

Programmatic CDM – How is it different?

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Outline

- The Concept and Origin of P-CDM
- International rules on P-CDM implementation
- Best practice of P-CDM projects

The Origin of P-CDM

➤ Criticism about CDM

- ✓ Fails to benefit LDCs and poor communities
- ✓ High transaction costs and complicated rules
- ✓ Leaves energy efficiency among households, service sector, renewable for end users, transportation, much untouched

➤ Suggestions to Reform CDM

- ✓ Programmatic CDM (among others)

The Concept of P-CDM

Definition

A programme of activities (PoA) is a voluntary coordinated action by a private or public entity which coordinates and implements any policy/measure or stated goal (i.e. incentive schemes and voluntary programmes), which leads to anthropogenic GHG emission reductions or net anthropogenic greenhouse gas removals by sinks that are additional to any that would occur in the absence of the PoA, via an unlimited number of CPAs.

PoA vs CPA

(a) PoA - programme of activities

(b) CPA - CDM programme activity - a project activity under a programme of activities. A CPA is a single, or a set of interrelated measure(s), to reduce GHG emissions or result in net anthropogenic greenhouse gas removals by sinks, applied within a designated area defined in the baseline methodology.

————— ‘Guidance on the registration of project activities under a PoA as a single CDM project activity’, (ver 2), Annex 38, EB 32 Report

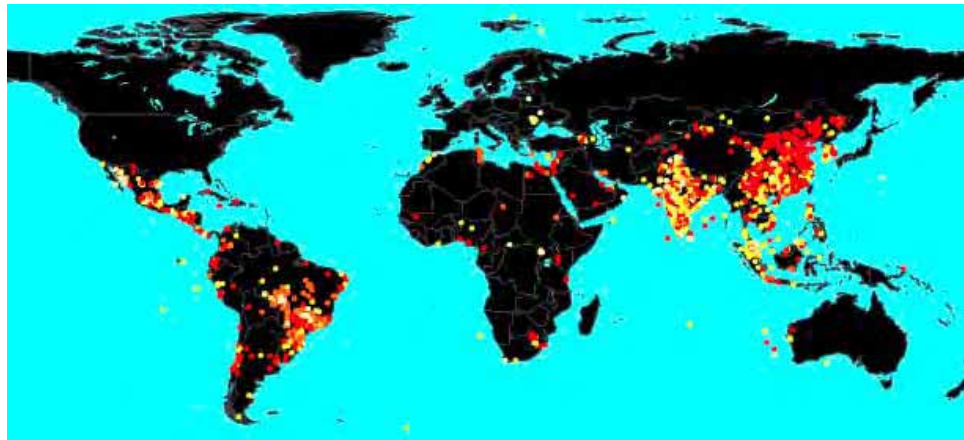
Why PoAs?

- CDM by Nov 2010 issued 450m tCO₂e in emission reductions and mobilized billions of dollars for projects that reduce ghgs in DCs.
- BUT project-by-project process for registering and and verifying includes **high transaction costs, long times to market and risks of non-registration**
- This is difficult to implement in least developed countries and small island states where average project sizes and the scale of national markets tend to be smaller, so relative transaction costs are higher.

PoA advantages

- Drastically shorter »time to market for project operators who wish to secure CER revenues since the inclusion of CPAs in a registered PoA no longer require approval from the CDM Executive Board in Bonn.
- Substantially lower transaction costs because the registration and verification processes for CPAs are streamlined.
- Full scalability since, in contrast to a standard CDM project, a PoA does not need to define ex-ante the scale and location of each project activity.

