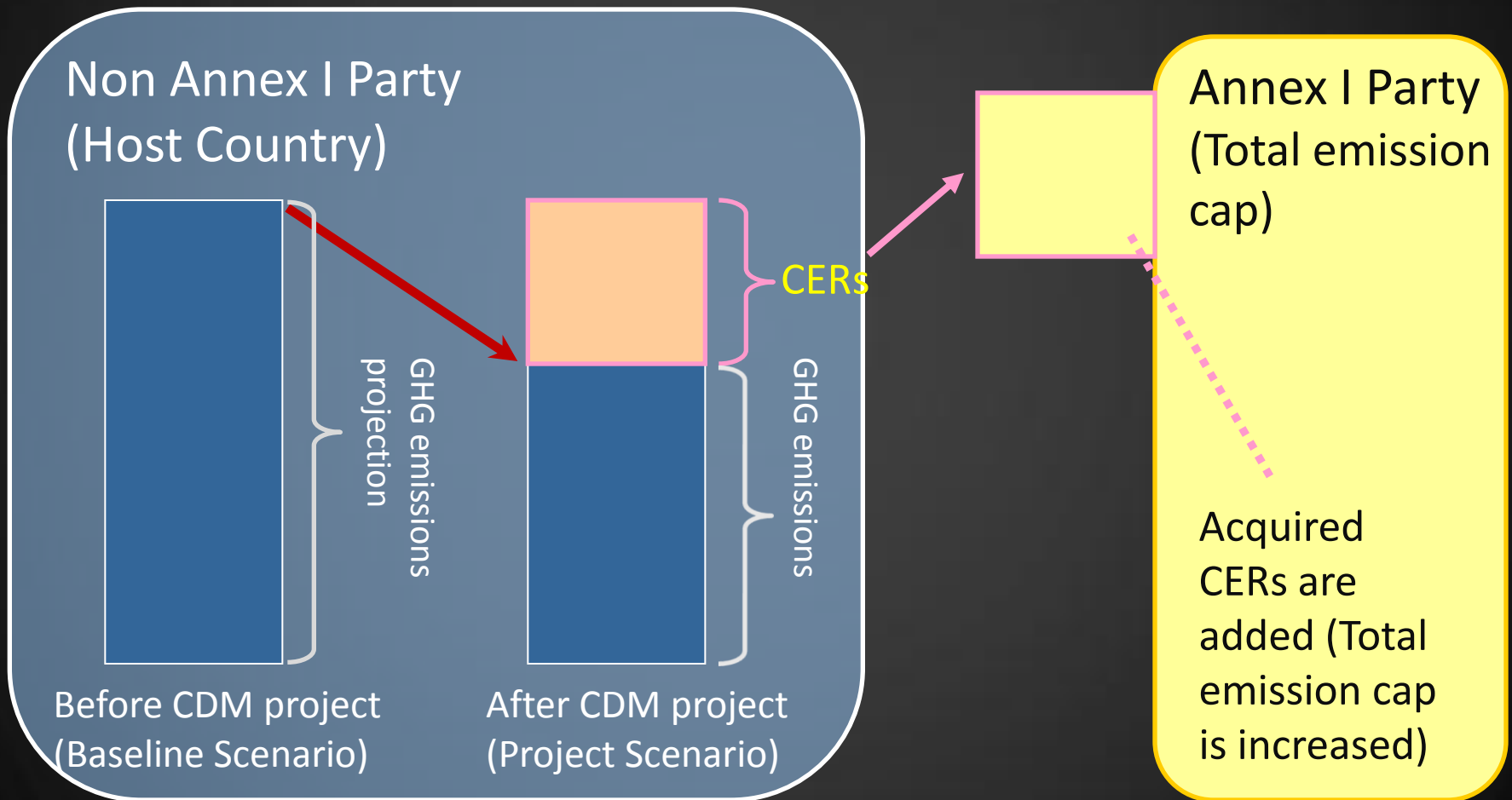
Reduce GHG at Annex I and NAI is same effect for global warming.

Reduce GHG at NAI is more Cost-effective than at AI.

Brief review of CDM

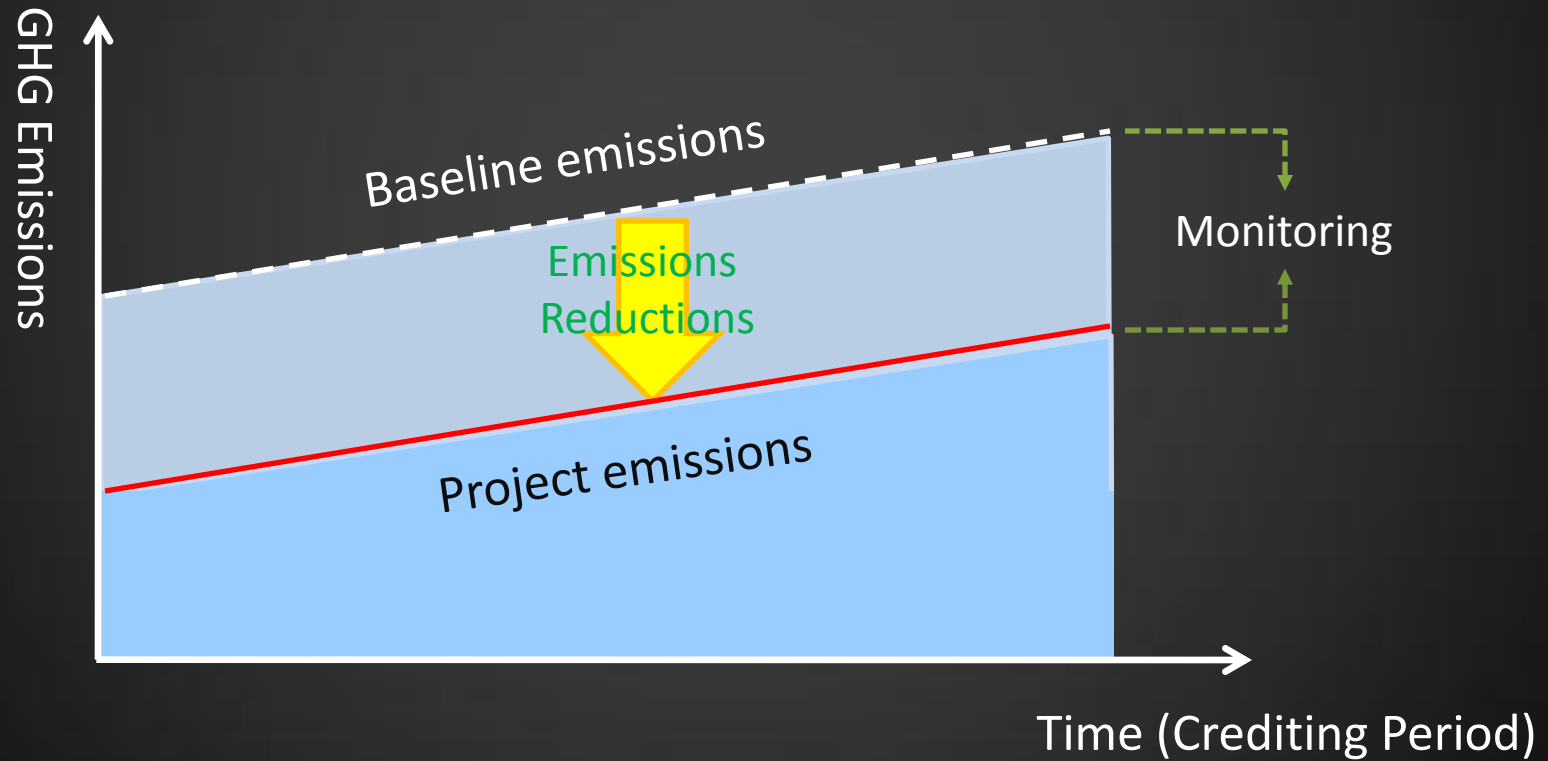


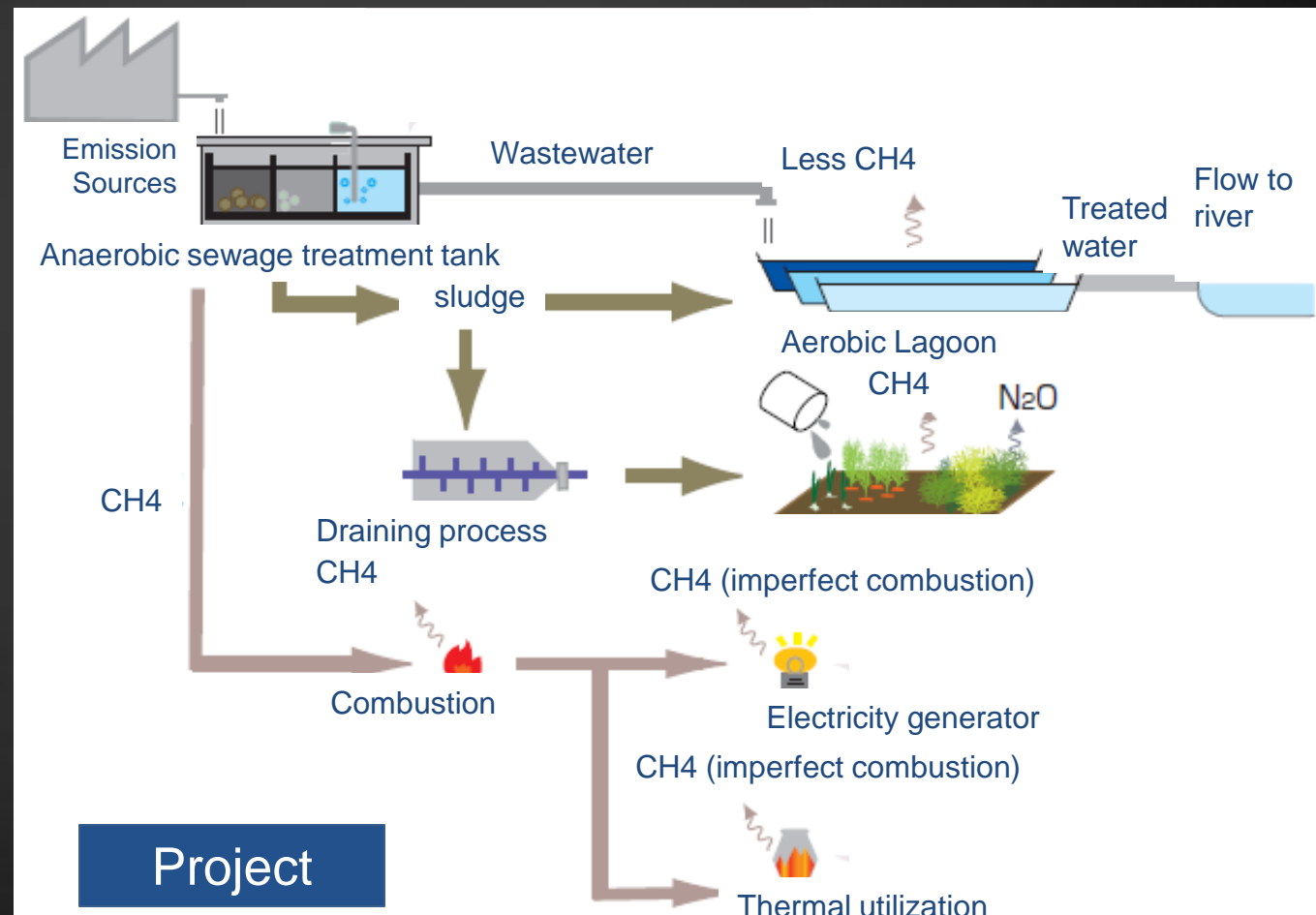
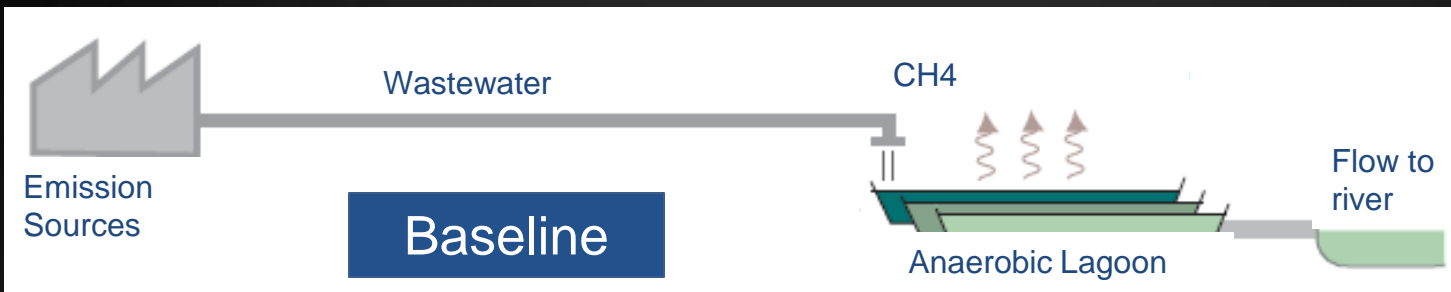
Brief review of CDM



