

Introduction to the UNFCCC, CDM background and the work of the RCCs

CDM Training Workshop for DNAs and Stakeholders in Pakistan
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UNFCCC

PoA

Carbon
Pricing

Clean
Development
Mechanism
(CDM)

Paris Agreement

CERs – Certified
Emission
Reductions

Standardized
Baseline

National Determined Contributions
(NDCs)

Kyoto Protocol



UNFCCC

United Nations Framework Convention
on Climate Change



A Brief History of the Climate Change Process

- In 1979 the first World Climate Change Conference recognized climate change as a serious problem & called on all governments to address it.
- In Dec. 1990, the UN General Assembly approved the start of treaty negotiations on the UNFCCC & a deadline was set for the June 1992 Rio “Earth Summit”.



- In 1992, countries joined an international treaty, the **United Nations Framework Convention on Climate Change**, to cooperatively consider what they could do to limit average global temperature increases
- The convention entered into force on March 21st 1994

United Nations Framework Convention on Climate Change

- A global legal instrument (international agreement) on the control and management of **greenhouse gases (GHG)**.
- Participants: 197 parties
- Contains 2 annexes:
 - a) **Annex 1**: countries with obligations to take measures to mitigate the effects of climate change
 - b) **Annex 2**: countries with obligations to provide financing to developing countries for their obligations under UNFCCC
- Affiliated instruments: **Kyoto Protocol**.
- In February 1995, the Conference of the Parties (COP) became the Convention's ultimate authority
The Conference of Parties (COP) is the highest decision-making authority of the Convention.

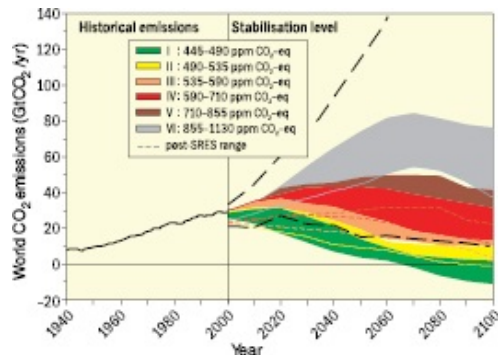


UNFCCC - Overall goal and objectives

- **What is the overall goal?**
 - “ to **protect the climate system** for the benefit of present and future generations of mankind. ”

- **What are the further objectives?**

- “ to **achieve stabilisation of greenhouse gas**



concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. ”



CDM Overview



OUTLINE

- The Kyoto Protocol
- Market-based mechanisms
- CDM support structure
- Project types, examples
- CDM project cycle
- Current statistics



Kyoto Protocol



In 1997, countries under UNFCCC agreed on Kyoto Protocol, to commit Parties to reduce greenhouse gas emissions

Participants:
192 parties

- Annex I: developed countries obliged to reduce GHG
- Non Annex I: developing countries not obliged to reduce GHG

- The Conference of the Parties Serving as the Meeting of Parties to the Kyoto Protocol (**CMP**) is the decision-making authority.
- The Kyoto Protocol entered into force on 16 February 2005. Its first commitment period started in 2008 and ended in 2012.
- In Doha, Qatar, on 8 December 2012, the **Doha Amendment** to the Kyoto Protocol was adopted. This launched a second commitment period, starting on 1 January 2013 until 2020.



The Kyoto Protocol - Background

- Developed countries are principally responsible for the current high levels of GHG emissions in the atmosphere as a result of more than 150 years of industrial activity
→ the Protocol places a heavier burden on developed nations under the **principle of "common but differentiated responsibilities."**
- The detailed rules for the implementation of the Protocol were adopted at COP 7 in Marrakesh, Morocco, in 2001, and are referred to as the **"Marrakesh Accords."**
- first commitment period (2008 – 2012), 37 industrialized countries and the EU committed to reduce GHG emissions of 5% against 1990 levels (on average).
- second commitment period (2013 to 2020): at least 18 percent below 1990 levels, composition of Parties is different from the first.



Monitoring emission targets

- Under the Protocol, countries' actual emissions have to be **monitored** and **precise records** have to be kept of the trades carried out.
- **Registry systems** track and record transactions by Parties under the mechanisms. The UN Climate Change Secretariat, based in Bonn, Germany, keeps an international transaction log to verify that transactions are consistent with the rules of the Protocol.
- **Reporting is done by Parties** by submitting annual emission inventories and national reports under the Protocol at regular intervals.