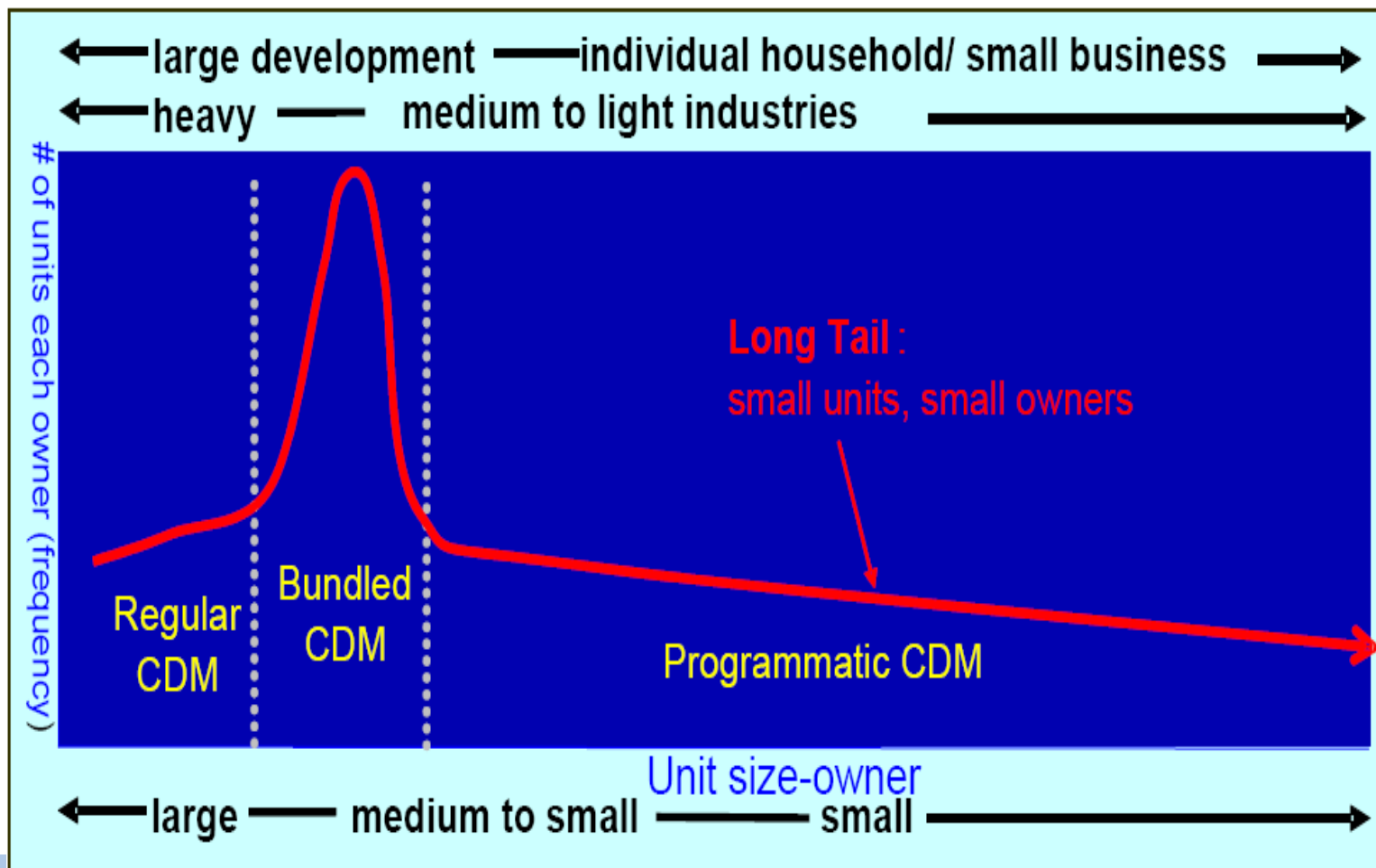
Distribution of registered CDM projects as of early 2010. Red dots denote large scale projects; yellow dots denote small scale projects