Brief review of CDM

Baseline and Emission Reductions





Example Project
(waste water
treatment
project)

<AM0013>

Brief review of CDM

Category	Scale	
Emission reduction projects	CDM (Large Scale)	
	Small Scale CDM	Type I: Renewable Energy Projects (max output capacity of 15MW)
		Type II: Energy Efficiency Improvement Projects (max output of 60GWh/year)
		Type III: Other Project Activities (less than or equal to 60kt CO ₂ e/year)
AR projects	AR CDM (Large Scale)	
	Small Scale AR CDM (GHG removals not exceed 16,000tCO ₂ /year)	

Brief review of CDM

Sectoral Scope	
1	Energy industries (renewable - / non-renewable sources)
2	Energy distribution
3	Energy demand
4	Manufacturing industries
5	Chemical industry
6	Construction
7	Transport
8	Mining / Mineral production
9	Metal production
10	Fugitive emissions from fuels (solid, oil and gas)
11	Fugitive emissions from production and consumption of halocarbons and sulphur hexafluoride
12	Solvent use
13	Waste handling and disposal
14	Afforestation and reforestation
15	Agriculture

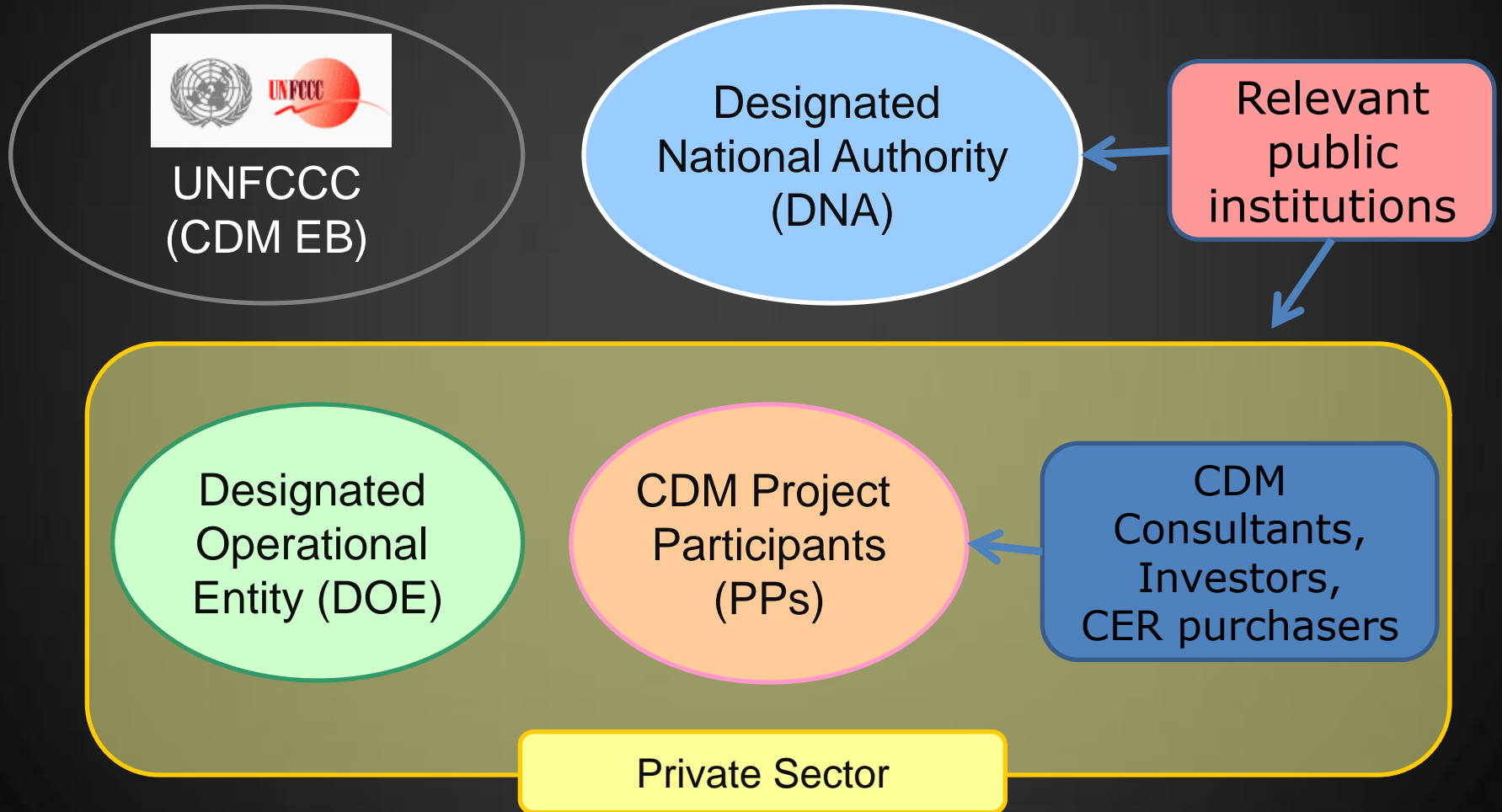
Institutional Background

- UNFCCC
 - United Nations Framework Convention on Climate Change (UNFCCC) was adopted at UNCED (“Rio Summit”) in June 1992 (UNFCCC entered into force in March 1994)
 - Ultimate objective: To stabilize GHG concentrations in the atmosphere at level that will prevent dangerous human interference with the climate system
 - Principle: Common but differentiated responsibilities (Annex I and Non-Annex I)
 - Parties: 192

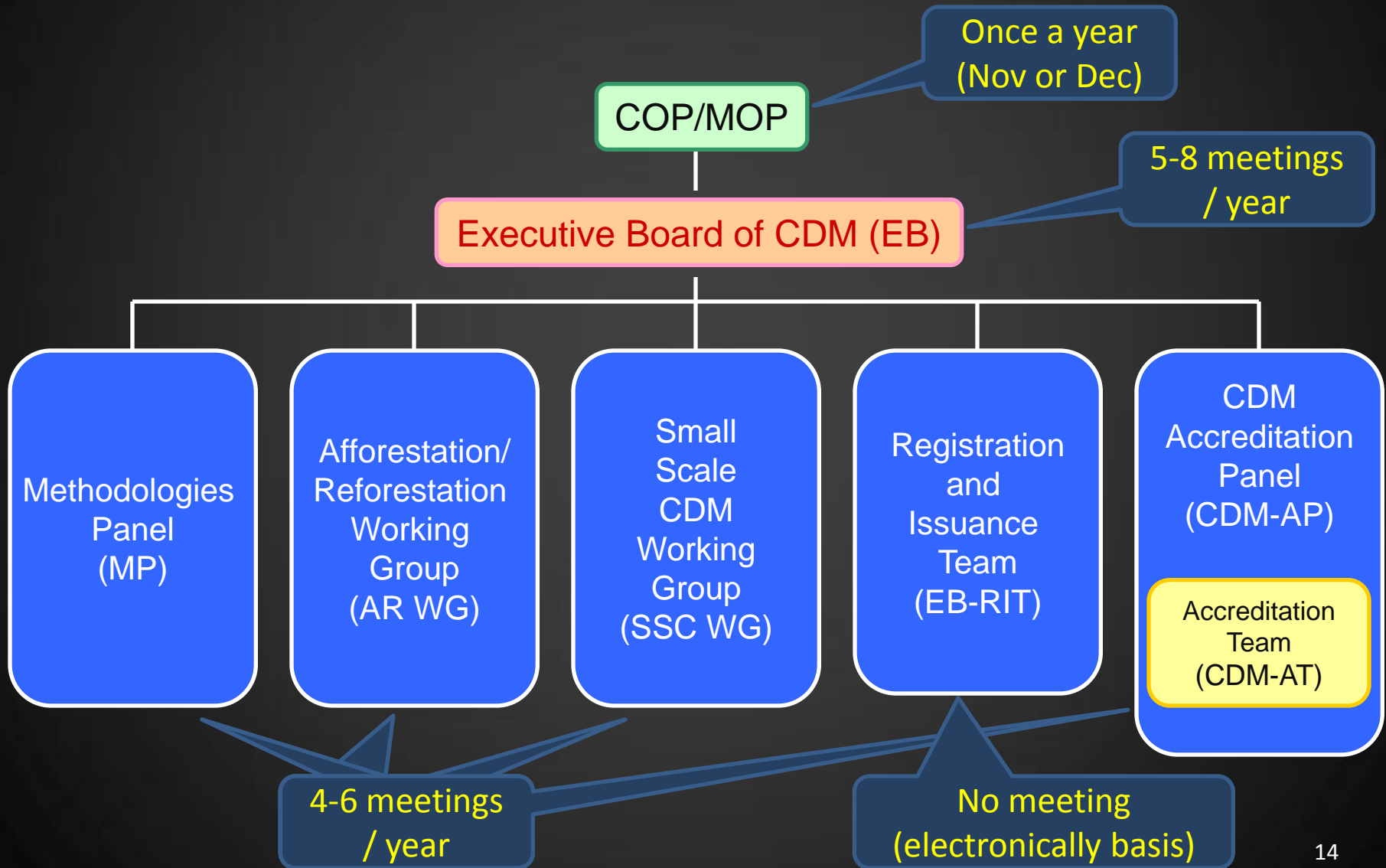
Institutional Background

- Kyoto Mechanisms
 - The Kyoto Protocol (KP) was adopted at COP3 in Dec. 1997 (KP entered into force on 16 Feb. 2005)
 - 37 industrialized countries and EU have committed to reduce emissions by 5% average by 2012 against 1990 levels
 - KP introduces three market mechanisms
 - Parties: 184
- Three Market Mechanisms (“Kyoto Mechanisms”)
 - Clean Development Mechanisms (CDM) <Art.12>
 - Joint Implementation (JI) <Art.6>
 - Emission Trading (ET) <Art.17>

