

Making the Carbon Market work for Development Finance

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ADB Basics

The Asian Development Bank (ADB):

- Multilateral development finance institution established in 1966
- Poverty reduction is overarching mandate
- Provides lending and technical assistance
- 67 members – 48 of which are from Asia and Pacific region
- 2004-2007 approved lending: US\$6-10 billion per year

ADB's strategic agenda:

- Focuses on pro-poor sustainable economic growth, inclusive social development, and governance for effective policies and institutions.

ADB's Focus on Addressing Climate Change

- ❑ **Role:** catalyze the development and financing of new mitigation & adaptation projects
- ❑ **Means:**
 - National/regional capacity building activities
 - Loans, investments and guarantees
 - Project-specific technical support
 - **Innovative Finance** (incl. market mechanisms)

ADB's Climate Change Program

Financing Tools

**Mobilize
Concessional
Resources**

**Catalyze
Private
Capital**

**Maximize
Market
Mechanisms**

**Mitigation
“Thrusts”**

Advance Energy Efficiency and Low-Carbon Energy Sources

Enable Sustainable Transport Policy and Application of Efficient Systems

Promote Improved Urban Sanitation and Reduction of Fugitive Methane Emissions

Promote Sustainable Land Use and Forestry

**Adaptation
“Thrusts”**

Incorporate Vulnerability Risks into National Development Strategies

Increase Climate Resilience of Vulnerable Sectors

“Climate Proof” Projects

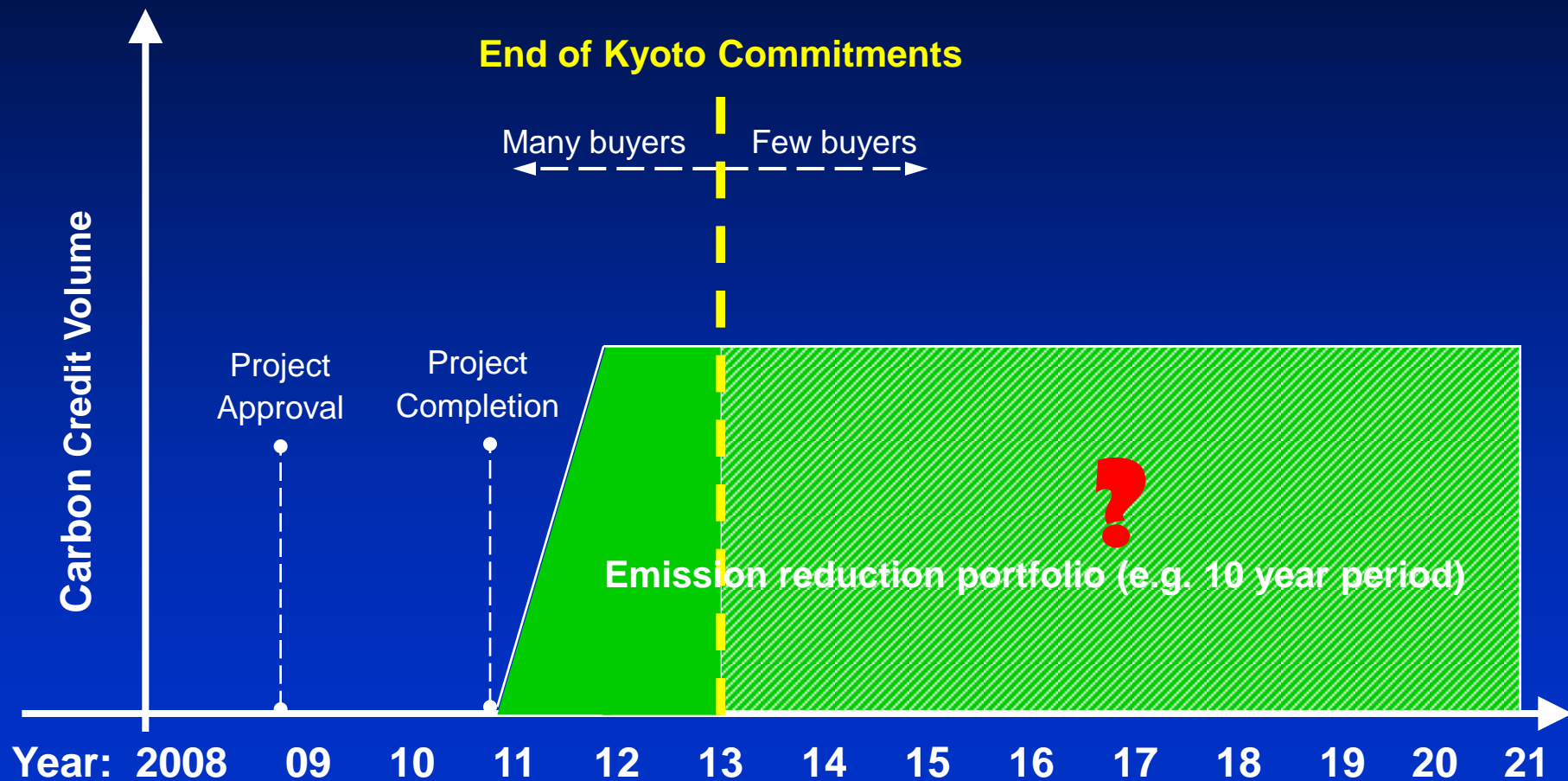
Address Social Dimensions



Issue

- ❑ Kyoto Protocol commitments ending in 2012; no agreed international framework yet on post-2012
 - Lack of long-term price signal to induce developing and developed economies to invest in low-carbon alternatives
 - In the meantime, countries are installing massive amounts of new power/thermal capacity with conventional systems, locking the world into 20-30 years of voluminous GHG emissions