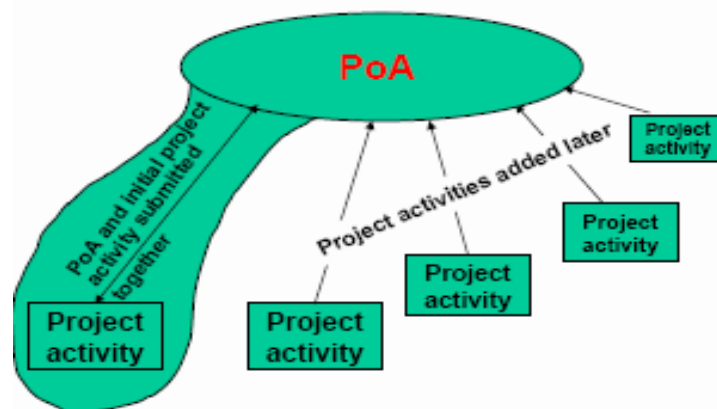
P-CDM vs Bundles

| | BUNDLE | PROGRAM |
|----------------------|---|---|
| Definition | Bringing together of several CDM project activities, to form a single CDM project activity or portfolio without the loss of distinctive characteristics of each project activity. | A programme of activities (PoA) is a voluntary coordinated action by a private or public entity which coordinates and implements any policy/measure or stated goal (i.e. incentive schemes and voluntary programmes), which leads to GHG emission reductions or increased net greenhouse gas removals by sinks. |
| Sites | Ex ante identification of exact sites | Exact sites may not be known, but type and criteria for inclusion is known |
| Project participants | Each single activity is represented by a CDM project participant | Only the entity implementing the project – the coordinator – represents the project activity as a CDM project participant |
| Actors | Project participants are identical to entities achieving reductions | The project participant does not necessarily achieve the GHG reducing activities but rather promotes others to do so |
| Project activities | Each activity in the bundle is an individual CDM project activity | The sum of all individual activities under the program is the CDM project activity |

Conceptual distribution of EE projects



CDM Programme of activities | Design frame

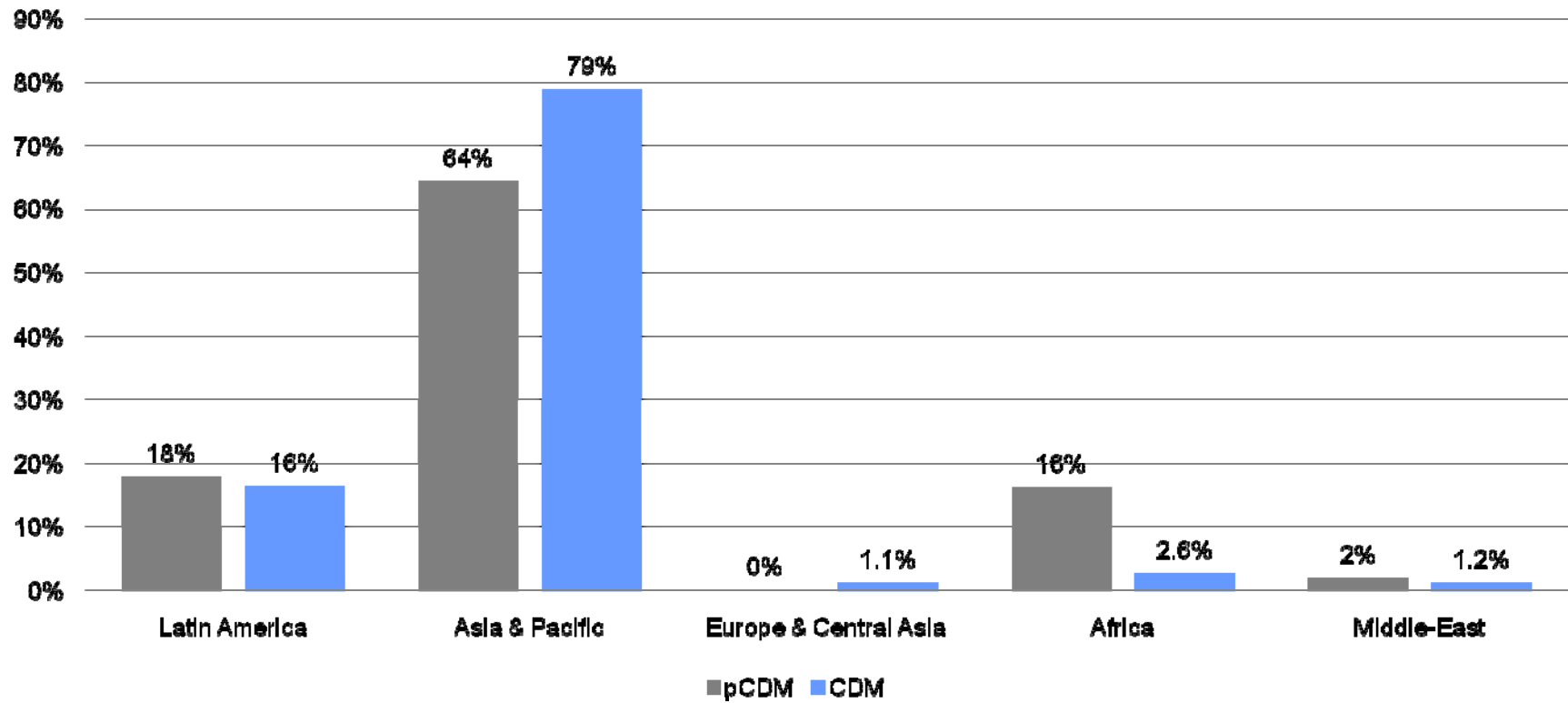


- A private or public entity implementing any policy/measure or stated goal requests registration of PoA with one project.