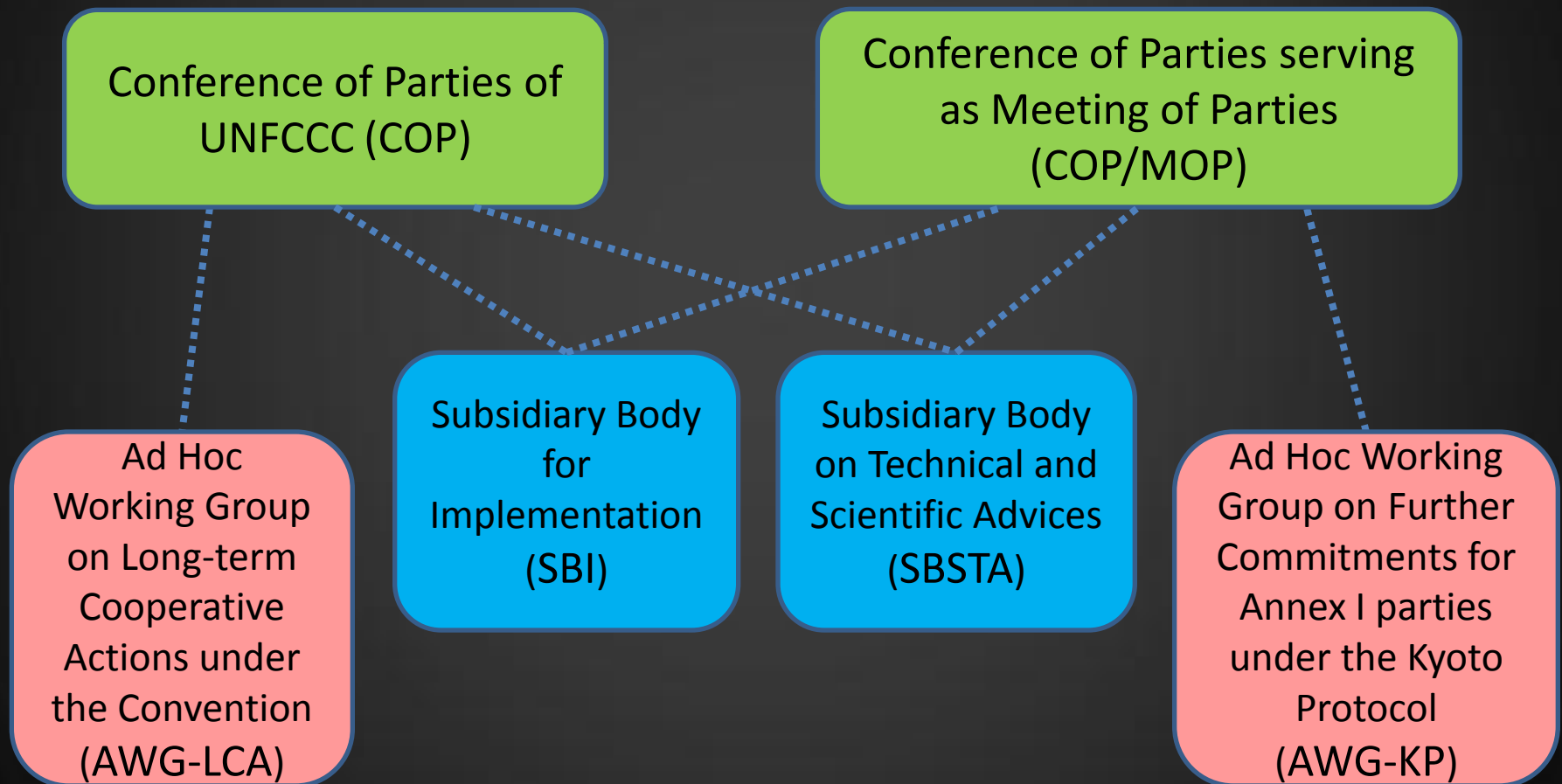
Relevant organizations



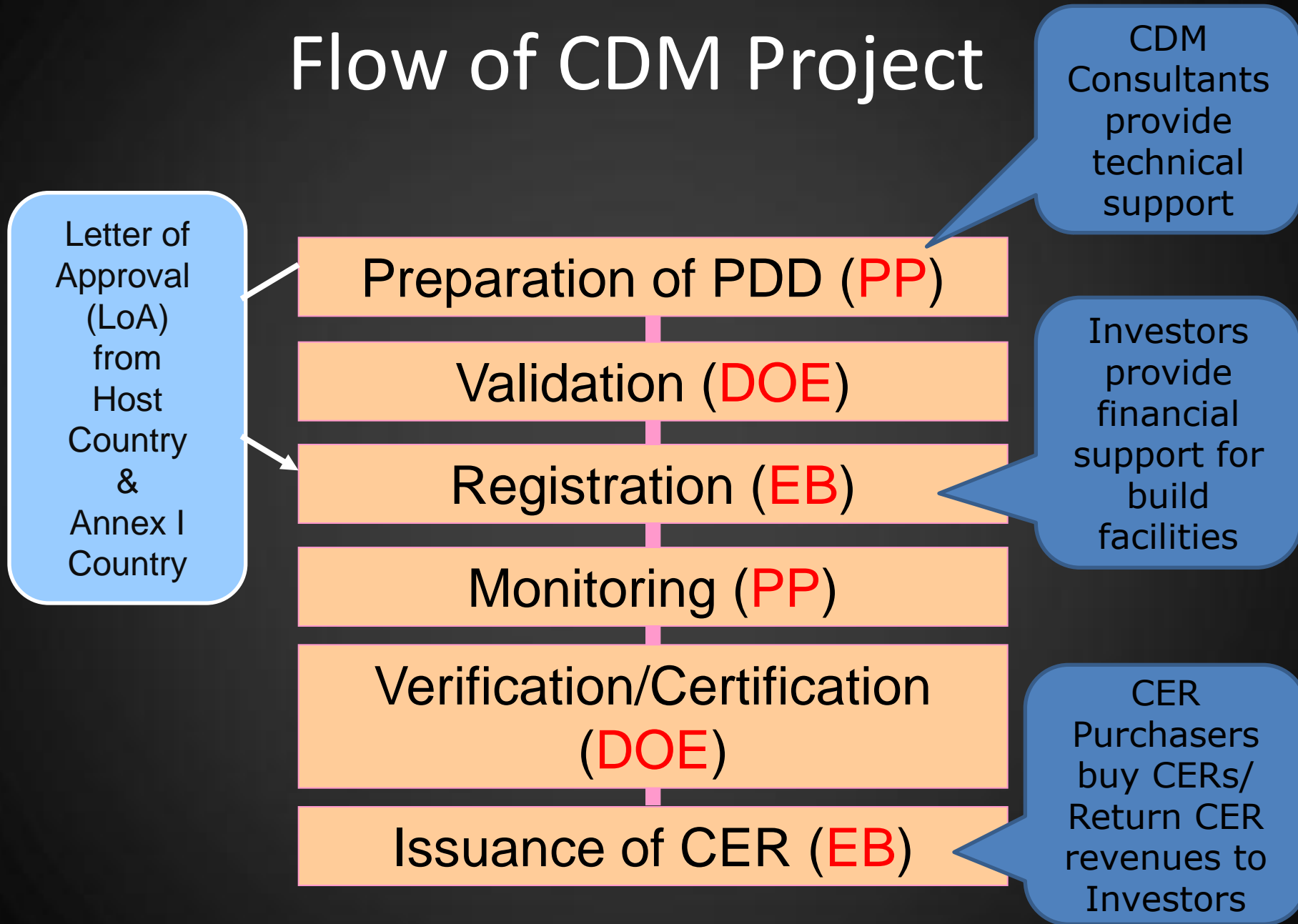
Relevant organizations in UN



Relationship among COP, CMP, SB and AWG



Flow of CDM Project



Current Trends of CDM

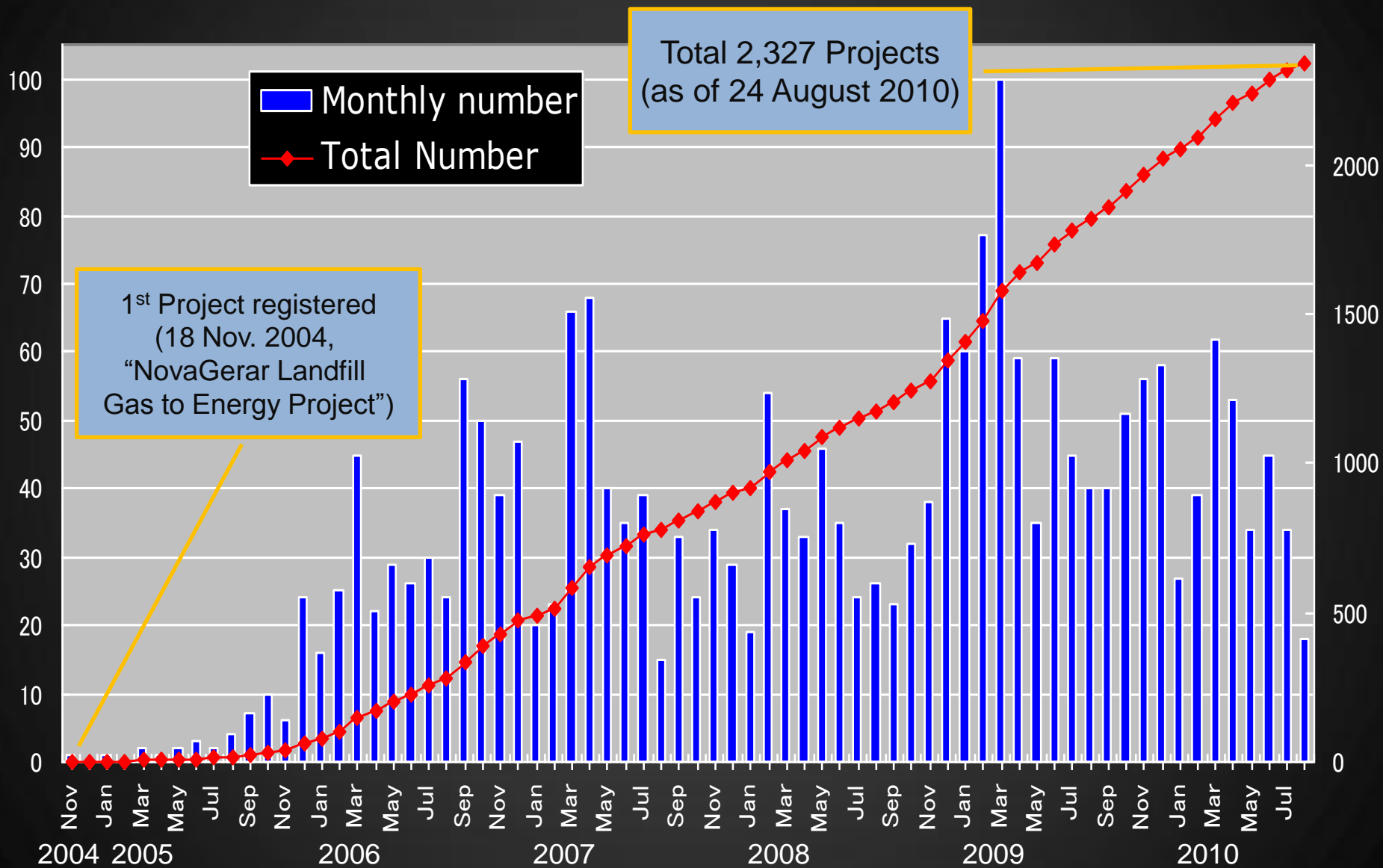
Number of CDM projects

	Number	CER	Expected CERs (2012)
Pipeline	>4,200	N/A	>2,900,000,000
Registered	2,327	377,263,574	>1,820,000,000
