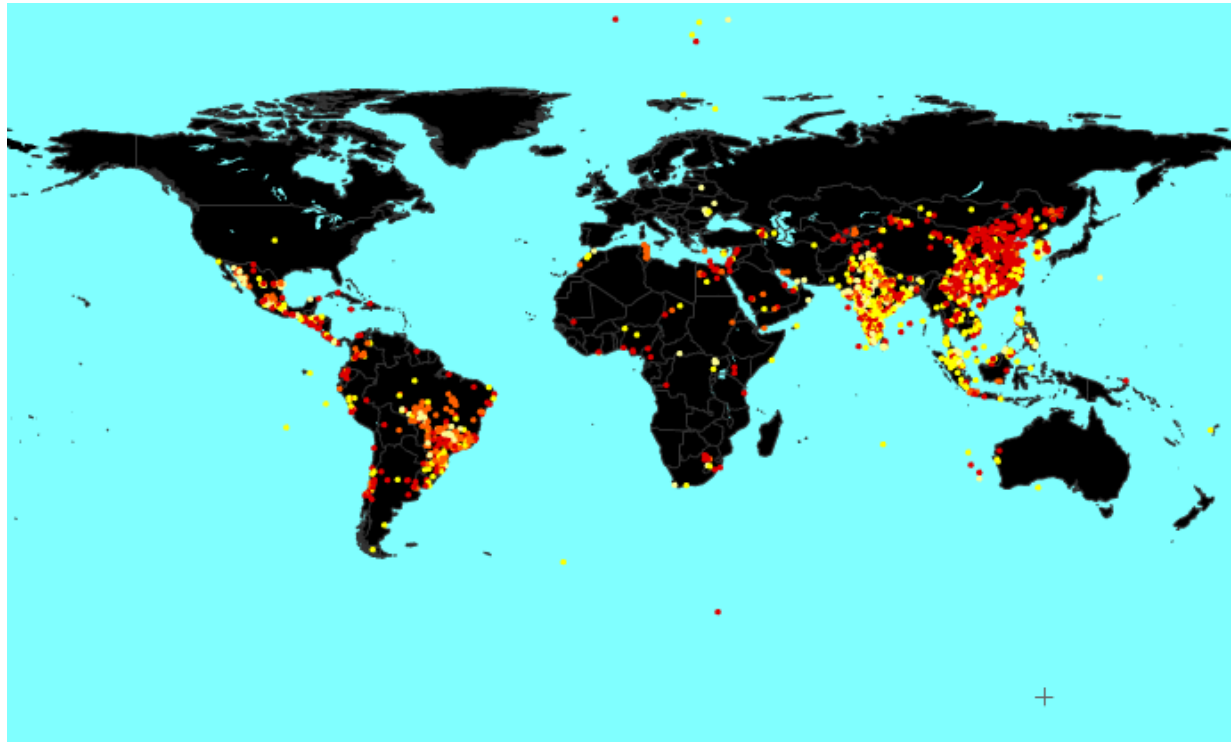


# Programmatic CDM

Xianli Zhu, UNEP Risoe Centre  
24-28, Jan 2011, Suva, Fiji



# Regular CDM implementation – unbalanced distribution of projects worldwide



The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

## Legend

- = CDM project, Large scale, one location
- = CDM project, Large scale, several locations
- = CDM project, Small scale, one location
- = CDM project, Small scale, several locations

Total submitted: 6697

Of which:

44% at validation

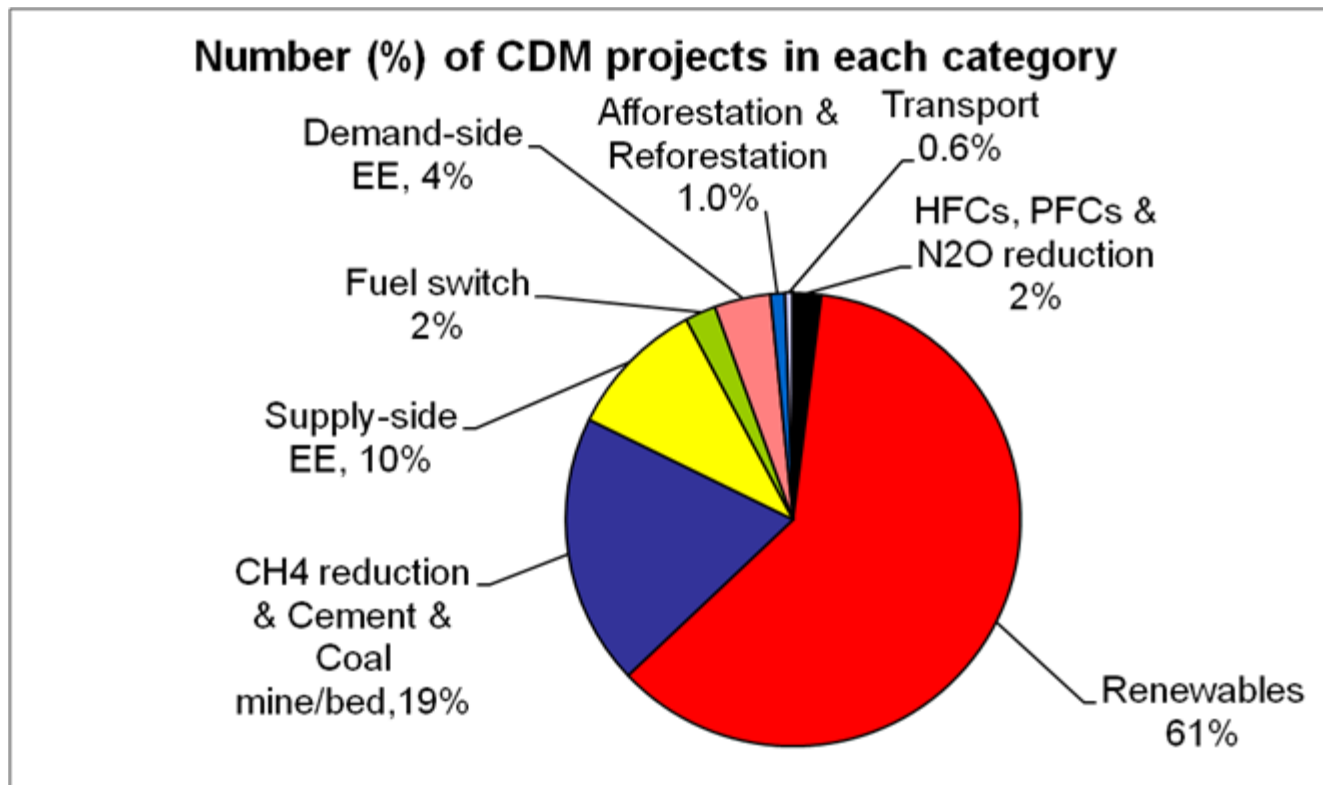
36% registered

3% in process of registration

