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Secretary  
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Officer in Charge  
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United Nations Framework  
Convention on Climate Change

## Clean Development Mechanism

Up and running, learning,  
evolving, growing

EPRI GHG Offsets Workshop  
26 June, 2008  
Washington DC, USA



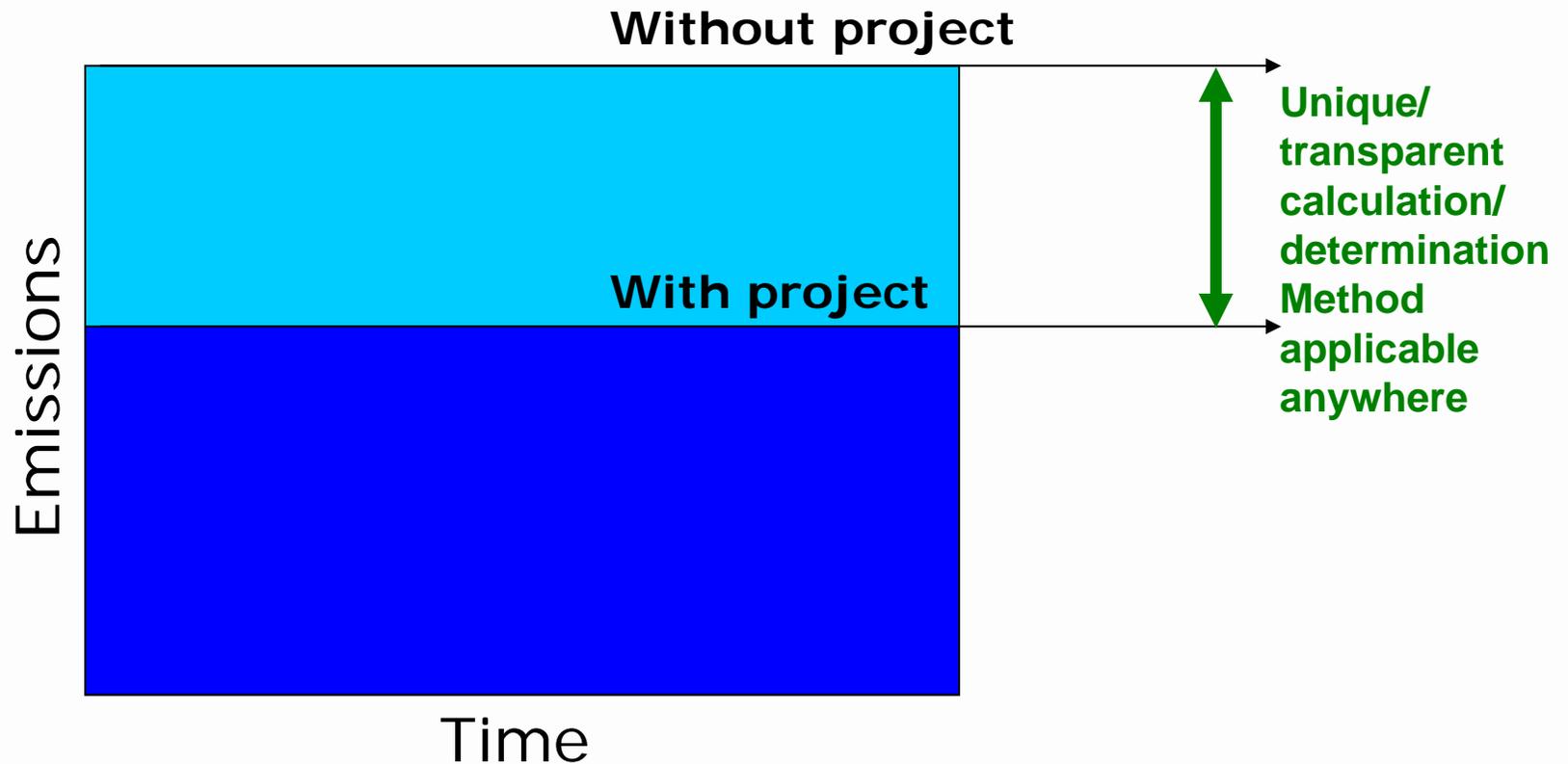
# KP mechanisms | Flexibility, investment, participation

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- **Emission Trading (ET):**  
exchanging emission allowances among Kyoto Protocol Parties
- **Clean Development Mechanism (CDM):**  
credits for emissions reduced through projects in developing countries that would not have occurred in the absence and that assist those countries in achieving sustainable development (host country to confirm).  
(non-Annex I countries)
- **Joint Implementation (JI):**  
credits for emissions reduced through projects in countries with an emission limitation/reduction commitment under Protocol, primarily projects in countries with economies in transition



# KP mechanisms | Flexibility, investment, participation



 = Certified emission reductions that are real, measurable and additional to those that would have occurred.