The Kyoto Protocol - Background

- Set legally **binding targets** for emissions of six major GHGs in industrialized countries
- With targets, emission reductions took on **economic value**
- Countries can meet reduction commitments through (3) **market-based mechanisms**



Market based mechanisms/ Kyoto mechanisms



- **International Emissions Trading:** exchanging emission allowances among Kyoto Protocol Parties
- **Clean Development Mechanism (CDM):** credits for emissions reduced/avoided through sustainable development projects in developing countries (non-Annex I countries)
- **Joint Implementation (JI):** credits for emissions avoided through projects in Annex I Countries

CDM PROJECT TYPES (6)

Each project type has different requirements, timelines and applicable methodologies

- Large Scale
- Small Scale (simplified procedures)
- Afforestation/Reforestation (A/R)
- Small scale A/R (simplified procedures)
- CCS
- Programmes of Activities (PoA)



EXAMPLES OF CDM PROJECTS

Solar water
heaters,
insulation,
energy efficient
lighting



CDM Project 79
Cape Town, South Africa



EXAMPLES OF CDM PROJECTS

Rapid and reliable bus transport



CDM Project 672
Bogotá, Colombia



Solar cookers



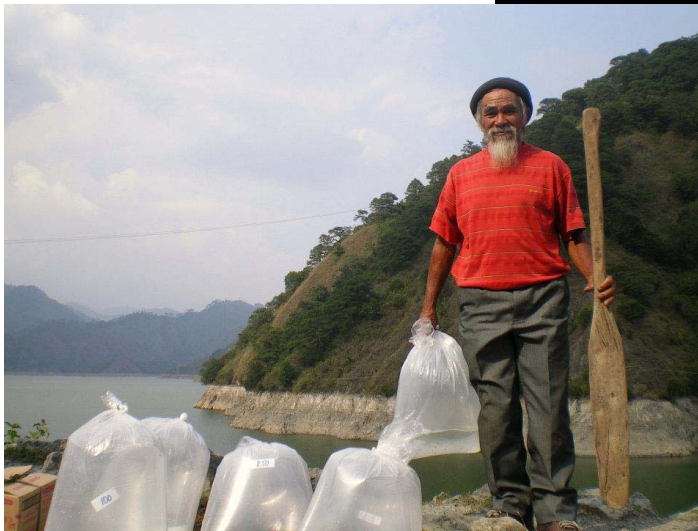
CDM Project 2307
China



Wind, Hydro, Solar



Wind Power:
Mexico



Hydro Power: Philippines



Solar Power: Peru

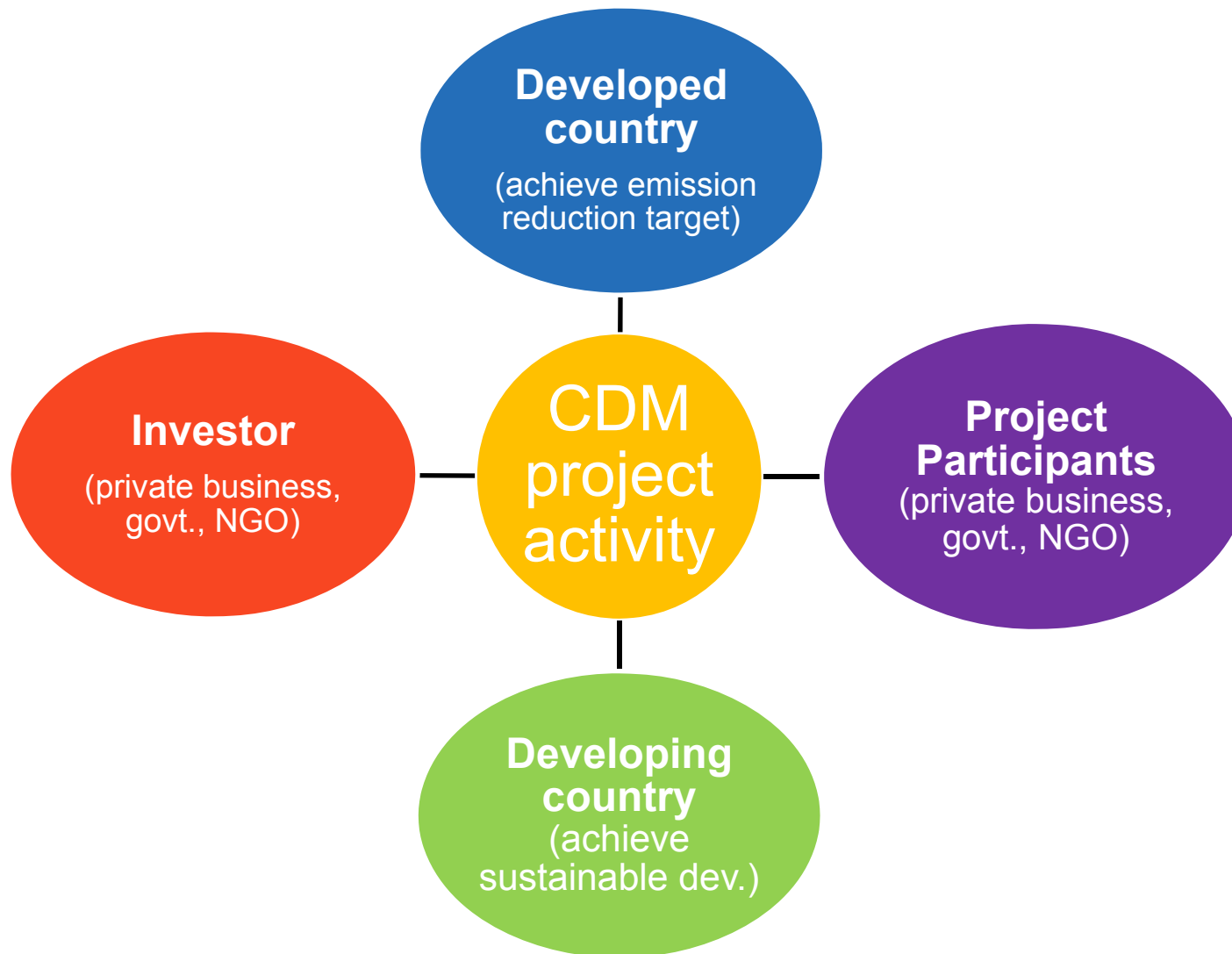
What is CDM

- The CDM was established as a “flexible mechanism” by the Kyoto Protocol, to help ANNEX I Parties to meet their **emission reduction** commitments, while bringing **sustainable development** benefits to the CDM host countries.
- The first global, environmental investment and credit scheme of its kind, providing a standardized emissions offset instrument, **Certified Emission reductions (CERs)**.



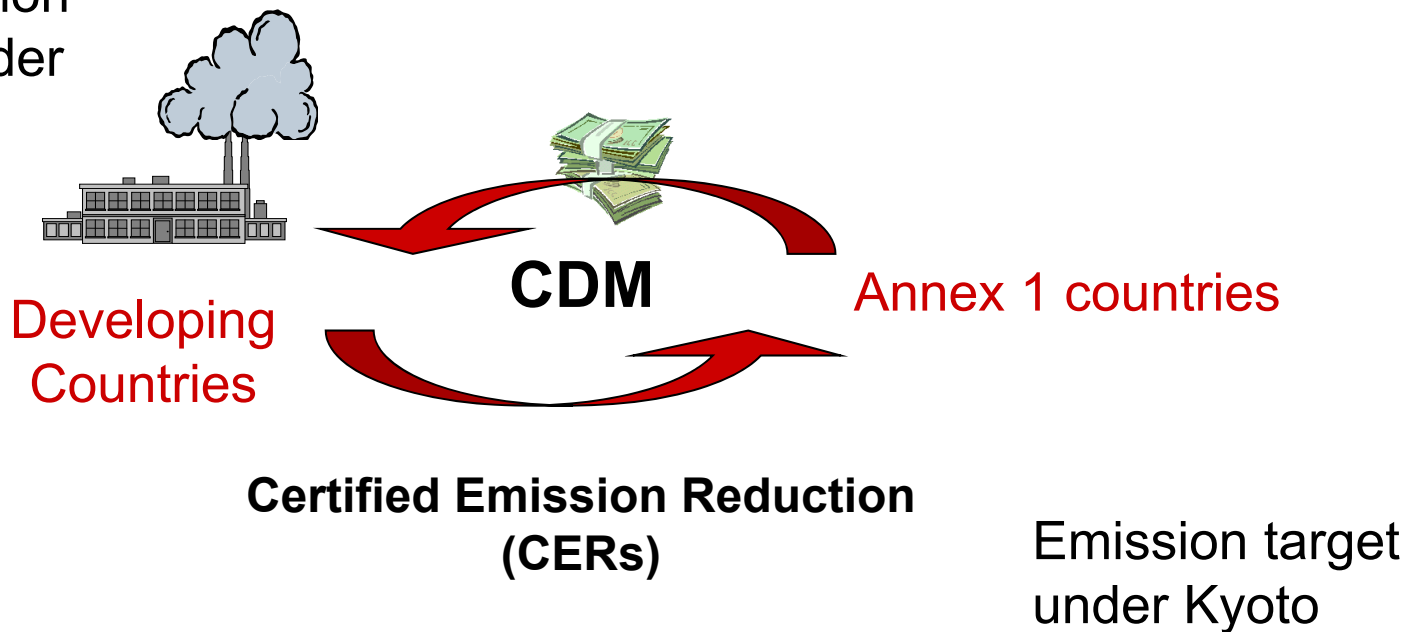
- ✓ Additional (would not happen without CDM incentive)
- ✓ Environmental integrity (reductions are real)