17% rejected or withdrawn

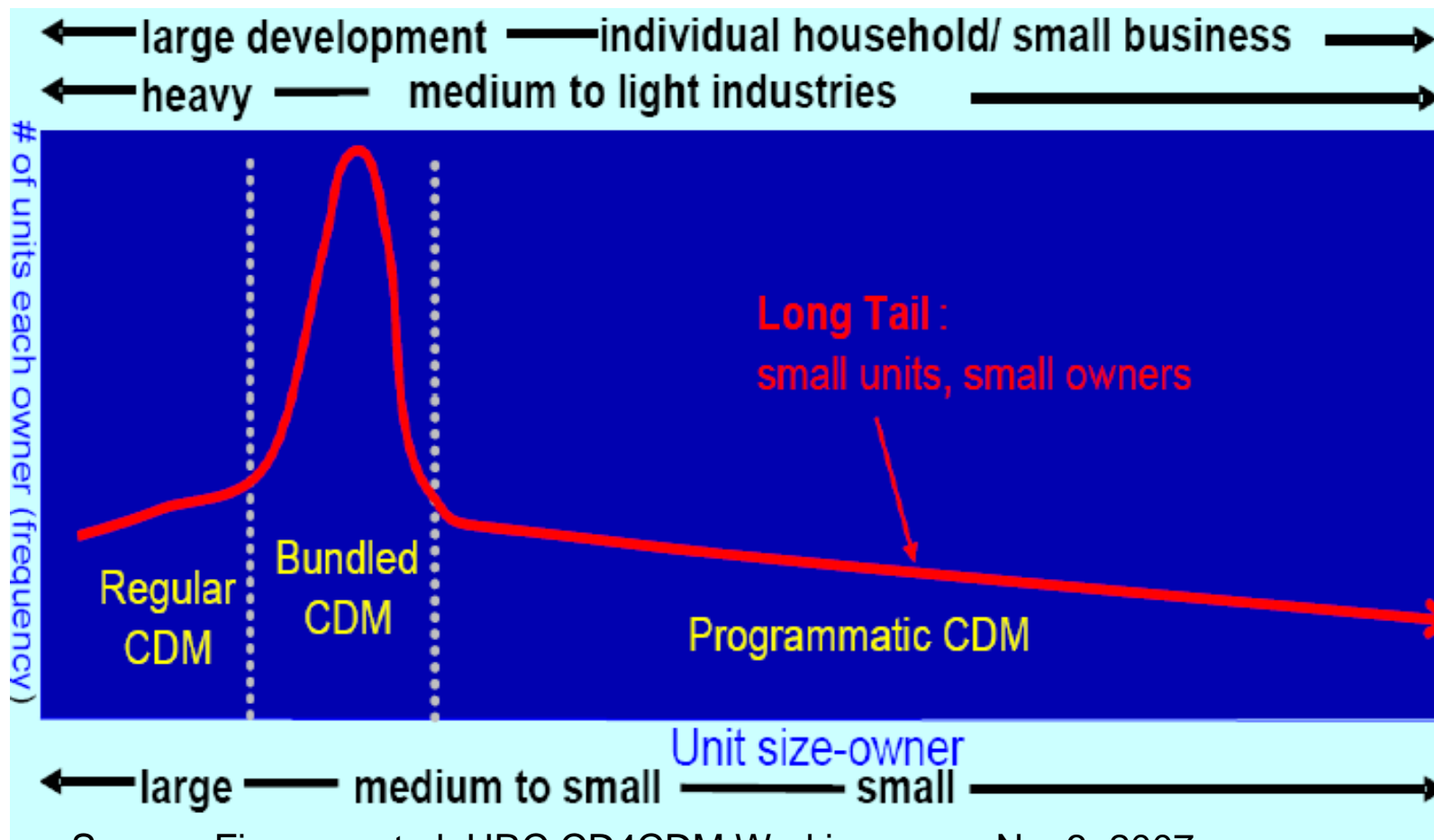
Source: UNEP Risoe Centre CDM Pipeline, 1-Jan-2011