Request for register	70	5,689,649	>10,000,000

Source: UNFCCC-CDM website (<http://cdm.unfccc.int>)

(as of 24 August 2010)

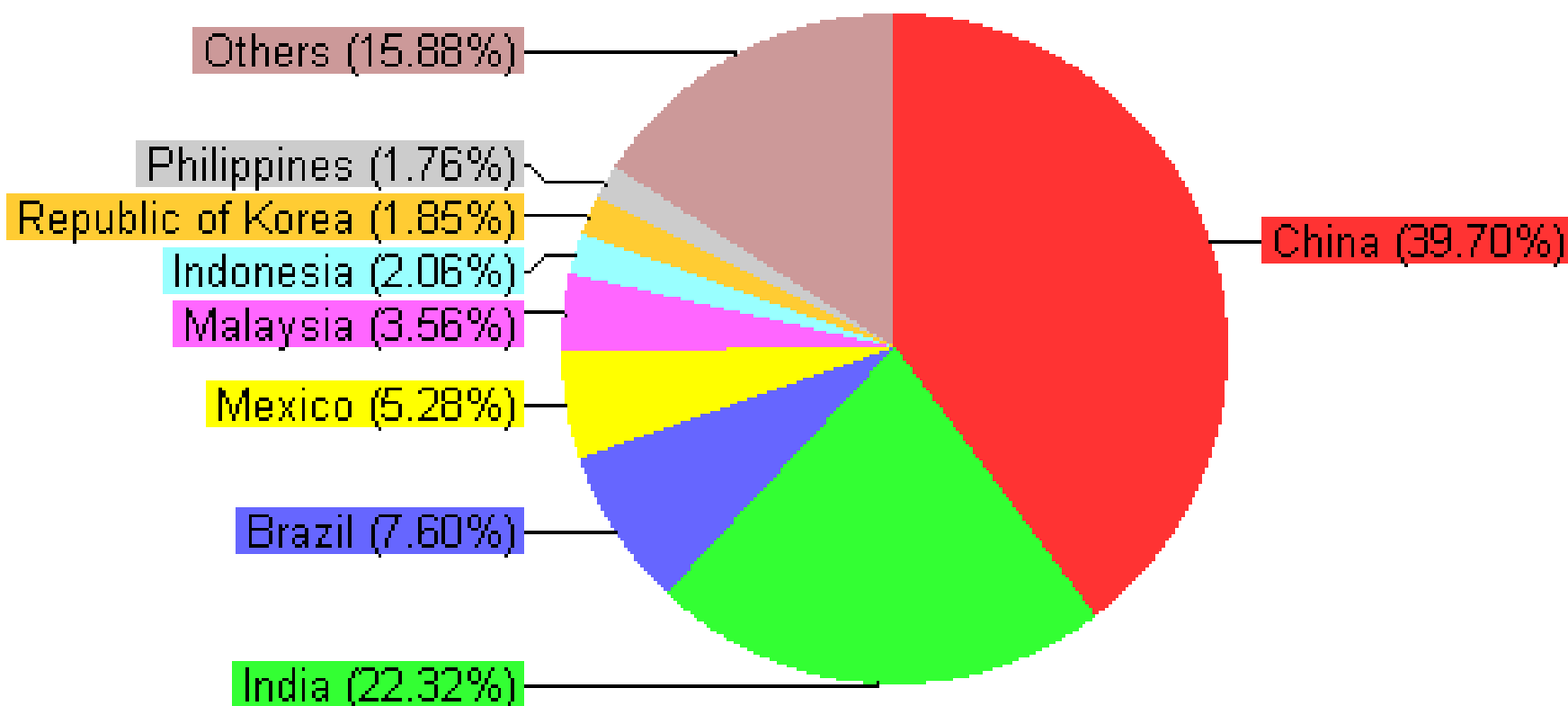
Transition of number of registered CDM projects



Registered CDM Projects

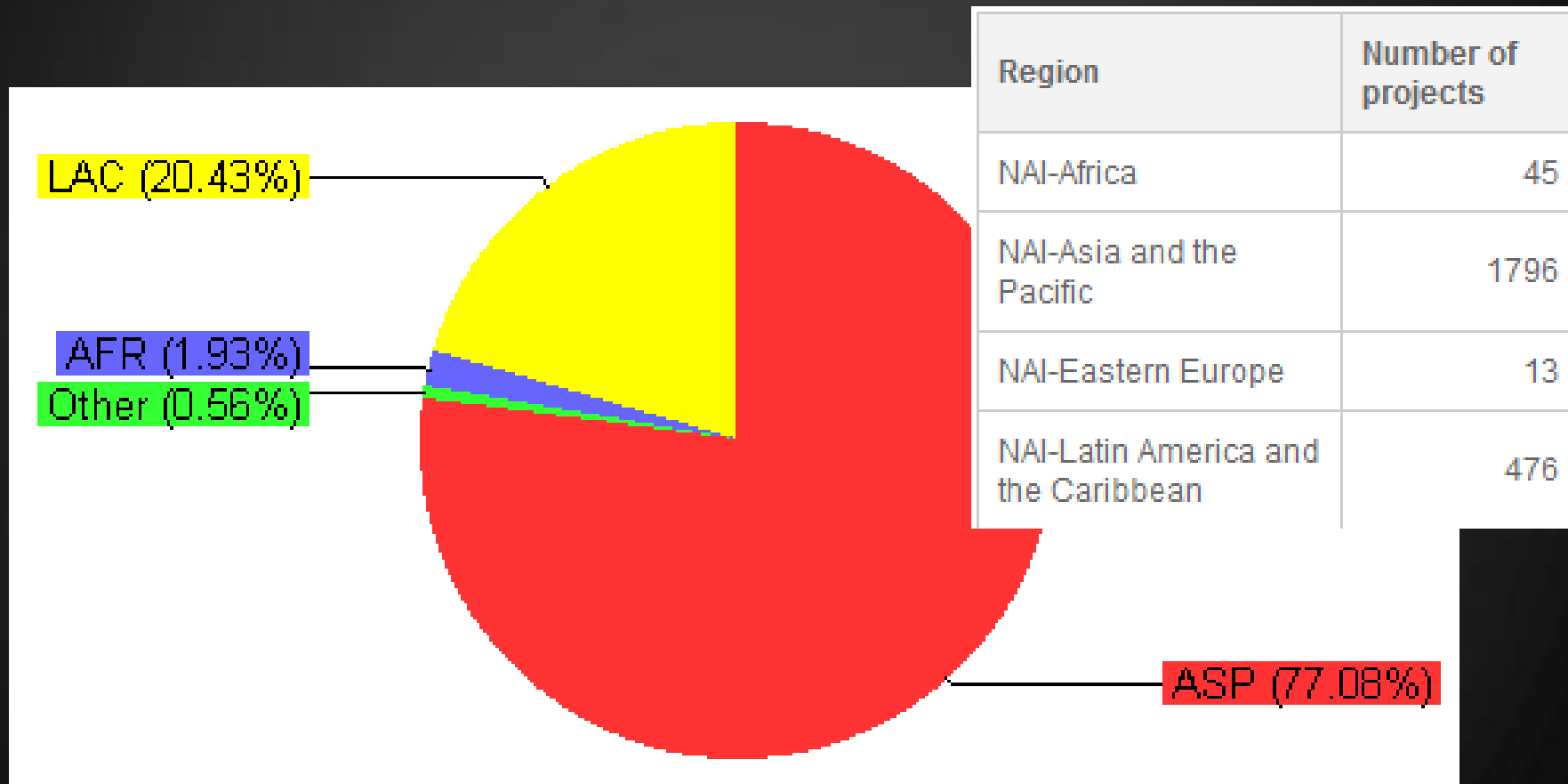
(by Host Country)

Registered projects by host country (Total: 2,327)



Registered CDM Projects (by Region)

