History and Development of the CDM

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Overview of Presentation

- Evolution of the CDM
- Characteristics of CDM Projects
- CDM Design: Governance
- CDM Design: Project Cycle
- Current State of Play
- Conclusions for NZ Businesses

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Evolution of the CDM (1)

- **UN Framework Convention on Climate Change (1992)**
  - Goal: Stabilize GHG emissions by Annex I (industrialized) countries at 1990 levels by 2000
  - Established concept of “joint implementation”
  - Activities Implemented Jointly (AIJ) pilot phase started in 1995; projects have to be
    - Additional to what would otherwise occur
    - Voluntary; no credits during the pilot phase
    - 150 AIJ projects reported by March 2002; not all operational
    - Good source of experience on project mechanisms

Evolution of the CDM (2)

- **Kyoto Protocol (1997)**
  - Goal: Reduce Annex I GHG emissions by 5.2% (average) below 1990 levels by 2008-2012
  - Differentiated binding targets for Annex I countries; NZ target is 1990 emissions level
  - Still waiting for entry into force
    - Requires ratification by 55 countries representing 55% of Annex I CO_2 emissions in 1990; currently at 44.2%

Evolution of the CDM (3)

- Three Kyoto Protocol Flexibility Mechanisms
  - Allow Annex I Parties to meet a portion of their commitments at a lower cost than solely domestic actions
    - International Emissions Trading: Trading of assigned amount of emissions, removal units, or CDM/JI credits
    - Joint Implementation: GHG mitigation projects among Annex I Parties; generate tradable credits (ERUs)
    - Clean Development Mechanism: GHG mitigation projects between Annex I and developing country Parties; generate tradable credits (CERs)

Characteristics of CDM Projects (1)

- Assist developing countries with sustainable development, and Annex I countries with meeting their commitments
- Voluntary; must be approved by all Parties involved
- Produce “real, measurable, and long-term benefits related to climate change mitigation”
- Emission reductions must be “additional to any that would occur in the absence of the certified project activity;” determined using an emissions baseline
- Share of proceeds to cover administration and assist developing countries with adaptation

Characteristics of CDM Projects (2)

- CERs can be generated as early as 2000
- No funding by official development assistance
- Restrictions on maximum project crediting periods
  - Emission reduction projects
    - 7 years, renewable up to 2 times (e.g., 21 years)
    - 10 years with no renewal
  - Afforestation/reforestation projects
    - 20 years, renewable up to 2 times (e.g., 60 years)
    - 30 years with no renewal
- Limit on carry-over of CERs to next commitment period: 2.5% of a Party's assigned amount

Characteristics of CDM Projects (3)

- Parties to “refrain from” nuclear projects
- Limits on sinks projects for first commitment period
  - Only afforestation and reforestation, not avoided deforestation
  - Cap on credits: 1% of Party’s emissions in base year (e.g., 1990), times five
  - Special provisions for non-permanence
    - Temporary CERs (tCERs): Must be replaced at the end of the subsequent commitment period
    - Long-term CERs (lCERs): Must be replaced at the end of the [last] crediting period or upon reversal of credited removals
    - Verification every 5 years
    - No carry-over to subsequent commitment periods

Characteristics of CDM Projects (4)

- Simplified procedures for small-scale projects
  - Renewable energy projects with max output of 15 MW (or equivalent)
  - Energy efficiency improvements that reduce supply- or demand-side energy consumption by up to the equivalent of 15 GWh/year
  - Other project activities that reduce emissions by sources and directly emit less than 15 kt CO_2-e/year
  - Net anthrop. removals by sinks of less than 8 kt CO_2/year and developed or implemented by low-income communities and individuals