CDM: HOW IT WORKS



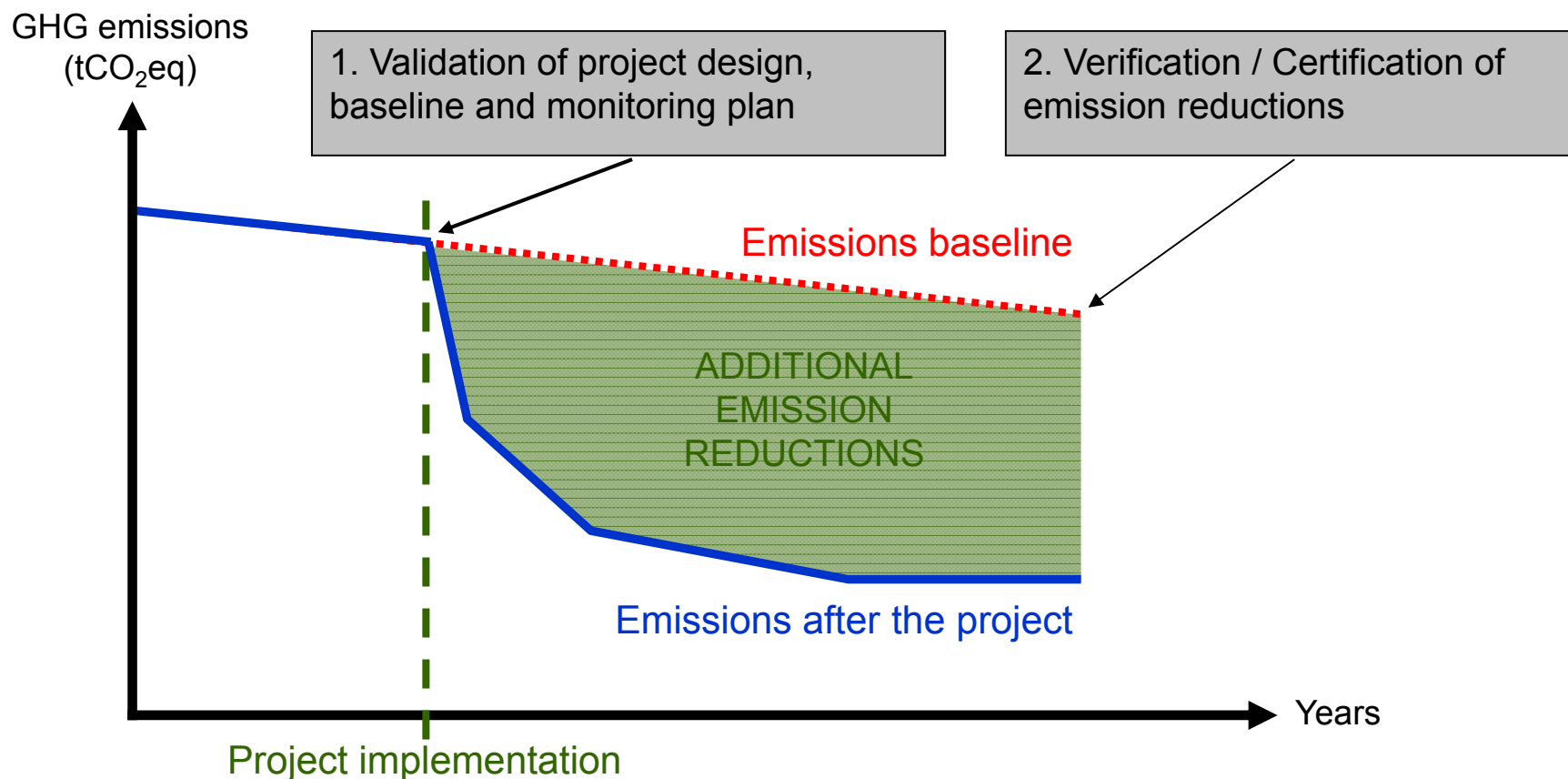
How CDM market works

No emission
target under
Kyoto

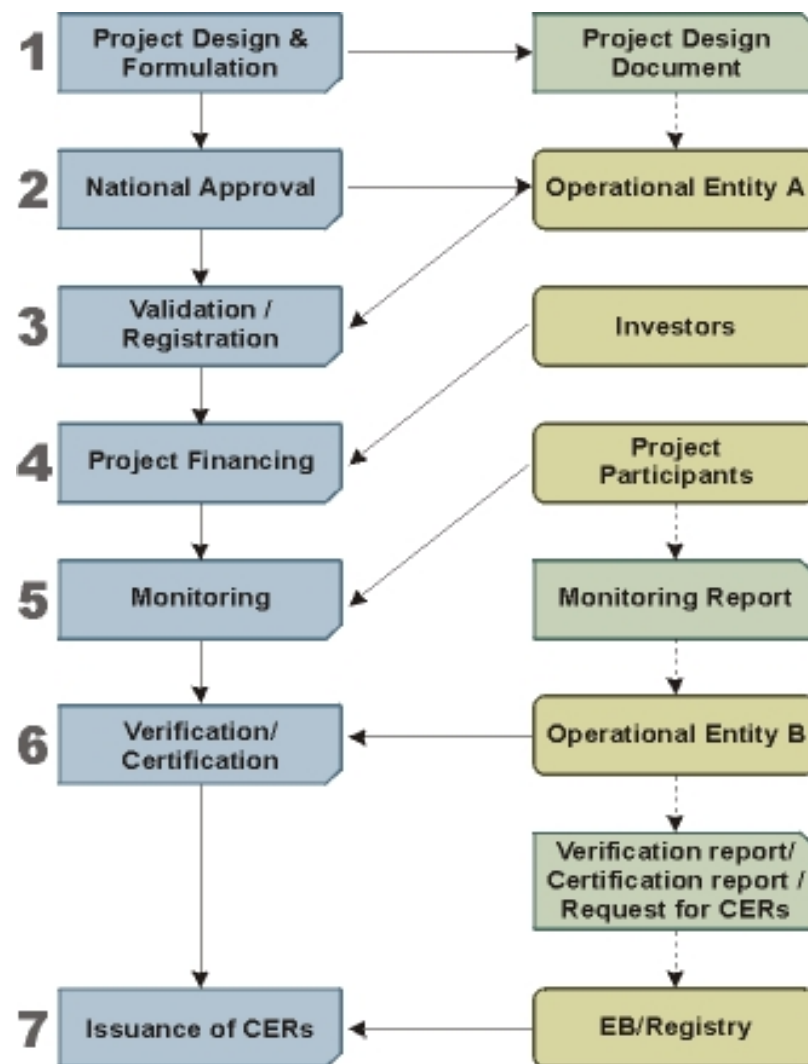


Concept of additionality and baseline

“A project is eligible for CDM if greenhouse gas emissions are reduced below those that would have occurred in the absence of the CDM project.”



