A Status of Global Carbon Markets and Post-2012 Negotiations

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Outline

• The global carbon markets
• CDM
• Climate negotiations for a post-2012 agreement
There are over 45 carbon markets – but 3 principal regimes

Kyoto Mandatory Regime
- UNFCCC
- Kyoto Protocol
- CDM
  - Non-Annex 1 Countries (Developing Countries)
- Joint Implementation
  - Annex 1 Countries

Non-Kyoto Mandatory Regimes
- New South Wales (Australia)
- Individual US States (East Coast, California, Oregon)
- European Union Trading Scheme (EU-ETS)

Voluntary Regimes
- Chicago Climate Exchange (CCX)
- Retail Market

Linking Directive

Source: Robert Kelly, UNDP, March 2008
Global Carbon Market

-fragmented market

**Allowance market** (cap and trade system)

- Emission allowances are defined by regulations at the international, national, regional or firm level - Kyoto-ET, EU-ETS, Domestic: UK, Japan, Canada, Korea.
- Firms: BP, Shell
- Linkage between EU ETS and project-based mechanisms

**Project-based** (baseline and credit system)

- Emission reductions are created and traded through a given project or activity (JI and CDM)

**Voluntary market**

- Individuals and companies account and trade their greenhouse gas emissions on a voluntary basis (carbon compensation and travel compensation schemes)
- Several companies expressed interest in buying project-based credits (CERs and ERUs)

Markets are likely to emerge over time as agreement widens
The EU Emissions Trading Scheme dominates the market

- EU Emissions Trading Scheme $24.4 billion
- Clean Development Mechanism (CDM) $5.3 billion
- New South Wales $225 million
- Chicago Climate Exchange $38 million
- Joint Implementation $141 million

EU-ETS & NSW markets trade allowances.
CDM, JI & CCX are project-based.

Source: Robet Kelly, UNDP, March 2008
Carbon markets surpassed US$100 billion by the end of 2007...

**Allowance markets (US$ million)**

- EU Emissions Trading Scheme
  50,100 in 2007 alone
  (more than double from previous year)

- New South Wales Certificates
  220

**Project-based transactions (US$ million)**

- CDM
  7,400 (30% over 2006)

- JI
  500

- Secondary CDM
  ± 5,500

**Voluntary market in 2007 – niche segments (US$ million)**

- Chicago Climate Exchange
  70

- Voluntary & retail
  270

Clean Development Mechanism (CDM)
CDM Basics

CDM allows Annex I countries meet part of their emission reduction requirements for first commitment period 2008-2012 at lower costs in non-Annex I countries than could be done domestically.

Annex I countries are allowed to acquire Certified Emission Reductions (CERs) by implementing GHG mitigating CDM projects in non-Annex I countries.

Selling CERs is an additional stream of cash inflow to the project, which improves project economics.

ODA (Official Development Assistance) funds can not be used in CDM investments.

CDM projects shall support sustainable development in the host country.

CDM is considered one of the major achievements of Kyoto.
## Number of CDM projects

<table>
<thead>
<tr>
<th>Status of CDM projects</th>
<th>Number</th>
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<tbody>
<tr>
<td>At validation</td>
<td>2930</td>
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<tr>
<td>Request for registration</td>
<td>56</td>
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<td><strong>Total in the process of registration</strong></td>
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<tr>
<td>Withdrawn</td>
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<tr>
<td>Rejected by EB</td>
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</tr>
<tr>
<td>Validation negative by DOE</td>
<td>160</td>
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<tr>
<td>Validation terminated by DOE</td>
<td>722</td>
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<tr>
<td>Registered, no issuance of CERs</td>
<td>1585</td>
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<tr>
<td>Registered. CER issued</td>
<td>759</td>
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<tr>
<td><strong>Total registered</strong></td>
<td><strong>2344</strong></td>
</tr>
<tr>
<td>Total number of projects (incl. rejected &amp; withdrawn)</td>
<td>6546</td>
</tr>
</tbody>
</table>

Source: UNEP Risoe Centre CDM Pipeline dated 1 September 2010
Host countries of CDM projects

Source: UNEP Risoe Centre CDM Pipeline dated 1 September 2010
CDM project examples

Kuyasa, Cape Town, South Africa

- low-income housing retrofit in 2309 RDP houses
- Install SWH, insulated ceilings, and CFL lighting
- first registered SA project
- first Gold Standard project in housing sectors