# CDM | Flexibility, investment, participation

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- Flexibility in how countries/companies plan for and meet their emission targets nationally or through mechanisms abroad. Reduce cost of compliance with set goal
- Complementarity to domestic action of using flexibility
- Emission reduction that would not have occurred in the absence of the registered activity
- Identify lower-cost opportunities to meet emission targets (voluntary or compliance)
- Leverages the power of private sector to find opportunities that best suits them and adds public interest by ensuring that the emissions are real, measurable and verifiable.
- Assist in achieving sustainable development
- Support for adaptation to climate change
- Involves developed and developing countries



# CDM general overview | Global reach, international mandate

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- CDM the largest CO2 offset system in the world
- The mechanism has a legal basis in the Kyoto Protocol
  - Run by Executive Board (EB) answerable to KP Parties
  - EB back-stopped by UNFCCC secretariat with support for:
    - Registration and issuance
    - Accreditation of third-party validators (designated operational entities)
    - Methodologies for emissions baseline setting and monitoring



# CDM general overview | Design features - choices

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- Registration and issuance
  - Single global registry, one regulatory body
  - Registration and issuance requested by DOEs – request executed unless a request for review is raised
  - Registration of one project – extended to programme of activities last year
- Accreditation of DOEs
  - One single, global accreditation body



# CDM general overview | Design features - choices

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- Methodologies for emissions baseline setting and monitoring
  - One currency / one global standard setting body
  - Bottom up – one activity leads to a calculation method that applies to all of the same kind.
  - Agreement not to include certain kinds: nuclear, forest other than afforestation and reforestation
- Aspects other than GHG reduction
  - Local stakeholder process required
  - Public role to play in project review and in methods development (peers, competitors, academia, NGO, government)
  - Transfer of technology not a hardcore requirement



# CDM | An offset mechanism with global reach

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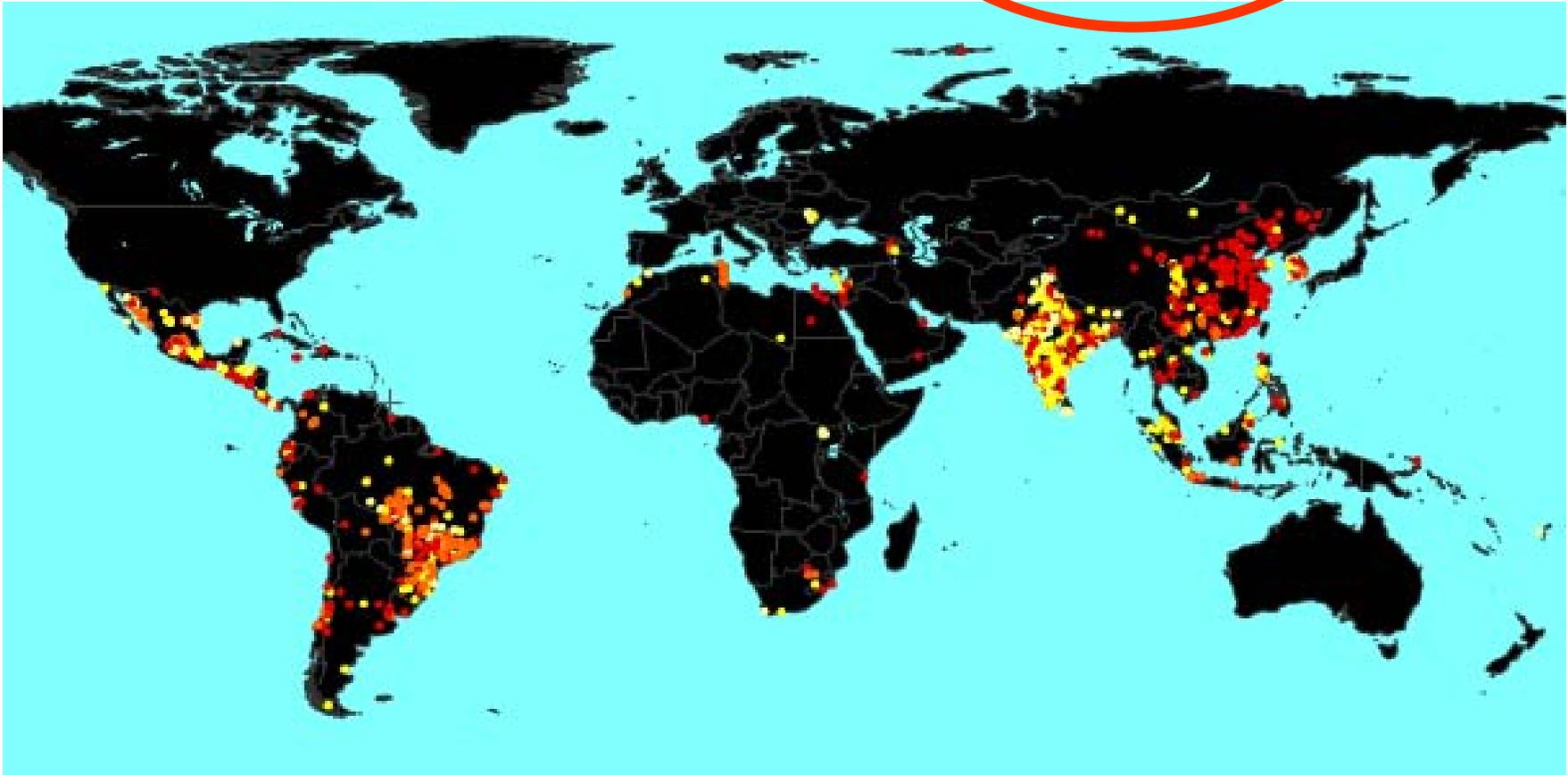
1084 registered projects in