CDM project cycle



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Achievements of the CDM

- During its 12+ year history, CDM has been able to:
 - ✓ Develop 200+ methodologies in 15 different sectors
 - ✓ Establish 174 Designated National Authorities
 - ✓ Accredite 40+ validators/verifiers (Designated Operational Entities)
 - ✓ Involve 4,500+ institutions in CDM projects
 - ✓ Establish five Regional Collaboration Centres (Africa, Latin America, the Caribbean and Asia)
 - ✓ Develop CDM development experts worldwide



- ✓ Over 7,776 projects + 310 PoAs registered
- ✓ 1.85 billion CERs issued
- ✓ Approximately US\$215 billion investment
- ✓ US196 million contribution Adaptation Fund



Achievements of the CDM

- But the CDM has even gone beyond that. It has:
 - Identified and initially addressed the **low hanging fruits** for mitigation, indicating a **clear way to get started and to continue** developing mitigation
 - **Developed capacity** to identify and develop those mitigation opportunities worldwide, and in the developing world in particular
 - **Placed climate change mitigation in the agenda** of developing countries, by requiring the establishment of DNAs with LoA procedures, etc.



Achievements of the CDM

- It has also:
 - Built capacity of developing country authorities, some of which are now pursuing their own mechanisms based on experienced gained with CDM
 - Developed the interest of the private sector, mobilizing a very significant investment (US\$150 billion at least, with potential for more)
 - Demonstrated that global approaches to mitigation CAN work
 - Contributed to adaptation through the Adaptation Fund

CDM has delivered offsets, but also capacity, know-how, finance, adaptation funding and sustainable development co-benefits



Adaptation Fund



ADAPTATION FUND

- The CDM is the main source of income for the UNFCCC Adaptation Fund
- The Adaptation Fund was established to finance adaptation projects and programmes in developing country Parties to the Kyoto Protocol that are particularly vulnerable to the adverse effects of climate change.
- The Adaptation Fund is financed by a 2% levy on CERs issued by the CDM.



CDM as climate finance

- Largest, most widely recognized baseline and crediting mechanism in the world leveraging private investment of US\$215 billion;
- CDM investment in sectors such as renewable energy projects leverages investment 18 times the price of the CERs purchased.
- In terms of financing, basically, two types of projects:
 1. With revenue (except CER) e.g. wind power
 - ❖ CDM increases the IRR beyond the threshold. Partial finance comes from CDM, but CDM is the key for operation of the project.
 2. Without revenue e.g. methane destruction
 - ❖ NPV of project becomes positive due to CDM contribution. CDM brings mitigation finance.
- Bottom line, the CDM project has to make business sense to project developer.
- CDM as MRV tool for climate finance: e.g. Green bond.



