Overview of Kyoto Protocol Market Mechanisms

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Overview

- Brief summary of the Kyoto Protocol
- Overview of the Clean Development Mechanism, as implemented
- How do CDM CERs move to market?
- CER contract risk mitigation

Kyoto Protocol to UNFCCC

- Commits parties to an average 10% reduction below 1990 levels of CO_2e in the 2008-2012 compliance period
- Entered into force February 2005
- Country-specific emission allowances, deposited in national registries
- Country targets are met by controlling emissions, or securing additional allowances through the joint implementation (JI) and clean development mechanism (CDM) programs, as well as land-use, land-use change, and forestry projects (LULUCF)
- Several "flavors" of emission units (one tonne CO_2e per unit):
  - AAUs: assigned amount units (allowances allocated to Annex I parties)
  - RMUs: removal units (LULUCF project credits in Annex I parties)
  - ERUs: emission reduction units (joint implementation project credits)
  - CERs: certified emission reduction units (clean development mechanism credits)
- Each type of emission unit is tradable between parties and may be used to "cover" emissions of GHGs
- United Nation's Kyoto Protocol webpage is at http://unfccc.int

CDM Project Cycle

- Up to $12 billion will flow from Annex I to developing countries under the CDM, with 1.14 billion CERs in the pipeline through 2012.
- CDM Project Participants
  - Host country
  - Investor country
  - Project participants
- CDM Project Requirements
  - Assists host country in achieving sustainable development
  - Provides real, measurable, long-term benefits related to the mitigation of climate change
  - Delivers emission reductions that are additional to those that would occur without the project
  - Is eligible (by reference to approved methodologies) for CDM registration

CDM Project Cycle

- CDM Project Elements
  - Project idea note ("PIN")
  - Project design document ("PDD")
  - Letter of approval
  - Validation
  - Registration
  - Monitoring
  - Verification and Certification
  - CER issuance

- Sources: Kyoto Protocol Art. 12 and Marrakech Accords CDM Modalities

How Do CERs Move to the Market?

- The contract used to purchase CERs is referred to as an ERPA, or **E**mission **R**eductions **P**urchase **A**greement
- The function of the ERPA is to contractually bind the parties to deliver and accept CERs.
  - By way of the international transactions log, or ITL, the CDM Executive Board transfers CERs in accordance with the modalities of communication document to a party's account in a particular country's national registry account.
  - Until the ITL is fully functional, CERs are issued into a project participant's "pending CDM Registry account"
  - Once the ITL confirms a transfer to a national registry account, the contracting parties can move CERs (and other credits) through intra-country transfers in the national registry, or internationally through the ITL

ERPA Risk Mitigation

- Security agreements
  - Capital assets (project assets, corporate assets)
  - Contracts rights (including assignment of rights to receive revenues / accounts receivable)
  - Contracts and permits/approvals
  - Stock pledge in project borrower (depending on transaction structure)
- CER delivery risk mitigation
  - Project participation; escrow agent project participation; CER delivery to security agent, with or without modalities communication
- Project risk mitigation
  - Use of financing tranches and structured drawdown requirements based on stage of project development
  - Use of independent engineering consultant to assess project design document, construction, and operation
  - Use of debt service reserve arrangements (*e.g.*, funded by equity, operating cash flow, or uncommitted CERs) to protect against revenue interruptions

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