49 countries

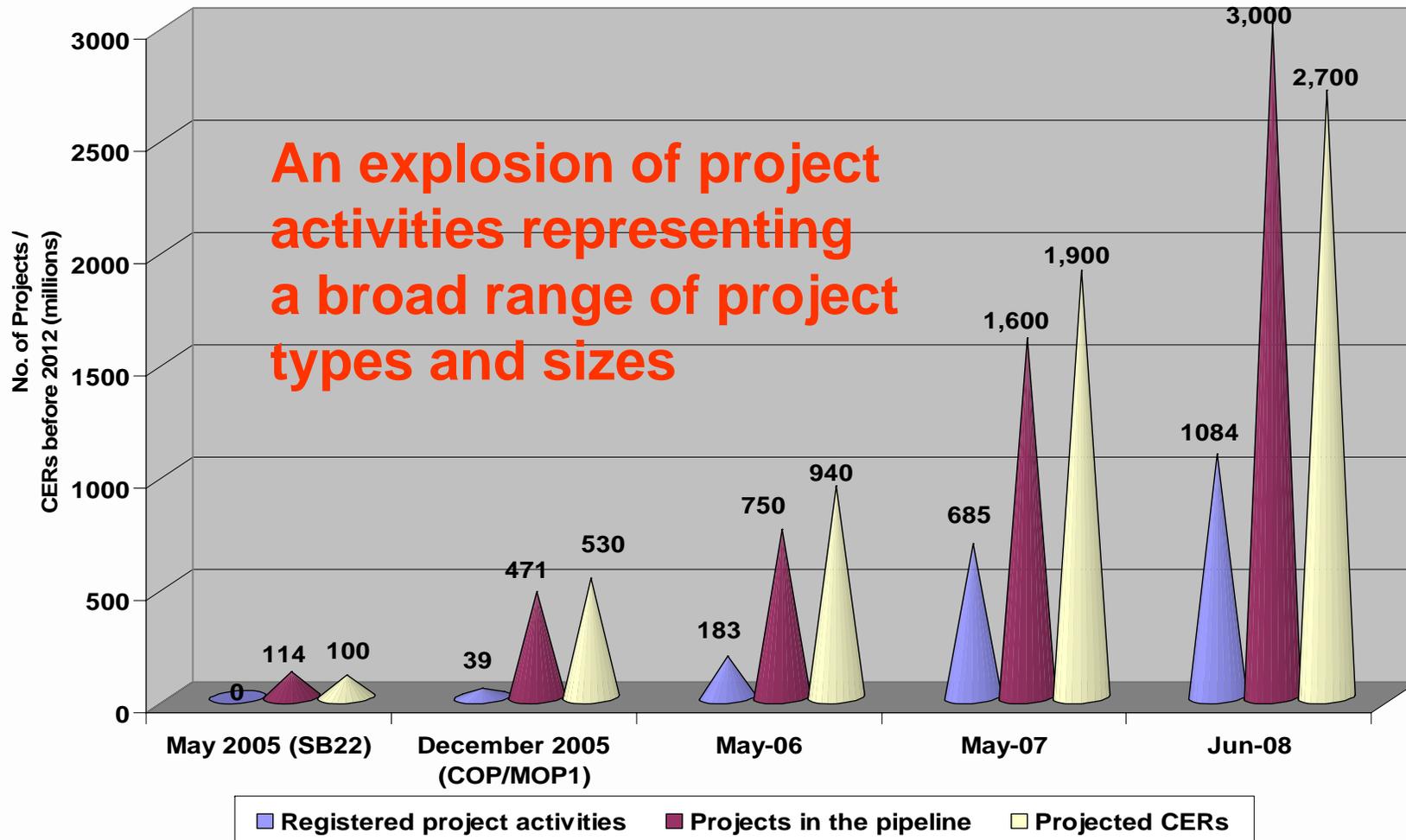
Plus >2000 more projects in pipeline

>2.7 billion certified  
emission reductions  
expected to the end  
of 2012

Status: 21 June 2008



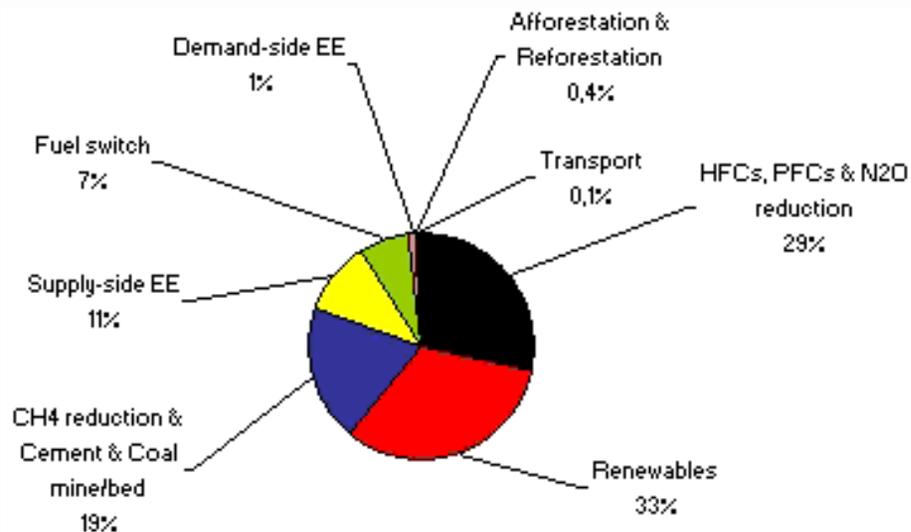