# Regular CDM implementation – low proportion of energy efficiency and transport projects



Source: UNEP Risoe Centre CDM Pipeline, 01-Jan-2011

# Large potential for dispersed, small emission reduction activities unable to benefit



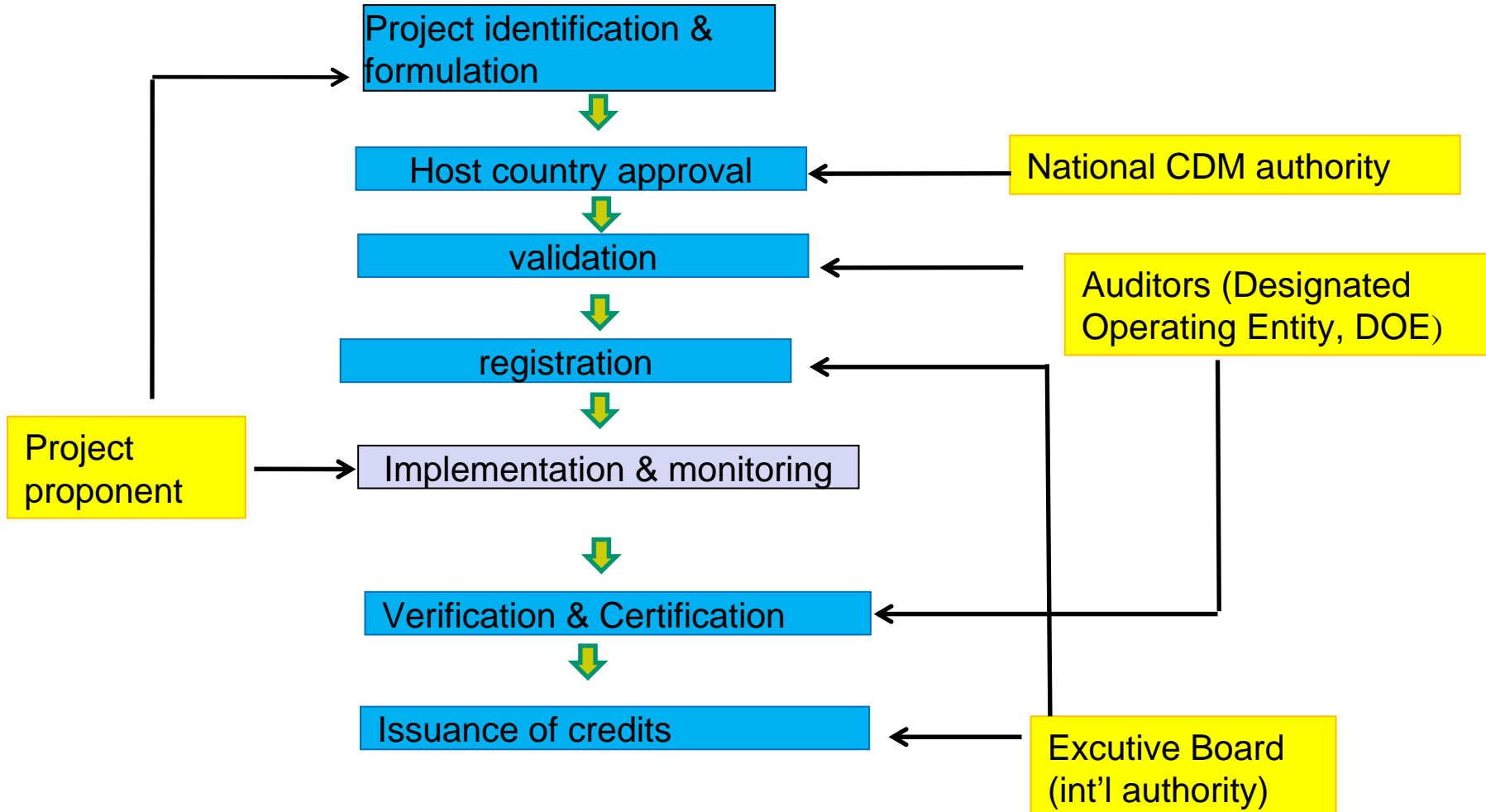
Source: Figuessa et al, URC CD4CDM Working paper No. 3, 2007

# Barriers to regular CDM project implementation

- High upfront CDM project development costs (100,000 – 200,000 USD)
- Long process: on average it takes 13 months from project submission to registration, and another 15 months from registration to the first issuance
- Ex poste revenue based on actual emission reduction
- Strict schedule – project size, starting date, technology, m Once size decided, can not change
  - ✓ Difficult to coordinate activities by different owners
  - ✓ Project cannot be added/expanded after project registration: size, starting date, technology, monitoring etc. fixed in registered Project Design Document



# CDM project cycle



# What is programmatic CDM?

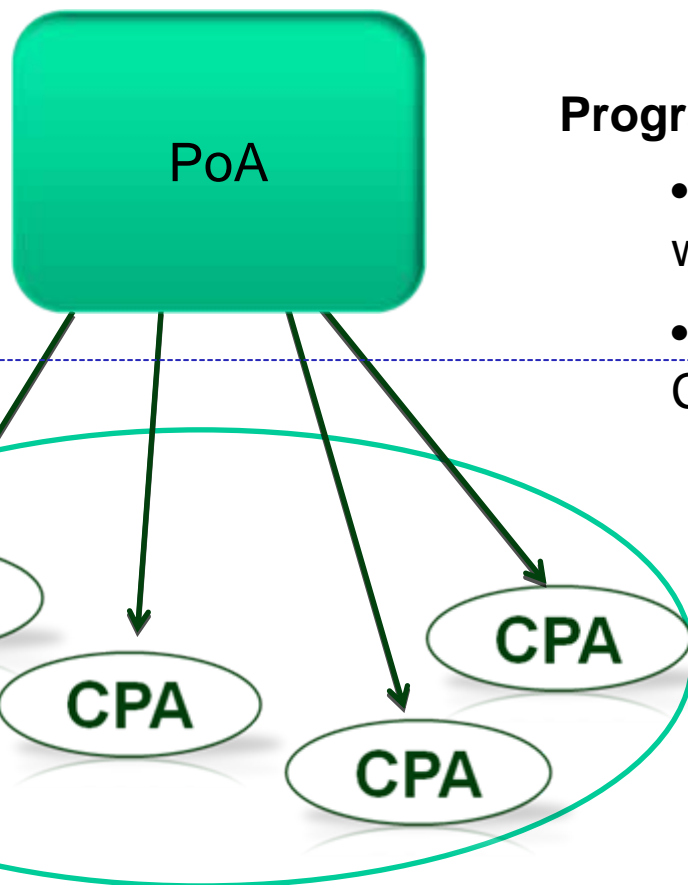
- A way introduced to overcome the above barriers to CDM implementation
- Definition:
  - ✓ A programme of activities (PoA) is a voluntary coordinated action by a private or public entity which coordinates and implements any policy/measure or stated goal (i.e. incentive schemes and voluntary programmes), which leads to anthropogenic GHG emission reductions or removals by sinks that are additional to any that would occur in the absence of the PoA, via an unlimited number of CDM programme activities
- Difference from regular CDM:
  - ✓ A programme of activities rather than a project activity can be registered
  - ✓ Many similar CDM project activities coordinated by a private or public entity
  - ✓ Flexible schedule: The activities can take place in many different locations (including multi-country) over a period of up to 28 years