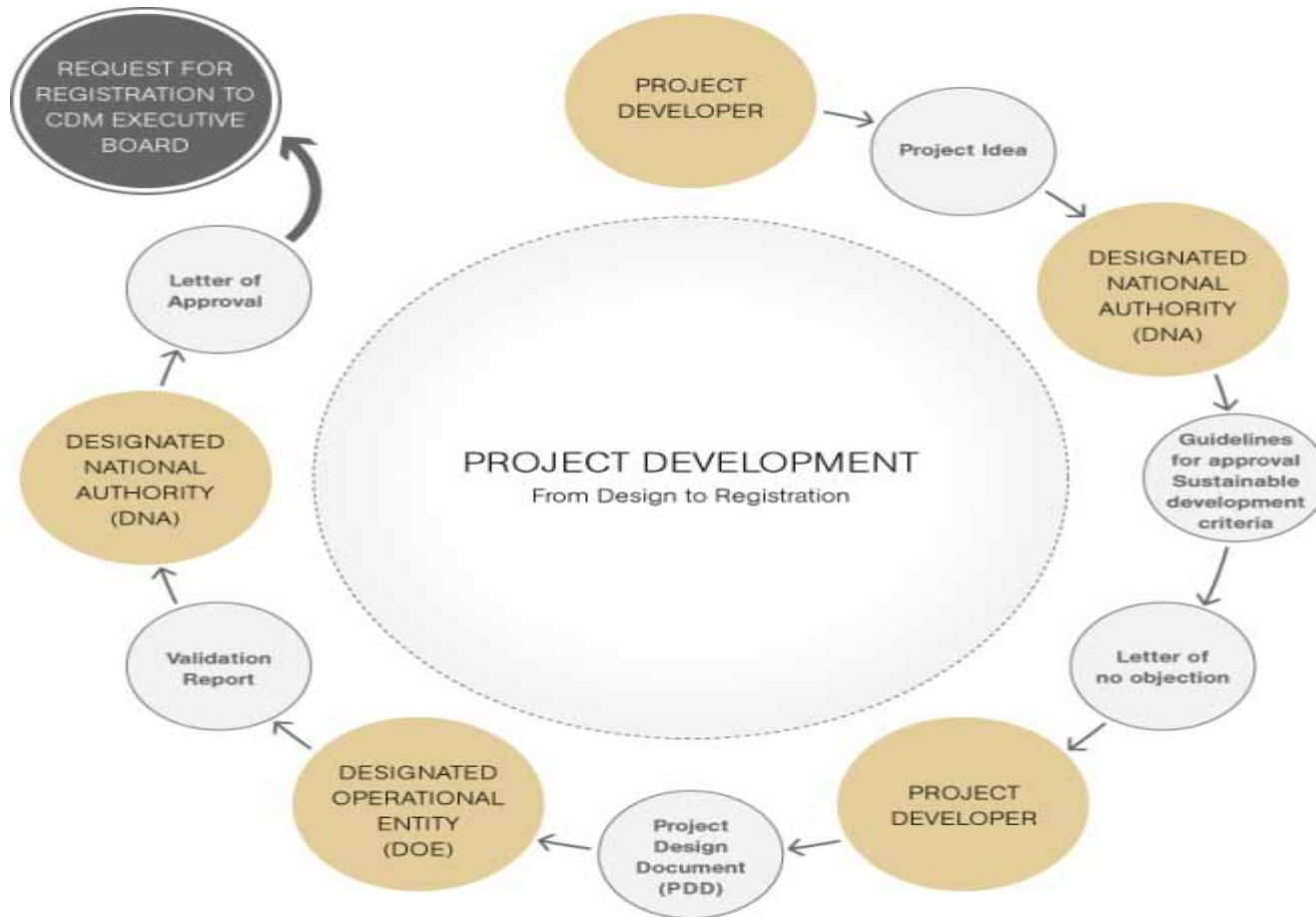
- Other project activities added later, according to proposed process for inclusion.