# CDM | Strong demand



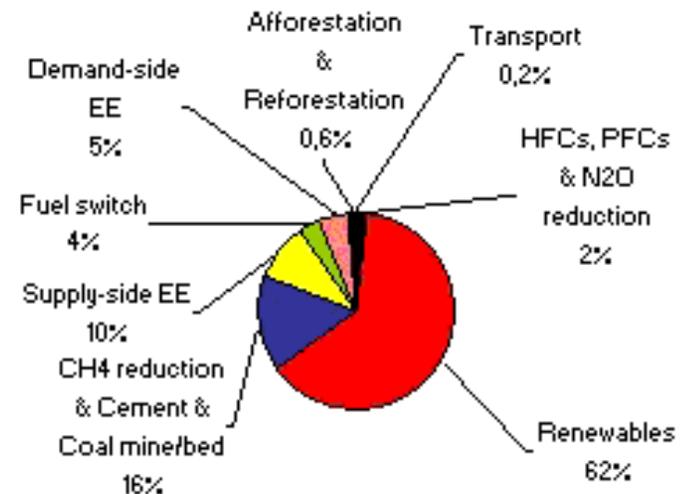
# CDM general overview | Types

- Two views: by CERs or by registered activities  
(one would expect low cost high yield to be firstly identified and predominant given the I.t. uncertainty)