- ❑ Lack of investment/equity – carbon market contributing to cash flow of approved projects, but rarely contribute to project financing

Issue 1: Post-2012



Good News Ahead?

- Increase in number of mandatory schemes – regional, national, sub-national
- Increase in number of voluntary schemes
- Carbon credit becoming common link? – e.g. International Carbon Action Partnership (ICAP)
- Post-2012 global agreement appears likely
- ? What will U.S. position be after elections?
- ? Will major developing countries take on sectoral or intensity based targets?

Existing and Emerging Schemes

	Start	Transacted Volume	Post-2012	Import Rules for Credits from CDM
The European Union Emission Trading Scheme (EU ETS)	2005	2,061 million tCO ₂ e (2007)	20% or 30% below 1990	Allowed (with limits depending on global agreement)
The New South Wales (NSW) Greenhouse Gas Abatement Scheme (GGAS)	2003	25 million tCO ₂ e (2007)	tbd	not allowed
Australia National Emission Trading Scheme (AN ETS)	2010	unknown	Target tbd; caps will be set for the first 5 years (until 2015)	limited
New Zealand National Emission Trading Scheme	2008	–	tbd	Allowed (no limit)
The Regional Greenhouse Gas Initiative (RGGI)	2009	–	Target tbd; from 2009 to 2018	10% can be used if prices rise above \$10/tCO ₂ e
California's Global Warming Solutions Act (AB 32)	2012	–	1990 levels by 2020	10% limit (tbd)
The Western Climate Initiative (WCI)	tbd	–	15% below 2005 baseline by 2020	tbd
The Midwestern Regional Greenhouse Gas Reduction Program (MRP)	2012	–	tbd	tbd
Switzerland National Emissions Trading Scheme	2008	–	tbd	tbd
Canadian Offset System	2009 (tbc)	–	20% below 2006 levels by 2020	10% limit
South Korea Emission Trading Scheme (Voluntary >> Mandatory?)	2009	–	tbd	tbd
Japan's Voluntary Emission Trading Scheme (JVETS)	2005	82,624 tCO ₂ e (2006-2007)	tbd	allowed

Drastic U.S. Position Change?