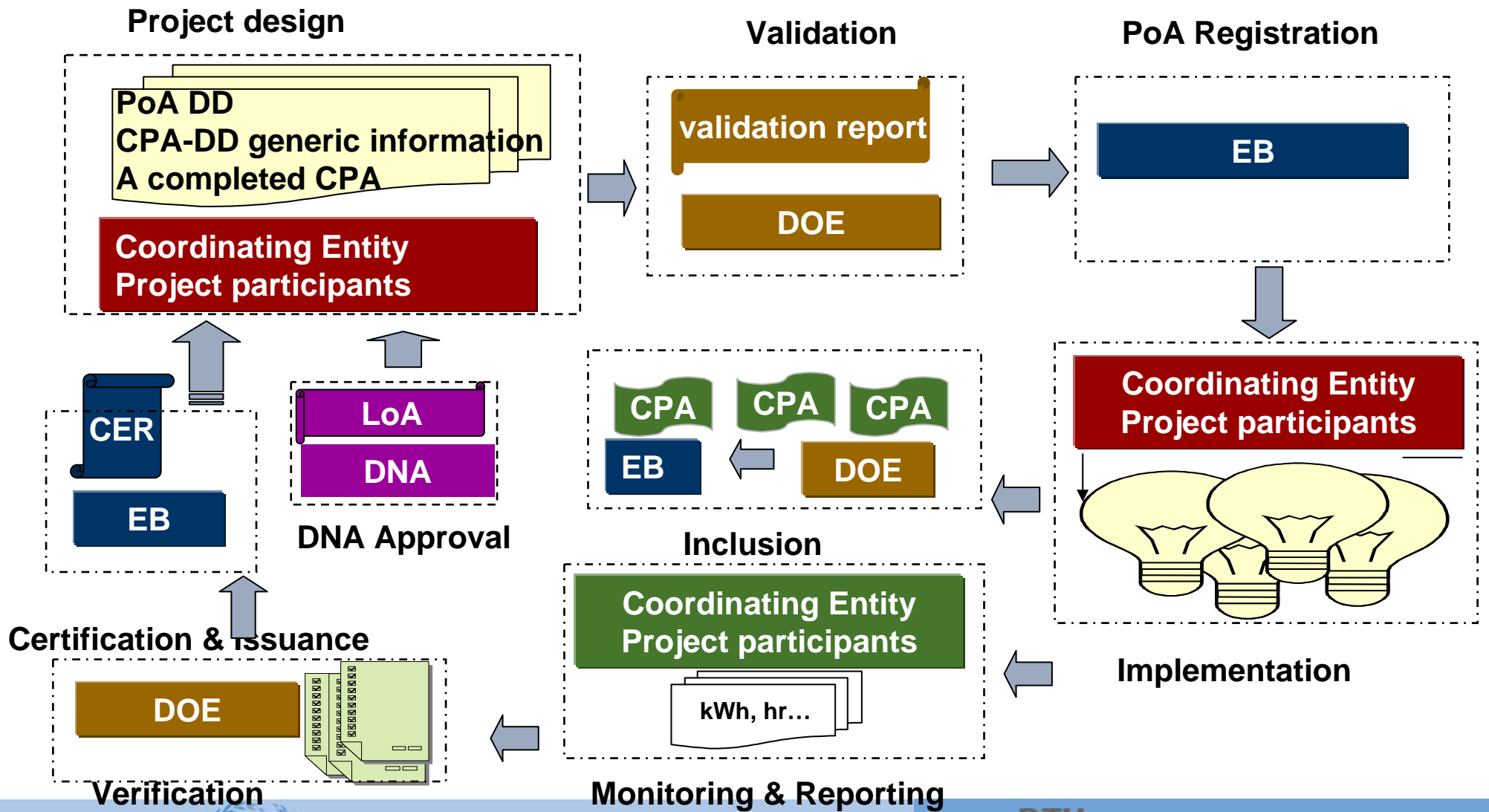
% comparison of regional distribution of pCDM and CDM