CDM Governance: Key Players

- Conference of the Parties/Meeting of the Parties to the KP
  - Makes major policy decisions
- CDM Executive Board (EB) (10 members, personal capacity)
  - Registers projects and issues CERs
  - Approves baseline methods
  - Develops guidance on modalities and procedures
  - Appoints panels of experts to provide advice
  - Designates Operational Entities
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  - Legal entities with demonstrated capacity and expertise
  - Validate, verify and certify project activities
- Designated National Authority
  - Appointed by each Party to approve CDM projects as part of project validation

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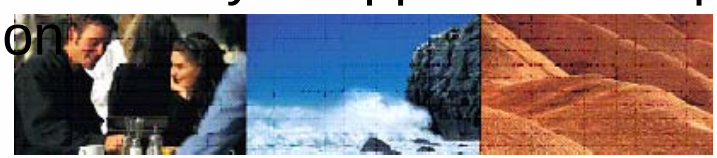

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CDM Project Cycle (1)

Validation

Registration

Monitoring

Verification

Certification

Issuance

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CDM Project Cycle (2)

- **Step 1: Validation**
  - Project participants prepare a project design document (PDD)
  - PDD is reviewed by a Designated Operational Entity (DOE); PDD posted for public comment
  - DOE submits a public validation report with a recommendation to the Executive Board (EB)

CDM Project Cycle (3)

- **Step 2: Registration**
  - EB accepts the validation recommendation unless a review is requested by a Party in the project or 3 EB members

CDM Project Cycle (4)

- **Step 3: Monitoring**
  - Project participants include a monitoring plan in the PDD; monitoring methodology must be approved
  - Project participants implement the registered monitoring plan and produce a monitoring report

CDM Project Cycle (5)

- **Step 4: Verification**
  - A DOE reviews the monitoring report and compares it against the registered PDD
  - The DOE issues a public verification report
- **Step 5: Certification**
  - The DOE certifies the verified amount of emission reductions or removals, and issues a public report

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CDM Project Cycle (6)

- **Step 6: Issuance of CERs**
  - The EB receives the certification report from the DOE
  - EB review can be requested by a project Party or 3 members of the EB
  - EB instructs the CDM registry administrator to issue credits (CERs, tCERs or lCERs)

Current State of Play (1)

- Executive Board operational since 2001
- 19 applicant OEs as of 12/03; first 2 DOEs announced in 04/04
  - Japan Quality Assurance Organization (JQA), Japan
  - Det Norske Veritas Certification (DNVcert), UK
- 36 proposals for new baseline/monitoring methods; EB approved 11 baseline methods so far
- First CDM projects could be registered by June 2004

Current State of Play (2)

- EU “Linking Directive” will decide eligibility of CERs in EU GHG trading system
- CDM capacity building and project design/implementation underway
  - Activities by legal entities, governments and regional development banks
  - Collective activities such as the World Bank’s Prototype Carbon Fund, BioCarbon Fund, and Community Development Carbon Fund

Current State of Play (3)

- The CDM offers significant opportunities:
  - Capacity building and technology transfer supporting sustainable development and GHG emission reductions in developing countries
  - New market development for environmental technologies
  - CERs represent a new revenue stream that can make previously marginal projects more feasible
  - Reduced KP compliance costs for Annex I countries

Current State of Play (4)

- The CDM poses challenges:
  - Balancing consistency and transparency against reasonable project transaction costs
  - Funding CDM administration
  - Capacity building in both Annex I and developing countries
  - Uncertainty about entry into force of the Kyoto Protocol
  - Uncertainty about the role of the CDM in future commitment periods

Conclusions for NZ Businesses

- The CDM is an evolving mechanism in the new global carbon market; we are currently learning by doing
- The NZ government's climate change policy package does not rely heavily on the CDM as a KP compliance tool
  - The CDM is relevant to NZ firms' compliance with Negotiated Greenhouse Agreements (NGAs)
- The CDM offers new business opportunities:
  - Markets for environmental technologies/services
  - New project investment opportunities linked to CERs
  - Provision of services for capacity building and project design, implementation, monitoring, and validation/verification

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