The role of the RCCs to increase the regional distribution of CDM



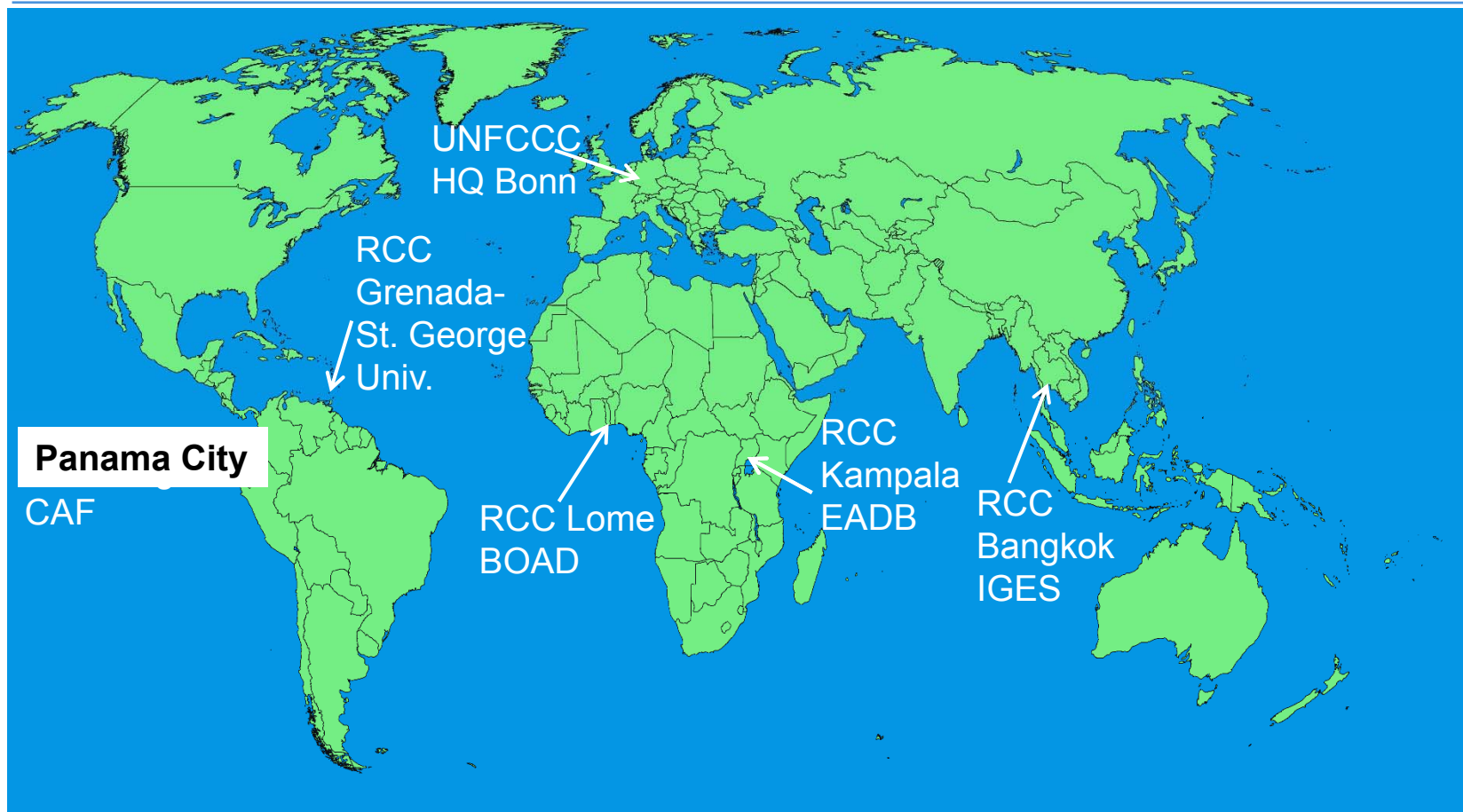
UNFCCC Regional Collaboration Centres (RCCs)

The RCCs are designed to help under-represented regions increase their attractiveness and potential for CDM, by building their capacity and reducing the risk for investors.

These centres are intended to support the identification of CDM projects, provide assistance for the design of such projects, address issues identified by validators, and offer opportunities to reduce transaction costs.



UNFCCC Regional Collaboration Centres (RCCs)



<http://cdm.unfccc.int/stakeholder/rcc/index.html>



- Set up to spread the benefits of the CDM, to **help under-represented regions** increase their attractiveness and potential for CDM, by **building their capacity** and reducing the risk for investors.
- **Support** the identification of CDM projects, provide assistance for the design of such projects, address issues identified by validators, and offer opportunities to reduce transaction costs.
- **Broader role since Paris** - supporting development and implementation of countries' NDCs to climate action under that agreement, with focus on markets and mechanisms.



RCC Bangkok—Our Team

- A collaboration between the UNFCCC Secretariat and Institute for Global Environmental Strategies (IGES)
- Hosted by IGES Regional Office in Bangkok, Thailand
- The fifth RCC, launched in September, 2015