## CERs by 2012

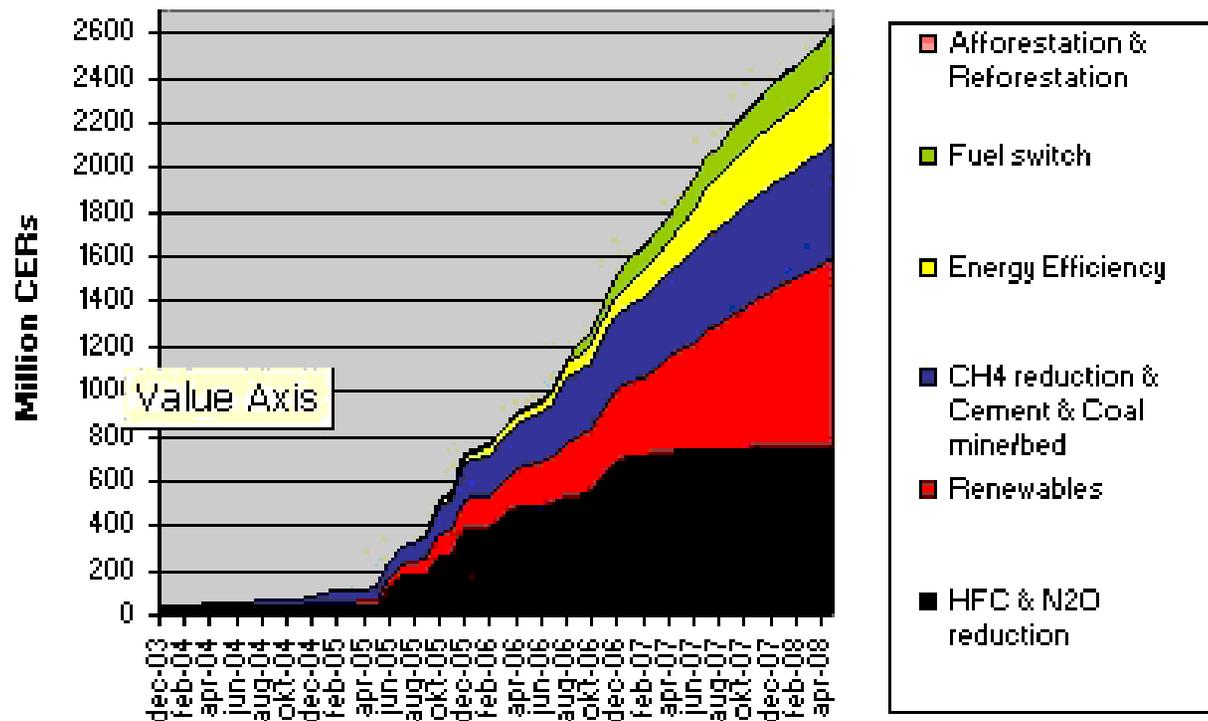


## Number of projects



# CDM general overview | Types

- CERs distribution by type forecast by date till 2012



<http://www.cdmpipeline.org/cers.htm>



## CDM general overview | Transparency

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- CDM is new, but it has already shown that it can work, that it can evolve and adapt
- What's more, stakeholders have direct influence on the evolution/improvement of CDM
- These facts, together with CDM's full transparency,\* have earned the mechanism respect, has enabled CDM to weather misplaced criticism and benefit from constructive criticism

\* Virtually every document, related to every project, is available on the CDM website.



# CDM general overview | Outcome from Bangkok

Emissions trading and project-based mechanisms should continue



UNITED  
NATIONS



Framework Convention  
on Climate Change

Distr.  
LIMITED

FCCC/KP/AWG/2008/L.2  
4 April 2008

Original: ENGLISH

AD HOC WORKING GROUP ON FURTHER COMMITMENTS  
FOR ANNEX I PARTIES UNDER THE KYOTO PROTOCOL  
Fifth session  
Bangkok, 31 March to 4 April 2008, and Bonn, 2–12 June 2008

Agenda item 3 (a–d)

Analysis of means to reach emission reduction targets and identification of ways to enhance their effectiveness and contribution to sustainable development  
Emissions trading and the project-based mechanisms  
Land use, land-use change and forestry  
Greenhouse gases, sectors and source categories  
Possible approaches targeting sectoral emissions

**Analysis of means to reach emission reduction targets and identification of ways to enhance their effectiveness and contribution to sustainable development**

Draft conclusions proposed by the Chair



# CDM general overview | Outcome from Bangkok

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. . . and could be improved.