McCain plan

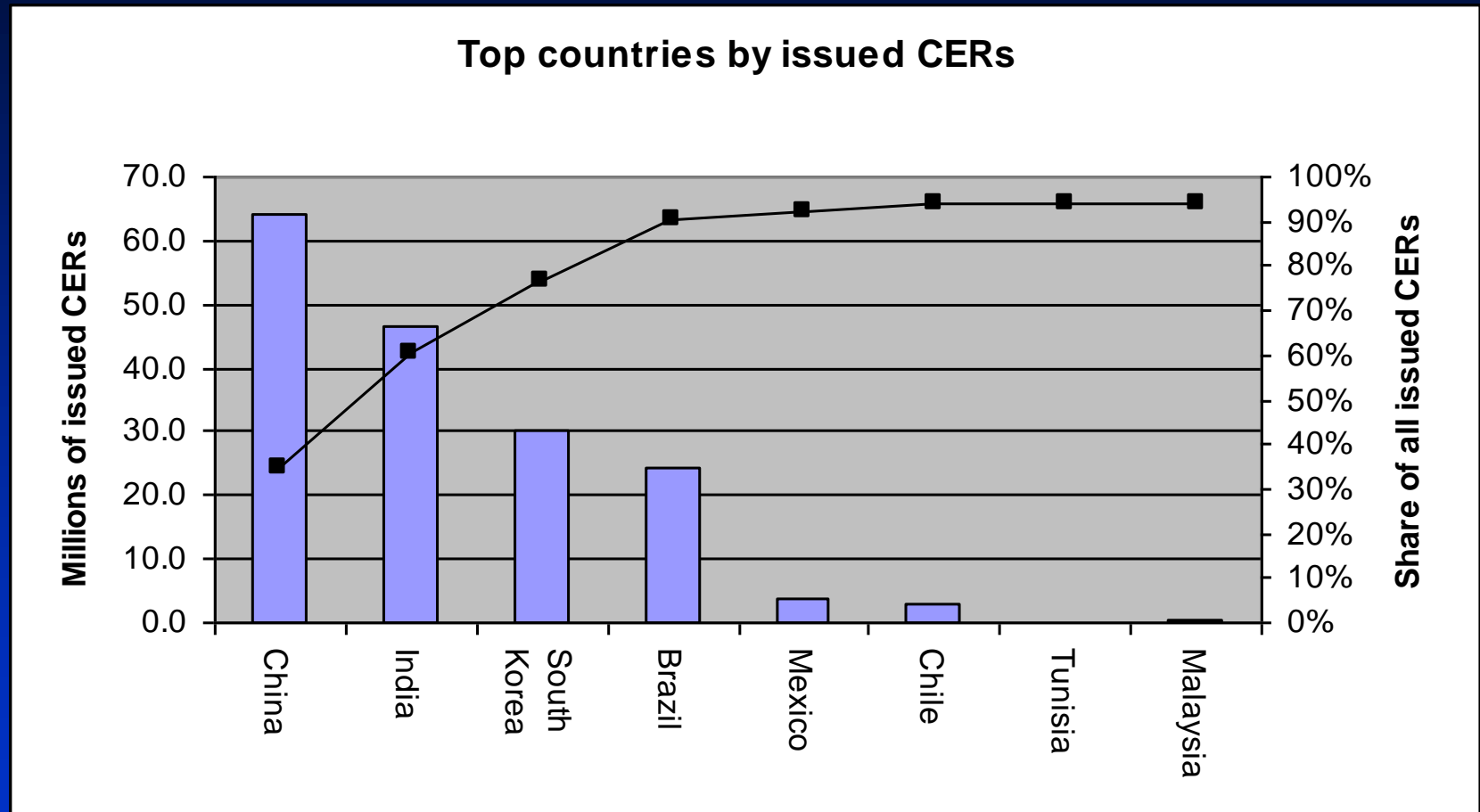
- 2050 target: 60% below 1990 levels
- Allowances will “eventually be auctioned”
- Auction proceeds to be used to fund nuclear, CCS and battery development
- Unlimited offsets as a start
- Co-sponsored McCain-Lieberman bill

Obama plan

- 2050 target: 80% below 1990 levels
- 100% allowances auctioned”
- Auction proceeds to be used to fund clean technologies, energy efficiency and workers compensation
- Limited use of offsets
- Address deforestation
- Co-sponsored Boxer-Sanders bill