# What is a PoA and What is a CPA?

Programmatic CDM occurs at two levels:



## Programme Level → Programmatic CDM (PoA) :

- One Coordinating/Managing Entity (CME) who coordinates/manages the PoA.
- PoA provides a Framework to implement CPAs

## Activity Level → Individual CDM Programme Activity (CPA) :

- Implementing Partners carry on individual CPAs
- Achieves GHG reductions or removals by sinks using CDM methodologies

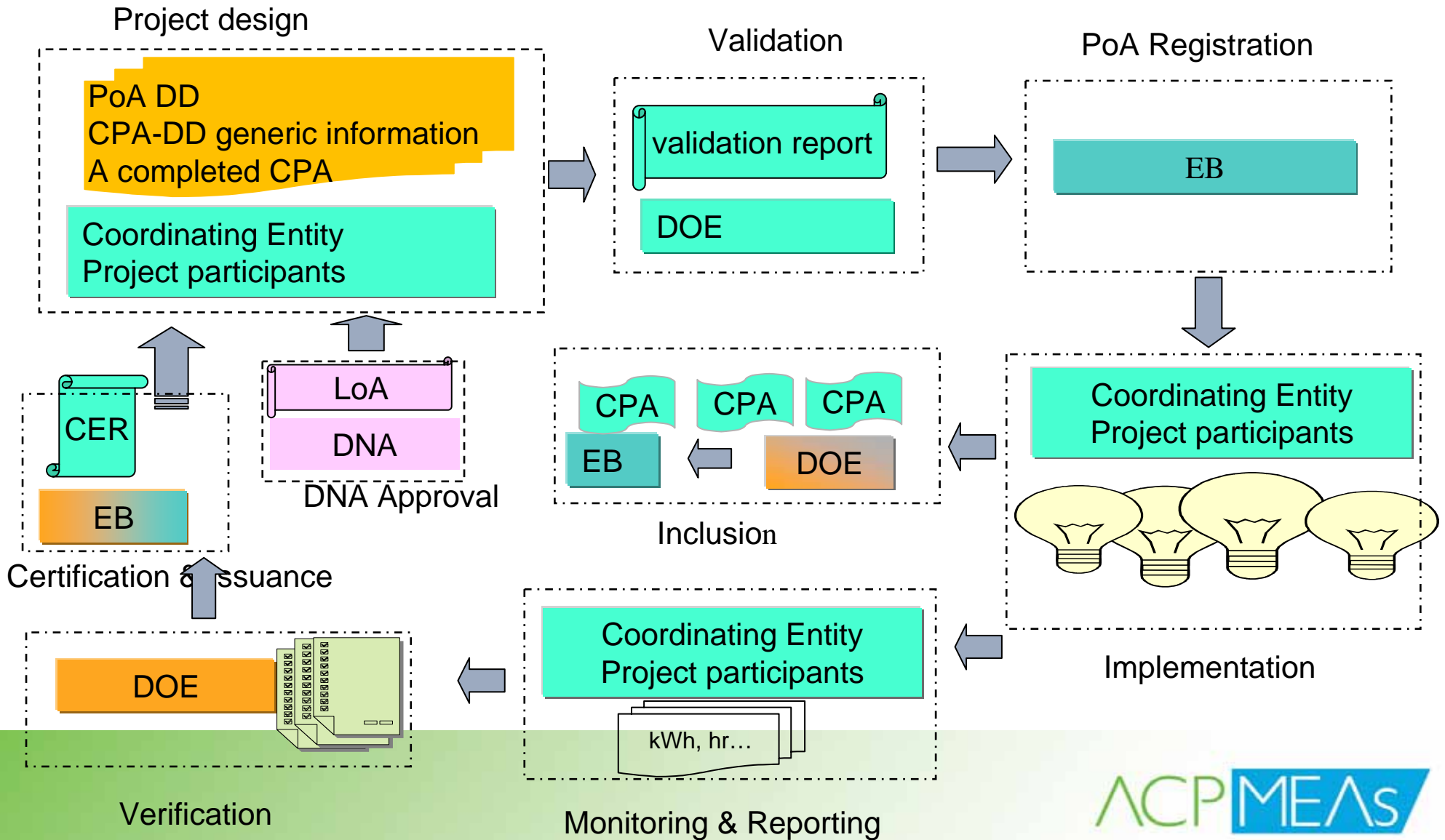


# Programme vs activities – an example

Program		Activities	
Content	example	Content	Example
Coordinating entity	Rural electrification office		
Participants	Households with no access to electricity	Identification	Programe Activity 2
Description	Use subsidies and micro-finance to promote solar-PVs (100 W, 200 W)	Description	8000 50-W + 7000 100-W solar PVs
Boundary	Whole Nepal	Geograpic sope	A region in Nepal
Starting date	1 Oct 2010	Starting date	1 May 2011
Duration	28 years (2010-2038)	Crediting period	10 years May 2011-2021
Eligiability	Only low-income households get support from the program	Eligibility	Contracts with households and other evidence



# PCDM Project Cycle



# Why is it important?

- Particularly important for end use energy efficiency or renewable energy generation by end users
- Important for LDCs and small island countries which are most vulnerable to climate change but lack potential for large GHG mitigation projects
- Can help roll out of mitigation reduction activities and lead to region or sector wide change
- Can lower transaction costs