Due attention should be paid to promoting:

- environmental integrity of the Kyoto Protocol
- contribution of the mechanisms to sustainable development



# CDM general overview | Outcome from Bangkok

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. . . and could be improved.

The AWG agreed to consider:

- Improvements with regard to scope, effectiveness, efficiency, accessibility, contribution to sustainable development, capacity to generate co-benefits and technology transfer
- How to address land use, land-use change and forestry in the second commitment period
- Sectoral approaches to reduce emissions.



# CDM general overview | Outcome from Bonn

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-> List of issues (not negotiated) :

- Can be addressed in this commitment period (ongoing review process and through guidance to the Board)
- Have to be negotiated in relation to the next commitment period

⇒ Need for a common understanding of what is on the list and negotiate what remains on the list for the future.

According to work programme:

2007 - ranges of reductions (25-40)

2008 – means (Accra in August);

2008/9 – new commitment period targets.



## CDM | Lessons learned

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CDM can grow if there is a demand for offsets

CDM can improve

CDM can evolve if Governments guide it e.g. PoA  
(pending CCS, HFC 23 new  
facilities, sectoral...)



## CDM | Lessons learned

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- **Resources** should be in place up front to jump start the system and support efforts to enhance transparency and broader understanding. Not wait till through a not yet perfect system self financing occurs.
- **Transparency** is critical – the CDM has evolved and improved, and indeed probably survived thanks to its transparency, and the importance placed on public and expert input and critique.
- **Need for broad public understanding** of the system. Public and “expert” view based on hearsay or non-peer reviewed analysis, second hand information and often on data that is awfully outdated (exponentially developing system).
- **Learning by doing** is essential in this context. The theory is beautiful and around since so many years. The practice vets the applicability and provides continuously better and more effective ways to achieve the same result.



# CDM | Lessons learned

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- **Legal certainty** of the decision-maker is critical – decisions makers should have clarity on how they are protected so that their decisions can remain independent, impartial. In the UN we talk about immunities for members of constituted bodies.
- **Economic efficiency** and **environmental integrity** are imperative – Our experience is that a balance can be struck that doesn't jeopardize environmental integrity. And the learning experience in this moves on. E.G. programme of activities



## CDM | Lessons learned

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- The process of **independent verification** of offsets, in a distributed fashion (certification companies request registration, automatic registration) is challenging but feasible. Biggest challenge is consistency of their decisions (present focus of CDM) and the perceived independence (ongoing monitoring whether existing provisions work).
- **Limiting factor human resource** in the market (throughout, regulator, certifier, project developer etc). One important challenge lies in **developing the critical levels of expertise** required to ensure quality and efficiency.



# CDM | Lessons learned

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- **Additionality/Baseline is a counterfactual** – having differing views as to how to define this is natural. Bottom up, opportunity for public/government to contribute, involve industry experts, consistency by regulatory body support, vetting by group of experts, is the best one could do. Top down can help and is sometimes probably needed (e.g. demand side energy efficiency, transport).
- **Standards** should be written in such a way as to minimize value judgements. Also here quite some learning by application.



# CDM general overview | Investment, financial flows

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- CDM projects that entered pipeline in 2006 expected to result in USD 25 billion in capital investment

*(almost double the USD 14 billion in total investment leveraged through GEF in the climate change area since it started)*

- CDM renewable energy and energy efficiency projects registered in 2006 expected to result in USD 5.7 billion in capital investment

*(about triple the ODA support for energy policy and renewable energy projects in the same countries. Almost as much as private investment in renewable energy and energy efficiency (USD 6.5 billion in 2006) in the same countries)*



# Thank You!

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CDM Bazaar

<http://www.cdmbazaar.net/>

Catalogue of decisions:

<http://cdm.unfccc.int/Reference/catalogue/search>

CDM UNFCCC website

[cdm.unfccc.int](http://cdm.unfccc.int)

Statistics: UNEP RISOE

<http://cdmpipeline.org/>

Statistics: UNFCCC

<http://cdm.unfccc.int/Statistics/index.html>