Source: Point Carbon

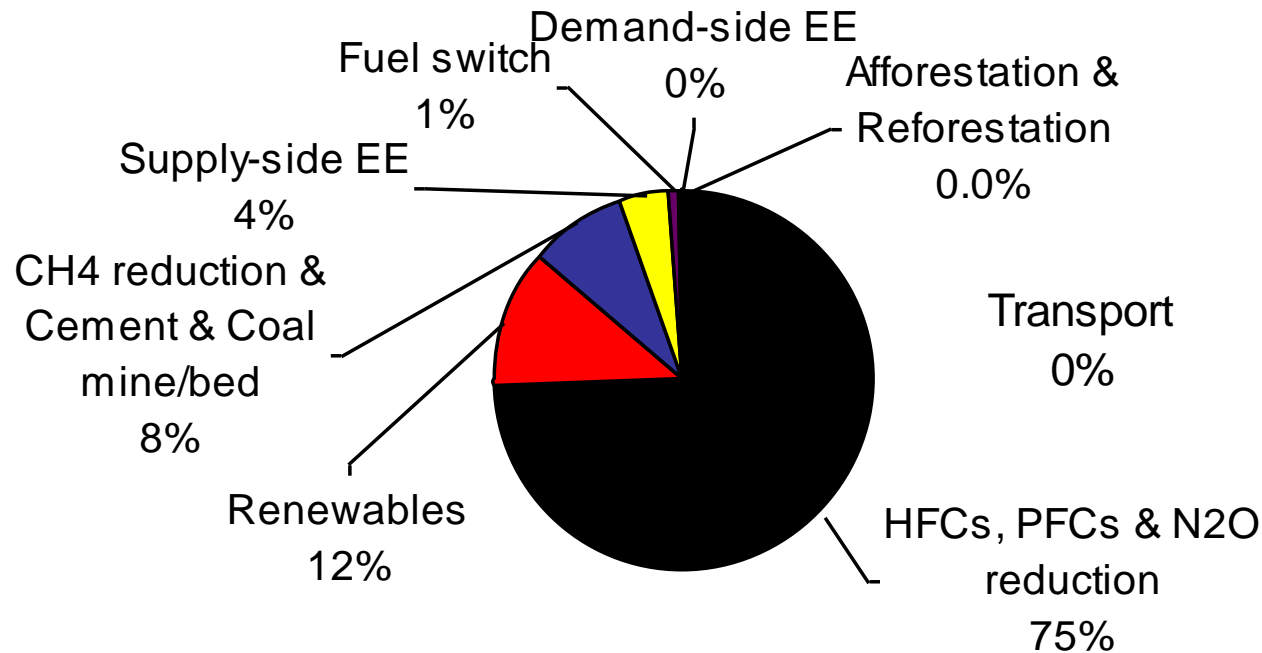
Issue 2: CDM is only for large/richer nations?



Source: UNEP Riso Centre

Low hanging fruit – the way markets are supposed to work?

CERs issued in each sector



Source: UNEP Riso Centre

Country/sector limitation: contributing causes

- Focus on “low hanging fruit” – high GWP gas
- Limited DNA and project development capacity
- Restriction in international rules (CCS, REDD, transport?)
- Difficult to develop methodologies for new categories
- **Lack of finance for GHG reduction benefits**
 - Most buyers offer “pay-on-delivery” contracts
 - Some offer upfront payment but with strict penalties for under-delivery
 - Such schemes do not share project risks – remains almost entirely with project sponsors
 - **Projects heavily skewed towards countries/sectors already with capital and/or favorable to foreign direct investment**

CDM Concept

Industrialized Country
(Annex B)

Developing Country
(non-Annex B)

② Carbon Credits

Entity A

✓GHG Emissions

Entity B

✓Project Activity

✓Emission Reduction

① Finance

Technology

(Capacity Building)

CDM Reality

Industrialized Country
(Annex B)

Developing Country
(non-Annex B)