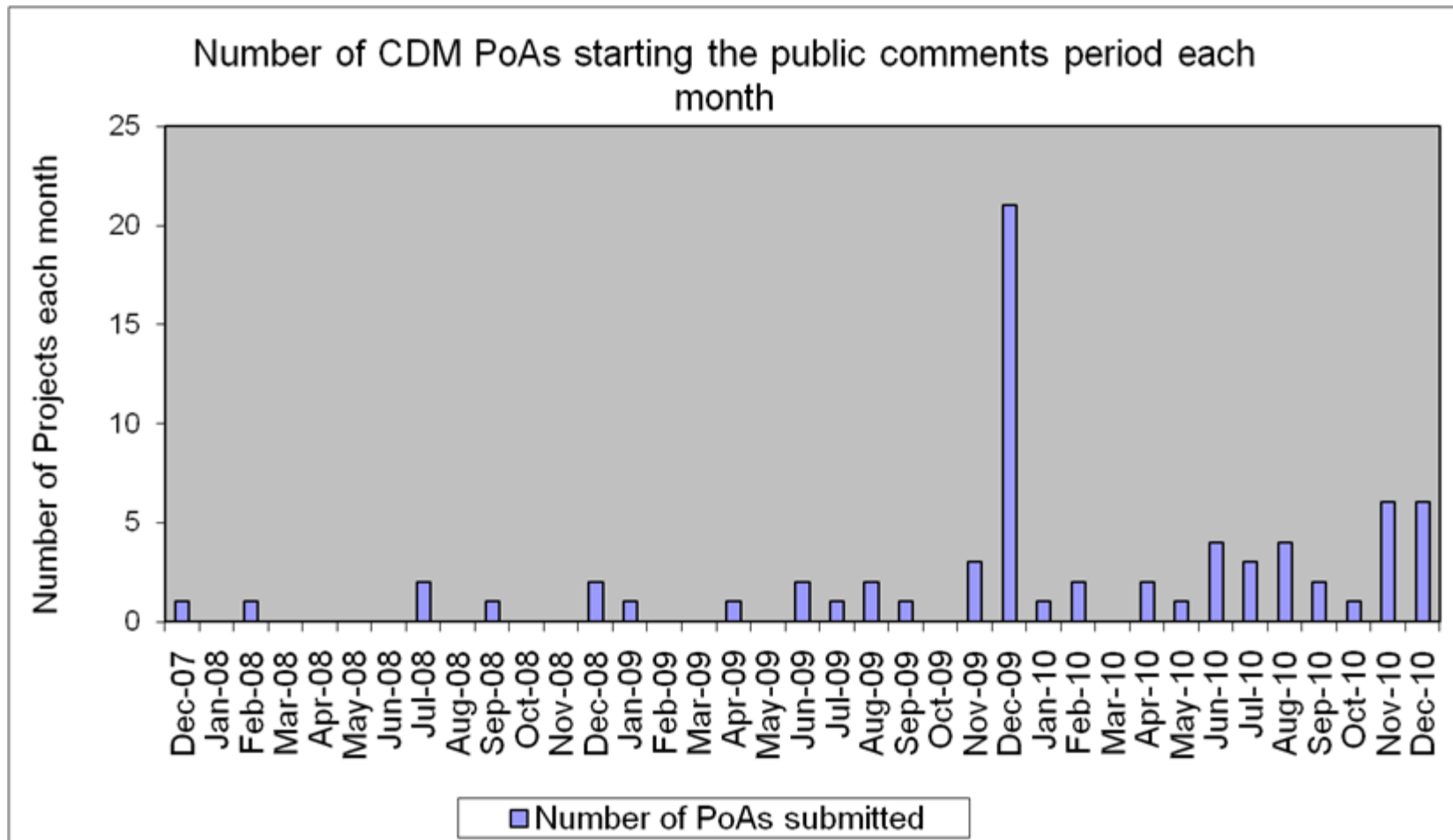


# A brief history

- Concept introduced at COP11/MOP1 in 2005
- Finally approved at EB 32 in June 2007
- Guidance, procedures, and PDD templates issued in July 2007
- Methodologies revised in 2007 to accommodate pCDM
- Procedures further streamlined and clarified in May 2009 and July 2010