International Rules about P-CDM Implementation



P-CDM Project Cycle



Existing Int'l Rules about P-CDM (2)

- **One Methodology and one type of technology:** All CPAs of a PoA shall apply the same approved baseline and monitoring methodology, involving one type of technology or set of interrelated measures in the same type of facility/installation/land.
- **Additionality:** The PoA shall demonstrate that **net GHG emission reductions or removals for each CPA are real and measurable**, accurate, and are uniquely attributable to the PoA.
- **Requirements for CPA:** Each CPA shall be uniquely identified, defined and localized in an unambiguous manner including the exact start and end date of the crediting period and meet requirements set in PoA
- **Duration of the PoA, (1) max. 28 years** for regular projects and **max. 60 years** for A/R project activities, shall be fixed at the time of request for PoA registration. **Any CPA can be added to the PoA at any time during the duration of the PoA by the C/ME.**

Existing Int'l Rules about P-CDM (3)

➤ Methodology Change:

- ✓ If the **AM is put on hold or withdrawn**, **not** for the purpose of inclusion in a consolidation, no new CPAs shall be added to the PoA after some timelines
- ✓ If the **AM is subsequently revised or replaced** by inclusion in a consolidated methodology, the PoA shall be revised accordingly and changes validated by a DOE and approved by the EB. Each CPA included in the PoA thereafter has to use the new PoA.

➤ **Monitoring:** The emission reductions or removals of each *CPA* shall be monitored as per the registered monitoring plan. The verification method or approach shall ensure the accuracy of emission reductions.

Procedures for P-CDM implementation

- **EB 32 Report Annex 39 ‘Procedures for Registration of a PoA as a Single CDM Project Activities and Issuance of CER for a PoA (Ver. 1)**
- **Preparation of a PoA Design Document (CDM-POA-DD)** A C/ME shall develop a POA-DD to set a framework for the implementation of the PoA and unambiguously defining a CPA under the PoA.
- The C/ME shall obtain LoA for the PoA from each Host Party and Annex I Party involved in the PoA. LoAs shall be issued in accordance with the guidance provided by the EB.
- The C/ME shall prepare the PoA specific CPA-DD using the provisions of the proposed PoA.

Contents to be covered in the POA-DD

- a) Identify the C/ME, Host Party(ies) and PoA participants
- b) Definition of the boundary for the PoA in terms of a geographical area
- c) Description of the policy/measure or stated goal that the PoA seeks to promote
- d) Confirmation that the proposed PoA is a voluntary action by the C/ME.
- e) Demonstration that in the absence of the CDM
 - (i) the proposed voluntary measure would not be implemented, or
 - (ii) the mandatory policy/regulation: 'systematically not enforced' + non-compliance widespread in the country/region, or

Contents to be covered in the PoA-DD

- f) Description of a typical CPA that will be included in the PoA
- g) Definition of eligibility criteria for CPA
- h) PoA starting date and duration: Max 28 yr (60 yr for A/R)
- i) Description of the operational and management arrangements
- j) Description of a monitoring plan for a CPA
- k) Description of sampling method/procedure to be used by DOEs for verification
- l) Environmental analysis of the PoA
- m) Stakeholder consultation
- n) If public funding is used, confirm that no ODA is not being diverted to the implementation of the PoA

Contents of the template CPA-DD

- a) Geographic reference or other means of identification, Name/contact details of the entity/individual responsible for CPA
- b) the Host Party
- c) Starting date, type and duration of the crediting period of the CPA
- d) Information showing each CPA meets requirements about: (i). Eligibility criteria; ii. The demonstration of additionality; iii. Calculations of baseline emissions and estimated emission reductions
- e) Environmental analysis
- f) Local stakeholder consultation
- g) Confirmation that the CPA is neither registered as a CDM project activity nor included in another registered PoA

Meth Application under P-CDM

- Some existing CDM projects apply 2 or even 3 methodologies, this is especially common among SSC projects
- Under P-CDM, CPA, if not exceeding the size limit for SSC, could apply SSC methodologies, but each P-CDM project could use only one methodology and one type of technology or set of interrelated measures in the same type of facility/installation/land