Proposal to upscale to a programmatic CDM project:

- VISION: A clearing house which enables and incentivises access to financing for clean energy services in all low income housing in South Africa
- MISSION: To establish a Facility which 1) administers a CDM programme, and 2) leverages and manages access to the additional upfront financing required for the incremental capital costs of sustainable energy interventions in low income housing
Programmatic CDM projects

A Programme of Activities (PoA) is:

- Voluntary action
- Implementing a policy, measure or stated goal
- Coordinated by a public or private entity
- Made up of CDM Programme Activities (CPA)

Multiple CPAs can be included under a PoA at the time of registration and additional CPAs can be added at any point in the life of the PoA.
The project seeks to reduce GHG emissions through free distribution and installation and installation of 30 million energy-saving light bulbs throughout Mexico.

Change from Incandescent lamps to Compact Fluorescent Lamps (CFL)

PoA lifetime 31 July 2009 – 30 July 2037
Crediting Period 31 July 2009 – 30 July 2016
CDM Challenges

Complex CDM Modalities & Procedures:
  - Transaction cost to hire service providers.

Heavy institutional requirements for project cycle (DNA, DOE Validation, DOE Verification, etc.).

Knowledge gap between CER buyers & sellers.

Limited access to finance by potential developers:
  - Financial intermediaries lack of knowledge about CDM.
  - Lack of trained national CDM consultants.
  - Investment climate in host countries (e.g. SS Africa).
  - Limited budgets for operations of DNAs.
  - Need for national entities capable of bundling projects.

CDM is undergoing gradual reforms and will be part of a new deal
Post-2012 negotiations
The post-2012 negotiation structure and agenda

Bali Roadmap

AWG-KP

Parties
Annex I Parties & Non-Annex I Parties
(USA excluded)

Legal Boundary
Kyoto Protocol
(Art. 3.9 and Art. 21)

Mandate
"Consideration of further commitments by Annex I Parties, to be established in amendments to Annex B to the Kyoto Protocol"

Topics
Annex I Reduction Targets

Other Issues

CDM (Flexible Mechanism)

Post Kyoto CDM

Overlap

CDM
LULUCF
Potential Consequences
Climate, Sectors, Sources

Improve
- Pos./Neg. List
- Improve Access
- Co-benefits
- Multiplication factor
- Graduation of Host

Upscale
- LULUCF
- CCS

Sectoral
- NAMAs
- Multi-project
- Baseline

Developed and Developing Countries

Bali Action Plan
"Dialogue" on long-term cooperation

"Enabling the full, effective and sustained implementation of the Convention through long-term cooperative action"

Shared Vision
Technology
Finance

Mitigation
Adaptation

Mitigation in Developing Countries
(TBD 1.1.16)

Market Mechanisms
REDD
NAMAs
Sectors
North-South Disparity in Climate Change Contribution

Contributions to Global Warming
Areas are proportional to historic carbon dioxide emissions from fossil fuel combustion, 1900–1999

INDUSTRIALIZED
DEVELOPING

Underlying data sources:
United States Department of Energy,
Energy Information Administration
and the Carbon Dioxide Information
Analysis Center

World Resources Institute
http://www.wri.org/
1-202-729-7600

Map by Equator Graphics, Inc.
Negotiation groups

Groups

G77 & China
(130 Developing Countries)

Other Groups:
EU, EIG, Umbrella Group, CAMCAM and others

Subgroups

AOSIS
(40 Countries)

LDC
(49 Countries)

African Group
(53 Countries)

OPEC
(10 Countries)

NIC
(5 Countries)

Overlap

In LDC:
11 countries from AOSIS,
31 countries from African Group

In OPEC:
Nigeria & Algeria from African Group
In African Group:
South Africa from NIC

Argentina
Brazil
China
India
South Africa
Main challenges for negotiators

- Delicate balance between engaging major emitters and the economic growth and poverty eradication imperatives of developing countries

- Building strong investment opportunities beyond a pure assistance approach and subsidization; and

- Tying together the developed and the developing world, respecting the principle of common but differentiated responsibilities and the growing sense of common interest.

- Finance and mitigation as a key
Thank you!!

More information:
http://uneprisoe.org
http://cd4cdm.org
http://cdmbazaar.net
http://cdmpipeline.org