- As of end of Dec 2010, 71 P-CDM projects submitted, of which 5 registered, 66 are at validation stage



# Speed of P-CDM activity submission



Source:  
UNEP  
Risoe  
Centre  
CDM  
Pipeline,  
01-01-2011

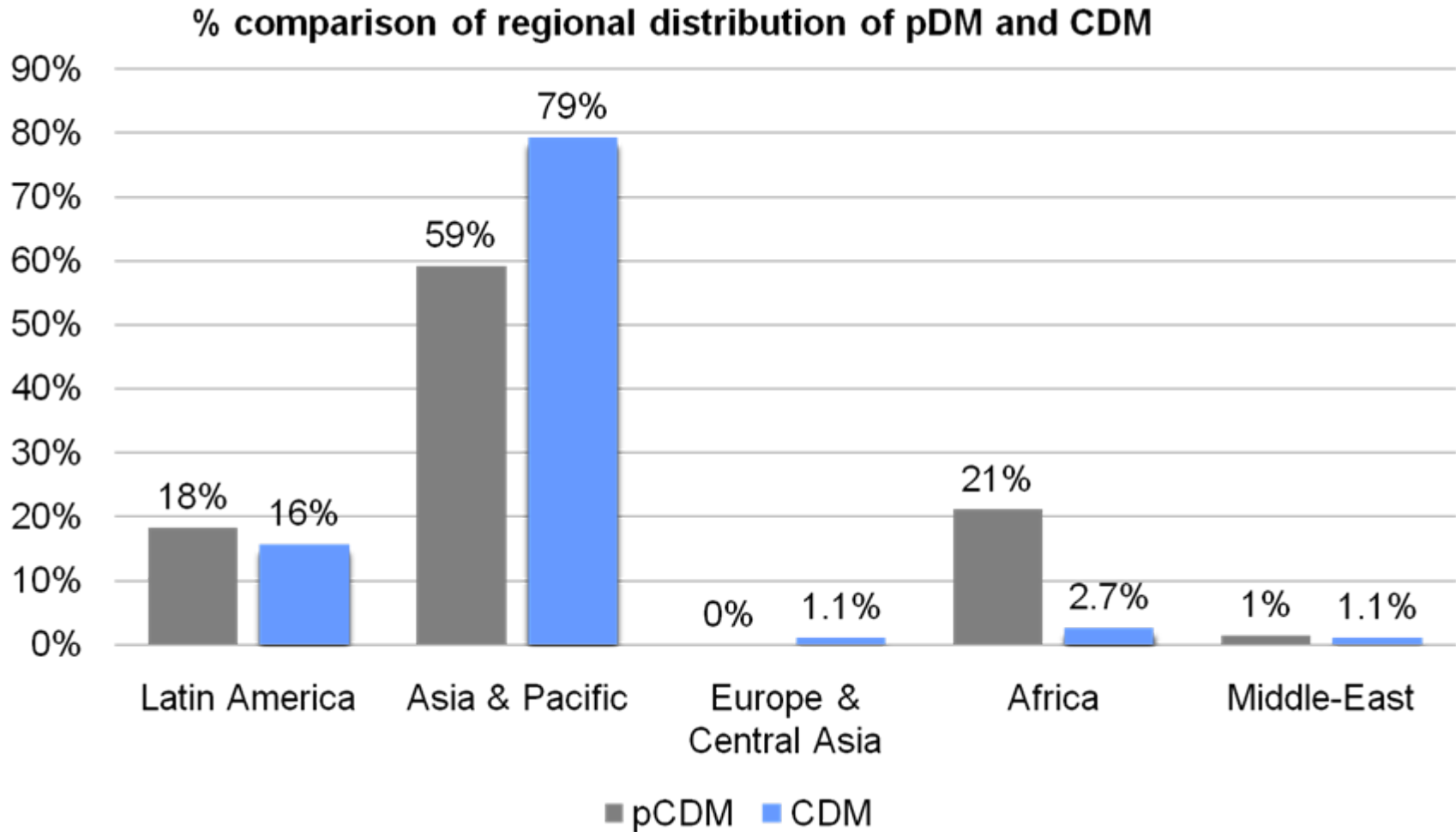
Note: surge in PoAs submitted in Dec 2009 is because it is the deadline for allowing activities start before registration of programs