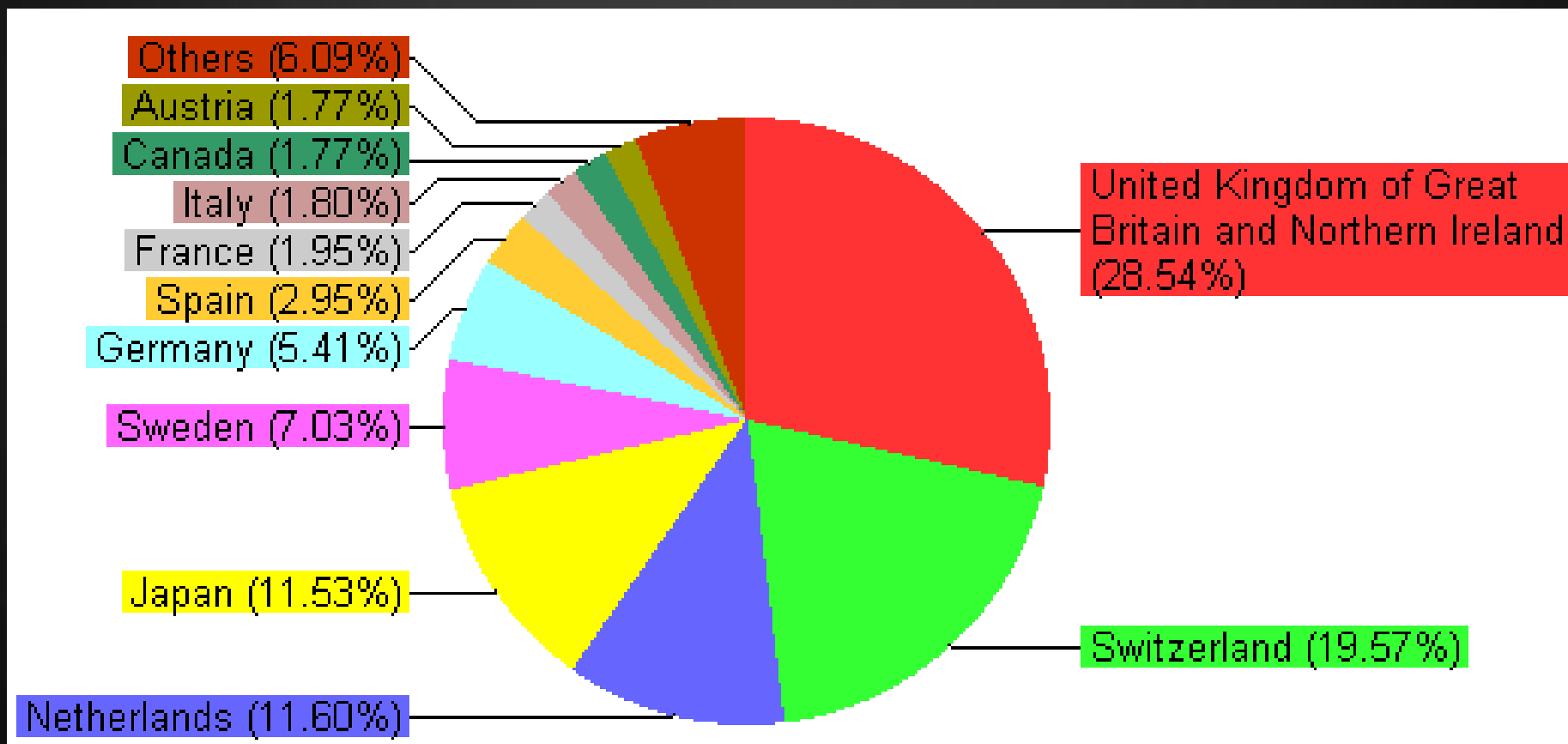
Registered projects by region (Total: 2,327)



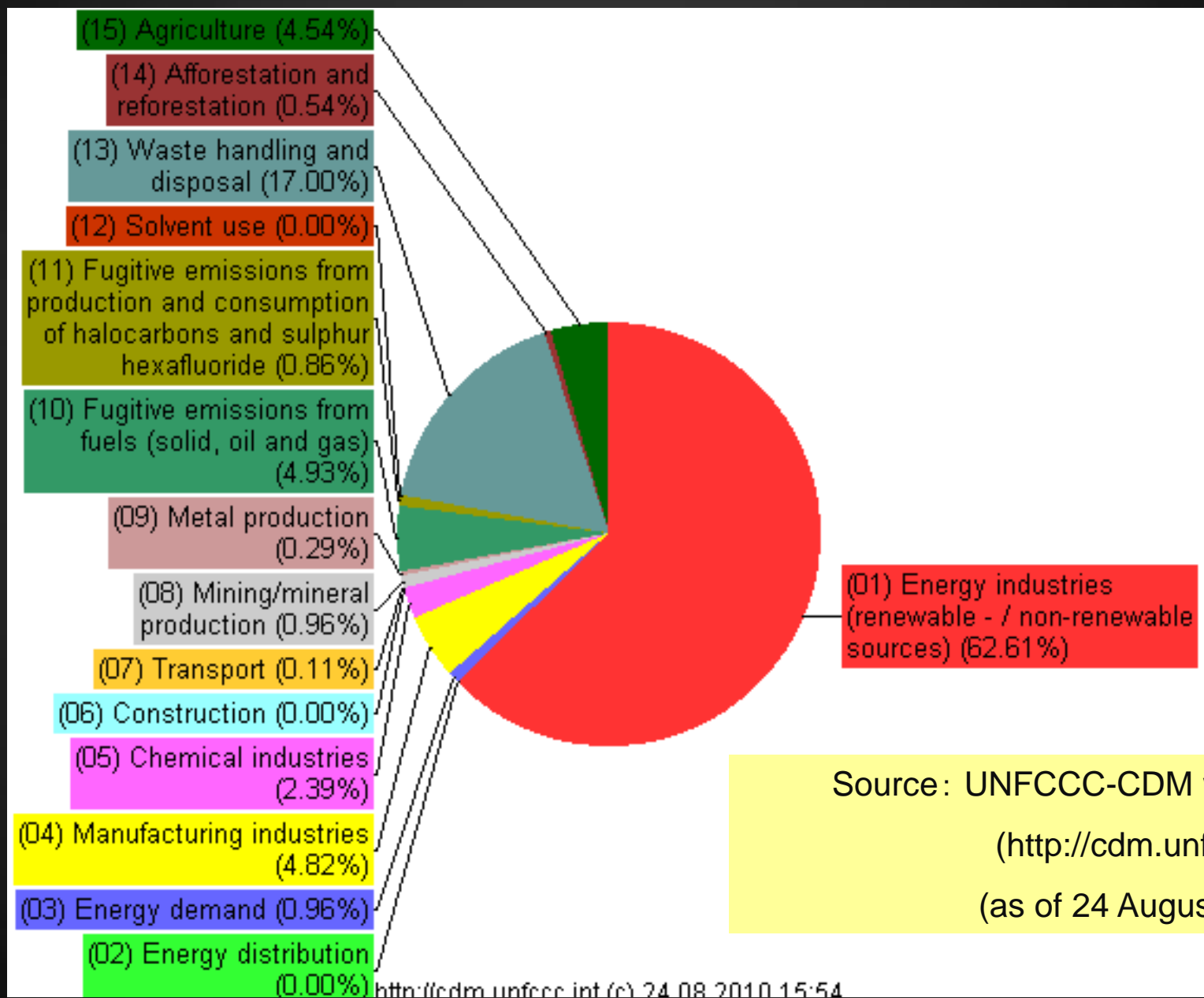
Registered CDM Projects

(by Investor Country)

Registered projects by investor country (Total: 2,327)



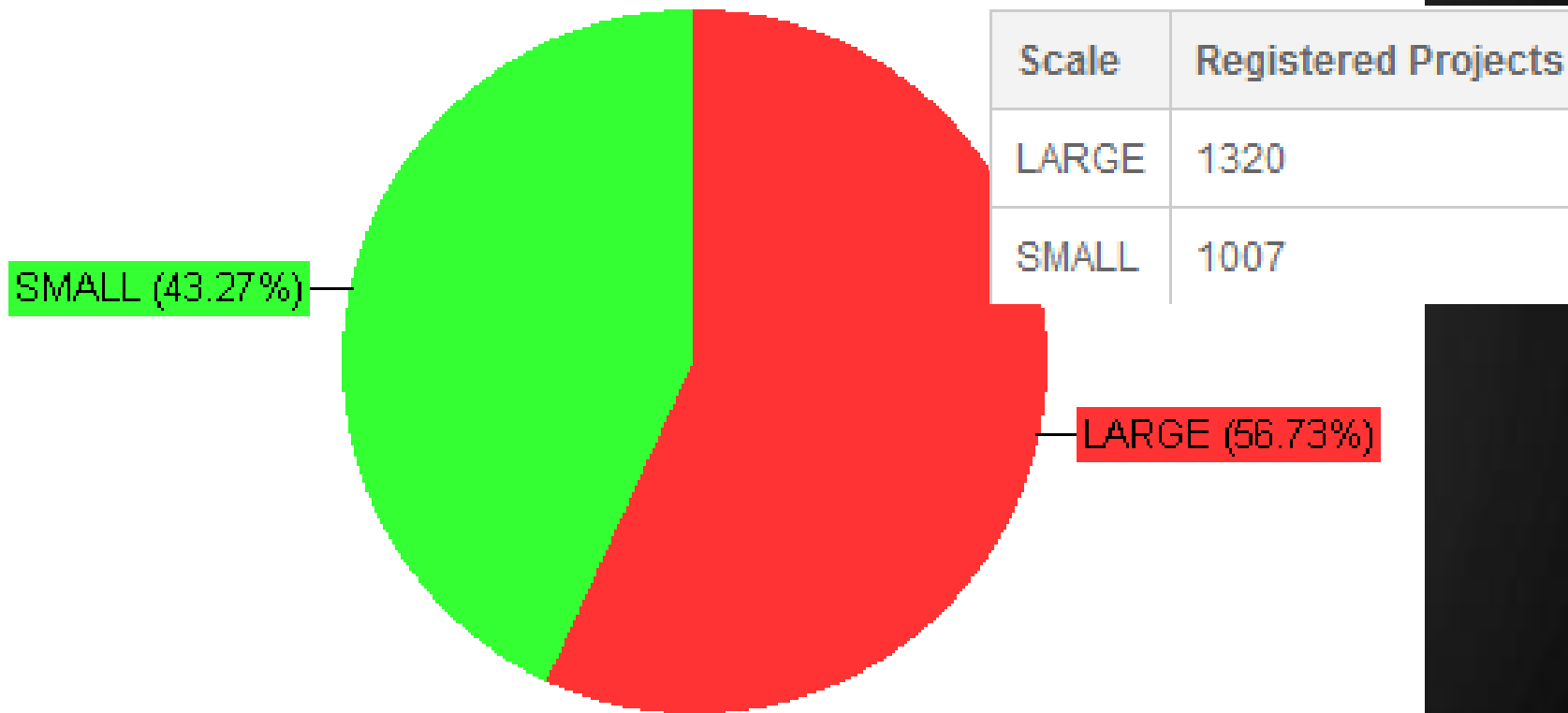
Registered CDM Projects (by Scope)



Registered CDM Projects

(by Project Scale)