P-CDM project implementation and Examples

Experience in Latin America

1 existing P-CDM project in Brazil

- Voluntary program by Sadia, a Brazilian market leaders in frozen and chilled meat products and margarines, which has close cooperation with many farmers for swine production
- Install identical digesters following same standards among contracted farmers, CH₄ collected will be flared
- Methodology: AMS.III.D
- Resources generated by the 3S Program will return to the farmers, start in 2003 with 3 farms

Case study about fuel switch for EE among industrial boilers in Peru

- Switch industrial boiler fuelled by oil or coal to NG, no extension of use boiler and process equipment life
- Activities: EE improvement through extending NG pipeline, fuel switching from coal or oil at boilers, furnaces, and roasters to NG
- Meth: ACM9 Consolidated baseline methodology for fuel switching from coal or petroleum fuel to natural gas
- No sampling, comprehensive monitoring

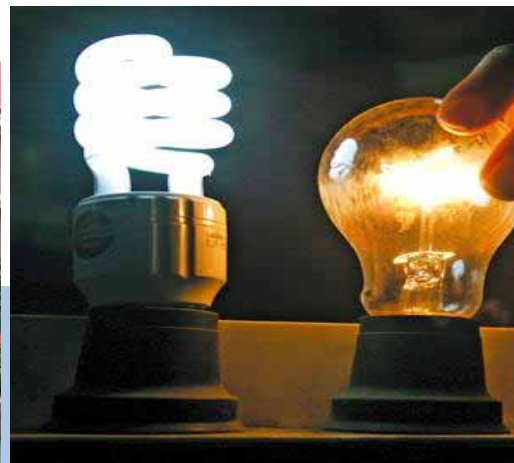
Experiences in China

General Reactions

- Strong interest among market players
- Large potential: ambitious government plans for energy efficiency improvement (20% for the 2006-2010 period) and renewable energy development (RE share in commercial primary energy supply grow from 7% to 15% during 2004-2020)
- Still face many detailed option problems and difficulty in getting LoA

Examples

- Solar Water Heater Promotion
- Small Biogas among Rural Households
- CFL Free Distribution



Progress so far and The way ahead...

P-CDM activities in the pipeline

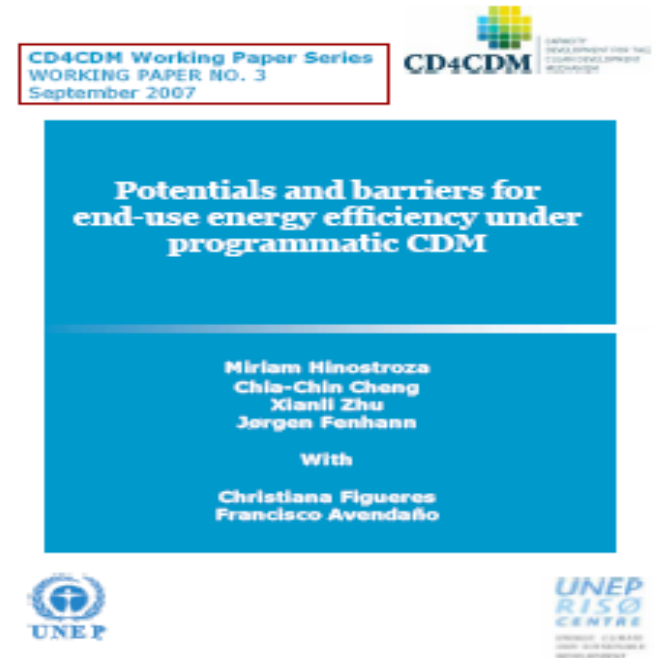
- Late 2007, a Bangladesh solar system for households project appeared, first only with 2 documents, then with 3 documents, but finally withdrawn
- Currently, only one P-CDM project in validation, Methane capture and combustion from Animal Waste Management System (AWMS) of the 3S Program farms of the Sadia Institute. Brazil
- In both cases, DNV is the DOE

Future prospects

- How to optionalise the rules: sampling, monitoring, baseline, leakages...
- How to balance to engage DOE: existing P-CDM rules involve high risks for the DOE
- Post-2012 market demand

Related Activities in UNEP Risoe Centre

- Working Paper published in Sept 2007, co-authored by URC employees and external consults
- China Programmatic CDM project (Mar 2007- April 2008), Denmark funded technical assistance project
- Mainly find out how to unlock the huge potential for P-CDM in China and offer policy inputs



Thank You!

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