① Carbon Credits

Entity A

✓GHG Emissions

Entity B

✓Project Activity

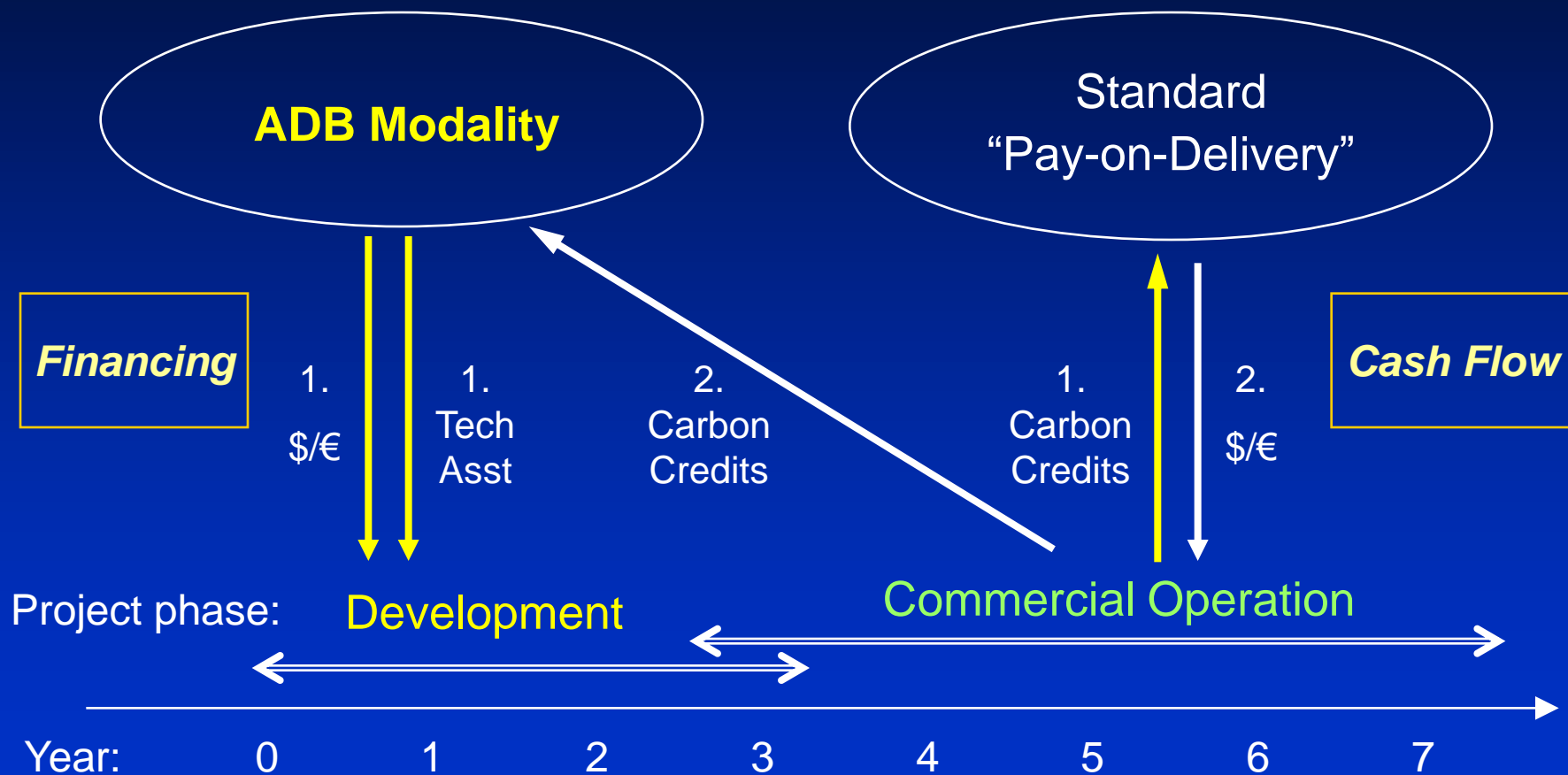
✓Emission Reduction

② Payment

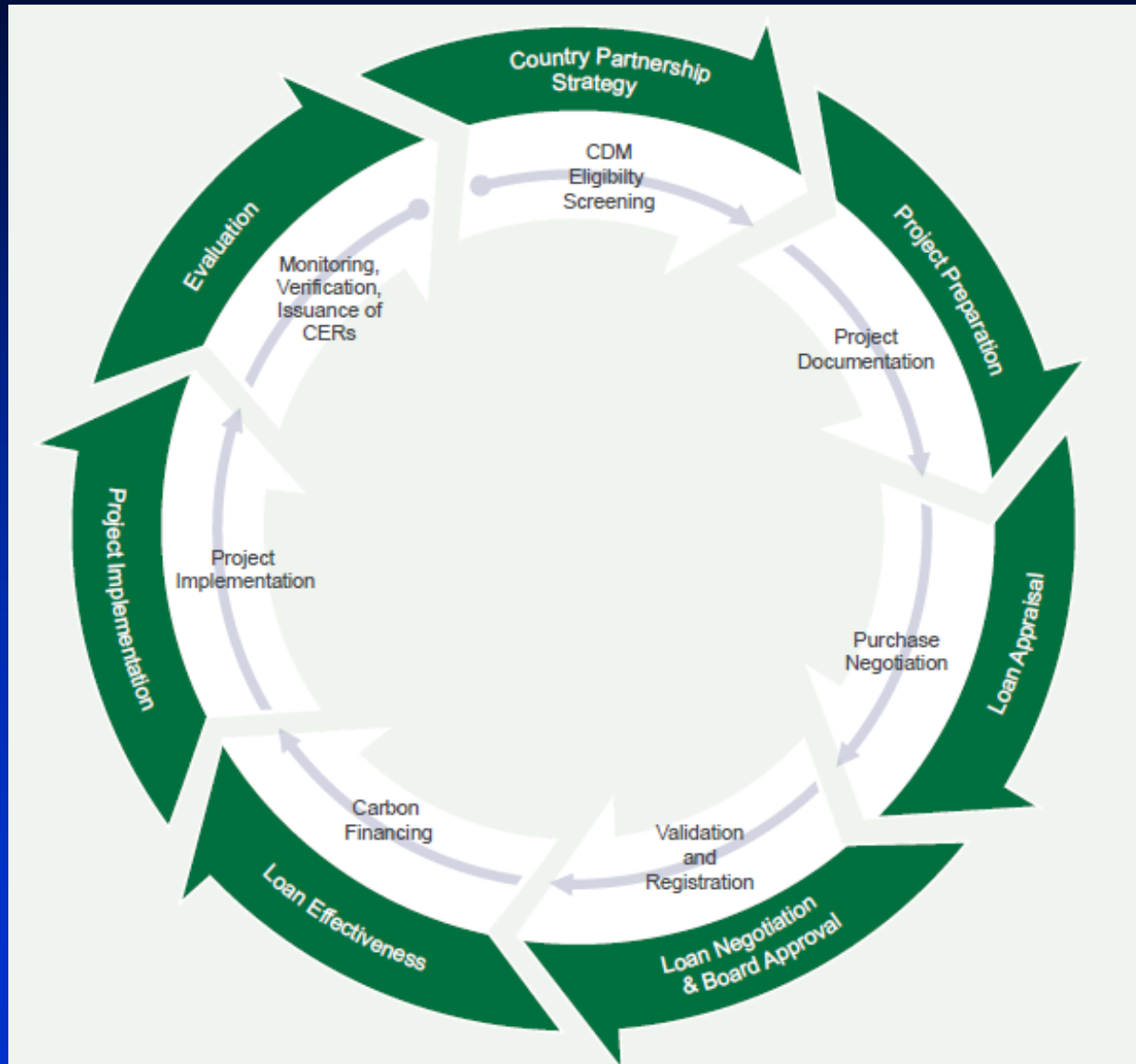
ADB's Attempt – Future Carbon Fund

- ❑ Purchase post-2012 carbon credits from projects proposed today
- ❑ Pay upfront, to help developing countries reduce the upfront capital constraint of installing clean energy systems
- ❑ Provided to project developers/sponsors who receive ADB financial support and CDM-specific technical assistance
- ❑ Associated costs and risks are largely reduced due to “piggy back” design and strategy
 - ❑ General technical, financial and legal due diligence carried out by ADB main operations to process/approve financing

Turning Cash Flow into Financing



Integrate CDM into Bank Processing



Lower CDM Transaction Risk/Costs

**General
Project
Risk**

**Incremental
CDM Risk**

Concessional Resources

- ❑ Climate Investment Funds – Clean Technology Fund
 - Supported by: Japan, U.K., U.S.
 - World Bank Group as Trustee, Implemented by Multilateral Development Banks
 - Target: \$5 billion
 - Grant for preparation; concessional loan for investment
- ❑ Global Environment Facility
 - Climate Change Focal Area
 - \$250 million/year; mainly for capacity building, project preparation

Additional Market Schemes

- ❑ Markets to improve local air pollution
 - Trading of SO₂ and NO_x permits; some measures can simultaneously reduce CO₂ emissions
 - US market operational since 1995
 - Proposed in China – support from ADB and other international agencies
- ❑ Markets to advance energy efficiency
 - ❑ UK “White Certificates”
 - ❑ Now proposed in India
- ❑ Markets to promote energy security?

THANK YOU!!

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