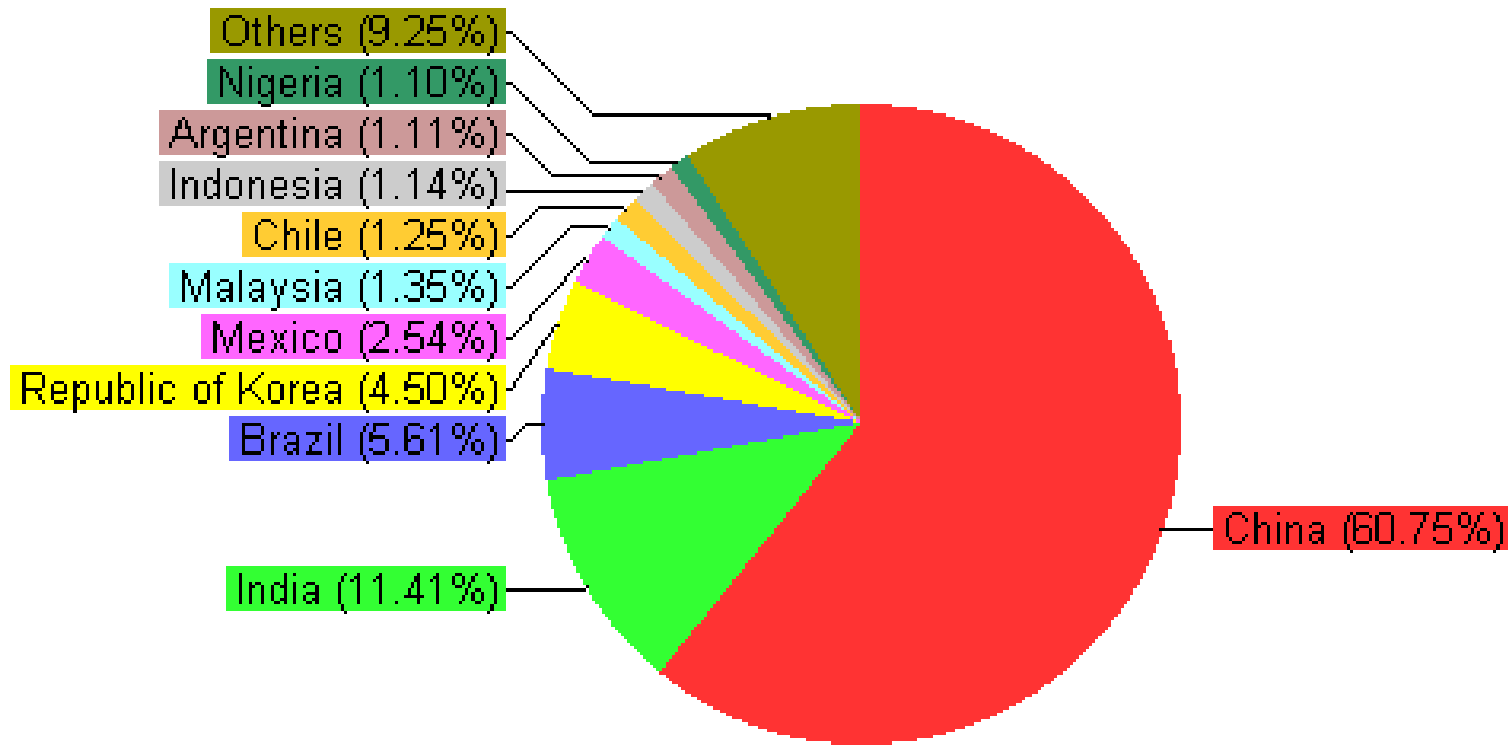
Registered projects activities by scale. Total 2327



<http://cdm.unfccc.int> (c) 24.08.2010 15:53

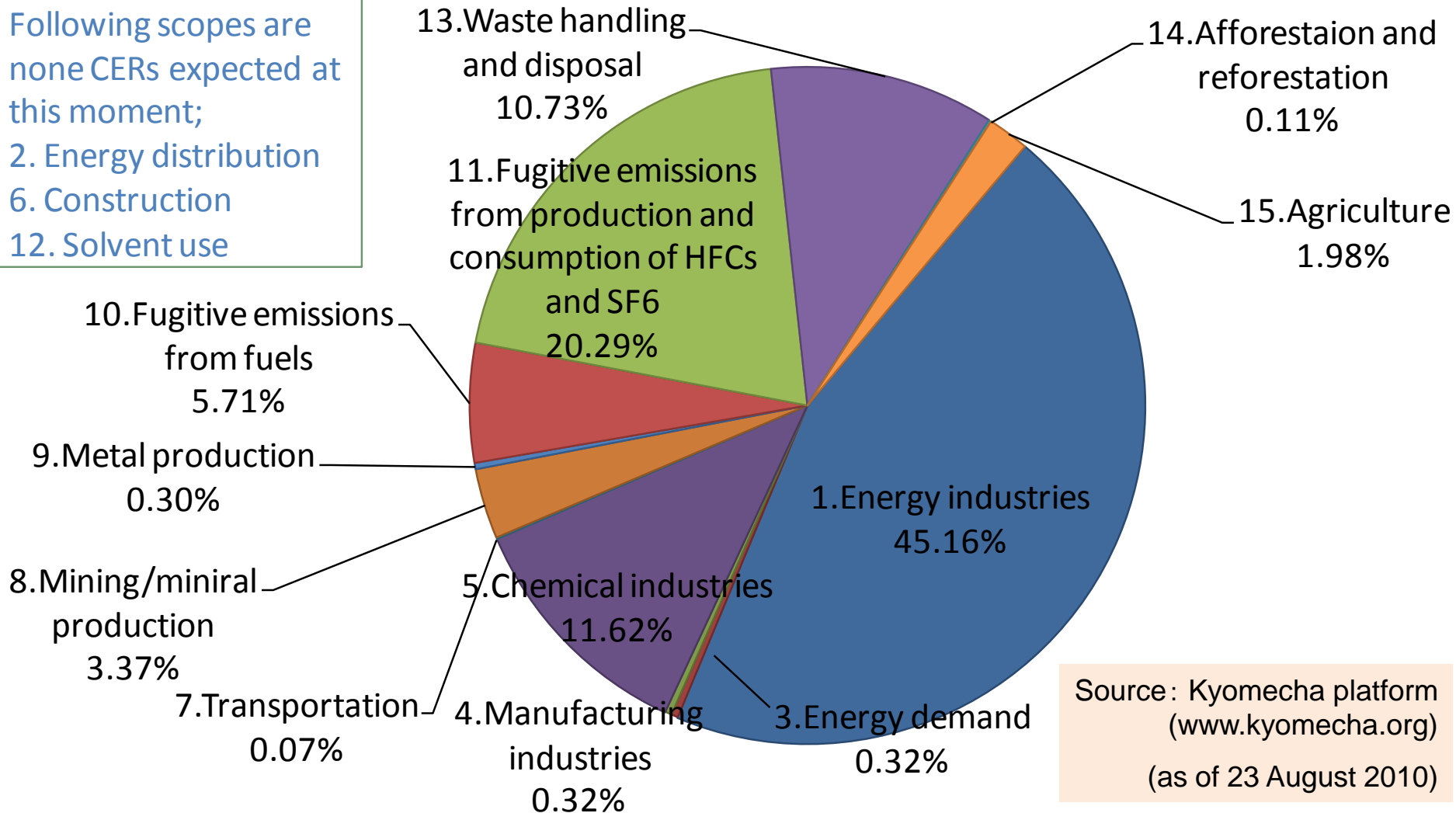
Expected average annual CERs (by Host Country)

Expected average annual CERs from registered projects by host party. Total: 378,139,136



Expected average annual CERs (by Sectoral Scope)

Following scopes are none CERs expected at this moment;
2. Energy distribution
6. Construction
12. Solvent use



Source: Kyomecha platform (www.kyomecha.org) (as of 23 August 2010)

Post Kyoto Negotiations

- Brief History of Climate Change Negotiation
- Discussion of CDM issues at COP/MOP (CMP)
- Copenhagen Climate Change Conference (CMP5)
 - Copenhagen Accord
 - Analysis of outcomes
- Current movements (after CMP5)

COP15: Success or Failure ?

Copenhagen Accord

Break-off negotiation

Agree to setup new operational rules by COP

Agree to setup new consolidated protocol for all countries

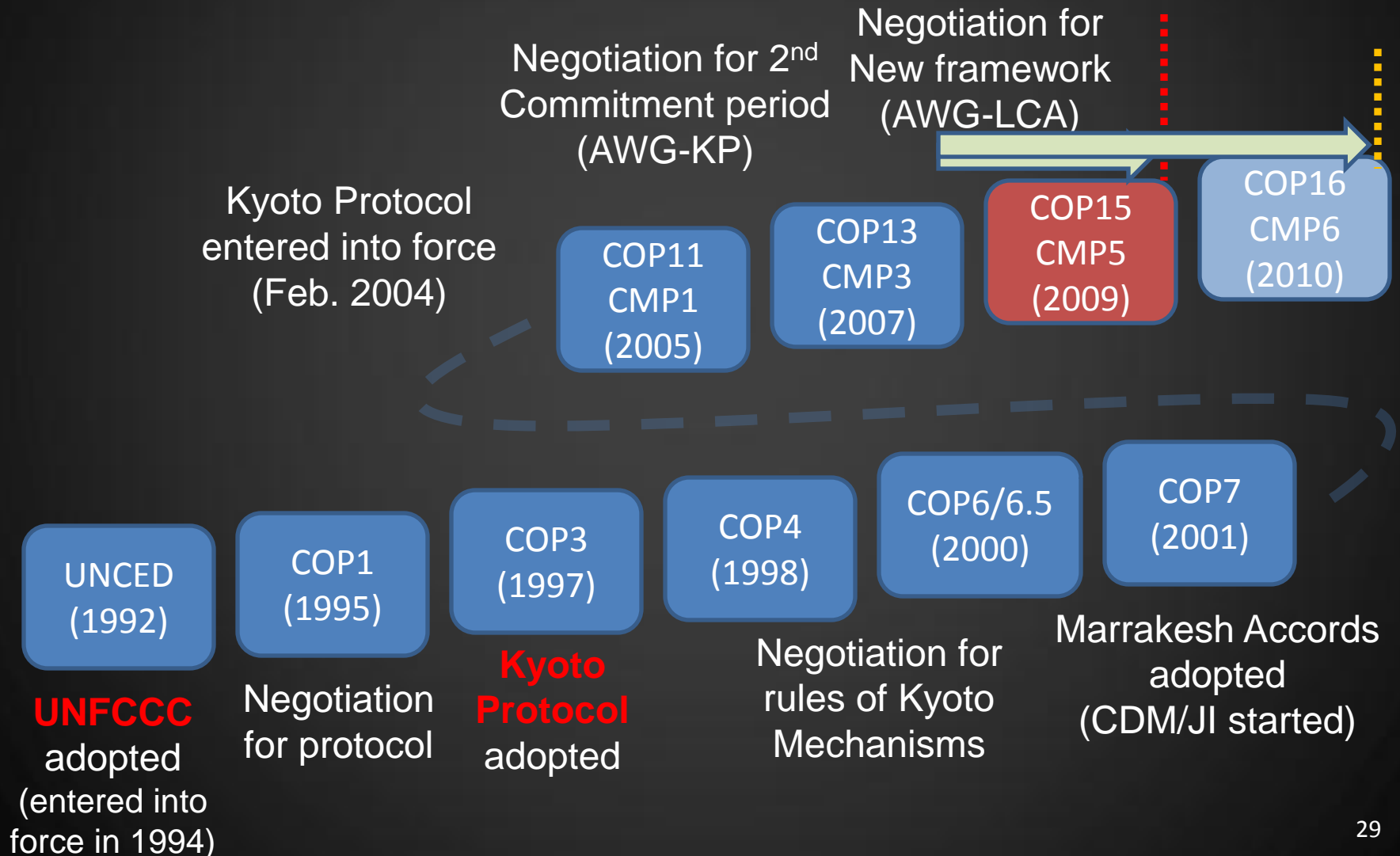
Adopt new consolidated new protocol

Political declaration at COP

Agree to setup new Protocol for US and China

Without Mandate of Bali Action Plan

Brief history of Climate Change Negotiations



Discussion of CDM issues at CMP

- CMP1 (Montreal, Canada, Dec. 2005)
 - Facilitate initiative of “Future CDM” (promote EE/RE project)
 - Review of definition of SSC project (Expand the applicability condition)
 - Agreed on guiding principle of CCS (CCS is feasible as CDM project (detail procedures are under discussion))
 - Adopt the eligibility guidance of Programmatic CDM (policy or standard cannot be considered as a CDM project)
 - Enhancement of EB and Secretariat