# Types and technologies of existing PoAs

Type	Sub-types	Number of PoAs		
		At validation	Registered	Total
Renewable energy	Irrigation	1		<b>1</b>
	Biomass	1		<b>1</b>
	Hydro	<b>4</b>	1	<b>5</b>
	Solar	8		8
Energy efficiency	Electricity distribution	3		<b>3</b>
	Own generation	1		1
	Households-Stoves, lighting, solar+insulation+lighting	17	2	<b>19</b>
	Industry	3		<b>3</b>
	Service (HVAC & lighting)	4		4
	Transport	1		<b>1</b>
Fuel switch	Oil to LPG	2		<b>2</b>
Landfill gas	Power, Piped landfill gas	3		<b>3</b>
	Composting	1	1	<b>2</b>
CH4 avoidance	Manure and waste	16	1	<b>17</b>
Forestry	Reforestation	<b>1</b>		<b>1</b>
Total		66	5	<b>71</b>

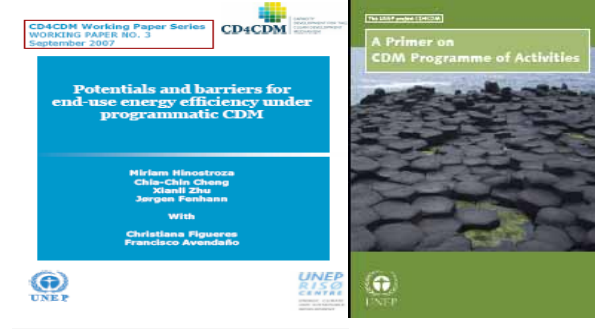
# Does P-CDM lead to more balanced regional contribution?





# PCDM activities at URC

- **Two publications:**
  - ✓ 2007: Working paper, Potentials and barriers for end-use energy efficiency under pCDM
  - ✓ 2009: A Primer on CDM Programme of Activities
- **Training and capacity building under CDM capacity building projects**
- **Projects**
  - ✓ 2007-2008: Danida-funded China pCDM project, disseminating of rules, and case studies for implementation in 3 sectors (efficient lighting among households, biogas digestors, and solar water heaters)
  - ✓ 2009: technical support to Sri Lanka Ministry of Environment on pCDM implementation for renewable energy and municipal solid waste Upcoming: URC and UNEP are working on a proposal about supporting pCDM implementation in Africa



## Knowledge:

- ✓ Working with World Bank Institute and KfW on an e-learning course on pCDM



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