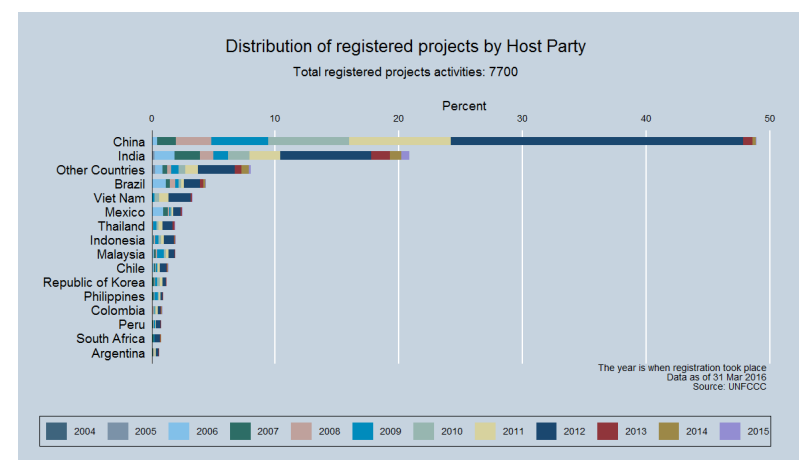
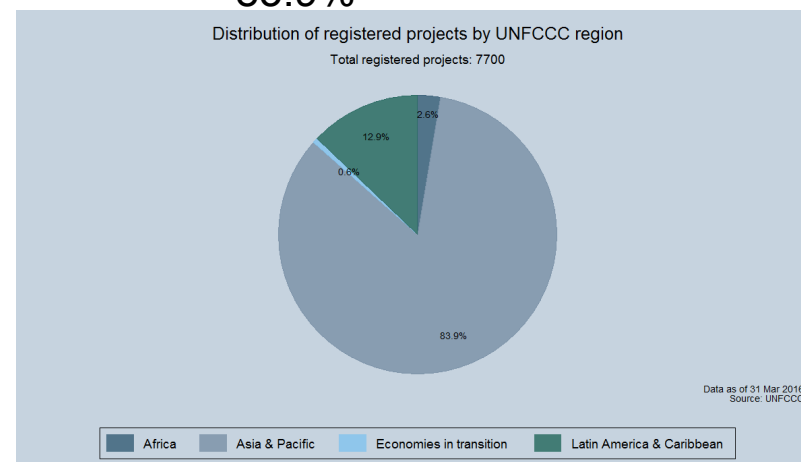
Here with UNFCCC SDM programme director (l.) at UN ESCAP APFSD



Regional Context—CDM Statistics

- The Asia-Pacific region hosts 84% of registered CDM projects and 48% of registered PoAs.
- The distribution of CDM project activities is **highly uneven** in the region.
- If China and India are not counted, the rest of the region only represents 12% of the total registered CDM projects, leaving a large number of LDCs and SIDS underrepresented.

Asia & Pacific-
83.9%



Regional Context—CDM Statistics

- Standardized baselines: A **baseline developed for a Party or a group of Parties** on sub-national, national or group-of-countries basis rather than on a project basis, to facilitate the calculation of GHG emission reductions and/or the determination of additionality for CDM project activities or PoAs
- Currently 35 approved Standardized Baselines, of which **only 3 are from Asia-Pacific region** (GEF in Usbekistan, Rice mills in Cambodia, Rice cultivation in the Philippines)



RCC Bangkok Activities (Sep 2015 - Aug 2017)



Launch event, Sep 2015



Indonesian DNA training, Dec 2015



Asia LEDS Forum 2016, June 2016



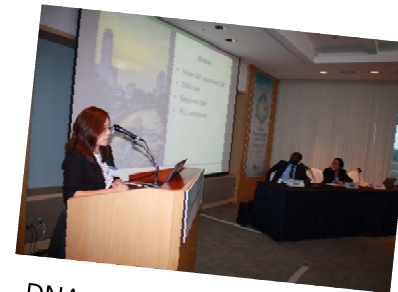
RCC-CITC workshop,
March 2017



INDC clinic-Bhutan, Sep 2015



Norwegian Carbon Credit
Program marketplace meeting,
March 2016



DNA training, APCF, Sept 2016



RT at APFSD, March 2016



INDC workshop, Feb 2016



Asia-Pacific non-state actor Article
6 dialogue , June 2016



APCF, Sept 2016



UN ESCAP WG, innovative
climate finance, May 2017



Overview of the 2017 work areas

I	II	III	IV	V
CDM Support and Development	Climate Finance	MRV and Transparency	Global Climate Action	Communication & Collaborations
a) Technical and Procedural Support to CDM projects ; b) Regional analysis and capacity building c) Nurturing CER demand	a) Establishment of green credit lines ; b) Green Bonds c) Climate Funds d) Regional analysis and capacity building	a) Technical and Procedural Support to CDM SBL b) Measurement, Reporting and Verification (MRV)	a) Support to the Carbon Pricing project b) APCF 2017 c) Support to NFP activities d) Support to NAZCA e) Support to Momentum for Change	a) Communication b) Coordination of UN agencies on climate change c) Partnerships and collaborations d) Reporting e) Administration and HR



United Nations Framework Convention on Climate Change



Thank you!

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