Discussion of CDM issues at CMP

- CMP2 (Nairobi, Kenya, Nov. 2006)
 - Facilitate initiative of “Future CDM”
 - Agreed on discussion schedule of CCS guidance (guidance will adopt at CMP4)
 - Improvements of regional distribution of CDM projects
 - “Nairobi Framework” adopted (Assist to LDCs by relevant UN organs)
 - 3 months extension for application of Retroactive credit (the end of Dec.2006 → Mar.2007)
 - Request EB to arrange the sort of guidance of PoA (Guidance and PDD format)

Discussion of CDM issues at CMP

- CMP3 (Bali, Indonesia, Dec. 2007)
 - Facilitate initiative of “Future CDM”
 - “Bali Roadmap” adopted (agreed on the negotiation schedule for next commitment period)
 - Assistance to developing countries: Agreed on establish the Adaptation Fund Board (Secretariat: GEF, Trustee: WB)
 - Change the upper limit of SSC project (6ktCO₂ → 12ktCO₂)
 - Exempt of fees (e.g. registration fee) for CDM project at LDCs

Discussion of CDM issues at CMP

- CMP4 (Poznan, Poland, Dec. 2008)
 - Governance, Accreditation, Regional Distribution
 - Discussion on improvement of Kyoto Mechanisms on next commitment period (after 2013)
 - Chairperson's guidance (draft idea) includes;
 - ✓ Right and wrong of scope/subject expansion of project
 - ✓ Introduce sectoral credit mechanisms
 - ✓ Credit issuances based on Party's emission reduction activities
 - ✓ Accredited Co-benefit aspects as registration criteria
 - ✓ Emission Trading Scheme based on sectoral target
 - Invite parties to submit improvement of draft ideas

Discussion of CDM issues at CMP

- CMP5 (Copenhagen, Denmark, Dec. 2009)

- Agendas for current commitment period (-2012)

- Expand scopes of CDM
- Governance
- Regional Distribution
- Relationship with National policy (E+/E-)

(Outcomes)

- ✓ Strengthen financial support to less than 10 project country
- ✓ Simplified methodologies
- ✓ Set up appeal process
- ✓ Develop guidance on E+/E- policy

Discussion of CDM issues at CMP

- CMP5 (Copenhagen, Denmark, Dec. 2009)
 - Agendas for next commitment period (2013-)
 - Expand scopes of CDM (incl. Nuclear, CCS, etc.)
 - Change rules and procedures
 - New market mechanisms

(Outcomes)

- ✓ No decisions above issue (still remain “options”)

Expected outcomes

- From Annex I countries:
 - ✓ New Protocol will be adopted (Kyoto Protocol will be terminated)
 - ✓ Comprehensive Agreement incl. US and China
 - ✓ Obligation to NAI countries as well AI
- From Non-Annex I countries:
 - ✓ Keep the framework “Bali Action Plan + Kyoto Protocol” (= AI keeps their obligation & no obligation to reduce GHG for NAI)

Post 2012 Target

- Kyoto Protocol (Article 3.9)
 - ✓ No expiring of the Kyoto Protocol
 - ✓ Prerequisite: 2nd commitment period will continue after 2012
- CMP1 (Montreal)
 - ✓ No blank period between 1st (2008-12) and 2nd (2013-??) commitment period
- CMP3 (Bali Action Plan)
 - ✓ Negotiation will be concluded the end of 2009 (CMP5)

Bali Action Plan (Mandate for LCA)

- Bali Action Plan (1/CP.13)
 1. *Decides to launch a comprehensive process* to enable the full, effective and sustained implementation of the Convention through long-term cooperative action, now, up to and beyond 2012, in order to reach an *agreed outcome* and *adopt a decision at its fifteenth session*, by addressing, inter alia:
 - (a) A shared vision for long term cooperative action, including a long-term global goal for emission reductions,...
 - (b) Enhanced national/international action on mitigation of climate change, including, inter alia, consideration of:
 - (ii) *Nationally appropriate mitigation actions* by developing country Parties, in the context of sustainable development, supported and enabled technology, financing and capacity-building , in a *measurable, reportable and verifiable* manner;
 2. *Decides that process be conducting...(skip)...AWG-LCA under the convention, that shall complete its work in 2009* and present the outcome of its work to the Conference of the Parties for adoption at its fifteenth session;

Decision

Friends of Chair (25 head of countries)
Drafted Copenhagen Accord

UNFCCC

Conference of Parties
of UNFCCC (COP)

Conference of Parties serving as
Meeting of Parties (COP/MOP)

Respective
Reports
(Containing a
set of
decisions)

Take note & adopt

CDM EB

JI SC

Compliance
Committee

EGTT

LEG

CGE

AWG-LCA

SBI

SBSTA

AWG-KP

Contact
Group

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Other Int'l Negotiations (G8 Summit,
UN, regional or bilateral talk, etc.)

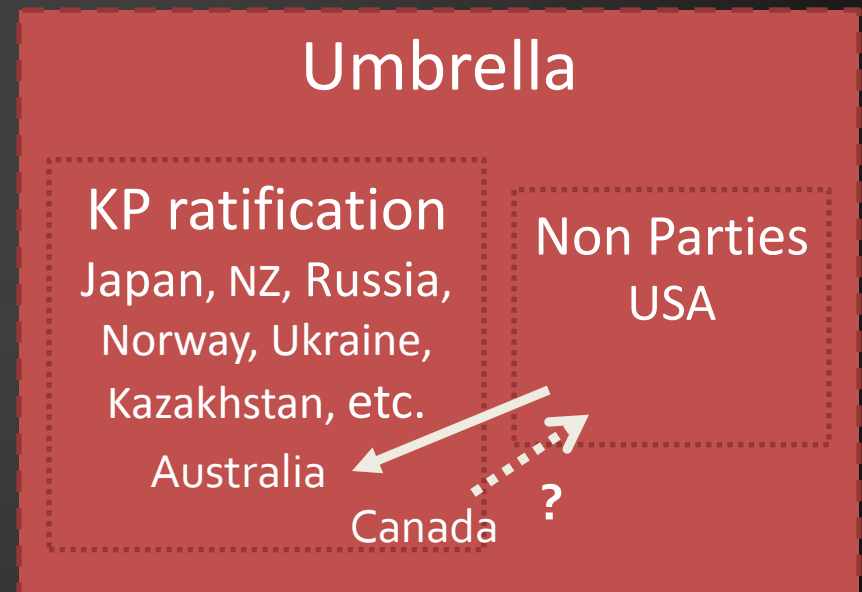
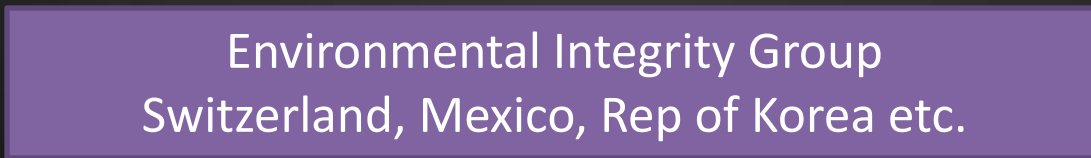
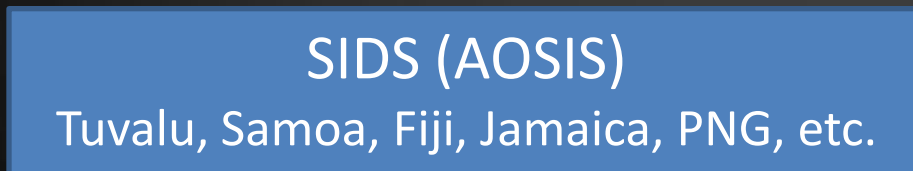
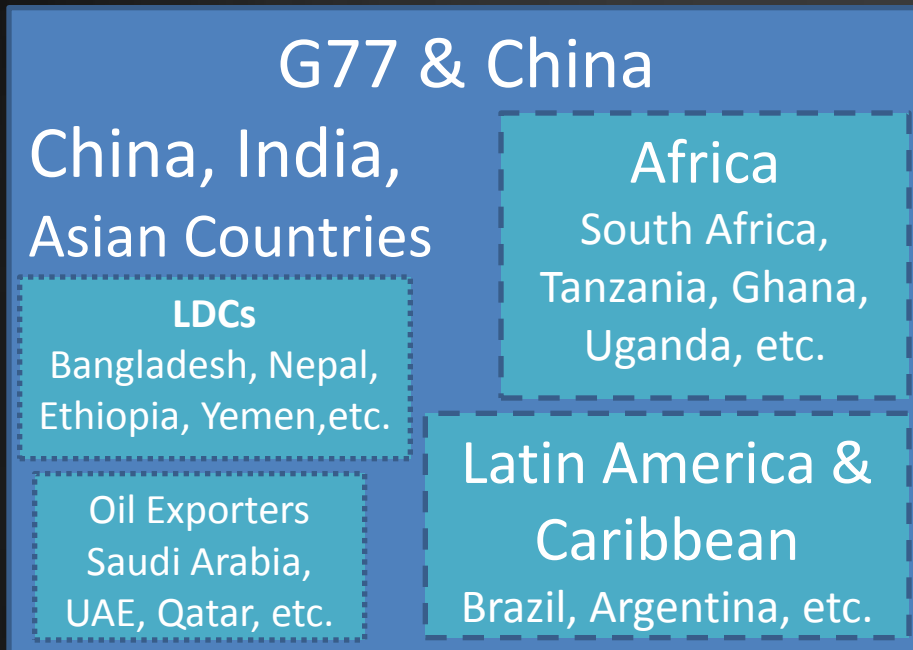
Official
documents

Negotiation/
Suggestion

Negotiation Blocs

Non Annex I

Annex I



* Depending on Issues, Countries changes their groups.

Outcomes of Copenhagen CC Conference

- Copenhagen Accord drafted by Friends of the Chair (Head of 25 countries, incl. US, China, EU, Japan, Indonesia, Brazil, Ethiopia, etc.)
- “Take note” the Copenhagen Accord at the COP15 (not Adopt = couldn’t achieve as COP decision) <strong opposed by Sudan, Cuba, Venezuela, Bolivia, etc.>
- AWG-KP and AWG-LCA will continue until Dec. 2010 at Mexico

Copenhagen Accord

Advance unedited version

Decision -/CP.15

The Conference of the Parties,

Takes note of the Copenhagen Accord of 18 December 2009.

Copenhagen Accord

The Heads of State, Heads of Government, Ministers, and other heads of the following delegations present at the United Nations Climate Change Conference 2009 in Copenhagen: *[List of Parties]*

In pursuit of the ultimate objective of the Convention as stated in its Article 2,
Being guided by the principles and provisions of the Convention,

Noting the results of work done by the two Ad hoc Working Groups,
Endorsing decision x/CP.15 on the Ad hoc Working Group on Long-term

Cooperative Action and decision x/CMP.5 that requests the Ad hoc Working Group on Further Commitments of Annex I Parties under the Kyoto Protocol to continue its work,
Have agreed on this Copenhagen Accord which is operational immediately.

1. We underline that climate change is one of the greatest challenges of our time. We emphasise our strong political will to urgently combat climate change in accordance with the principle of common but differentiated responsibilities and respective capabilities. To achieve the ultimate objective of the Convention to stabilize greenhouse gas concentration in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system, we shall, recognizing the scientific view that the increase in global temperature should be below 2 degrees Celsius, on the basis of equity and in the context of sustainable development, enhance our long-term cooperative action to combat climate change. We recognize the critical impacts of climate change and the potential impacts of response measures on countries particularly vulnerable to its adverse effects and stress the need to establish a comprehensive adaptation programme including international support.

2. We agree that deep cuts in global emissions are required according to science, and as documented by the IPCC Fourth Assessment Report with a view to reduce global emissions so as to hold the increase in global temperature below 2 degrees Celsius, and take action to meet this objective consistent with science and on the basis of equity. We should cooperate in achieving the peaking of global and national emissions as soon as possible, recognizing that the time frame for peaking will be longer in developing countries and bearing in mind that social and economic development and poverty eradication are the overriding priorities of developing countries and that a low-emission development strategy is indispensable to sustainable development.

APPENDIX I

Quantified economy-wide emissions targets for 2020

Annex I Parties	Quantified economy-wide emissions targets for 2020	
	Emissions reduction in 2020	Base year

Copenhagen Accord

- [Preamble] Operational immediately
- [Para.1] Strong political will to urgently combat climate change (w/common but differentiated responsibilities principle)
- [Para.1] Global temperature should be below 2 degrees Celsius
- [Para.2] Cooperate in achieving the peaking of global and national emissions as soon as possible
- [Para.3] Developed countries shall provide adequate, predictable and sustainable financial resources, technology and capacity-building

Copenhagen Accord (cont.)

- [Para.4] Voluntary emission reduction targets for 2020 by Annex I (submit until 31 Jan. 2010)
- [Para.5] Voluntary mitigation actions by Non-Annex I (submit until 31 Jan. 2010)
- [Para.6] Immediate establishment of REDD-plus mechanisms
- [Para.7] Enhance cost-effectiveness, utilize market mechanisms

Copenhagen Accord (cont.)

- [Para.8] New and additional funding to developing countries from developed countries
 - ✓ Agreed to pledge 30 bil USD / year (2010-12) for mitigation and adaptation (Funding for Adaptation: Prioritized for vulnerable countries, LDCs, SIDS and Africa)
 - ✓ Developed countries commit to a goal mobilizing jointly 100 bil USD / year by 2020
 - ✓ Funding flow through the Copenhagen Green Climate Fund
 - [Para.10] Copenhagen Green Climate Fund shall be established as an operating entity of the financial mechanism of the Convention

Copenhagen Accord (cont.)

- [Para.11] Enhance action on Development and Transfer of Technology, Establish a Technology Mechanism
- [Para.12] Implementation review by 2015.
- [Para.12] Consider strengthening goal incl. 1.5 degree Celsius (→ Reflect strong opinion by AOSIS)

New Crediting Schemes

- NAMA crediting
- Sectoral crediting
- REDD-plus

→ all decisions were not concluded^(*) at Copenhagen and to be discussed at Cancun, Mexico (CMP6)

(*) But most of the Annex I parties (incl. Japan) designing their crediting scheme (= like CDM) for multi-/bilateral cooperation with Non-Annex I parties (developing countries) now.

Pledge commitment under the Copenhagen Accord

- Target until 2012 (30 bil USD for 3 years₍₂₀₁₀₋₁₂₎)
 - Japan
 - Pledge agreement until COP15: 9.2 bil
 - (New) Additional pledge agreement: 1 bil
 - (New) Mobilize from private sector: 4 bil
 - EU: 10 bil USD (Decided at EU summit)
 - US and other AI: 5 bil USD
- Target on 2020 (100 bil USD/year)
 - Depends on commitment by US

Analysis of outcomes of Copenhagen CC Conference

- High expectations from Annex I
- Annex I requested beyond the mandates of BAP to NAI
- Raised public & media concerns (high pressures from outside world)
- Too insist to establish the legal framework
- Negotiation managements were poor (by Gov't of Denmark)
- Insufficient trusteeship among Parties
- Exposed different opinions among NAI (AOSIS vs. Newly developing countries) etc.
- Developing countries got pledge commitment from AI

Voluntary commitment actions

- Copenhagen Accord requested voluntary actions by AI and NAI
 - [Para.4] Voluntary emission reduction targets for 2020 by Annex I (submit until 31 Jan. 2010)
 - [Para.5] Voluntary mitigation actions by Non-Annex I (submit until 31 Jan. 2010)
- Sri Lanka is not yet submit the voluntary mitigation action plan

List of commitment actions submission countries

Annex I (43 parties) (Percentage of emission reduction target in 2020)	
Australia (5%-15% or 25%)	Liechtenstein (20%)
Belarus (5-10%)	Monaco (30%)
Canada (17%)	New Zealand (20%)
Croatia (5%)	Norway (30-40%)
EU & 27 Member States* (20/30%)	Russia (15-25%)
Iceland (30%)	Switzerland (20/30%)
Japan (25%)	Ukraine (20%)
Kazakhstan (15%)	USA (17%)

* EU 27 Member states: Belgium, Bulgaria, Czech Rep., Denmark, Germany, Estonia, Ireland, Greece, Spain, France, Italy, Cyprus, Latvia, Lithuania, Luxembourg, Hungary, Malta, Netherlands, Austria, Poland, Portugal, Romania, Slovenia, Slovakia, Finland, Sweden and UK

List of commitment actions submission countries

Non-Annex I (40 parties)			
Afghanistan	Congo	Israel	Peru
Antigua & Barbuda	Costa Rica	Jordan	Rep. Korea
Armenia	Cote d'Ivoire	Madagascar	Moldova
Benin	Ethiopia	Maldives	San Marino
Bhutan	Eritrea	Marshall Islands	Sierra Leone
Botswana	Gabon	Mauritania	South Africa
Brazil	Georgia	Mexico	Macedonia
Cameroon	Ghana	Mongolia	Togo
Central African Rep.	India	Morocco	Tunisia
China	Indonesia	PNG	San Marino

<Party's participation to the CA>
98% of Annex I Parties
26% of Non-Annex I Parties

Current movements (after CMP5)

- Bolivia hosted int'l conference (April 2010)
 - ALBA countries trying to negotiate outside of UN process. (*ALBA: Cuba, Ecuador, Venezuela, etc.)
- Germany and Mexico hosted informal ministerial meeting (May 2010)
 - 41 countries (AI and NAI) agreed to draft documents at CMP6 with reflection of CA.
 - Needed to consensus to set up 2nd Commitment period of KP (from NAI parties).

Current movements (after CMP5)

- AWG-LCA10 & AWG-KP12 (June 2010)
 - LCA Chair issued Chair's text (based on the negotiation and CA) for next session, but most of the NAI parties denied to discuss it.
 - KP requested secretariat to analyze the legal matter relating to the gap between KP and New framework.
- AWG-LCA11 & AWG-KP13 (August 2010)
 - Re-issued LCA Chair's text with many options and brackets (→ still far from consensus agreement).

Current movements (after CMP5)

- AWG-LCA12 & AWG-KP14 (October 2010)
 - Tianjin, China
 - Last meeting of AWGs for COP16/CMP6
- COP16 & COP/MOP6 (December 2010)
 - Cancun, Mexico
 - But negotiation will continue until Dec. 2011 (COP17 @South Africa) ???
 - ✓ Kyoto Commitment Period will be terminate soon (2012).
 - ✓ Remaining issue: How to treat the gap between Kyoto and Future commitment period? (Extend the Kyoto period?)

Current movements (after CMP5)

- New UNFCCC Executive Secretary (Ms. Christina Figueres) (July 2010)



Related News: [Environment](#) · [Latin America](#)

UN's Next Climate Chief Figueres Says Final Deal Unlikely in Her Lifetime

By Alex Morales - Jun 9, 2010

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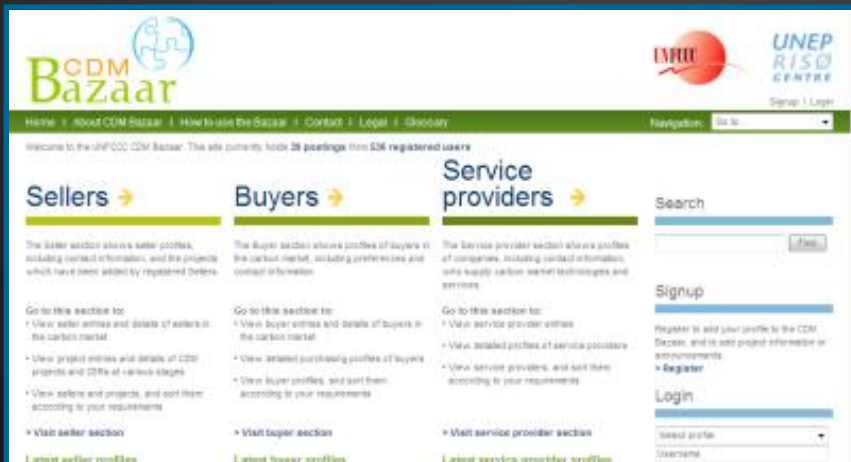
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[Christiana Figueres](#), a Costa Rican who on July 8 will take the helm of the United Nations body that organizes global climate-change treaty talks, said an all-encompassing deal is unlikely to happen in her lifetime.

Governments must instead focus on making incremental efforts to end global warming because the response “is going to require the sustained effort of those who will be here for the next 20, 30, 40 years,” Figueres, 53, told reporters today in Bonn, where the latest two-week round of talks is taking place.

Useful links

- UNFCCC-CDM website: <http://cdm.unfccc.int/>
 - CDM Project Activity Cycle: <http://cdm.unfccc.int/Projects/pac/index.html>
- UNEP Risoe Center: <http://uneprisoe.org/>
 - CDM Pipeline: <http://cdmpipeline.org/>
- CDM Bazaar: <http://cdmbazaar.net/>



Useful links

- CDM Programme, Institute for Global Environmental Strategies (IGES):
<http://www.iges.or.jp/en/cdm/index.html>
- CDM/JI Manual for Project Developers and Policy Makers – 2009 (GEC):
http://gec.jp/main.nsf/en/Activities-CDMJF_FS_Programme-Top
- Kyoto Mechanisms Information Platform (OECC):
<http://www.kyomecha.org/e>



Thank you for your attention!



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